



Telecom Regulatory Authority of India

The Indian Telecom Services Performance Indicators

April–June, 2023

New Delhi, India

5th December, 2023

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Snapshot

(Data as on Q.E. 30th June, 2023)

Telecom Subscribers (Wireless+Wireline)	
Total Subscribers	1,173.89 Million
% change over the previous quarter	0.13%
Urban Subscribers	653.70 Million
Rural Subscribers	520.19 Million
Market share of Private Operators	90.60%
Market share of PSU Operators	9.40%
Tele-density	84.43%
Urban Tele-density	133.19%
Rural Tele-density	57.83%
Wireless Subscribers	
Total Wireless Subscribers	1,143.58 Million
% change over the previous quarter	-0.03%
Urban Subscribers	626.07 Million
Rural Subscribers	517.51 Million
Market share of Private Operators	91.11%
Market share of PSU Operators	8.89%
Tele-density	82.25%
Urban Tele-density	127.56%
Rural Tele-density	57.53%
Total Wireless Data Usage during the quarter	44,967 PB
Number of Public Mobile Radio Trunk Services (PMRTS)	64,839
Number of Very Small Aperture Terminals (VSAT)	2,52,823
Wireline Subscribers	
Total Wireline Subscribers	30.31 Million
% change over the previous quarter	6.70%
Urban Subscribers	27.63 Million
Rural Subscribers	2.68 Million
Market share of PSU Operators	31.04%
Market share of Private Operators	68.96%
Tele-density	2.18%
Rural Tele-density	0.30%
Urban Tele-density	5.63%
No. of Village Public Telephones (VPT)	68,606
No. of Public Call Office (PCO)	36,259

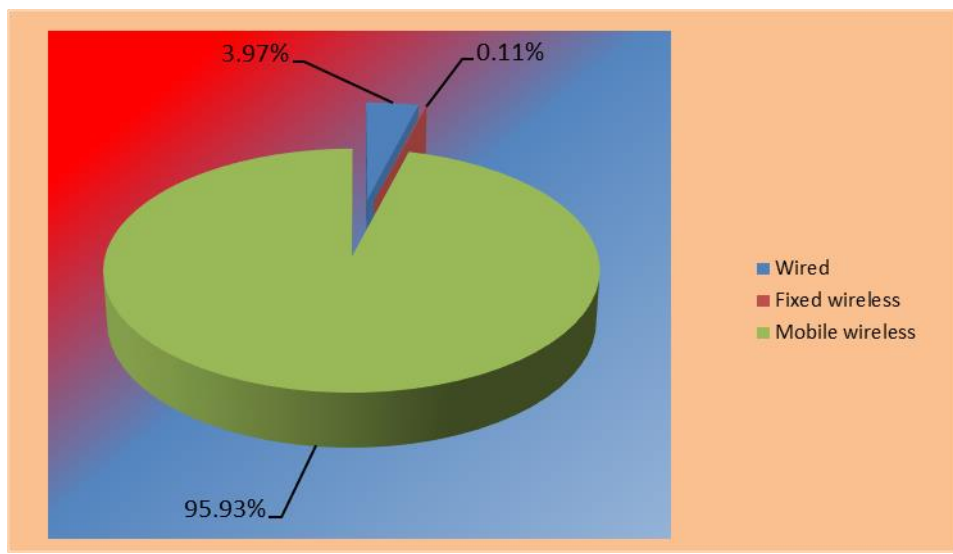
Telecom Financial Data	
Gross Revenue (GR) during the quarter	Rs. 80,899 Crore
% change in GR over the previous quarter	-5.22%
Applicable Gross Revenue (ApGR) during quarter	Rs. 78,349 Crore
% change in ApGR over the previous quarter	-0.36%
Adjusted Gross Revenue (AGR) during the quarter	Rs. 65,624 Crore
% change in AGR over the previous quarter	1.75%
Share of Public sector undertakings in Access AGR	4.15%
Internet/Broadband Subscribers	
Total Internet Subscribers	895.83 Million
% change over previous quarter	1.65%
Narrowband subscribers	34.36 Million
Broadband subscribers	861.47 Million
Wired Internet Subscribers	35.54 Million
Wireless Internet Subscribers	860.29 Million
Urban Internet Subscribers	530.12 Million
Rural Internet Subscribers	365.71 Million
Total Internet Subscribers per 100 population	64.43
Urban Internet Subscribers per 100 population	108.01
Rural Internet Subscribers per 100 population	40.66
No. of Public Wi-Fi Hotspots	1,65,727
Aggregate Data Consumed (GB)	69,50,508
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	360
Number of private FM Radio Stations (excluding All India Radio)	388
Number of total active subscribers with pay DTH operators	65.50 Million
Number of Operational Community Radio Stations	446
Number of pay DTH Operators	4
Revenue & Usage Parameters	
Monthly ARPU of Wireless Service	Rs.145.64
Minutes of Usage (MOU) per subscriber per month - Wireless Service	960 Minutes
Total Outgoing Minutes of Usage for Internet Telephony	75.34 Million
Wireless Data Usage	
Average Wireless Data Usage per wireless data subscriber per month	18.39 GB
Average revenue realization per GB for wireless data usage during the quarter	Rs.9.44

* For ARPU explanation please refer to footnote on Page 52

Executive Summary

1. Total number of Internet¹ subscribers increased from 881.25 million at the end of Mar-23 to 895.83 million at the end of Jun-23, registering a quarterly rate of growth 1.65%. Out of 895.83 million internet subscribers, number of Wired Internet subscribers are 35.54 million and number of Wireless Internet subscribers are 860.29 million.

Composition of internet subscription



2. The Internet subscriber base is comprised of Broadband² Internet subscriber base of 861.47 million and Narrowband³ Internet subscriber base of 34.36 million.
3. The broadband Internet subscriber base increased by 1.76% from 846.57 million at the end of Mar-23 to 861.47 million at the end of Jun-23. The narrowband Internet subscriber base decreased from 34.69 million at the end of Mar-23 to 34.36 million at the end of Jun-23.

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.

4. Wireline subscribers increased from 28.41 million at the end of Mar-23 to 30.31 million at the end of June-23 with a quarterly rate of growth 6.70% and, on Y-O-Y basis, wireline subscriptions also increased by 18.58% at the end of QE Jun-23.
5. Wireline Tele-density increased from 2.05% at the end of Mar-23 to 2.18% at the end of Jun-23 with quarterly rate of growth 6.47%.
6. Monthly Average Revenue per User (ARPU)⁴ for wireless service increased by 2.33%, from Rs.142.32 in QE Mar-23 to Rs.145.64 in QE Jun-23. On Y-O-Y basis, monthly ARPU for wireless service increased by 9.05% in this quarter.
7. Prepaid ARPU per month increased from Rs.139.63 in QE Mar-23 to Rs.143.81 in QE Jun-23, however, Postpaid ARPU per month decreased from Rs.173.50 in QE Mar-23 to Rs.166.22 in QE Jun-23.
8. On an all-India average, the overall MOU per subscriber per month increased by 1.45% from 946 in Q.E. Mar-2023 to 960 in Q.E. Jun-2023.
9. Prepaid MOU per subscriber per month increased from 983 in QE Mar-23 to 1000 in QE Jun-23. Postpaid MOU per subscriber per month decreased from 518 in QE Mar-23 to 509 in QE Jun-23.

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. Jun-23 has been Rs.80,899/- Crore, Rs.78,349 crore and Rs.65,624/- Crore respectively. GR decreased by 5.22%, ApGR decreased by 0.36% and AGR increased by 1.75% in Q.E. Jun-23, as compared to previous quarter.
11. The Y-O-Y rate of growth in GR, ApGR and AGR in Q.E. Jun-23 over the same quarter in last year has been 5.88%, 6.17% and 8.42% respectively.
12. Pass-through charges decreased from Rs.14,725 Crore in QE Mar-23 to Rs.13,220 Crore in QE Jun-23 with quarterly rate of decline 10.22%. The Y-O-Y rate of decline 1.46% has been recorded in pass-through charges for QE Jun-23.
13. The License Fee⁷ increased from Rs.5,159 Crore for the QE Mar-23 to Rs.5,246 Crore for the QE Jun-23. The quarterly and the Y-O-Y rates of growth in license fee are 1.69% and 8.30% respectively in this quarter.

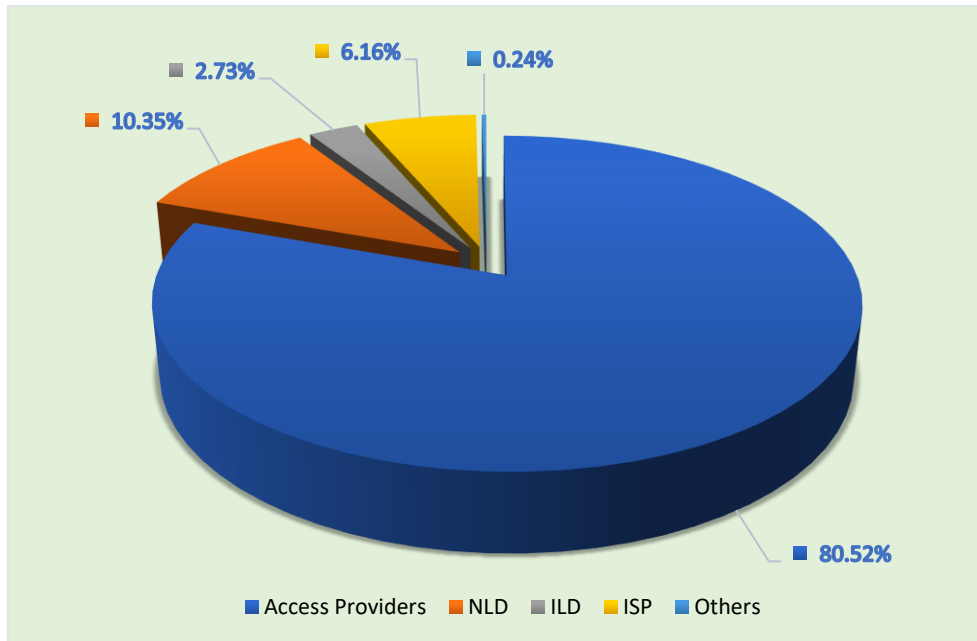
⁵ Gross Revenue is inclusive of installation charges, late fees, sale proceeds of handsets (or any other terminal equipment etc.), revenue on account of interest, dividend, value added services, supplementary services, access or interconnection charges, roaming charges, revenue from permissible sharing 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



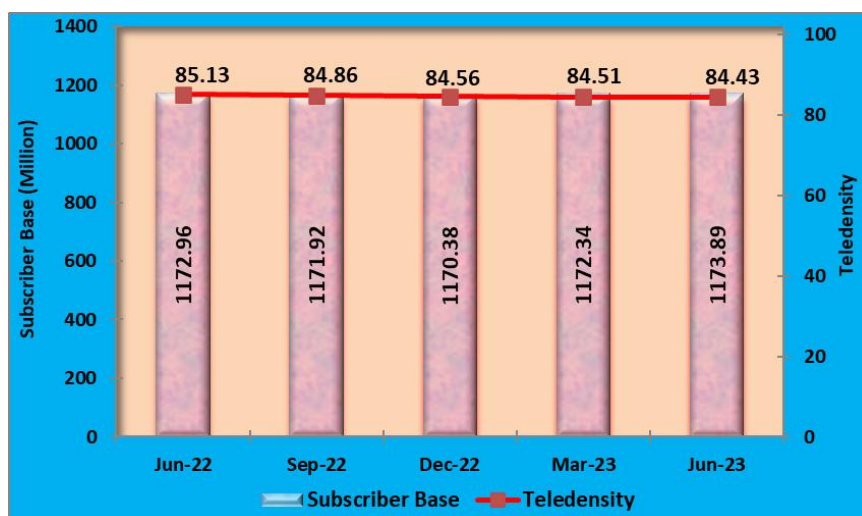
14. Access services contributed 80.52% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Applicable Gross Revenue (ApGR), Adjusted Gross Revenue (AGR), License Fee, Spectrum Usage Charges (SUC)⁸ and Pass Through Charges increased by -6.34%, -0.06%, 2.34%, 2.20%, 8.41% and -11.90% respectively in QE Jun-23.

15. The number of telephone subscribers in India increased from 1,172.34 million at the end of Mar-23 to 1,173.89 million at the end of Jun-23, registering a rate of growth 0.13% over the previous quarter. This reflects Year-On-Year (Y-O-Y) rate of growth 0.08% over the same quarter of the last year. The overall Tele-density in India decreased from 84.51% as in QE Mar-23 to 84.43% as in QE Jun-23.

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

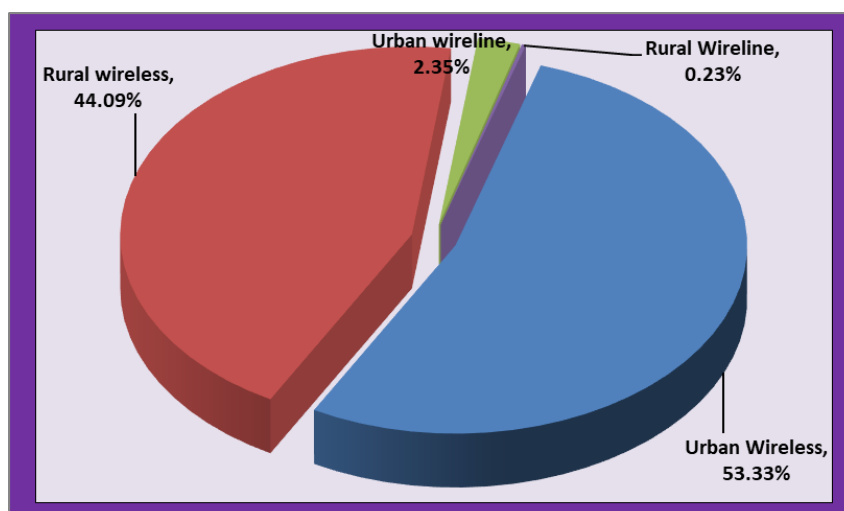
(Source – DoT License Agreement)

Trends in Telephone subscribers and Tele-density in India



16. Telephone subscribers in Urban areas decreased from 653.71 million at the end of Mar-23 to 653.70 million at the end of Jun-23 and Urban Tele-density also decreased from 133.81% to 133.19% during the same period.
17. Rural telephone subscribers increased from 518.63 million at the end of Mar-23 to 520.19 million at the end of Jun-23 and Rural Tele-density also increased from 57.71% to 57.83% during the same period.
18. Out of the total subscription, the share of Rural subscription increased from 44.24% at the end of Mar-23 to 44.31% at the end of Jun-23.

Composition of Telephone Subscribers



19. With a net decrease of 0.35 million subscribers during the quarter, the total wireless subscriber base decreased from 1,143.93 million at the end of Mar-23 to 1,143.58 million at the end of Jun-23, registering a rate of decline 0.03% over the previous quarter. On Y-O-Y basis, wireless subscriptions decreased at the rate of 0.33% during the year.

20. Wireless Tele-density decreased from 82.46% at the end of Mar-23 to 82.25% at the end of Jun-23 with quarterly rate of decline 0.25%.

21. During this quarter, the following parameters in terms of QoS benchmarks have been fully complied by wireline service providers: -
 - i. 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 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 6 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 by next working day (for urban areas) $\geq 85\%$
 - ❖ % Fault repaired within 5 days (for urban areas) 100%
 - ❖ % Fault repaired within 7 days (for rural and hilly areas) 100%

- ❖ 'Mean time to Repair' (MTTR) \leq 10Hs
- ❖ Termination / closure of service \leq 7 days

23. The following parameters have shown deterioration as compared to the previous quarter, in QoS by wireline 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%

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. 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%
- iii. SDCCH/ Paging Channel Congestion/ RRC Congestion (% age) \leq 1%
- iv. TCH, RAB and E-RAB congestion (%age) \leq 2%
- v. Network QoS DCR Spatial Distribution Measure [Network_ QSD (90,90)] \leq 2%
- vi. Network QoS DCR Temporal Distribution Measure [Network_ QTD (97,90)] \leq 3%
- vii. Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality \geq 95%
- viii. Down Link (DL) Packet Drop Rate or DL-PDR \leq 2%
- ix. Up Link (UL) Packet Drop Rate or UL-PDR \leq 2%
- x. Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) \leq 0.5%
- xi. Metering and billing credibility - postpaid \leq 0.1%
- xii. Metering and billing credibility – prepaid \leq 0.1%
- xiii. Resolution of billing/charging/validity complaints - 98% within 4 weeks

- xiv. Resolution of billing/charging/validity complaints - 100% within 6 weeks
 - xv. Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution - within 1 week of resolution of complaint
 - xvi. Termination / Closure of service < 7 days
 - xvii. Time taken for refund of deposits after closures (100% within 60 days).
25. The following parameters have shown improvement, as compared to the previous quarter, in QoS by Cellular Mobile service providers: -
- ❖ Percentage of calls answered by the operators (voice to voice) within ninety seconds $\geq 95\%$
26. The following parameters have shown deteriorated, as compared to the previous quarter, in QoS by Cellular Mobile service providers: -
- ❖ Worst affected BSs due to down-time (%age) < 2%
 - ❖ Accessibility of call centre/ customer care $\geq 95\%$
27. 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.
28. 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 360 satellite pay TV channels as on 30th June, 2023. Out of 360 pay channels, 256 are SD satellite pay TV channels and 104 are HD satellite pay TV channels.

29. Since the introduction of DTH Sector in the year 2003, Indian DTH (direct-to-home) services have displayed a phenomenal growth. During the QE 30th June 2023, there were 4 pay DTH service providers in the country.
30. Pay DTH has attained total active subscriber base of around 65.50 million. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). The total active subscriber base has increased from 65.25 million in QE March 2023 to 65.50 million in QE June 2023.
31. 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 30th June 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.
32. The advertisement revenue reported by FM Radio operators during the quarter ending 30th June 2023 in respect of 388 private FM Radio channels is Rs.389.97 crore as against Rs.388.97 crore in respect of 388 private FM Radio channels for the previous quarter.
33. As on 30th June, 2023, 446 Community Radio stations are operational.

Trends at a Glance

A. Access Service (Wireline + Wireless)									
	QE Jun 2022	QE Sep 2022	QE Dec 2022	QE Mar 2023	QE Jun 2023	%age change over Jun- 2022	%age change over Sep- 2022	%age change over Dec- 2022	%age change over Mar- 2023
						(12 months)	(9 months)	(6 months)	(3 months)
1) Subscriber Base (in million)									
Wireline	25.57	26.47	27.45	28.41	30.31	18.58%	14.53%	10.42%	6.70%
Wireless	1147.39	1145.45	1142.93	1143.93	1143.58	-0.33%	-0.16%	0.06%	-0.03%
Total	1172.96	1171.92	1170.38	1172.34	1173.89	0.08%	0.17%	0.30%	0.13%
Rural	523.87	520.30	517.99	518.63	520.19	-0.70%	-0.02%	0.42%	0.30%
Urban	649.09	651.61	652.39	653.71	653.70	0.71%	0.32%	0.20%	-0.001%
2) Tele-density									
Wireline	1.86	1.92	1.98	2.05	2.18	17.52%	13.76%	9.92%	6.47%
Wireless	83.27	82.94	82.57	82.46	82.25	-1.22%	-0.83%	-0.39%	-0.25%
Total	85.13	84.86	84.56	84.51	84.43	-0.81%	-0.50%	-0.15%	-0.09%
Rural	58.46	58.01	57.69	57.71	57.83	-1.08%	-0.31%	0.24%	0.21%
Urban	134.72	134.62	134.16	133.81	133.19	-1.14%	-1.06%	-0.72%	-0.46%
3) Service Provider wise Subscribers Base (in Million) (wireless+wireline)									
Reliance Jio	419.99	427.62	432.92	439.35	448.53	6.80%	4.89%	3.61%	2.09%
Bharti Airtel	369.00	370.62	374.39	378.06	381.24	3.32%	2.86%	1.83%	0.84%
Vodafone Idea	257.32	249.82	242.04	237.45	230.34	-10.49%	-7.80%	-4.84%	-3.00%
BSNL	118.73	116.45	113.82	110.79	106.10	-10.64%	-8.89%	-6.78%	-4.24%
MTNL	5.87	5.35	5.17	4.66	4.27	-27.29%	-20.28%	-17.38%	-8.44%
Tata Tele.	1.59	1.58	1.57	1.54	2.25	41.78%	42.43%	43.21%	45.93%
Reliance Com.	0.17	0.16	0.15	0.15	0.14	-17.06%	-11.04%	-5.39%	-3.52%
Quadrant	0.30	0.30	0.32	0.34	0.36	19.94%	18.70%	12.44%	5.93%
VMIPL	0.00	0.00	0.00	0.00	0.01	-	-	-	-
APFSPL	0.00	0.00	0.00	0.00	0.66	-	-	-	-
Total	1172.96	1171.92	1170.38	1172.34	1173.89	0.08%	0.17%	0.30%	0.13%

B. Internet Services									
	QE Jun 2022	QE Sep 2022	QE Dec 2022	QE Mar 2023	QE Jun 2023	%age change over Jun-2022 (12 months)	%age change over Sep-2022 (9 months)	%age change over Dec-2022 (6 months)	%age change over Mar-2023 (3 months)
1) Subscriber's Base (in million)									
A. Wired Internet Subscribers	28.73	30.82	32.41	33.94	35.54	23.72%	15.33%	9.67%	4.72%
B. Wireless Internet Subscribers	808.13	820.13	833.49	847.31	860.29	6.45%	4.90%	3.22%	1.53%
i. Mobile Wireless (Mobile & Dongle)	807.02	818.98	832.35	846.21	859.33	6.48%	4.93%	3.24%	1.55%
ii. Fixed Wireless (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	1.11	1.16	1.13	1.10	0.96	-13.53%	-17.01%	-15.45%	-12.86%
Total Internet Subscribers	836.86	850.95	865.90	881.25	895.83	7.05%	5.27%	3.46%	1.65%
2) No. of Internet Subs per 100 Population	60.73	61.62	62.56	63.53	64.43	6.09%	4.57%	3.00%	1.43%
C. Usage and Revenue for Wireless Services									
Traffic (MOU) (minutes of uses/subscriber/month)	914	894	919	946	960	5.05%	7.34%	4.47%	1.45%
ARPU (Rs./sub/month)	134	137.31	141.14	142.32	145.64	9.05%	6.07%	3.19%	2.33%
D. Telecom Financial Data									
	QE Jun 2022	QE Sep 2022	QE Dec 2022	QE Mar 2023	QE Jun 2023	%age change over Jun-2022 (12 months)	%age change over Sep-2022 (9 months)	%age change over Dec-2022 (6 months)	%age change over Mar-2023 (3 months)
1. Telecom Sector									
i) Gross Revenue (Rs.in Crores)	76408	83767	88166	85356	80899	5.88%	-3.42%	-8.24%	-5.22%
ii) Adjusted Gross Revenue (Rs. in Crores)	60530	61981	62904	64494	65624	8.42%	5.88%	4.32%	1.75%
2. Access Services									
Adjusted Gross Revenue (Rs. in Crores)	48999	50327	51023	51631	52838	7.83%	4.99%	3.56%	2.34%

Introduction

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending 30th June, 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@tra.gov.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 1,172.34 million at the end of Mar-23 to 1,173.89 million at the end of Jun-23, registering a rate of growth 0.13% over the previous quarter. This reflects year-on-year (Y-O-Y) rate of growth 0.08% over the same quarter of last year. The overall Tele-density in India decreased from 84.51% as on 31st March, 2023 to 84.43% as on 30th June, 2023 with quarterly rate of decline 0.09%.

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

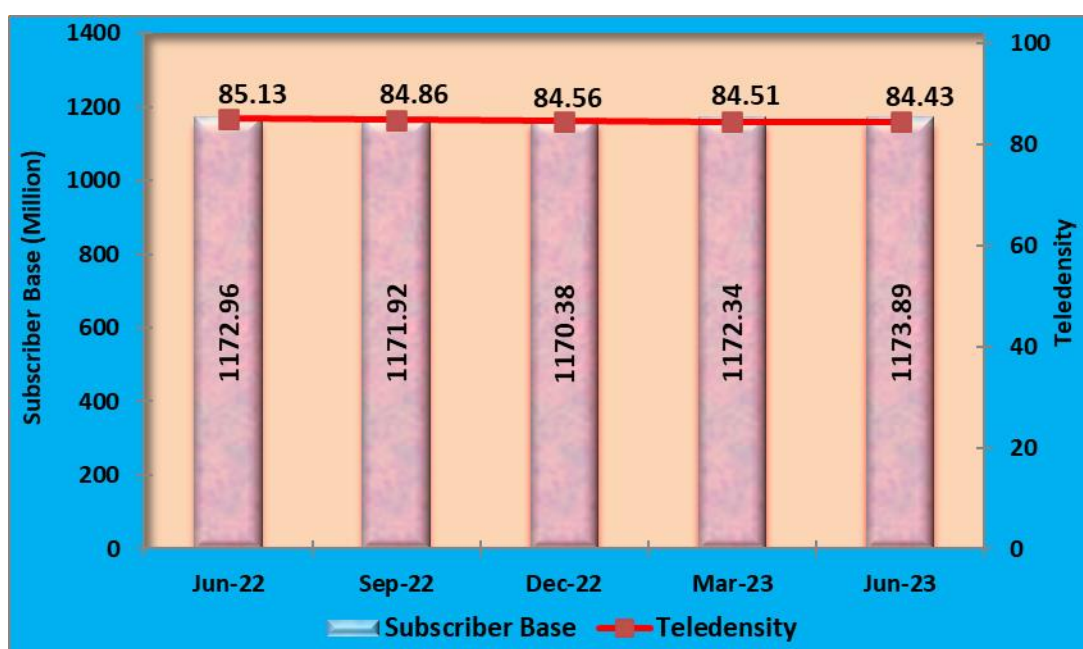
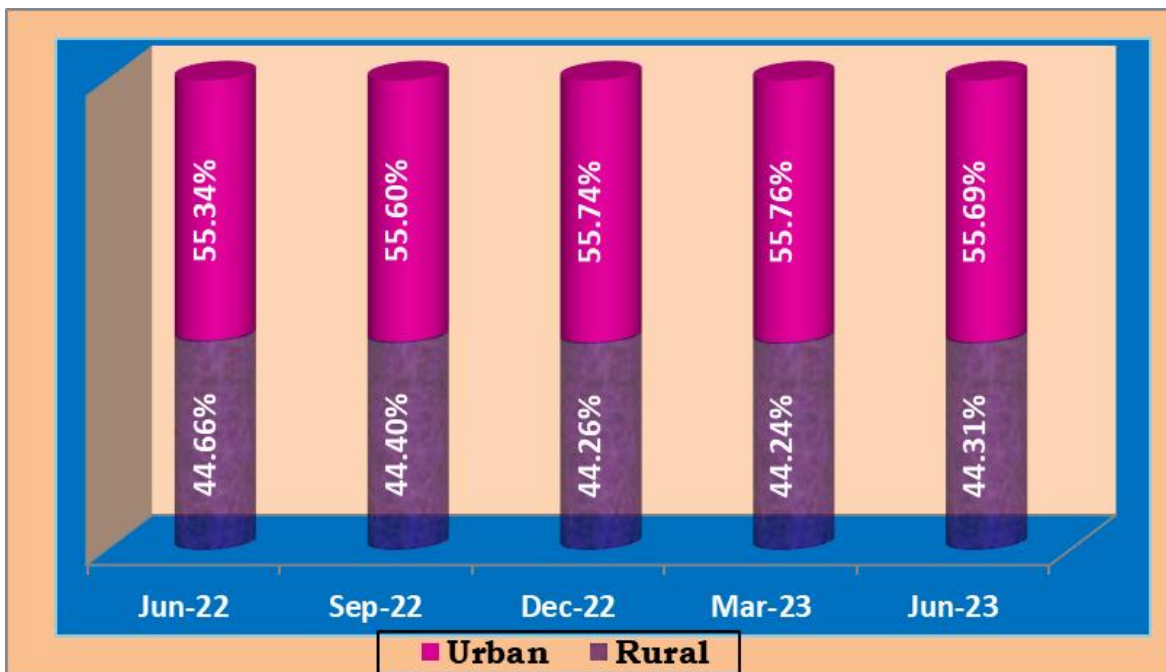


Table 1.1: Subscriber Base & Tele-density - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Jun-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
Jun-23	520.19	653.70	57.83	133.19

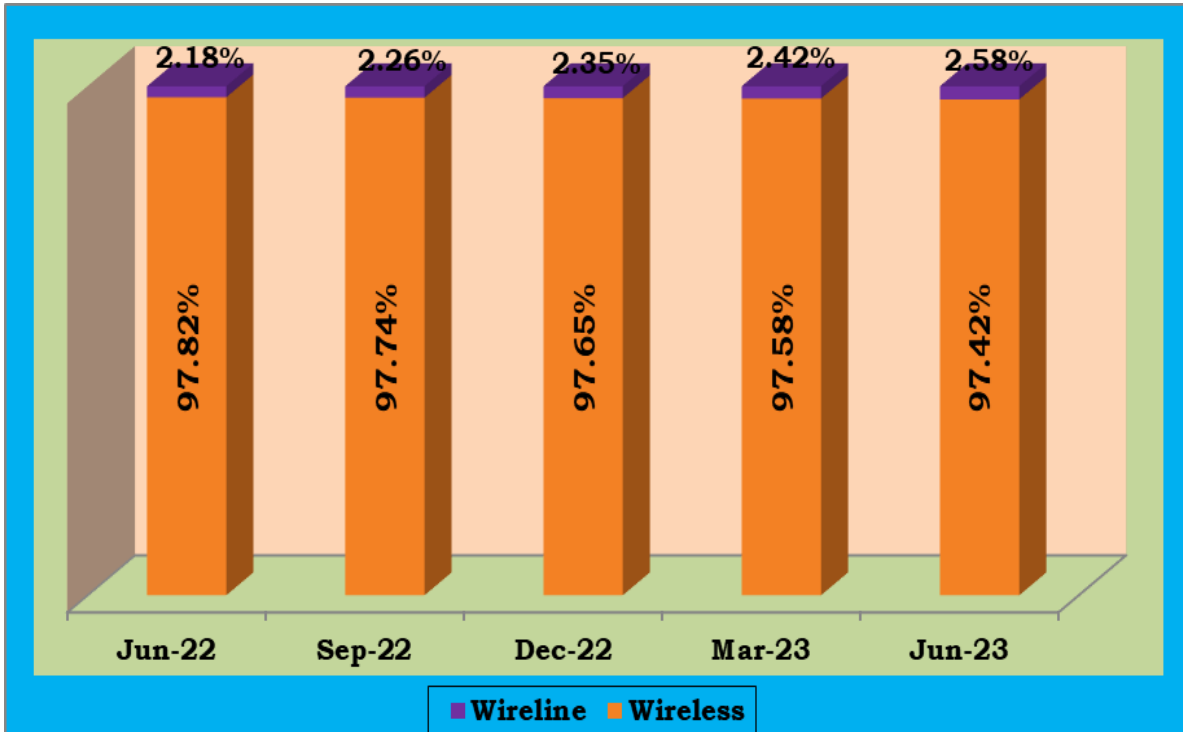
- 1.2 Telephone subscription in Urban areas decreased from 653.71 million at the end of Mar-23 to 653.70 million at the end of Jun-23 and Urban Tele-density also decreased from 133.81% to 133.19% at the end of the quarter.
- 1.3 Rural telephone subscription increased from 518.63 million at the end of Mar-23 to 520.19 million at the end of Jun-23 and Rural Tele-density also increased from 57.71% to 57.83% at the end of the quarter.
- 1.4 The Y-O-Y rates of growth in Urban and Rural telephone subscriptions from Jun-22 to Jun-23 are -0.71% and -0.70% respectively. The Y-O-Y rates of growth in Urban and Rural Tele-density from Jun-22 to Jun-23 are -1.14% and -1.08% respectively.

Chart 1.2: Market Share - Rural & Urban Subscribers



- 1.5 Share of subscriptions of rural areas in the total telephone subscriptions increased from 44.24% at the end of Mar-23 to 44.31% at the end of Jun-23.

Chart 1.3: Composition of Access subscription - Wireline & Wireless



1.6 Share of wireline subscription in total telephone subscription increased from 2.42% at the end of Mar-23 to 2.58% at the end of Jun-23.

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

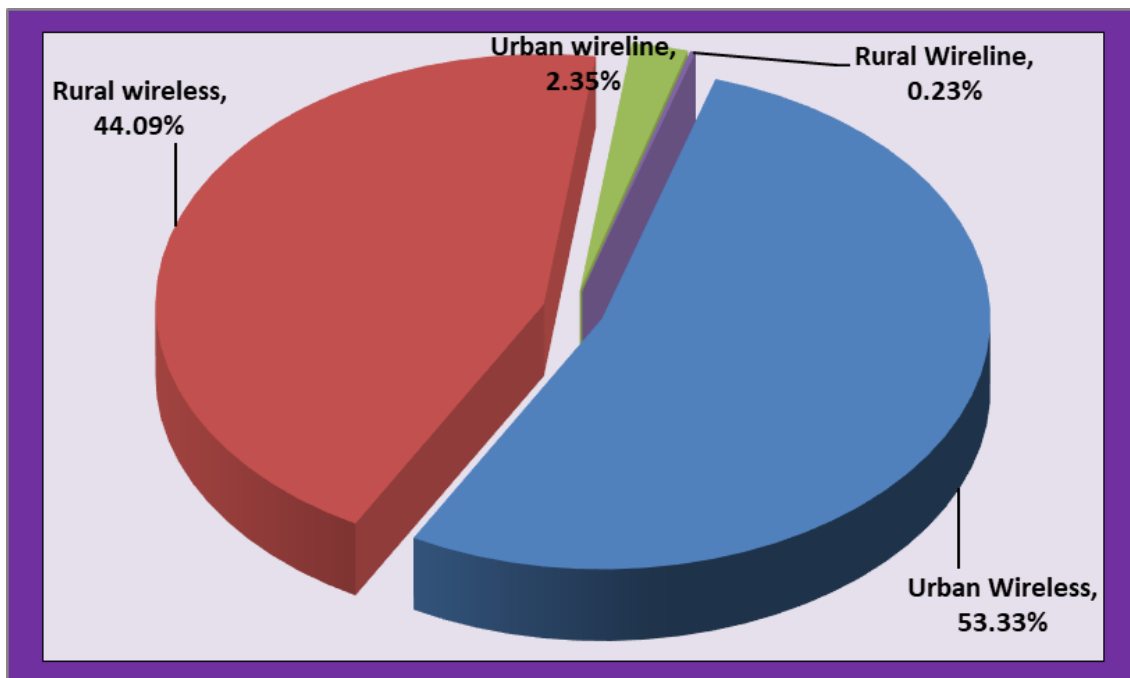


Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base

Service Area	Subscribers (million)			
	Mar-23	Jun-23	Net Additions	Rate of Growth
Andhra Pradesh	84.91	85.59	0.68	0.81%
Assam	25.28	25.49	0.22	0.86%
Bihar	91.92	93.20	1.28	1.39%
Delhi	58.54	58.63	0.08	0.14%
Gujarat	67.44	67.51	0.06	0.09%
Haryana	27.10	26.98	-0.12	-0.45%
Himachal Pradesh	8.94	8.94	0.002	0.03%
Jammu & Kashmir	12.37	12.59	0.22	1.75%
Karnataka	69.02	68.93	-0.09	-0.14%
Kerala	43.79	43.68	-0.11	-0.26%
Madhya Pradesh	77.99	78.56	0.57	0.73%
Maharashtra	92.96	93.51	0.54	0.59%
Mumbai	37.59	37.26	-0.33	-0.88%
North East	12.56	12.52	-0.04	-0.34%
Odisha	33.55	33.83	0.27	0.82%
Punjab	36.88	36.56	-0.32	-0.87%
Rajasthan	64.43	64.65	0.22	0.34%
Tamil Nadu	81.25	79.48	-1.76	-2.17%
Uttar Pradesh(E)	100.19	100.97	0.78	0.78%
Uttar Pradesh(W)	63.49	63.18	-0.31	-0.48%
Kolkata	24.74	24.88	0.13	0.54%
West Bengal	57.39	56.97	-0.42	-0.73%
All India	1,172.34	1,173.89	1.56	0.13%

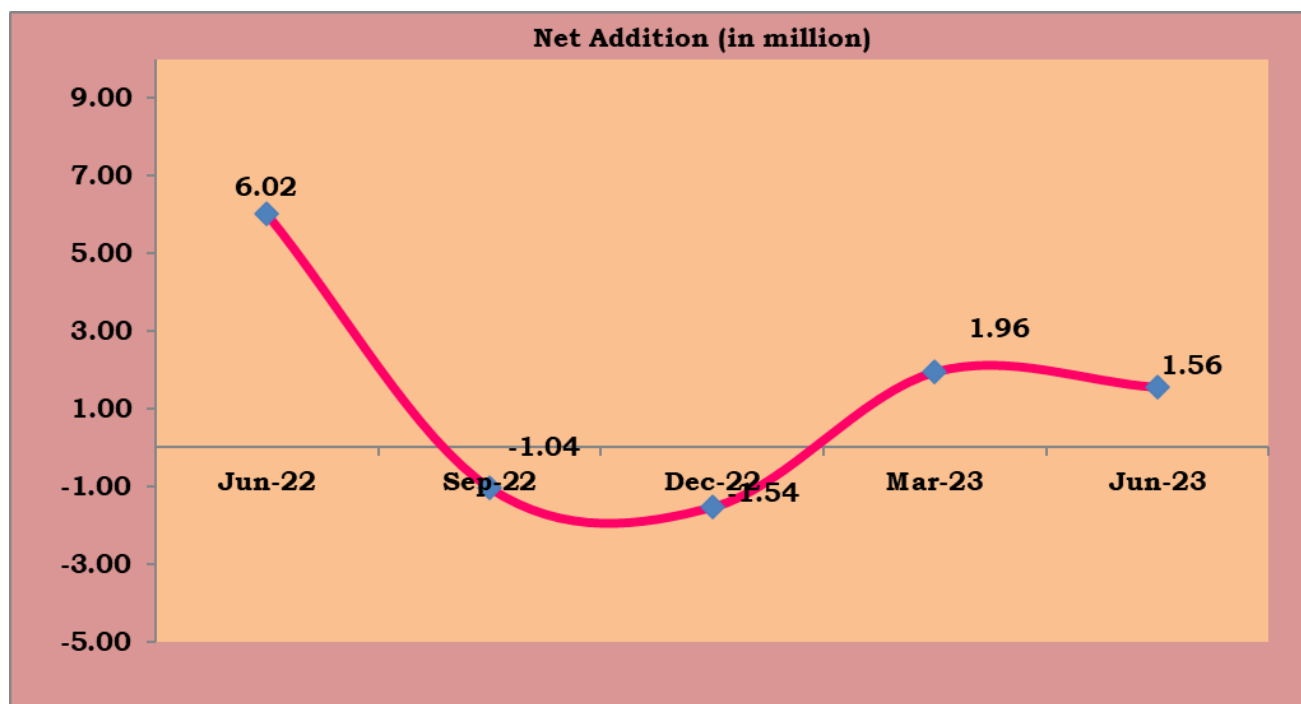
1.7 All service areas, except Haryana, Karnataka, Kerala, Mumbai, North East, Punjab, Tamil Nadu, Uttar Pradesh(W) and West Bengal showed growth in their subscriber base during the quarter ending Jun-23. Jammu & Kashmir service area showed maximum growth of 1.75% during the quarter.

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

Service Area	Number of Subscribers (in million)			
	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	85.59	41.39	44.20	48.36%
Assam	25.49	16.06	9.44	62.99%
Bihar	93.20	61.68	31.51	66.19%
Delhi	58.63	1.73	56.90	2.95%
Gujarat	67.51	25.88	41.63	38.34%
Haryana	26.98	12.00	14.98	44.48%
Himachal Pradesh	8.94	5.74	3.20	64.19%
Jammu & Kashmir	12.59	6.04	6.55	47.98%
Karnataka	68.93	25.18	43.75	36.53%
Kerala	43.68	19.49	24.19	44.63%
Madhya Pradesh	78.56	33.69	44.87	42.88%
Maharashtra	93.51	41.31	52.20	44.18%
Mumbai	37.26	3.53	33.73	9.46%
North East	12.52	6.44	6.08	51.43%
Odisha	33.83	22.12	11.71	65.39%
Punjab	36.56	12.12	24.44	33.15%
Rajasthan	64.65	34.11	30.54	52.76%
Tamil Nadu	79.48	23.35	56.14	29.37%
U.P.(E)	100.97	62.19	38.78	61.59%
U.P.(W)	63.18	29.86	33.32	47.26%
Kolkata	24.88	1.64	23.24	6.57%
West Bengal	56.97	34.66	22.31	60.84%
All India	1,173.89	520.19	653.70	44.31%

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 66.19% 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 1.56 million during QE Jun-23 as compared to the net increase of 1.96 million during QE Mar-23.

Table 1.4 : Service Area wise Tele-density

Service Area/ States	As on 31 st Mar, 2023			As on 30 th June, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Andhra Pradesh	76.31	116.59	92.93	77.25	116.68	93.58
Assam	52.74	168.25	70.72	53.11	168.83	71.16
Bihar	43.30	119.87	55.23	43.77	120.87	55.81
Delhi	-	-	273.67	-	-	272.81
Gujarat	70.56	115.19	92.58	70.08	115.12	92.37
Haryana	68.90	118.04	89.61	68.56	116.75	88.94
Himachal Pradesh	86.31	410.01	119.69	85.59	414.90	119.57
J&K	61.71	150.78	88.94	62.49	153.36	90.33

Service Area/ States	As on 31 st Mar, 2023			As on 30 th June, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Karnataka	68.06	144.22	101.91	66.96	144.71	101.61
Kerala	-	-	122.13	-	-	121.69
Madhya Pradesh	41.76	129.30	66.73	40.23	134.03	67.02
Maharashtra (incl. Mumbai)*	65.53	140.05	101.96	68.47	136.81	101.93
North East	63.06	110.97	79.71	62.62	110.29	79.26
Orissa	60.96	139.14	75.74	61.56	139.39	76.30
Punjab	68.54	174.62	115.31	67.79	172.67	114.13
Rajasthan	57.18	140.79	79.45	57.19	140.88	79.51
Tamil Nadu	64.71	136.39	103.46	64.83	131.84	101.13
Uttar Pradesh (incl. UPE & UPW)*	49.27	117.79	66.12	49.22	117.92	66.15
West Bengal (incl. Kolkata)*	57.68	123.39	81.95	57.46	122.54	81.57
All India	57.71	133.81	84.51	57.83	133.19	84.43

* 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 Himachal Pradesh service area has the highest Rural Tele-density of 85.59 followed by Andhra Pradesh service area of 77.25. Madhya Pradesh service area has the lowest Rural Tele-density of 40.23 followed by Bihar service area with rural tele-density of 43.77 in QE Jun-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	44.46	24.67	19.79
2	Arunachal Pradesh	1.26	0.83	0.43
3	Assam	25.49	16.06	9.44
4	Bihar	68.95	48.22	20.73
5	Chhattisgarh	20.29	9.84	10.44
6	Goa	2.54	0.88	1.66
7	Gujarat	66.60	25.55	41.05
8	Haryana	33.42	12.05	21.37
9	Himachal Pradesh	8.94	5.74	3.20
10	Jharkhand	24.25	13.46	10.78
11	Karnataka	68.93	25.18	43.75
12	Kerala	43.61	19.48	24.13
13	Madhya Pradesh	58.27	25.68	32.59
14	Maharashtra Incl. Mumbai	128.23	42.12	86.11
15	Manipur	2.45	0.99	1.46
16	Meghalaya	2.57	1.59	0.98
17	Mizoram	1.39	0.53	0.87
18	Nagaland	1.67	0.85	0.82
19	Odisha	33.83	22.12	11.71
20	Punjab	34.47	12.07	22.40
21	Rajasthan	64.65	34.11	30.54
22	Sikkim	0.86	0.52	0.34
23	Tamil Nadu	78.24	22.98	55.26
24	Telangana	41.14	16.72	24.42
25	Tripura	3.18	1.65	1.53
26	Uttar Pradesh (UPE + UPW)	160.31	85.82	74.49
27	Uttarakhand	12.68	6.23	6.45
28	West Bengal Incl. Kolkata	80.46	35.56	44.90
Union Territories				
1	Andaman & Nicobar Islands	0.53	0.22	0.31
2	Chandigarh	2.08	0.05	2.03
3	Dadra and Nagar Haveli and Daman and Diu	0.91	0.33	0.58
4	Delhi	43.35	1.67	41.68
5	Jammu & Kashmir	12.03	5.73	6.30
6	Ladakh	0.56	0.31	0.25
7	Lakshdweep	0.07	0.02	0.05
8	Puduchery	1.25	0.37	0.88
Total		1173.89	520.19	653.70

Table 1.6: State/UT wise total Tele-density

Sl.No.	State/UT	Total Tele-density (%)		
		Total	Rural	Urban
1	Andhra Pradesh	83.54	122.63	226.48
2	Arunachal Pradesh	80.13	71.12	106.43
3	Assam	71.16	53.21	168.83
4	Bihar	54.13	43.32	132.26
5	Chhattisgarh	66.97	44.73	126.63
6	Goa	160.70	-	-
7	Gujarat	92.76	69.68	116.93
8	Haryana	110.18	68.88	166.58
9	Himachal Pradesh	119.57	85.69	414.90
10	Jharkhand	61.18	46.17	103.71
11	Karnataka	101.61	66.92	144.71
12	Kerala	121.73	-	-
13	Madhya Pradesh	67.04	41.74	129.15
14	Maharashtra Incl. Mumbai	101.20	64.74	139.77
15	Manipur	75.86	45.62	138.76
16	Meghalaya	76.59	59.84	141.44
17	Mizoram	112.30	94.35	127.04
18	Nagaland	74.44	70.46	78.69
19	Odisha	76.30	61.56	139.39
20	Punjab	111.94	67.52	173.42
21	Rajasthan	79.51	57.32	140.88
22	Sikkim	124.21	-	-
23	Tamil Nadu (incl. Chennai)	101.69	64.58	133.43
24	Telangana	107.57	83.92	132.95
25	Tripura	76.45	65.53	92.88
26	Uttar Pradesh (UPE +UPW)	67.79	47.90	130.83
27	Uttarakhand	108.56	83.50	153.13
28	West Bengal Incl. Kolkata	81.07	56.78	122.51
Union Territories				
1	Andaman & Nicobar Islands	131.88	96.80	175.85
2	Chandigarh	168.67	-	-
3	Dadra and Nagar Haveli and Daman and Diu	70.39	-	-
4	Delhi	201.72	-	-
5	Jammu & Kashmir	88.20	60.64	150.75
6	Ladakh	186.54	-	-
7	Lakshdweep	105.05	-	-
8	Puduchery	75.21	74.98	75.44
Total		84.43	57.83	133.19

Table 1.7 : Service Provider wise Growth in Subscriber base

Service Provider	Subscriber base (millions)			Rate of Growth (%)	Market Share in QE Mar-23 (%)	Market Share in QE Jun-23 (%)
	Mar-23	Jun-23	Net Additions			
Reliance Jio	439.35	448.53	9.19	2.09%	37.48%	38.21%
Bharti Airtel	378.06	381.24	3.18	0.84%	32.25%	32.48%
Vodafone Idea Ltd	237.45	230.34	-7.12	-3.00%	20.25%	19.62%
BSNL	110.79	106.10	-4.69	-4.24%	9.45%	9.04%
MTNL	4.66	4.27	-0.39	-8.44%	0.40%	0.36%
Tata Teleservices	1.54	2.25	0.71	45.93%	0.13%	0.19%
Quadrant	0.34	0.36	0.020	5.93%	0.03%	0.03%
Reliance Com.	0.15	0.14	-0.01	-3.52%	0.01%	0.01%
VMIPL	-	0.01	0.01	-	-	0.00%
APSFL	-	0.66	0.66	-	-	0.06%
Total	1,172.34	1,173.89	1.56	0.13%	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 38.21% in the access segment in terms of number of subscribers with 448.53 million subscribers at the end of Jun-23 followed by M/s Bharti Airtel Ltd with 381.24 million subscribers.

1.12 In term of net addition, Reliance Jio became the biggest gainer with net addition of 9.19 million telephone subscribers during the QE Jun-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	448.53	192.92	43.01%	37.09%
Bharti Airtel	381.24	181.38	47.58%	34.87%
Vodafone Idea Ltd	230.34	112.01	48.63%	21.53%
BSNL	106.10	33.32	31.41%	6.41%
MTNL	4.27	0.04	0.83%	0.01%
Tata Teleservices	2.25	0.01	0.45%	0.002%
Quadrant	0.36	0.02	5.23%	0.004%
Reliance Com.	0.14	0.0004	0.25%	0.0001%
VMIPL	0.01	-	0.00%	0.00%
APSFL	0.66	0.49	74.30%	0.09%
Total	1,173.89	520.19	44.31%	100

1.13 M/s APSFL is the telecom service provider with highest proportion of rural telephone subscribers of 74.30% followed by Vodafone Idea Ltd of 48.63% to their total telephone subscribers at the end of Jun-23.

Section B : Wireless Service

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

[As on 30th June, 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 30th June, 2023

1	AdPay Mobile Payment India Pvt. Ltd	Tamil Nadu including Chennai
2	Sur Telecom Private Limited	Tamil Nadu including Chennai

Source : As reported by telecom service providers

1.14 Number of wireless subscriber base has decreased from 1,143.93 million at the end of Mar-23 to 1,143.58 million at the end of Jun-23, thereby showing a quarterly rate of decline 0.03%. During the quarter, net decrease of 0.35 million wireless subscribers has been recorded.

1.15 The wireless subscriber base recorded a Y-O-Y rate of decline -0.33% in QE Jun-23 over the same quarter in the previous year.

1.16 Wireless Teledensity in the country decreased from 82.46% at the end of Mar-23 to 82.25% at the end of Jun-23.

Chart 1.6: Wireless Subscriber Base and Teledensity

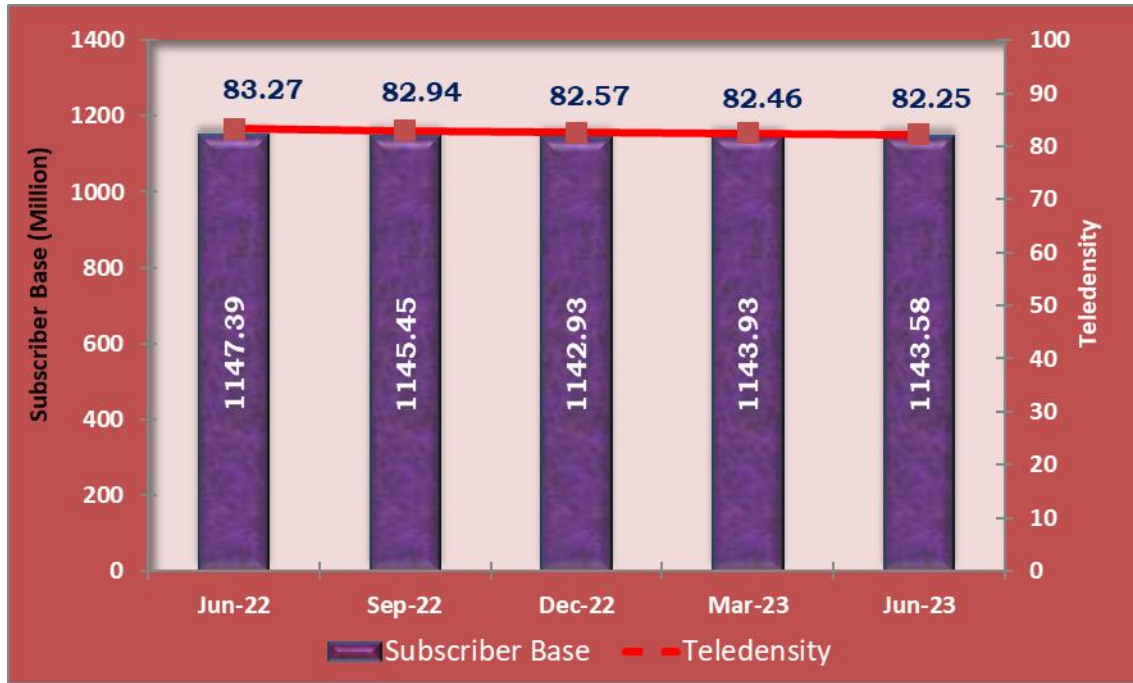


Table 1.10: Wireless Subscriber Base & Tele-density - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
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
Jun-23	517.51	626.07	57.53	127.56

1.17 Number of Rural Wireless subscribers increased from 516.38 million at the end of Mar-23 to 517.51 million at the end of Jun-23 however number of urban wireless subscribers decreased from 627.54 million to 626.07 million during

the quarter. Quarterly rate of growth of Rural and Urban wireless subscriptions are 0.22% and -0.24% respectively during QE Jun-23.

- 1.18 The share of rural wireless subscription increased from 45.14% million at the end of Mar-23 to 45.25% million at the end of Jun-23.

Chart 1.7: Wireless Market Share - Rural & Urban

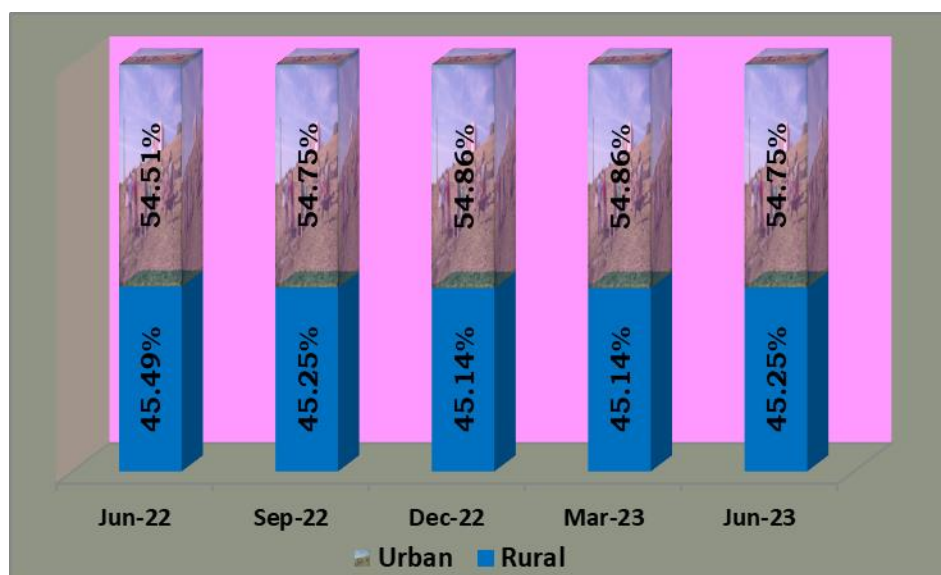


Table 1.11: Growth in Wireless Subscriber base

Service Provider	Subscriber Base (millions)			Rate of Growth	Market Share Mar-23	Market Share Jun-23
	Mar-23	Jun-23	Net Addition			
Reliance Jio	430.23	438.58	8.35	1.94%	37.61%	38.35%
Bharti Airtel	370.91	373.73	2.81	0.76%	32.42%	32.68%
Vodafone Idea Ltd	236.75	229.66	-7.09	-3.00%	20.70%	20.08%
BSNL	103.68	99.62	-4.06	-3.92%	9.06%	8.71%
MTNL	2.35	1.99	-0.36	-15.24%	0.21%	0.17%
Reliance Com.	0.003	0.003	0.00	-6.59%	0.0002%	0.0002%
Total	1,143.93	1,143.58	-0.35	-0.03%	100	100

- 1.19 M/s RJIL Limited is the market leader with a wireless subscriber base of 438.58 million which translates into market share of 38.35% and M/s Bharti Airtel Ltd. is at 2nd position with a total subscriber base of 373.73 million and market share of 32.68%.
- 1.20 In terms of net additions during QE Jun-23, except M/s Reliance Jio and M/s Bharti Airtel Limited, all other service providers have showed negative growth in their wireless subscribers.

Table 1.12: Service Area wise Wireless Subscriber base

Service Area	Subscriber base (in million)			
	Mar-23	Jun-23	Net Additions	Rate of change (%)
Andhra Pradesh	82.45	82.34	-0.11	-0.13%
Assam	24.99	25.20	0.20	0.81%
Bihar	91.22	92.46	1.24	1.35%
Delhi	54.48	54.41	-0.07	-0.13%
Gujarat	66.23	66.16	-0.08	-0.12%
Haryana	26.64	26.48	-0.16	-0.59%
Himachal Pradesh	8.80	8.79	-0.01	-0.06%
Jammu & Kashmir	12.02	12.22	0.20	1.63%
Karnataka	65.91	65.85	-0.06	-0.08%
Kerala	42.41	42.29	-0.12	-0.28%
Madhya Pradesh	76.67	77.13	0.46	0.60%
Maharashtra	91.51	92.00	0.50	0.55%
Mumbai	34.30	33.79	-0.51	-1.48%
North East	12.35	12.30	-0.05	-0.43%
Orissa	33.16	33.41	0.25	0.76%
Punjab	35.66	35.25	-0.41	-1.15%
Rajasthan	63.59	63.76	0.17	0.27%
Tamil Nadu	78.62	76.75	-1.88	-2.39%
U.P.(E)	99.44	100.17	0.72	0.73%
U.P.(W)	62.72	62.35	-0.37	-0.59%
Kolkata	24.08	23.94	-0.14	-0.60%
West Bengal	56.66	56.53	-0.14	-0.24%
All India	1,143.93	1,143.58	-0.35	-0.03%

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	82.34	40.71	41.64	49.44%
Assam	25.20	16.03	9.16	63.63%
Bihar	92.46	61.61	30.84	66.64%
Delhi	54.41	1.72	52.69	3.17%
Gujarat	66.16	25.81	40.35	39.01%
Haryana	26.48	11.90	14.58	44.95%
Himachal Pradesh	8.79	5.69	3.10	64.75%
Jammu & Kashmir	12.22	6.02	6.20	49.30%
Karnataka	65.85	25.09	40.76	38.11%
Kerala	42.29	18.84	23.45	44.55%
Madhya Pradesh	77.13	33.63	43.50	43.60%
Maharashtra	92.00	41.19	50.82	44.77%
Mumbai	33.79	3.51	30.28	10.40%
North East	12.30	6.43	5.87	52.25%
Orissa	33.41	22.08	11.33	66.08%
Punjab	35.25	11.94	23.31	33.87%
Rajasthan	63.76	34.05	29.71	53.40%
T.N. (incl. Chennai)	76.75	23.08	53.67	30.07%
U.P.(E)	100.17	62.16	38.01	62.06%
U.P.(W)	62.35	29.82	32.54	47.82%
Kolkata	23.94	1.63	22.31	6.83%
West Bengal	56.53	34.57	21.95	61.16%
All India	1,143.58	517.51	626.07	45.25%

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 March, 2023			As on 30 th June, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density(%)
A.P.	75.92	110.63	90.24	75.98	109.91	90.03
Assam	52.66	163.59	69.93	53.03	163.98	70.34
Bihar	43.26	117.41	54.81	43.72	118.31	55.36
Delhi	-	-	254.68	-	-	253.19
Gujarat	70.36	112.02	90.92	69.88	111.59	90.52
Haryana	68.36	115.20	88.10	68.01	113.66	87.32
H.P.	85.62	397.33	117.77	84.88	401.46	117.55
J&K	61.54	142.94	86.42	62.32	145.09	87.68
Karnataka	67.73	134.28	97.31	66.73	134.81	97.08
Kerala	-	-	118.28	-	-	117.82
M.P.	41.69	125.51	65.60	40.16	129.92	65.80
Maharashtra (incl. Mumbai)*	65.30	132.71	98.25	68.27	129.11	98.06
North East	62.91	107.34	78.35	62.47	106.50	77.84
Orissa	60.85	134.93	74.85	61.44	134.93	75.36
Punjab	67.63	167.17	111.52	66.79	164.73	110.06
Rajasthan	57.09	137.17	78.41	57.09	137.05	78.41
Tamil Nadu	63.96	130.85	100.12	64.07	126.05	97.65
Uttar Pradesh (incl. UPE&UPW)*	49.23	115.42	65.51	49.18	115.38	65.49
West Bengal (incl. Kolkata)*	57.50	119.97	80.57	57.31	119.08	80.19
All India	57.46	128.45	82.46	57.53	127.56	82.25

* 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	42.46	24.04	18.42
2	Arunachal Pradesh	1.24	0.82	0.41
3	Assam	25.20	16.03	9.16
4	Bihar	68.52	48.17	20.35
5	Chhattisgarh	19.97	9.83	10.14
6	Goa	2.47	0.86	1.61
7	Gujarat	65.25	25.48	39.78
8	Haryana	32.77	11.95	20.82
9	Himachal Pradesh	8.79	5.69	3.10
10	Jharkhand	23.93	13.44	10.49
11	Karnataka	65.85	25.09	40.76
12	Kerala	42.22	18.82	23.40
13	Madhya Pradesh	57.16	25.64	31.52
14	Maharashtra	123.32	42.00	81.32
15	Manipur	2.41	0.99	1.41
16	Meghalaya	2.52	1.59	0.93
17	Mizoram	1.36	0.53	0.83
18	Nagaland	1.64	0.85	0.79
19	Odisha	33.41	22.08	11.33
20	Punjab	33.40	11.90	21.50
21	Rajasthan	63.76	34.05	29.71
22	Sikkim	0.85	0.52	0.33
23	Tamil Nadu	75.56	22.72	52.84
24	Telangana	39.88	16.66	23.22
25	Tripura	3.14	1.65	1.49
26	Uttar Pradesh	158.74	85.77	72.97
27	Uttarakhand	12.38	6.21	6.17
28	West Bengal	79.12	35.49	43.64
Union Territories				
1	Andaman & Nicobar Islands	0.49	0.20	0.29
2	Chandigarh	1.85	0.04	1.81
3	Dadra and Nagar Haveli and Daman and Diu	0.90	0.33	0.58
4	Delhi	39.53	1.67	37.86
5	Jammu & Kashmir	11.66	5.72	5.94
6	Ladakh	0.56	0.31	0.25
7	Lakshdweep	0.07	0.02	0.05
8	Puduchery	1.18	0.36	0.83
Total		1143.58	517.51	626.07

Table 1.16 : State/UT wise Wireless Tele-density

Sl.No.	State/UT	Wireless Tele-density (%)		
		Total	Rural	Urban
1	Andhra Pradesh	79.79	71.24	94.36
2	Arunachal Pradesh	79.00	70.81	102.95
3	Assam	70.34	53.13	163.98
4	Bihar	53.80	43.27	129.85
5	Chhattisgarh	65.93	44.66	122.96
6	Goa	156.81	-	-
7	Gujarat	90.89	69.48	113.31
8	Haryana	108.03	68.31	162.27
9	Himachal Pradesh	117.55	84.98	401.46
10	Jharkhand	60.39	46.10	100.91
11	Karnataka	97.08	66.69	134.81
12	Kerala	117.86	-	-
13	Madhya Pradesh	65.75	41.67	124.90
14	Maharashtra	97.33	64.55	132.00
15	Manipur	74.41	45.48	134.59
16	Meghalaya	74.99	59.75	134.06
17	Mizoram	109.48	94.23	122.02
18	Nagaland	73.11	70.40	75.87
19	Odisha	75.36	61.45	134.93
20	Punjab	108.46	66.55	166.47
21	Rajasthan	78.41	57.22	137.05
22	Sikkim	123.42	-	-
23	Tamil Nadu	98.21	63.85	127.59
24	Telangana	104.29	83.63	126.43
25	Tripura	75.45	65.33	90.66
26	Uttar Pradesh	67.12	47.87	128.16
27	Uttarakhand	106.00	83.19	146.57
28	West Bengal	79.72	56.66	119.07
Union Territories				
1	Andaman & Nicobar Islands	121.91	87.68	164.83
2	Chandigarh	150.04	-	-
3	Dadra and Nagar Haveli and Daman and Diu	69.87	-	-
4	Delhi	183.96	-	-
5	Jammu & Kashmir	85.51	60.47	142.35
6	Ladakh	185.56	-	-
7	Lakshdweep	99.36	-	-
8	Puduchery	71.41	72.45	71.09
All India Tele-density		82.25	57.53	127.56

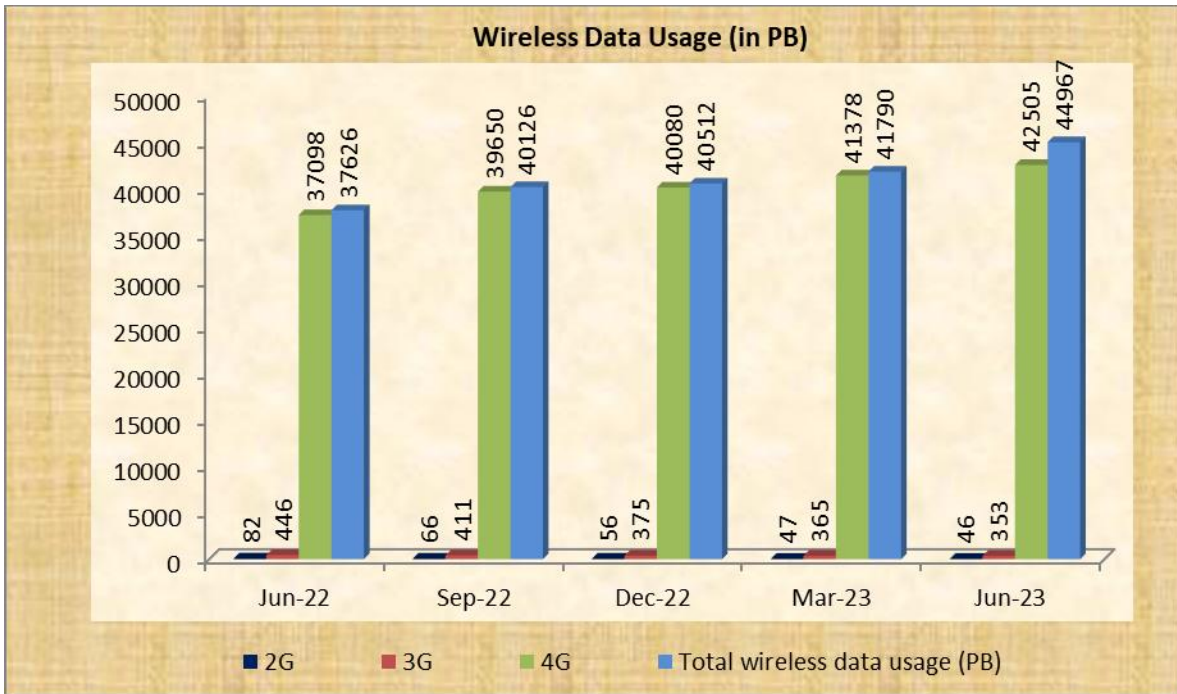
**Table 1.17 : Rural Wireless Subscriber base and Market Share
(as on 30.06.2023)**

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	438.58	192.74	43.95%	37.24%
Bharti Airtel	373.73	181.38	48.53%	35.05%
Vodafone Idea Ltd	229.66	112.01	48.77%	21.64%
BSNL	99.62	31.34	31.46%	6.06%
MTNL	1.99	0.04	1.77%	0.01%
Reliance Com.	0.003	0.00	0.00%	0.00%
Total	1,143.58	517.51	45.25%	100%

Wireless Data Usage

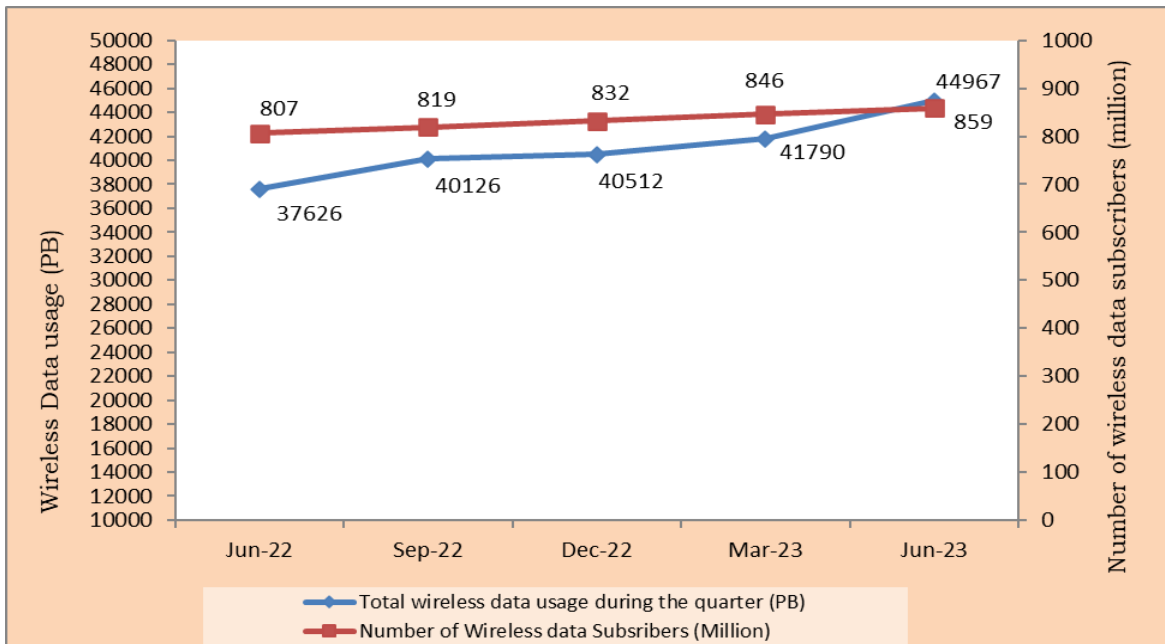
- 1.22 Volume of total wireless data usage increased from 41,790 PB during Q.E. Mar-23 to 44,967 PB during Q.E. Jun-23 with quarterly rate of growth 7.60%. Out of total data wireless usage, 2G data usage was 46 PB, 3G data usage was 353 PB, 4G data usage was 42505 and 5G data usage was 2,063 PB during the quarter.
- 1.23 Total number of wireless data subscribers increased from 846.21 million at the end of Mar-23 to 859.33 million at the end of Jun-23.
- 1.24 The contribution of 2G, 3G, 4G and 5G data usage in total volume of wireless data usage are about 0.10%, 0.78%, 94.53% and 4.59% respectively during the QE Jun-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 usase (in PB)



1.26 The following chart depicts the trend of number of wireless data subscribers and volume of wireless data usage in QE Jun-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 30th June, 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.
9.	V-CON Mobile & Infra Pvt. Ltd. (VMIPL)	Punjab
10.	Andhra Pradesh State Fibernet Pvt. Ltd. (APFPL)	Andhra Pradesh

1.27 Wireline subscribers base increased from 28.41 million at the end of Mar-23 to 30.31 million at the end of Jun-23 with quarterly rate of growth 6.70%. Overall Wireline Teledensity in the country increased from 2.05% at the end of Mar-23 to 2.18% at the end of Jun-23.

1.28 Urban wireline subscriber base increased by 5.63% from 26.16 million at the end of Mar-23 to 27.63 million at the end of Jun-23. Rural wireline subscription also increased by 19.24%, from 2.25 million to 2.68 million during the same period.

Chart 1.10: Wireline Subscriber Base and Tele-density

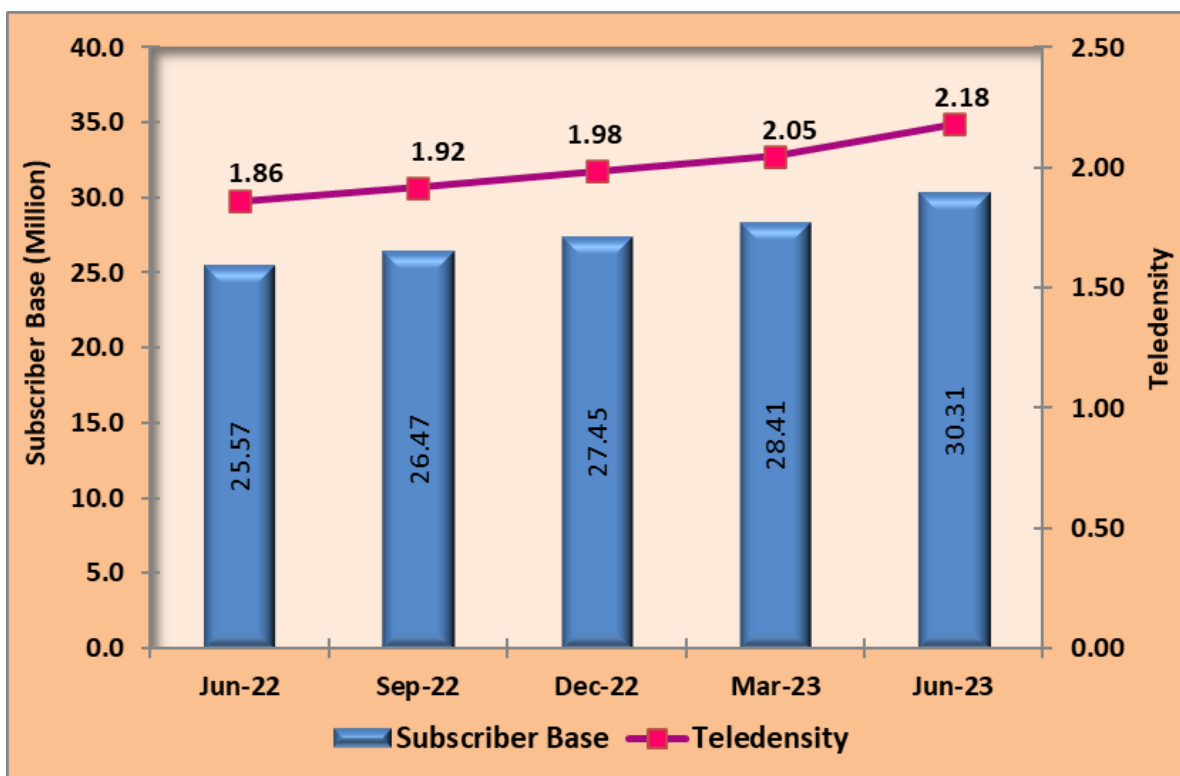


Table 1.19: Wireline Subscriber Base & Tele-density - Rural & Urban

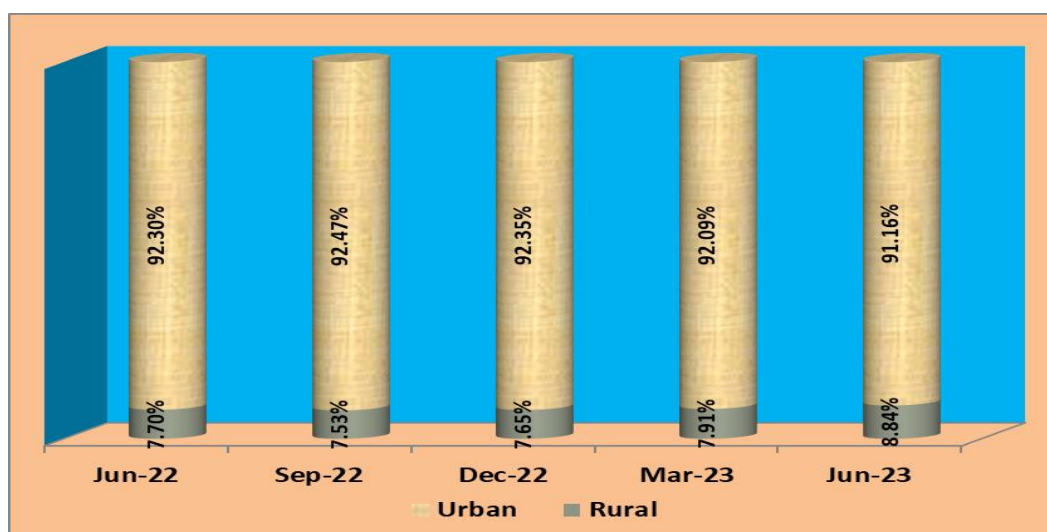
Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Jun-22	1.97	23.60	0.22	4.90
Sep-22	1.99	24.48	0.22	5.06
Dec-22	2.10	25.35	0.23	5.21
Mar-23	2.25	26.16	0.25	5.36
Jun-23	2.68	27.63	0.30	5.63

**Table 1.20 : Service Provider wise Wireline Subscriber base
(Rural - Urban) – As on 30.06.2023**

Service Provider	Subscriber Base (million)			Percentage of Rural subscribers	Share of Rural subscription
	Rural	Urban	Total		
BSNL	1.98	4.50	6.48	30.56%	73.84%
Bharti	0.00	7.51	7.51	--	0.00%
MTNL	0.00003	2.28	2.28	--	0.00%
Tata Tele.	0.01	2.24	2.25	0.45%	0.38%
Reliance Com.	0.0004	0.14	0.14	0.26%	0.01%
Quadrant	0.02	0.34	0.36	5.23%	0.70%
Vodafone Idea	0.00	0.68	0.68	--	0.00%
Reliance Jio	0.18	9.77	9.95	1.85%	6.87%
VMIPL	0.00	0.01	0.01	0.00%	0.00%
APSFL	0.49	0.17	0.66	74.30%	18.20%
Total	2.68	27.45	30.31	8.84%	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 7.91% in QE Mar-23 to 8.84% in QE Jun-23.

Table 1.21 : Service Provider wise growth in Wireline Subscriber base

Service Provider	Subscriber Base (million)			Rate of change (%)	Market share-Mar-23	Market share-Jun-23
	Mar-23	Jun-23	Net Addition			
Reliance Jio	9.12	9.95	0.84	9.17%	32.09%	32.83%
BSNL	7.11	6.48	-0.63	-8.86%	25.01%	21.36%
Bharti Airtel	7.15	7.51	0.36	5.09%	25.16%	24.78%
MTNL	2.31	2.28	-0.04	-1.53%	8.14%	7.51%
Vodafone Idea	0.70	0.68	-0.02	-3.18%	2.48%	2.25%
Tata Tele.	1.54	2.25	0.71	45.93%	5.42%	7.42%
Quadrant	0.34	0.36	0.02	5.93%	1.19%	1.18%
Reliance Com	0.15	0.14	-0.01	-3.46%	0.51%	0.46%
VM IPL	-	0.01	0.01	-	0.00%	0.04%
APSFL	-	0.66	0.66	-	0.00%	2.17%
Total	28.41	30.31	1.90	6.70	100	100

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

Service Area	Mar-23	Jun-23	Net Additions	Rate of Change (%)
Andhra Pradesh	2.46	3.25	0.79	32.25%
Assam	0.28	0.30	0.01	4.41%
Bihar	0.70	0.74	0.04	5.69%
Delhi	4.06	4.22	0.15	3.74%
Gujarat	1.21	1.35	0.14	11.55%
Haryana	0.46	0.49	0.04	7.74%
Himachal Pradesh	0.14	0.15	0.01	5.21%
Jammu & Kashmir	0.35	0.37	0.02	5.57%
Karnataka	3.11	3.08	-0.04	-1.24%

Service Area	Mar-23	Jun-23	Net Additions	Rate of Change (%)
Kerala	1.38	1.39	0.01	0.55%
Madhya Pradesh	1.32	1.44	0.11	8.68%
Maharashtra	1.46	1.50	0.05	3.16%
Mumbai	3.28	3.46	0.18	5.42%
North East	0.21	0.22	0.01	4.79%
Orissa	0.40	0.42	0.02	5.57%
Punjab	1.21	1.30	0.09	7.37%
Rajasthan	0.84	0.89	0.05	6.26%
Tamil Nadu	2.63	2.74	0.11	4.25%
U.P.(E)	0.75	0.80	0.05	6.96%
U.P.(W)	0.76	0.83	0.06	8.12%
Kolkata	0.66	0.93	0.28	42.26%
West Bengal	0.73	0.45	-0.28	-38.55%
All India	28.41	30.31	1.90	6.70

1.31 Kolkata service area showed maximum growth of 42.26% and West Bengal service area showed maximum decline of 38.55% in their wireline subscriber base during the quarter ending Jun-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	3.25	0.68	2.57	21.00%
Assam	0.30	0.02	0.27	8.37%
Bihar	0.74	0.07	0.67	9.34%
Delhi	4.22	0.00	4.21	0.08%
Gujarat	1.35	0.07	1.28	5.51%
Haryana	0.49	0.10	0.40	19.64%
Himachal Pradesh	0.15	0.05	0.10	31.32%
Jammu & Kashmir	0.37	0.02	0.35	4.38%

Service Area	Total Subscribers	Rural Subscribers	Urban Subscribers	% of Rural Subscribers
Karnataka	3.08	0.08	2.99	2.71%
Kerala	1.39	0.65	0.74	47.01%
Madhya Pradesh	1.44	0.06	1.37	4.23%
Maharashtra	1.50	0.12	1.38	8.16%
Mumbai	3.46	0.01	3.45	0.32%
North East	0.22	0.02	0.21	6.84%
Orissa	0.42	0.04	0.37	10.16%
Punjab	1.30	0.18	1.12	13.68%
Rajasthan	0.89	0.06	0.83	6.87%
Tamil Nadu	2.74	0.27	2.47	9.93%
U.P.(E)	0.80	0.03	0.78	3.45%
U.P.(W)	0.83	0.04	0.78	5.42%
Kolkata	0.93	0.00	0.93	0.09%
West Bengal	0.45	0.09	0.35	20.93%
All India	30.31	2.68	27.63	8.84%

1.32 Kerala service area has the maximum share 47.01% of rural wireline subscriber in its total wireline subscriber base at the end of Jun-23.

Table 1.24: Service Area wise Wireline Tele-density

Service Area	As on 31 st March, 2023			As on 30 th June, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Andhra Pradesh	0.39	5.97	2.69	1.27	6.77	3.55
Assam	0.08	4.66	0.79	0.08	4.85	0.83
Bihar	0.04	2.45	0.42	0.05	2.57	0.44
Delhi	-	-	18.99	-	-	19.61
Gujarat	0.20	3.17	1.66	0.20	3.54	1.85
Haryana	0.54	2.85	1.51	0.55	3.09	1.63
Himachal Pradesh	0.69	12.67	1.92	0.71	13.44	2.02
Jammu & Kashmir	0.17	7.84	2.51	0.17	8.26	2.65

Service Area	As on 31 st March, 2023			As on 30 th June, 2023		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Karnataka	0.33	9.94	4.60	0.22	9.90	4.53
Kerala	7.54	2.66	3.85	7.60	2.70	3.87
Madhya Pradesh	0.07	3.79	1.13	0.07	4.10	1.22
Maharashtra (incl. Mumbai)*	0.23	7.34	3.70	0.20	7.69	3.87
North East	0.15	3.64	1.36	0.15	3.80	1.42
Orissa	0.12	4.21	0.89	0.12	4.46	0.94
Punjab	0.91	7.45	3.79	1.00	7.94	4.07
Rajasthan	0.10	3.63	1.04	0.10	3.83	1.10
Tamil Nadu (incl. Chennai)	0.75	5.55	3.35	0.75	5.79	3.48
Uttar Pradesh (incl. UPE & UPW)*	0.04	2.37	0.61	0.04	2.55	0.66
West Bengal (incl. Kolkata)*	0.18	3.43	1.38	0.15	3.46	1.38
All India	0.25	5.36	2.05	0.30	5.63	2.18

* 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 Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

Table 1.25: State/UT wise Wireline Subscriber base

Sl. No.	States/UT	Wireline Subscribers (in million)		
		Total	Rural	Urban
1	Andhra Pradesh	1.99	0.62	1.37
2	Arunachal Pradesh	0.02	0.004	0.01
3	Assam	0.30	0.02	0.27
4	Bihar	0.43	0.05	0.38
5	Chhattisgarh	0.32	0.01	0.30
6	Goa	0.06	0.02	0.05
7	Gujarat	1.35	0.07	1.27
8	Haryana	0.65	0.10	0.55
9	Himachal Pradesh	0.15	0.05	0.10
10	Jharkhand	0.31	0.02	0.29
11	Karnataka	3.08	0.08	2.99
12	Kerala	1.38	0.65	0.73
13	Madhya Pradesh	1.12	0.05	1.07
14	Maharashtra Incl. Mumbai	4.90	0.12	4.79
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	0.03	0.001	0.03
19	Odisha	0.42	0.04	0.37
20	Punjab	1.07	0.17	0.90
21	Rajasthan	0.89	0.06	0.83
22	Sikkim	0.005	0.0005	0.00
23	Tamil Nadu	2.68	0.26	2.42
24	Telangana	1.25	0.06	1.20
25	Tripura	0.04	0.005	0.04
26	Uttar Pradesh (UPE+UPW)	1.57	0.05	1.52
27	Uttarakhand	0.30	0.02	0.28
28	West Bengal Incl. Kolkata	1.34	0.07	1.26
Union Territories				
1	Andaman & Nicobar Islands	0.04	0.02	0.02
2	Chandigarh	0.23	0.005	0.23
3	Dadra and Nagar Haveli and Daman and Diu	0.007	0.002	0.005
4	Delhi	3.82	0.0003	3.82
5	Jammu & Kashmir	0.37	0.02	0.35
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		30.31	2.68	27.63

Table 1.26: State/UT wise Wireline Tele-density

Sl.No.	State/UT	Wireline Tele-density		
		Total (%)	Rural (%)	Urban (%)
1	Andhra Pradesh	6.10	2.02	13.15
2	Arunachal Pradesh	1.12	0.31	3.48
3	Assam	0.83	0.08	4.85
4	Bihar	0.33	0.04	2.41
5	Chhattisgarh	1.04	0.06	3.67
6	Goa	3.88	4.06	3.81
7	Gujarat	1.87	0.20	3.63
8	Haryana	2.15	0.57	4.31
9	Himachal Pradesh	2.02	0.71	13.44
10	Jharkhand	0.79	0.07	2.81
11	Karnataka	4.53	0.22	9.90
12	Kerala	3.87	7.43	2.69
13	Madhya Pradesh	1.29	0.08	4.25
14	Maharashtra Incl. Mumbai	3.87	0.18	7.77
15	Manipur	1.45	0.14	4.18
16	Meghalaya	1.60	0.09	7.39
17	Mizoram	2.82	0.12	5.02
18	Nagaland	1.33	0.05	2.82
19	Odisha	0.94	0.12	4.46
20	Punjab	3.48	0.97	6.96
21	Rajasthan	1.10	0.10	3.83
22	Sikkim	0.79	0.15	1.43
23	Tamil Nadu	3.48	0.73	5.83
24	Telangana	3.28	0.29	6.52
25	Tripura	1.00	0.20	2.22
26	Uttar Pradesh (UPE + UPW)	0.66	0.03	2.67
27	Uttarakhand	2.56	0.30	6.55
28	West Bengal incl. Kolkata	1.35	0.12	3.44
Union Territories				
1	Andaman & Nicobar Islands	9.97	9.12	11.02
2	Chandigarh	18.63	-	-
3	Dadra and Nagar Haveli and Daman and Diu	0.52	0.89	0.44
4	Delhi	17.76	0.28	17.83
5	Jammu & Kashmir	2.68	0.16	8.40
6	Ladakh	0.98	0.40	2.27
7	Lakshdweep	5.69	-	-
8	Puduchery	3.80	2.53	4.35
Total		2.18	0.30	5.63

Public Call Offices (PCO)

1.33 Total number of PCOs in the country decreased from 42,135 at the end of Mar-23 to 36,259 at the end of Jun-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 rate of decline 13.95% and on Y-O-Y basis rate of decline 40.97% at the QE Jun-23.

Table 1.27: Rate of change & Market share of PCOs

Service Provider	Mar-23	Jun-23	Rate of change (%)	Market share (%) (Jun-23)
BSNL	32,301	27,879	-13.69%	76.89%
MTNL	9,492	8,058	-15.11%	22.22%
Quadrant	342	322	-5.85%	0.89%
Total	42,135	36,259	-13.95%	100%

Village Public Telephones (VPTs)

- 1.35 There are 6,40,930 inhabited villages in India as per census 2011. During the Q.E. Jun-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 Jun-23, as were at the end of Mar-23.
- 1.37 As per the information received in TRAI, at the end of Jun-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 Jun-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 1076 operators as compared to 1031 operators in last quarter, total number of internet subscribers increased from 881.25 million at the end of Mar-23 to 895.83 million at the end of Jun-23 with quarterly rate of growth 1.65%. Out of total 895.83 million internet subscribers, 861.47 million were broadband subscribers and 34.36 million were narrowband subscribers.

1.40 Wired Internet subscribers increased from 33.94 million at the end of Mar-23 to 35.54 million at the end of Jun-23 with quarterly growth rate of 4.72%. Wireless Internet subscribers increased from 847.31 million at the end of Mar-23 to 860.29 million at the end of Jun-23 with quarterly rate of growth 1.53%.

1.41 The number of Broadband subscribers increased from 846.57 million at the end of Mar-23 to 861.47 million at the end of Jun-23 with quarterly rate of growth 1.76%. Number of Narrowband subscribers decreased from 34.69 million at the end of Mar-23 to 34.36 million at the end of Jun-23 with quarterly rate of decline 0.94%.

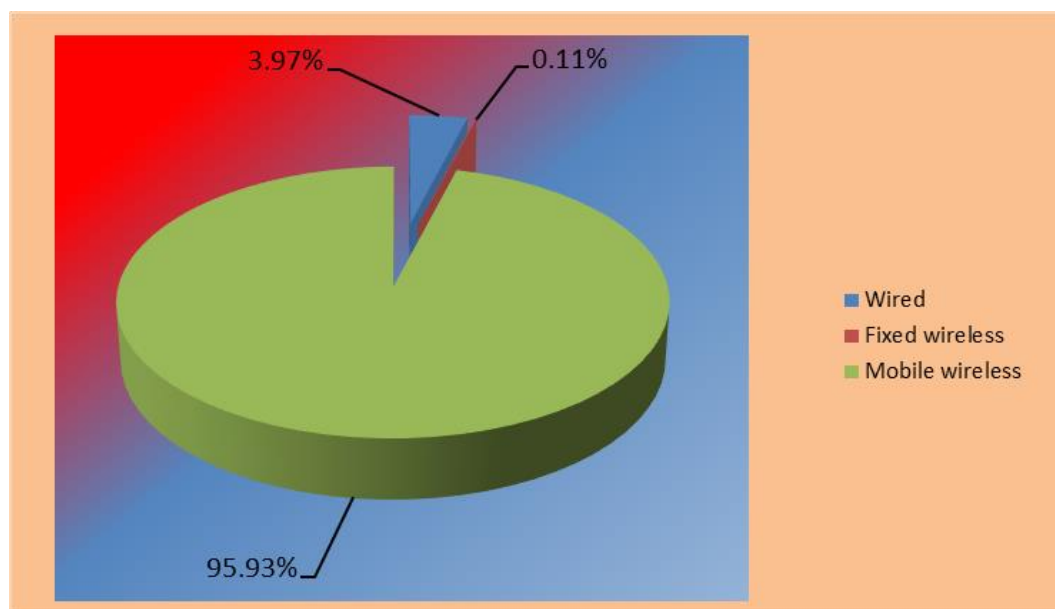
Table 1.28: Trend of Internet subscriber base

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			
	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23
Broadband	33.49	35.10	1.09	0.95	811.98	825.41	813.08	826.37	846.57	861.47
Narrowband	0.45	0.44	0.01	0.005	34.23	33.92	34.24	33.92	34.69	34.36
Total	33.94	35.54	1.10	0.96	846.21	859.23	847.31	860.29	881.25	895.83

Note: *Due to revision of broadband speed

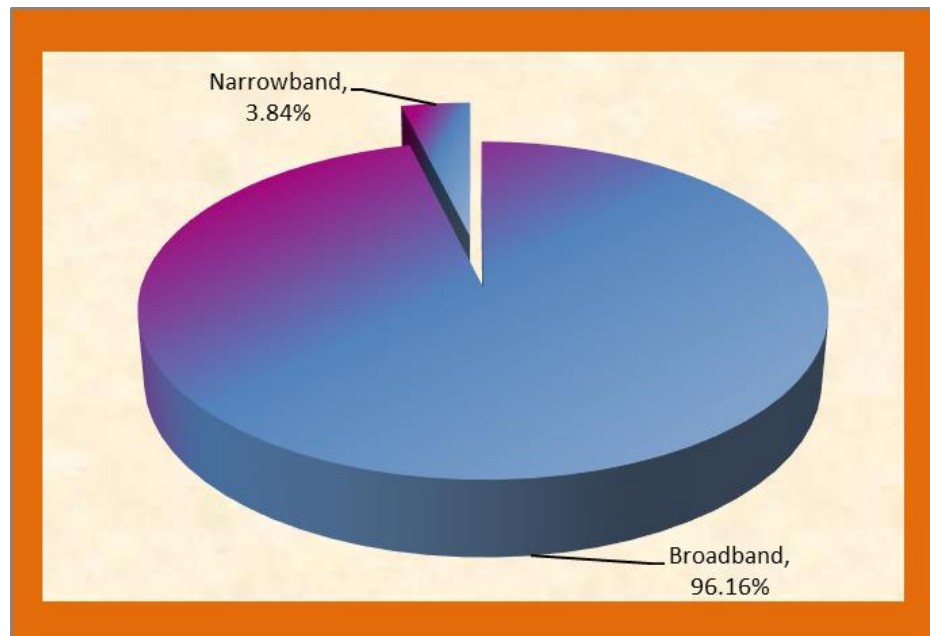
1.42 The following charts present the composition of Internet Subscribers by mode of access and composition of Broadband & Narrowband subscription as on 30th June, 2023.

Chart 1.14: Composition of Internet subscription



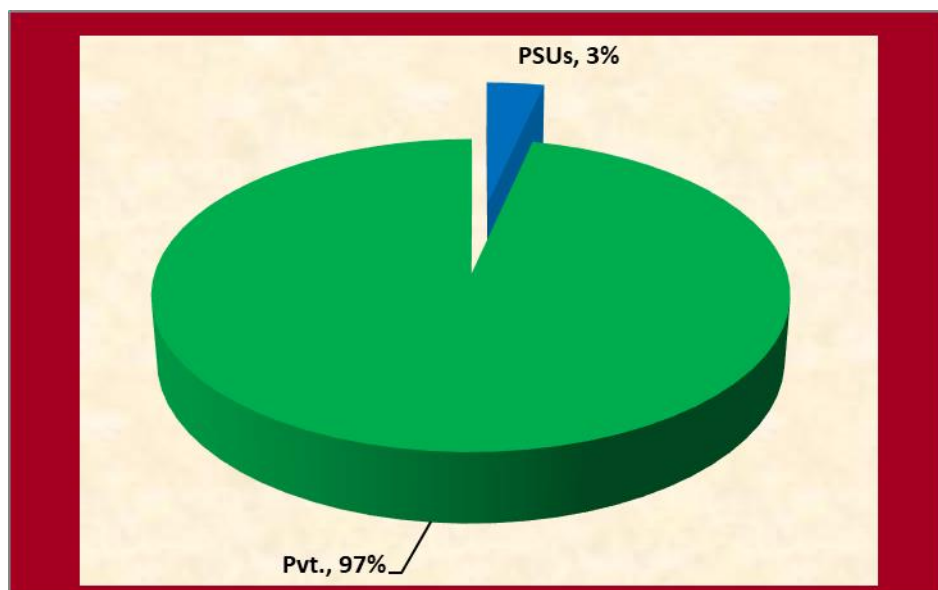
1.43 Out of total internet subscribers, 95.93% subscribers are using Mobile devices for access of internet service. Wired internet subscribers are only 3.97% in total internet subscribers at the end of Jun-23.

Chart 1.15 : Composition of Broadband & Narrowband subscription



- 1.44 Out of total internet subscribers, 96.16% 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 Jun-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 (Jun-2023)		Total (Mar-2023)	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Andhra Pradesh	1.21	1.27	28.22	36.43	29.43	37.70	28.95	37.34
Assam	0.28	0.12	10.97	6.56	11.26	6.68	10.98	6.61
Bihar	1.79	0.61	41.61	23.58	43.40	24.20	42.11	23.68
Delhi	0.26	5.93	0.58	46.78	0.84	52.71	0.83	51.91
Gujarat	0.41	0.69	17.10	35.28	17.51	35.97	17.29	35.88
Haryana	0.29	0.56	8.27	10.08	8.57	10.64	8.48	10.54
Himachal Pradesh	0.07	0.07	3.78	2.39	3.85	2.46	3.87	2.42
Jammu & Kashmir	0.13	0.08	4.36	5.20	4.49	5.28	4.36	5.18
Karnataka	1.37	2.58	18.19	32.02	19.56	34.60	19.29	33.69
Kerala	0.56	0.50	14.76	16.62	15.33	17.11	15.08	16.83
Kolkata	0.03	0.48	1.37	17.03	1.40	17.51	1.35	17.48
Madhya Pradesh	0.86	0.67	25.16	34.91	26.02	35.58	25.37	34.94
Maharashtra	1.03	1.05	30.89	42.96	31.91	44.02	31.27	43.48
Mumbai	0.01	0.95	1.09	29.16	1.11	30.11	1.09	29.44
North East	0.10	0.09	4.81	4.50	4.92	4.59	4.97	4.68
Orissa	0.42	0.15	14.64	7.64	15.07	7.79	14.79	7.79
Punjab	0.25	0.47	8.85	17.82	9.10	18.29	9.09	18.28
Rajasthan	0.76	0.73	22.23	24.35	22.98	25.07	22.19	24.70
Tamil Nadu	0.75	1.30	15.75	41.29	16.50	42.59	16.29	41.96
UP (East)	2.12	0.74	38.83	29.83	40.95	30.57	39.53	30.34
UP (West)	0.76	0.63	18.37	26.36	19.13	26.98	18.89	26.44
West Bengal	0.97	0.27	21.42	19.40	22.39	19.68	21.93	19.62
Grand Total	14.44	19.92	351.26	510.21	365.71	530.12	357.99	523.26
	34.36		861.47		895.83		881.25	

*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 (Jun-2023)	
		Rural	Urban	Rural	Urban	Rural	Urban
1	Andhra Pradesh	0.70	0.68	16.30	15.78	17.00	16.45
2	Arunachal Pradesh	0.01	0.01	0.45	0.31	0.46	0.32
3	Assam	0.28	0.12	10.97	6.56	11.26	6.68
4	Bihar	1.50	0.40	31.79	15.57	33.29	15.97
5	Chattisgarh	0.18	0.14	7.50	8.02	7.67	8.15
6	Goa	0.05	0.05	0.71	1.43	0.75	1.48
7	Gujarat	0.41	0.67	16.83	34.83	17.23	35.49
8	Haryana	0.29	1.79	8.32	17.65	8.62	19.44
9	Himachal Pradesh	0.07	0.07	3.78	2.39	3.85	2.46
10	Jharkhand	0.29	0.21	9.82	8.01	10.11	8.22
11	Karnataka	1.37	2.58	18.19	32.02	19.56	34.60
12	Kerala	0.53	0.50	14.74	16.61	15.28	17.11
13	Madhya Pradesh	0.68	0.53	17.67	26.89	18.35	27.42
14	Maharashtra incl. Mumbai	0.99	1.96	31.27	70.69	32.26	72.65
15	Manipur	0.02	0.02	0.85	1.19	0.87	1.21
16	Meghalaya	0.02	0.01	1.20	0.70	1.23	0.71
17	Mizoram	0.01	0.01	0.47	0.65	0.48	0.66
18	Nagaland	0.01	0.01	0.90	0.63	0.91	0.64
19	Odisha	0.42	0.15	14.64	7.64	15.07	7.79
20	Punjab	0.25	0.45	8.81	16.57	9.06	17.02
21	Rajasthan	0.76	0.73	22.23	24.35	22.98	25.07
22	Sikkim	0.01	0.00	0.35	0.35	0.36	0.35
23	Tamil Nadu incl. Chennai	0.72	1.23	15.45	40.61	16.17	41.84
24	Telangana	0.51	0.60	11.93	20.65	12.44	21.25
25	Tripura	0.03	0.03	0.94	1.02	0.97	1.05
26	Uttar Pradesh (UPE+UPW)	2.79	4.23	52.92	65.26	55.71	69.50
27	Uttarakhand	0.09	0.10	4.29	4.79	4.37	4.89
28	West Bengal incl. Kolkata	0.99	0.75	22.22	35.85	23.22	36.60
Union Territories							
1	Andaman & Nicobar Islands	0.00	0.00	0.20	0.21	0.21	0.21
2	Chandigarh	0.00	0.03	0.04	1.25	0.05	1.27
3	Dadar & Nagar Haweli (incl. Daman & Diu)	0.01	0.02	0.27	0.46	0.28	0.48
4	Delhi	0.26	1.73	0.52	25.33	0.78	27.06
5	Jammu & Kashmir	0.12	0.07	4.09	5.10	4.21	5.17
6	Ladakh	0.00	0.01	0.27	0.10	0.27	0.11
7	Lakshdweep	0.03	0.00	0.02	0.00	0.05	0.00
8	Puduchery	0.03	0.07	0.31	0.72	0.34	0.78
	Total	14.44	19.92	351.26	510.21	365.71	530.12
	Grand Total	34.36		861.47		895.83	

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

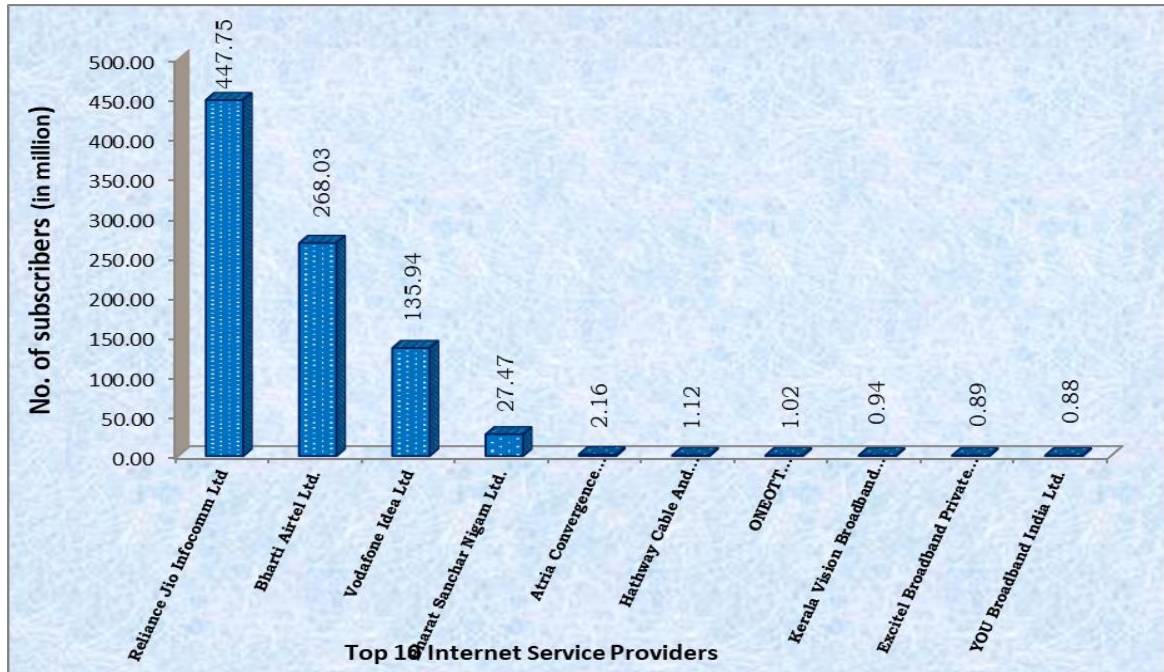
S.No	ISP	No. of Subscribers (In million)	Share (%)
1	Reliance Jio Infocomm Ltd	447.75	49.98
2	Bharti Airtel Ltd.	268.03	29.92
3	Vodafone Idea Ltd	135.94	15.17
4	Bharat Sanchar Nigam Ltd.	27.47	3.07
5	Atria Convergence Technologies Limited	2.16	0.24
6	Hathway Cable And Datacom Limited	1.12	0.12
7	ONEOTT iNTERTAINMENT LIMITED	1.02	0.11
8	Kerala Vision Broadband Ltd.	0.94	0.10
9	Excitel Broadband Private Limited	0.89	0.10
10	YOU Broadband India Ltd.	0.88	0.10
Total of Top 10 ISPs		886.20	98.92
Others		9.63	1.08
Grand Total		895.83	100

1.47 Reliance Jio holds the top position with 49.98% of market share of internet subscribers followed by Bharti Airtel Ltd with 29.92% at the QE Jun-23. M/s Vodafone Idea Ltd held the third position in respect of internet subscriber base with market share of 15.17%.

1.48 Out of total 1076 internet service providers, top 10 Service Providers together hold 98.92% of total internet subscriber base at the QE Jun-23. Detailed table of number of internet subscriber base (broadband and narrowband) of all the service providers is available at **Annexure-1.5**.

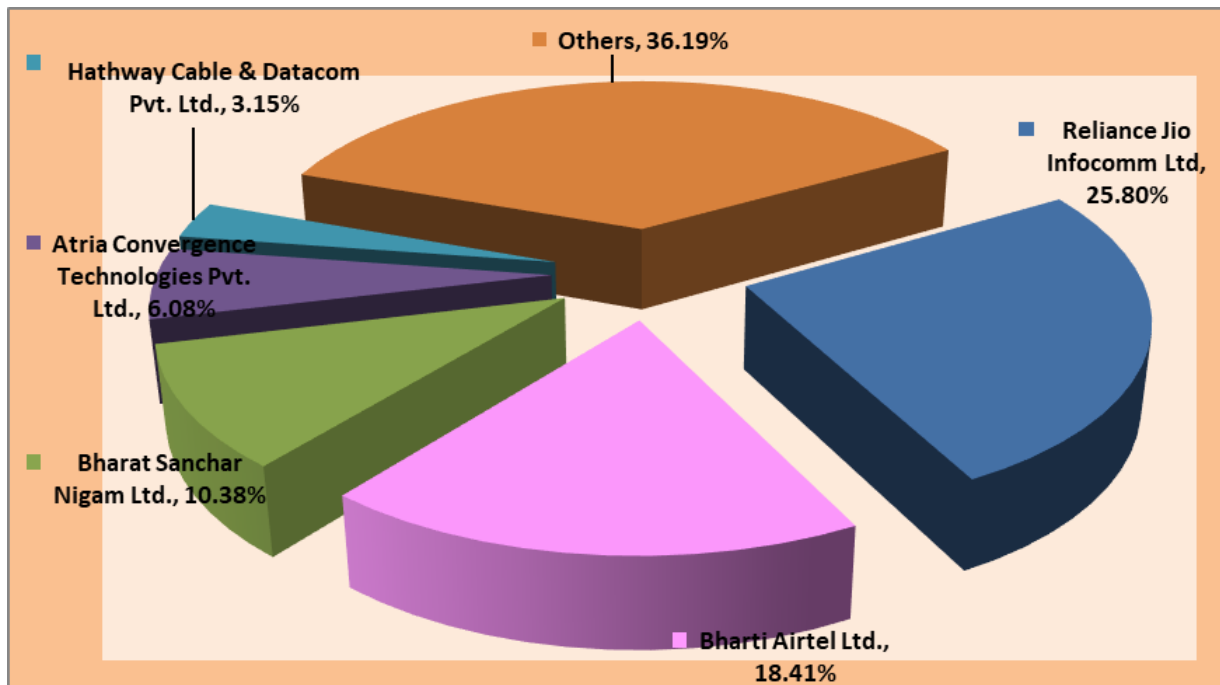
1.49 The following chart depicts the internet subscriber base of top ten Internet Service Providers (ISPs) in the QE Jun-23.

Chart 1.17 : Subscriber base of top ten ISPs



1.50 Out of total 35.54 million wired internet subscribers, Reliance Jio Infocomm Ltd holds 25.80% market share with 9.17 million subscribers, followed by Bharti with 6.54 million subscribers.

Chart 1.18: Composition of Wired Internet subscribers



1.51 In wireless internet segment, Reliance Jio holds 50.98% market share with 438.58 million subscribers followed by Bharti Airtel Ltd with 30.40% and 261.49 million wireless internet subscribers at the QE Jun-23.

Chart 1.19 : Composition of Wireless Internet subscription

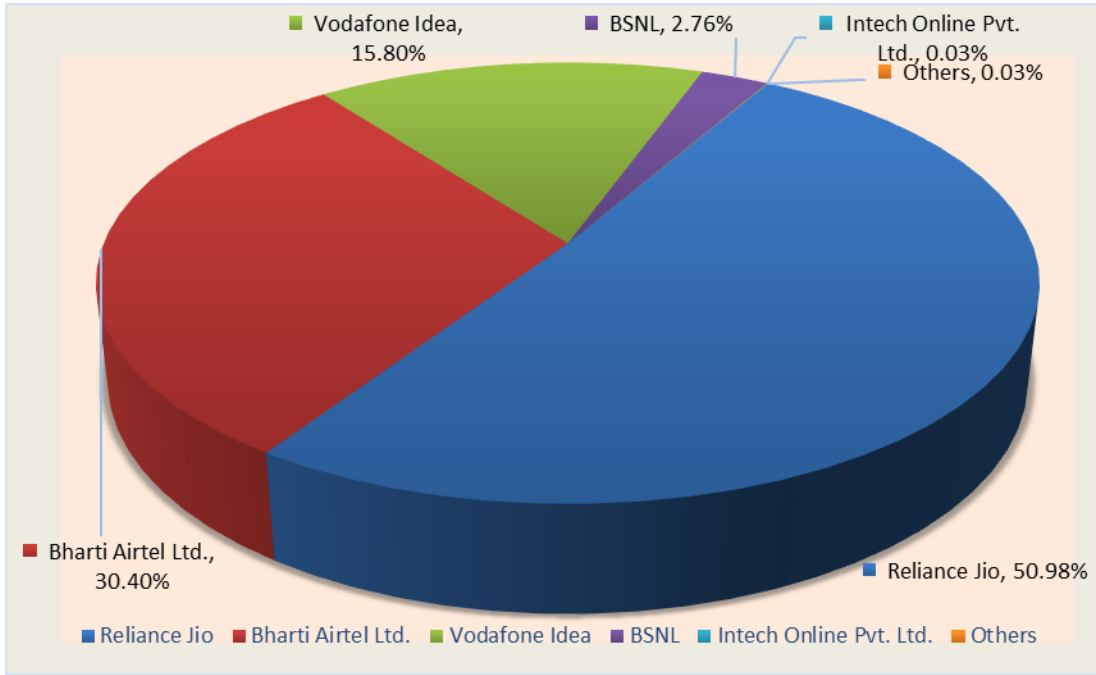


Chart 1.20 : Technology trend for Wireless Internet Access

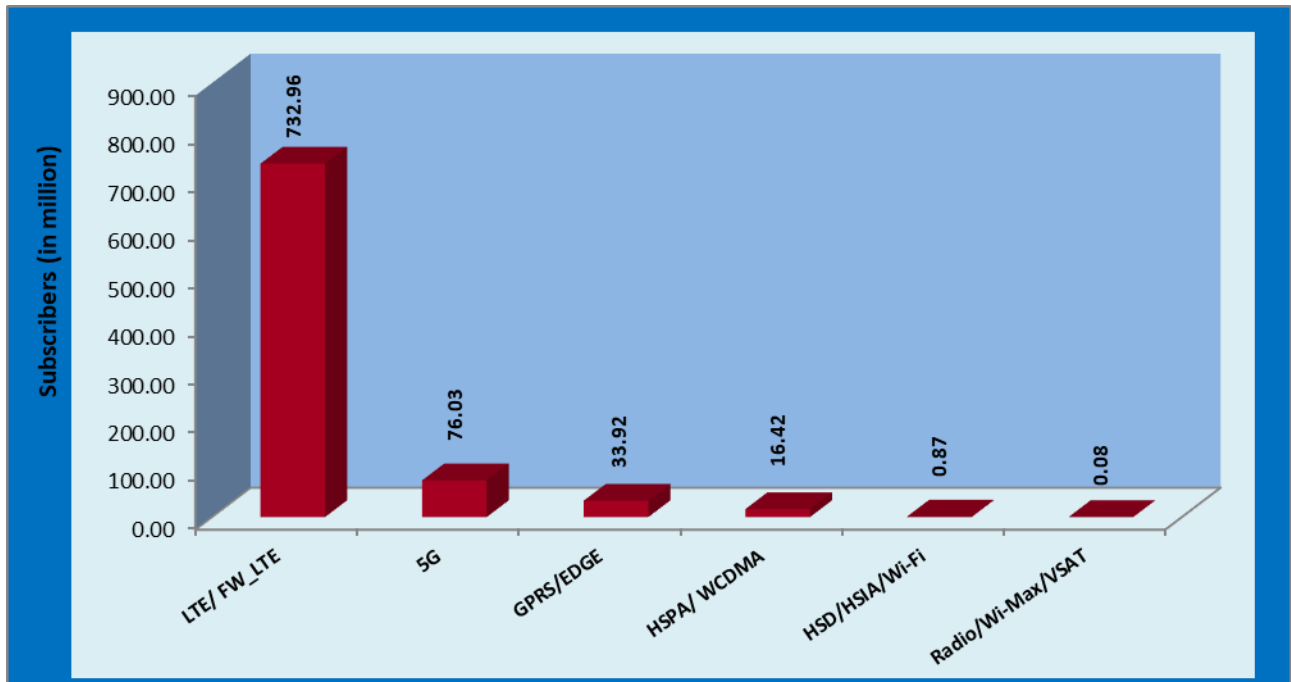
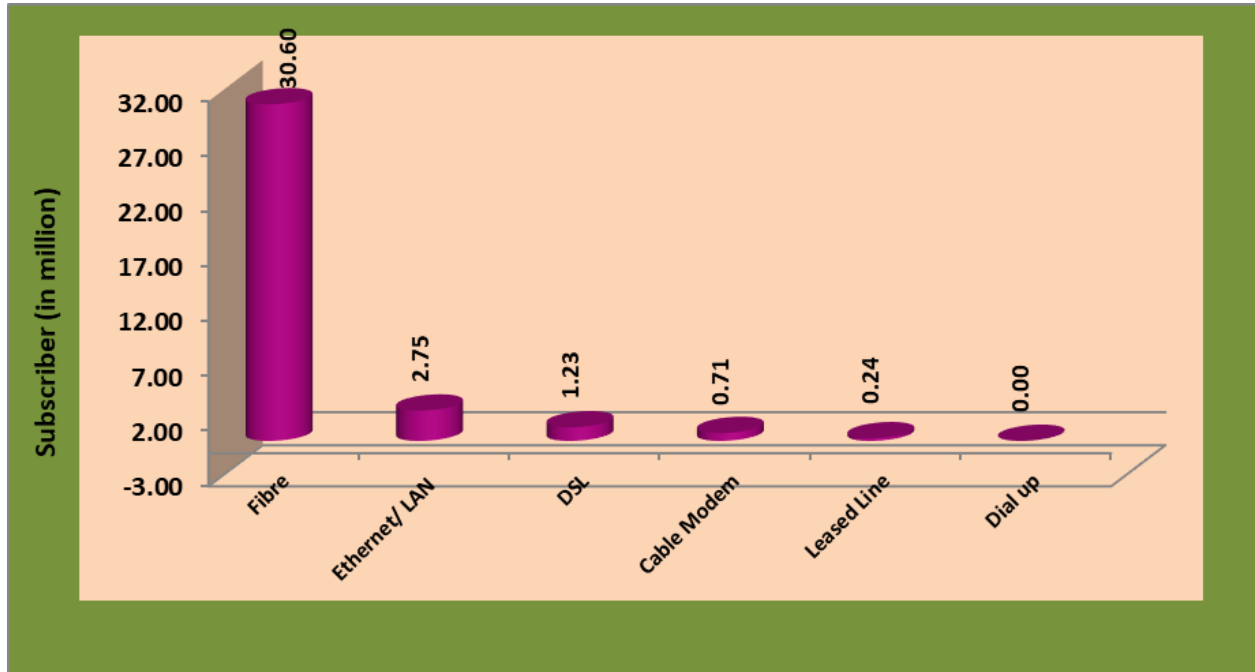


Chart 1.21: Technology trend for Wired Internet Access



1.52 Top five service areas in terms of internet subscriptions (wired+wireless) are Maharashtra 75.93 million, U.P.(East) 71.53 million, Bihar 67.59 million, Andhra Pradesh 67.14 million and Madhya Pradesh 61.60 million.

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

Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	29.43	37.70	67.14	54.94	99.53	73.41
Assam	11.26	6.68	17.94	37.23	119.53	50.07
Bihar	43.40	24.20	67.59	30.80	92.81	40.48
Delhi	0.84	52.71	53.55	-	-	249.19
Gujarat	17.51	35.97	53.48	47.41	99.47	73.17
Haryana	8.57	10.64	19.20	48.94	82.92	63.31
Himachal Pradesh	3.85	2.46	6.31	57.44	318.61	84.39
Jammu & Kashmir	4.49	5.28	9.76	46.43	123.56	70.06
Karnataka	19.56	34.60	54.16	52.02	114.44	79.84
Kerala	15.33	17.11	32.44	-	-	90.38
Madhya Pradesh	26.02	35.58	61.60	31.08	106.25	52.55
Maharashtra	31.91	44.02	75.93	50.43	118.02	83.52
Mumbai	1.11	30.11	31.22			
North East	4.92	4.59	9.50	47.81	83.19	60.15
Orissa	15.07	7.79	22.86	41.93	92.74	51.56
Punjab	9.10	18.29	27.40	50.92	129.26	85.53
Rajasthan	22.98	25.07	48.06	38.54	115.66	59.10
Tamil Nadu	16.50	42.59	59.09	45.82	100.01	75.18
UP (East)	40.95	30.57	71.53	32.13	94.13	47.40
UP (West)	19.13	26.98	46.11			
Kolkata	1.40	17.51	18.91	37.66	100.04	60.77
West Bengal	22.39	19.68	42.06			
Total	365.71	530.12	895.83	40.66	108.01	64.43

* 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 Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

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

S.N.	State(s)	Total Subscribers (In million)			Tele-density (%)		
		Rural	Urban	Total	Rural	Urban	Total
1	Andhra Pradesh	17.00	16.45	33.45	50.36	84.31	62.86
2	Arunachal Pradesh	0.46	0.32	0.78	39.55	79.48	49.78
3	Assam	11.26	6.68	17.94	37.31	119.56	50.08
4	Bihar	33.29	15.97	49.26	29.90	101.90	38.67
5	Chattisgarh	7.67	8.15	15.83	34.87	98.85	52.25
6	Goa	0.75	1.48	2.23	-	-	141.40
7	Gujarat	17.23	35.49	52.73	46.99	101.11	73.44
8	Haryana	8.62	19.44	28.06	49.25	151.56	92.51
9	Himachal Pradesh	3.85	2.46	6.31	57.50	318.60	84.39
10	Jharkhand	10.11	8.22	18.33	34.67	79.05	46.25
11	Karnataka	19.56	34.60	54.16	51.99	114.44	79.84
12	Kerala	15.28	17.11	32.39	-	-	90.41
13	Madhya Pradesh	18.35	27.42	45.77	29.82	108.68	52.66
14	Maharashtra	32.26	72.65	104.92	49.59	117.93	82.80
15	Manipur	0.87	1.21	2.08	39.91	114.90	64.25
16	Meghalaya	1.23	0.71	1.94	46.12	102.52	57.69
17	Mizoram	0.48	0.66	1.14	85.98	96.44	91.69
18	Nagaland	0.91	0.64	1.55	75.58	61.74	69.36
19	Odisha	15.07	7.79	22.86	41.93	92.75	51.56
20	Punjab	9.06	17.02	26.08	50.66	131.75	84.68
21	Rajasthan	22.98	25.07	48.06	38.62	115.66	59.10
22	Sikkim	0.36	0.35	0.71	102.84	102.20	102.93
23	Tamil Nadu incl. Chennai	16.17	41.84	58.01	45.43	101.04	75.40
24	Telangana	12.44	21.25	33.68	62.43	115.69	88.08
25	Tripura	0.97	1.05	2.02	38.44	63.66	48.48
26	Uttar Pradesh (UPE+UPW)	55.71	69.50	125.21	31.09	122.07	52.95
27	Uttarakhand	4.37	4.89	9.27	58.60	116.25	79.36
28	West Bengal incl. Kolkata	23.22	36.60	59.81	37.07	99.87	60.27
Union Territories							
1	Andaman & Nicobar Islands	0.21	0.21	0.42	92.32	118.30	103.88
2	Chandigarh	0.05	1.27	1.32	-	-	106.73
3	Dadar & Nagar Haweli (incl. Daman & Diu)	0.28	0.48	0.75	116.38	45.03	58.08
4	Delhi	0.78	27.06	27.85	-	-	129.58
5	Jammu & Kashmir	4.21	5.17	9.38	44.59	123.81	68.82
6	Ladakh	0.27	0.11	0.38	131.75	112.64	125.90
7	Lakshdweep	0.05	0.00	0.05	-	-	77.48
8	Puduchery	0.34	0.78	1.12	68.87	67.13	67.56
Total		365.71	530.12	895.83	40.66	108.01	64.43

ISP Connectivity

1.53 The International Internet bandwidth owned by various service providers is reported to be 36,417 Gbps during the quarter ending Jun-23 as compared to 35,855 Gbps during the previous quarter.

Public WiFi Hotspot

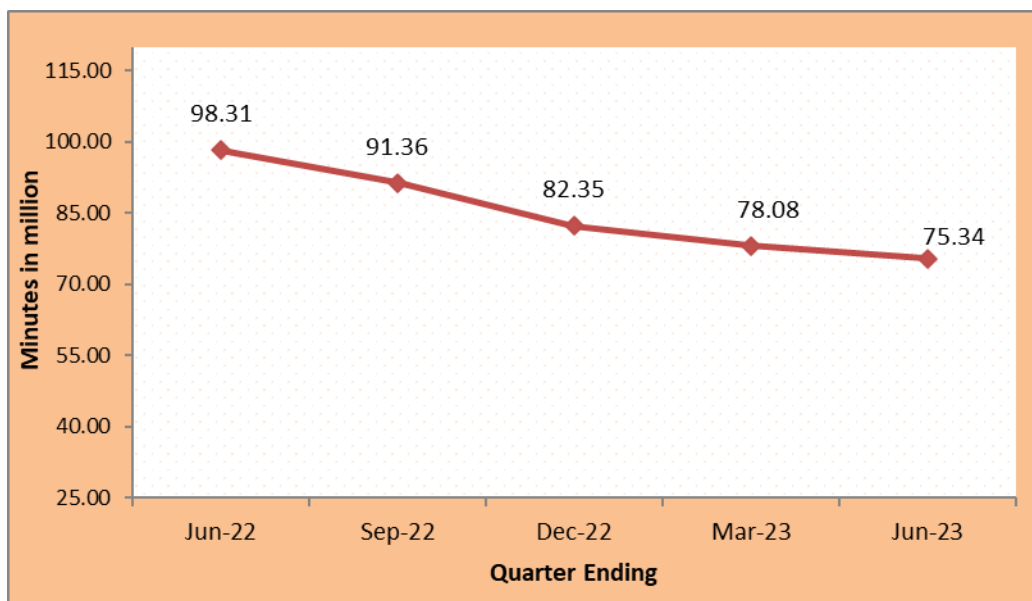
1.54 A public Wi-Fi hotspot is an area where you can access Wi-Fi enabled internet. These areas are usually created in places such as malls, coffee shops, airports, stadiums, and parks to name a few. As per the information furnished by operators, the details as on 30th June 2023 as tabulated below. LSA wise information on Public Wi-Fi Hotspots, as on 30th June, 2023, available at **Annexure-1.6.**

S. No.	Category	Mar-23	Jun-23	Growth (%)
1.	Public Wi-Fi Hotspots	166020	165727	-0.18%
2.	Number of Access Points	386897	386508	-0.10%
3.	Number of unique Wi-Fi Users	40883822	59979634	46.71%
4.	Aggregate Data Consumed (GB)	5342792	6950508	30.09%

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 78.08 million minutes at the end of Mar-23 to 75.34 million minutes at the end of Jun-23. List of Internet Telephony Service providers is available at **Annexure-1.7.**

Chart 1.22 : Trends in MOU for Internet Telephony

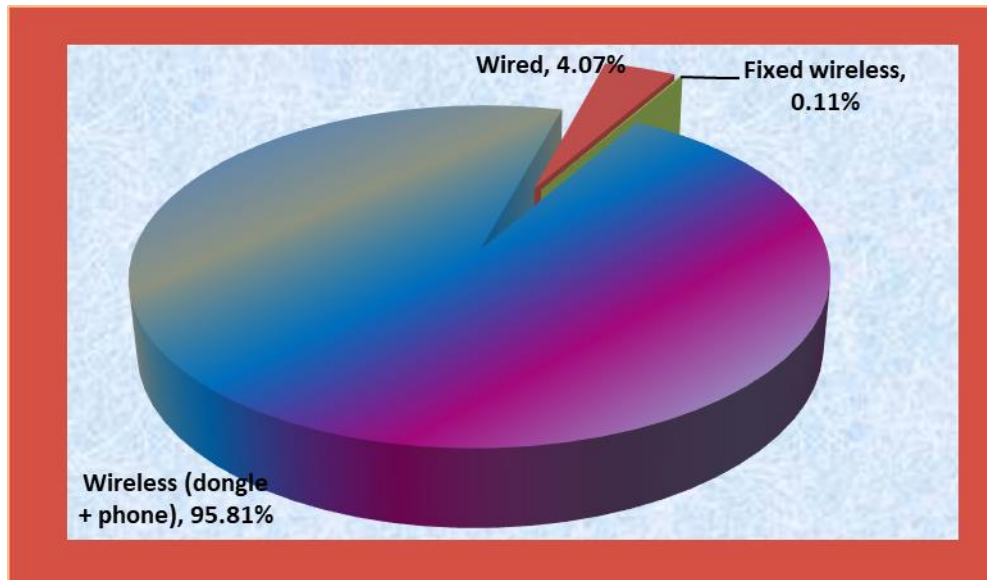


Part-II : Broadband Service (Download Speed >=2Mbps)

- 1.56 The total number of broadband subscribers increased from 846.57 million at the end of Mar-23 to 861.47 million at the end of Jun-23. Out of which number of wired broadband subscribers are 35.10 million and wireless broadband subscribers are 826.37 million.
- 1.57 Top five broadband (wired+wireless) service providers in term of subscribers are Reliance Jio 447.75 million, Bharti Airtel 248.06 million, Vodafone Idea Ltd 124.90 million, BSNL 24.59 million and Atria Convergence 2.16 million.
- 1.58 In wired broadband segment, Reliance Jio Infocomm Ltd. holds 26.12% market share with 9.17 million subscribers followed by Bharti Airtel Ltd. with 6.54 million subscribers in QE Jun-23.
- 1.59 In wireless broadband segment, Reliance Jio holds 53.07% market share with 438.58 million subscribers followed by Bharti Airtel Ltd 29.23% with 241.52 million subscribers in QE Jun-23.

1.60 Top five service areas in respect of broadband subscriptions at Q.E. Jun-23 are Maharashtra 73.85 million, U.P.-East 68.66 million, Bihar 65.19 million, Andhra Pradesh 64.65 million and Madhya Pradesh 60.07 million.

Chart 1.23 : Composition of Broadband subscription – Technology wise



1.61 Mobile Device Users (dongle+phone) constitute 95.81% of total broadband subscribers at the end of Jun-23.

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

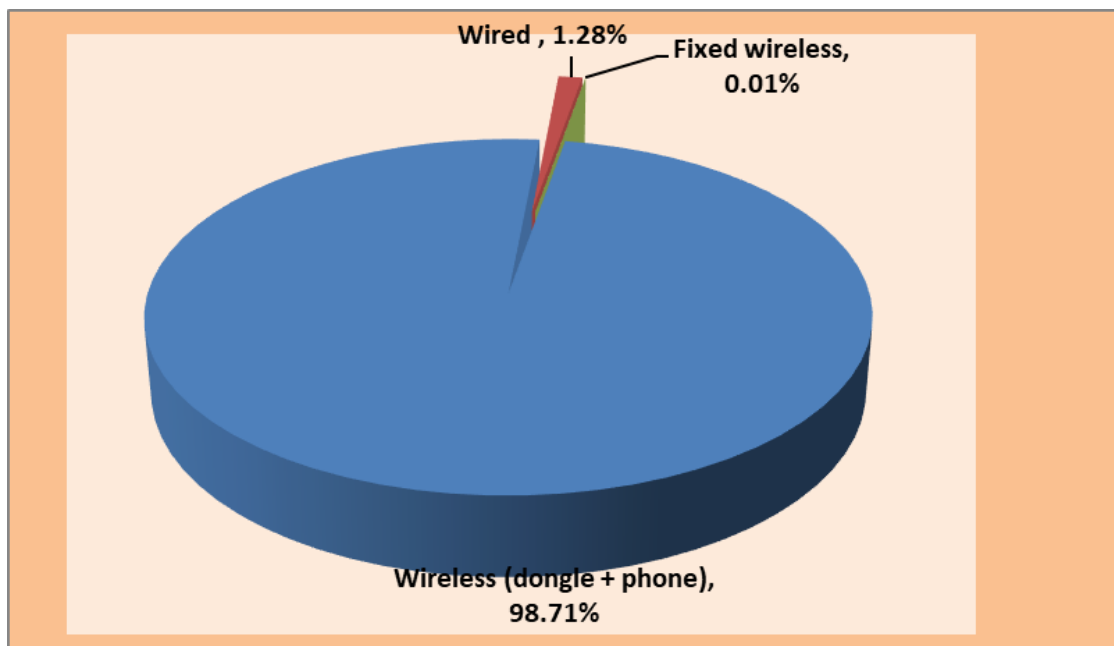
1.62 Total number of narrowband subscribers decreased from 34.69 million at the end of Mar-23 to 34.36 million at the end of Jun-23 with the quarterly rate of decline 0.94%. Out of 34.36 million narrowband subscribers, Wired Narrowband subscribers are 0.44 million and Wireless Narrowband subscribers are 33.92 million.

1.63 The top five narrowband (wired+wireless) service providers in term of subscriber base are Bharti Airtel 19.97 million, Vodafone Idea Ltd 11.04 million, BSNL 2.88 million, YOU Broadband India Ltd. 0.39 and MTNL 0.05 million and million at the end of Jun-23.

1.64 In wired narrowband segment, YOU Broadband India Ltd. hold 87.62% market share with 0.39 million subscribers followed by BSNL with 0.03 million subscribers.

1.65 In wireless narrowband segment, Bharti Airtel holds 58.87% market share with 19.97 million subscribers followed by Vodafone Idea Ltd with 11.04 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)

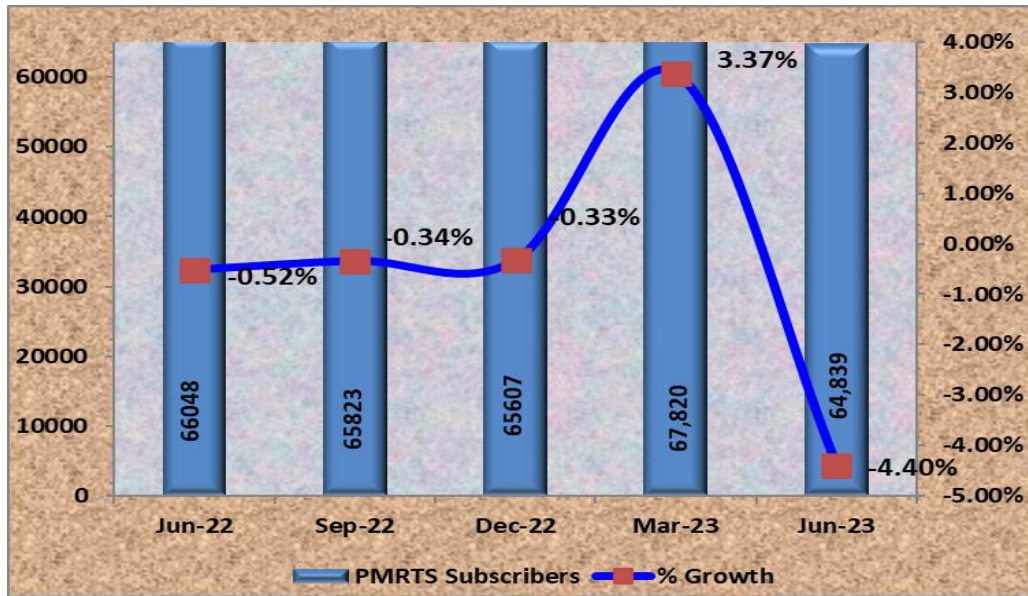
1.66 The subscriber base of PMRTS decreased from 67,820 at the end of Mar-23 to 64,839 at the end of Jun-23 with quarterly rate of decline 4.40%.

Table 1.34 : PMRTS Subscriber base - Service Provider wise

Sl. No	Name of the Service Provider	Subscriber Base as on 31.03.2023	Subscriber Base as on 30.06.2023	Net Addition	% Growth in subscribers in QE Jun-23
1	Arya Omnitalk Radio Trunking Services Pvt. Ltd.	55,506	52,848	-2,658	-4.79%
2	Procall Ltd.	4,246	4,060	-186	-4.38%
3	Quick Call	1,836	1,822	-14	-0.76%
4	Inative Networks Pvt Ltd	1,820	1,820	0	0.00%
5	Smartalk Pvt Ltd	1,691	1,417	-274	-16.20%
6	Bhilwara Telenet Services Pvt Ltd	883	883	0	0.00%
7	Wiwonet Solutions Pvt Ltd	1,053	1,107	54	5.13%
8	Airtalk Solutions & Services Pvt Ltd	785	882	97	12.36%
Total		67,820	64,839	-2981	-4.40%

1.67 Detailed table on Service Area wise subscriber base of PMRTS as on 30th June, 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 2,56,170 at the end of Mar-23 to 2,52,823 at the end of Jun-23. Net decrease during the quarter has been 3,347 at the rate of decline 1.31%.

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

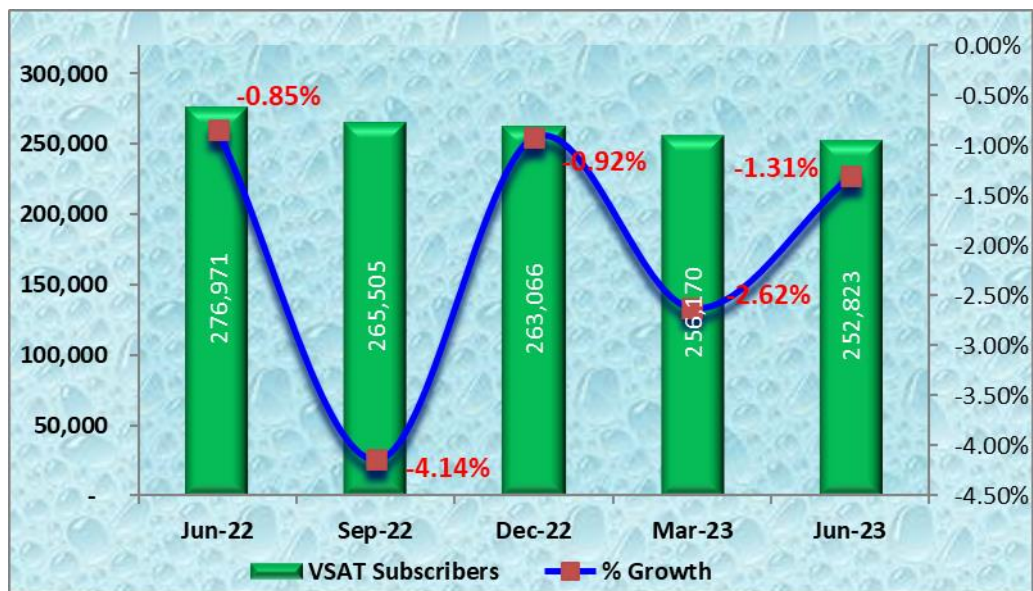


Table 1.35 : VSAT Service Providers currently providing service & their subscriber base

Sr. No	Name of Service Providers	Subscriber base at the Quarter ending		Net Addition	%age Growth	Market Share (%) Jun-23
		Mar-23	Jun-23			
1	Hughes Communications Ltd.	1,76,150	1,76,472	322	0.18%	69.80%
2	Nelco Ltd.	70,750	67,172	-3,578	-5.06%	26.57%
3	BSNL	6,556	6,455	-101	-1.54%	2.55%
4	Infotel Satcom	2,707	2,717	10	0.37%	1.07%
5	Cloudcast Digital	7	7	0	0.00	0.00
Total		2,56,170	2,52,823	-3347	-1.31	100

1.69 Hughes Communications Ltd. is the market leader having 1,76,472 subscribers with market share of 69.80% followed by Nelco Ltd. having 67,172 subscribers with market share of 26.57% at the end of Jun-23.

1.70 In term of net addition except Hughes Communications Ltd., 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

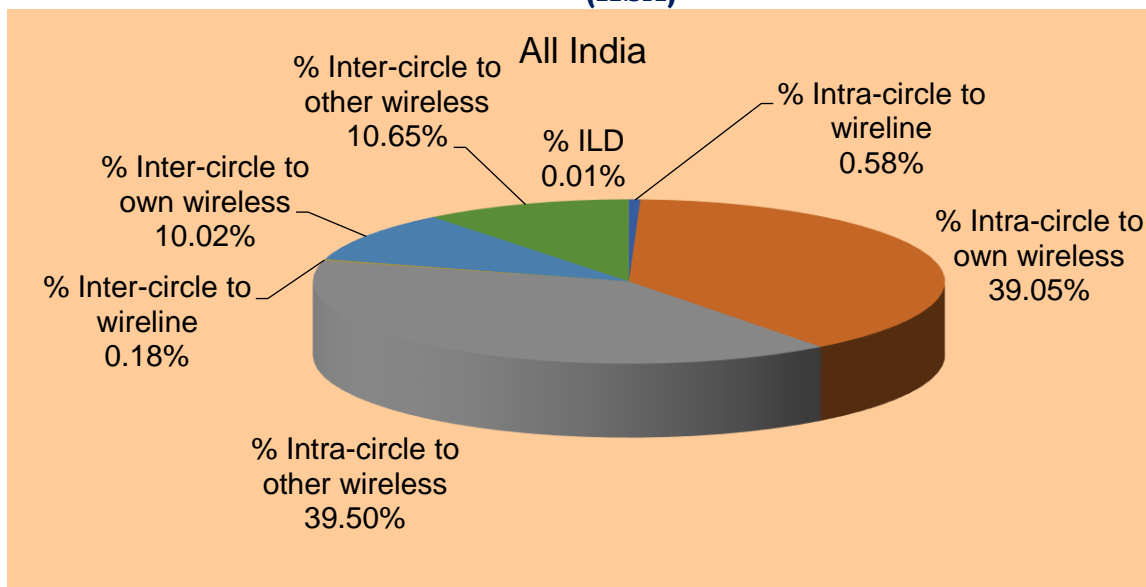
-
- For all the parameters, Metros indicate data for Delhi, Mumbai & Kolkata. Data for Chennai service area has been included in Circle A, as part of TN.
 - ARPU arrived after adjusting interconnect usage charges and roaming settlement charges.
 - The data contained in this section covers the licensees, 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	Jun-23	Mar-23	Jun-22	QoQ %age change	YoY %age change
Share of Prepaid (%)	91.74%	91.92%	92.74%	-0.19%	-1.07%
Incoming MOU per subscriber per month	479.63	472.70	456.93	1.47%	4.97%
Outgoing MOU per subscriber per month	480.07	473.25	456.64	1.44%	5.13%
No. of Outgoing SMS per subscriber per month	12.04	11.91	14.31	1.05%	-15.85%
Average Revenue Per User (ARPU) per month (Rs.)	145.64	142.32	133.55	2.33%	9.05%

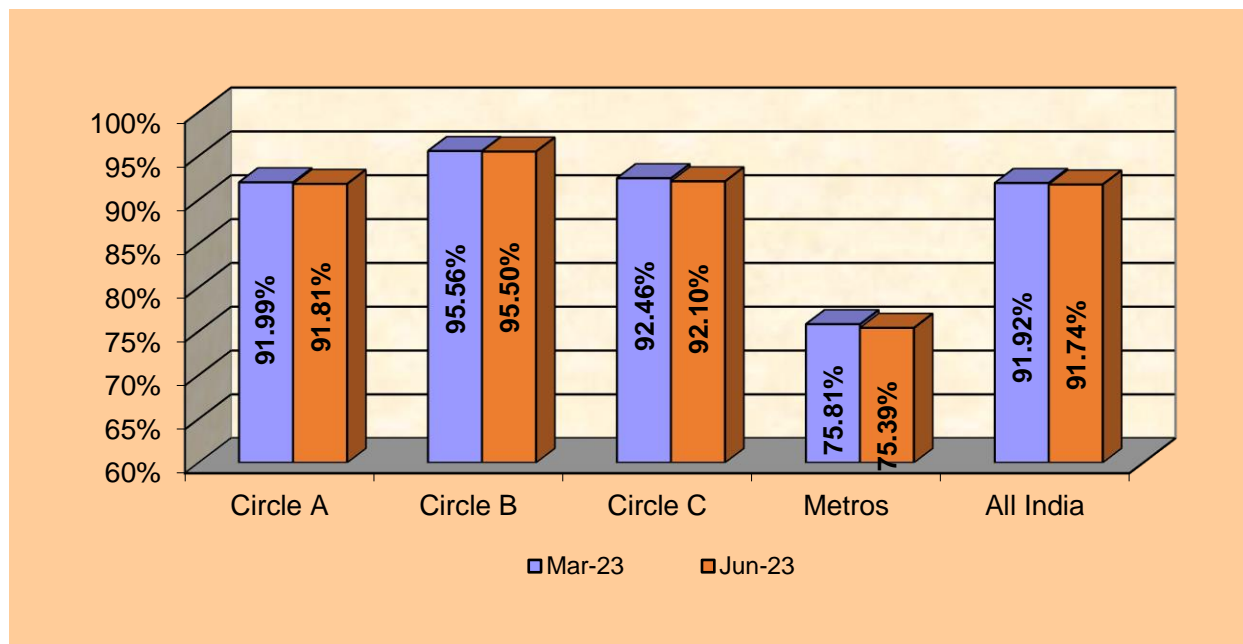
2.1 The following chart presents % break-up of outgoing minutes from Home Service Area (HSA) in the QE Jun-23.

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: Pre-paid subscribers as a percent of total 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 91.92% at the end of March-2023 to 91.74% at the end of June- 2023.
- 2.4 The ARPU increased by 2.33% from Rs.142.32 in Q.E. March-2023 to Rs.145.64 in Q.E. June-2023. The ARPU for private service providers increased by 2.21% from 150.83 in Q.E. March-2023 to Rs. 154.16 in Q.E. June- 2023 and for PSUs (BSNL/MTNL) decreased by 0.43% from Rs. 60.87 in Q.E. March-2023 to Rs. 60.61 in Q.E. June-2023.
- 2.5 The ARPU per month for the pre-paid segment is Rs. 143.81 and the ARPU per month for the post-paid segment is Rs. 166.22 for Q.E. June- 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	200.62	159.18	162.53
Circle B	153.50	136.09	136.87
Circle C	151.80	140.90	141.75
Metros	144.36	126.02	130.49
All India	166.22	143.81	145.64
All private SPs	169.04	152.78	154.16
BSNL/MTNL	111.92	58.23	60.61

2.7 The following table presents the composition of ARPU per month for QE June-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 per subscriber per month
1	Usage from Home Service Area		
1.1.	Rental Revenue	0.82	0.47
1.2.	Revenue from calls	15.44	8.81
1.3.	Revenue from SMS	0.20	0.11
1.4.	Revenue from data usage	130.16	74.28
1.5.	Revenue from Other VAS	1.37	0.78
1.6.	Other revenue	3.43	1.96
2	B. Usage outside Home Service Area		
2.1	Revenue from outroamers	1.43	0.81
3	C. Total revenue from home subscribers (A+B)	152.84	
4	D. Revenue from inroamers and interconnect charges received	22.40	12.78
5	E. Total Gross Revenue (C+D)	175.24	100.00
6	F. Net inter-operable settlement charges payable	-29.60	
7	Net Revenue (ARPU) (E+F)	145.64	

* 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 (Rs. 29.60) accounted for 19.36% of the total revenue from home subscribers in the Q.E. June- 2023.

2.9 On an all-India average, the overall MOU per subscriber per month increased by 1.45% from 946 in Q.E. March-2023 to 960 in Q.E. June-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. Jun-23.

Table 2.4: MOU per subscriber per month - QE Jun-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	269	251	520	445	440	885	431	425	856
Circle B	281	282	563	492	496	988	483	487	969
Circle C	363	358	721	618	636	1254	598	614	1212
Metro	180	166	346	531	499	1029	446	418	863
All India	260	249	509	500	500	1000	480	480	960

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

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

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

Circle category	Outgoing SMS per subscriber per month		
	Post-paid	Pre-paid	Blended
Circle A	12	12	12
Circle B	8	11	11
Circle C	12	17	16
Metro	5	10	9
All India	9	12	12

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

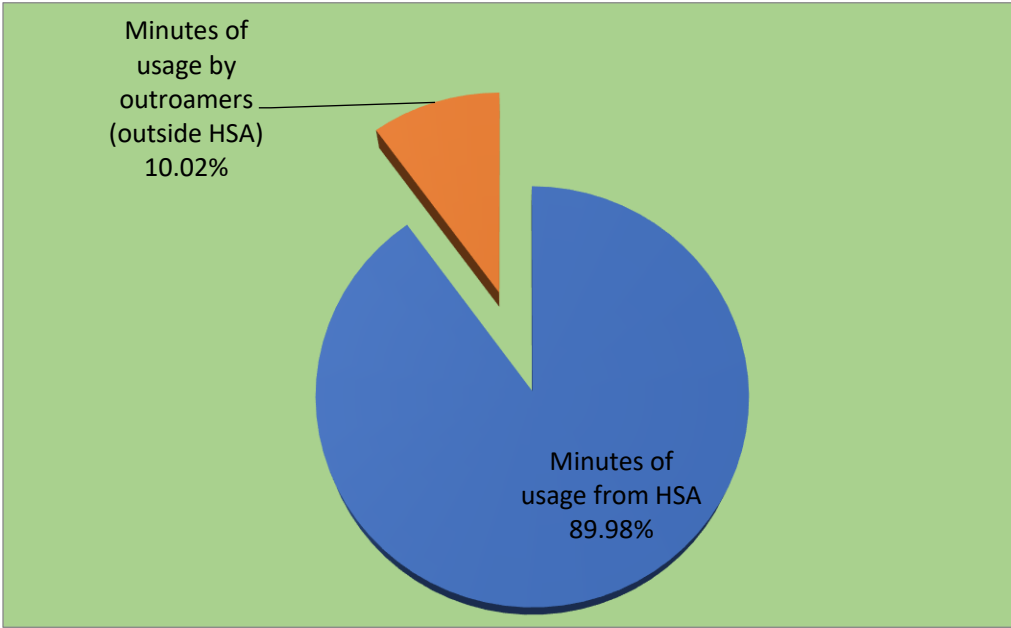
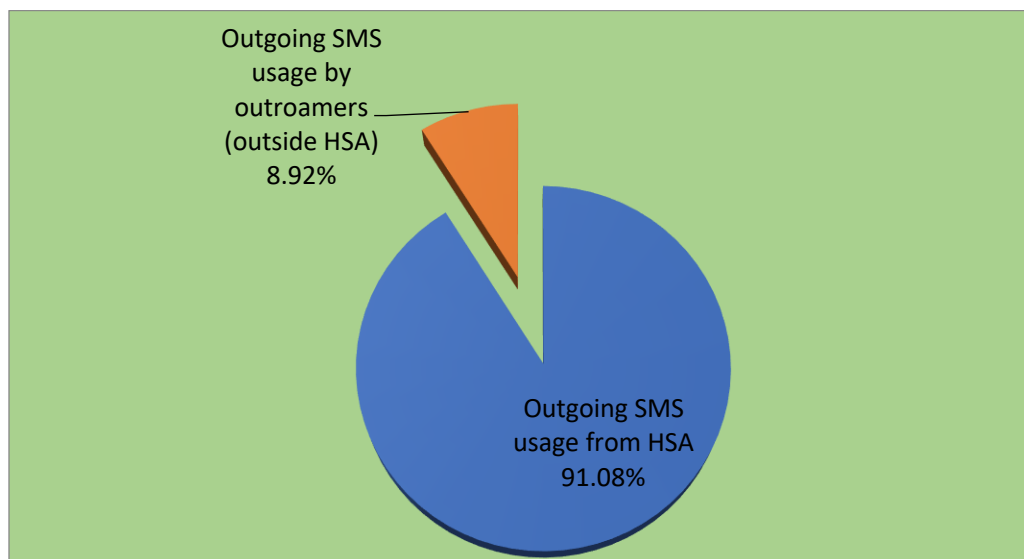


Chart 2.4: Outgoing SMS Usage by Out-roamers as a % of Total No. of Outgoing SMS Usage during Q.E. Jun-2023



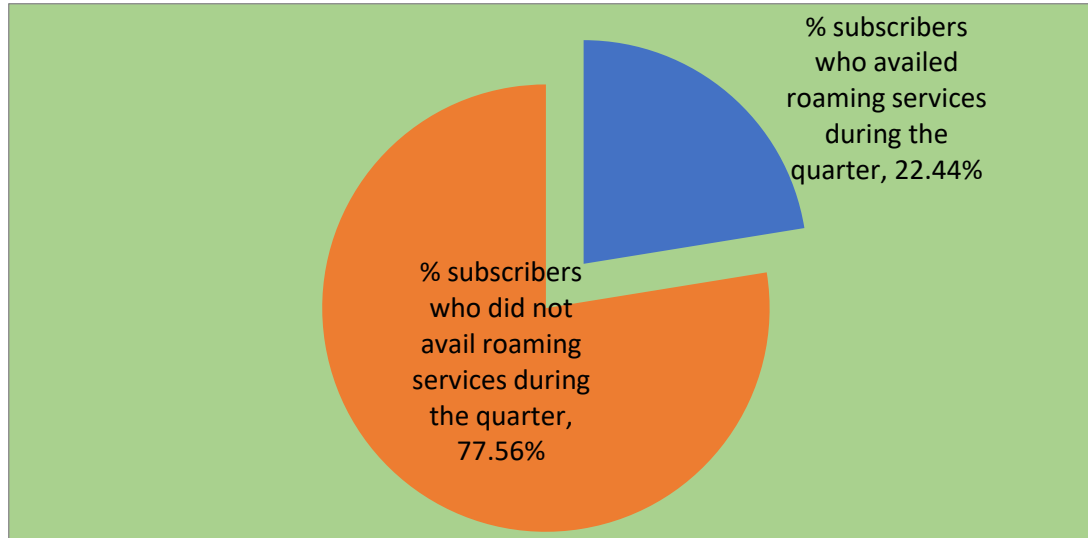
2.13 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks in the Q.E. Jun-23.

Table 2.6: % Break-up of Outgoing minutes from Home Service Area (HSA) during the Q.E. Jun-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	0.51%	41.51%	44.00%	0.15%	6.66%	7.11%	0.01%
Circle B	0.61%	37.99%	40.53%	0.16%	9.88%	10.82%	0.01%
Circle C	0.52%	41.83%	33.77%	0.17%	12.07%	11.64%	0.00%
Metros	0.86%	28.37%	31.24%	0.37%	18.46%	20.67%	0.03%
All India	0.58%	39.05%	39.50%	0.18%	10.02%	10.65%	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. Jun-23.

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



2.15 The usage pattern of outroamers i.e. usage from outside the home service area shows that incoming minutes accounts for 48.42% of the total minutes of usage by outroamers in Q.E. June- 2023 as against 47.70% in the Q.E. March- 2023. 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)

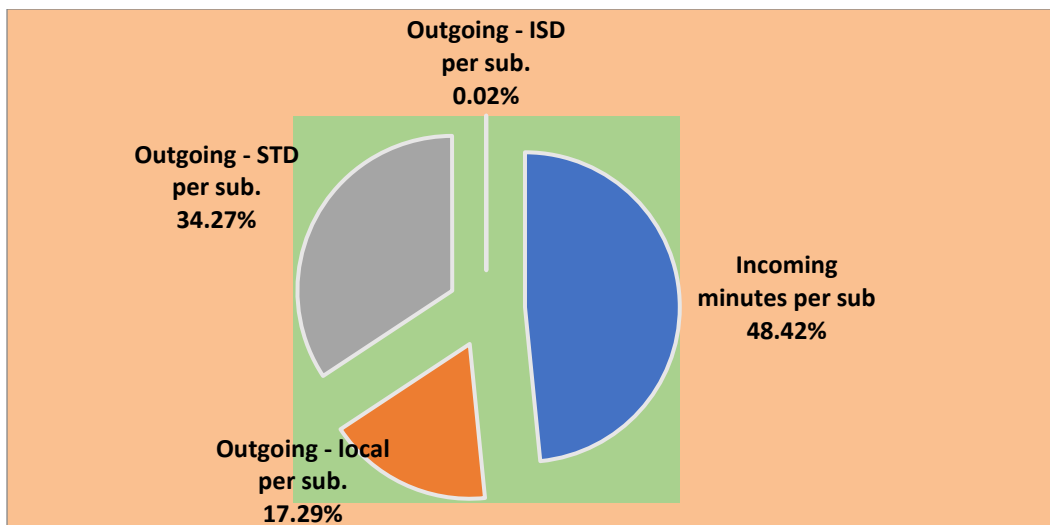


Table 2.7: Trends of Key Parameters - Wireless Services

Parameter	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23
1. ARPU (Rs. Per month)	134	137	141	142	146
2. Average revenue Realization per subscriber per GB wireless data (in Rs.)	10.29	9.94	10.10	9.92	9.44
3. MOU per subscriber per month	914	894	919	946	960
4. Outgoing MOU per subscriber per month					
4.1 Local (Intra-circle)	342	331	339	350	357
4.2 NLD (inter-circle)	115	115	120	123	123
4.3 ILD	0.05	0.05	0.05	0.05	0.05
5. Average no. of Outgoing SMS per subscriber per month	14	13	12	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

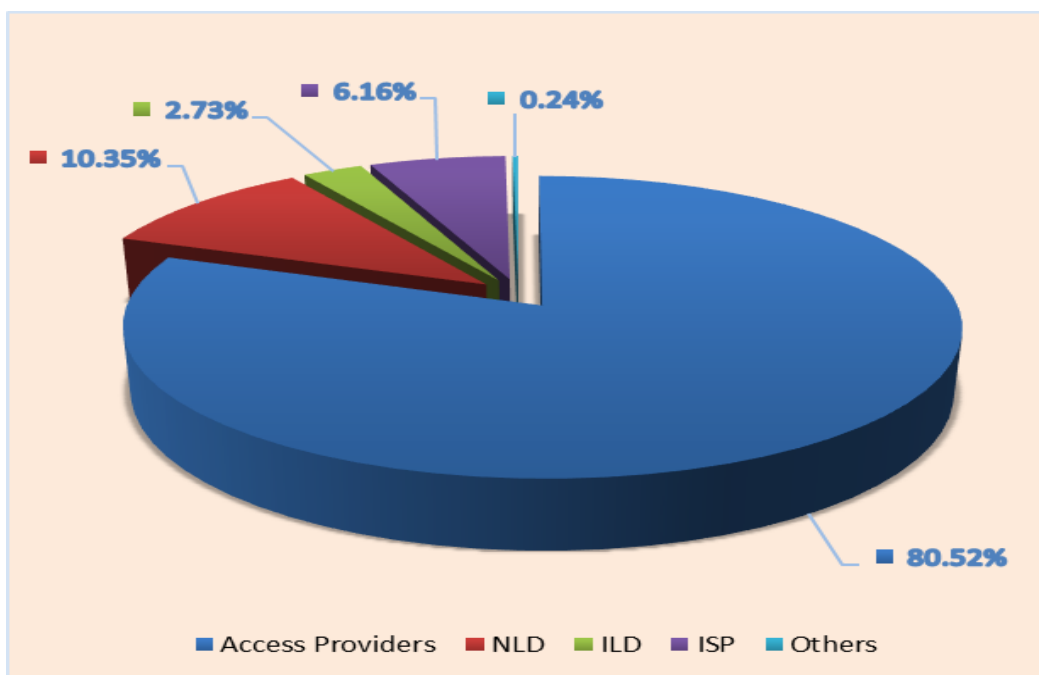
Particulars	QE Jun-22 (Rs. in Crore)	QE Mar-23 (Rs. in Crore)	QE Jun-23 (Rs. in Crore)	Q-O-Q % Change	Y-O-Y % Change
Gross Revenue (GR)	76,408	85,356	80,899	-5.22%	5.88
Applicable Gross Revenue (ApGR)	73,795	78,631	78,349	-0.36%	6.17
Adjusted Gross Revenue (AGR)	60,530	64,494	65,624	1.75%	8.42
Pass Through Charges (PTC)	13,415	14,725	13,220	-10.22%	-1.46
License Fee (LF)	4,844	5,159	5,246	1.69%	8.30
Spectrum Usage Charges (SUC)	1,999	755	818	8.32%	-59.08

- 3.1 Gross Revenue (GR) decreased by 5.22%, Applicable Gross Revenue (ApGR) decreased by 0.36% and Adjusted Gross Revenue (AGR) increased by 1.75% during QE Jun-23. On YoY basis GR increased by 5.88%, ApGR increased by 6.17% and AGR increased by 8.42% in QE Jun-23.
- 3.2 Pass through charges decreased by 10.22% in QE Jun-23 and on YoY basis it also decreased by 1.46%.
- 3.3 Pass-through charges as a percentage of Gross Revenue are 16.34% in QE Mar-23 as against 17.25% in the previous quarter.

**Table 3.2: Financial performance of service segments in Q.E. June, 23
(in Rs. Crore)**

Service	GR	ApGR	AGR	LF	SUC	PTC
Access Providers	63,903.94	62,710.05	52,838.40	4,221.53	813.57	10,007.47
NLD	7,875.86	6,832.07	6,793.11	543.58	-	249.30
ILD	3,653.23	3,612.57	1,789.33	146.57	-	1,825.82
ISP	5,290.12	5,078.11	4,043.77	322.75	-	1,124.48
Others	176.25	116.28	159.39	11.28	4.46	12.69
Total	80899.40	78349.09	65624.00	5245.71	818.03	13219.76

Chart 3.1: Composition of Adjusted Gross Revenue



3.4 Access services contributed 80.52% 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 -6.34%, -0.06%, 2.34%, 2.20%, 8.41%, and -11.90% respectively in QE Jun-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. Jun 2022	Q.E. Mar 2023	Q.E. Jun 2023		
Reliance Jio	21515.88	22985.00	23457.11	2.05	9.02
Bharti Airtel	17140.56	18500.36	19256.00	4.08	12.34
Vodafone Idea	7356.54	7210.63	7267.76	0.79	-1.21
BSNL	2177.95	2083.59	2049.95	-1.61	-5.88
Tata	533.01	599.34	598.91	-0.07	12.36
MTNL	213.67	181.64	142.79	-21.39	-33.17

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	43.11	52.38	47.19	-9.90	9.47
Quadrant	6.41	5.23	8.37	60.06	30.62
V-Con Mobile & Infra	11.39	12.24	7.00	-42.78	-38.53
Shyam Spectra	0.10	0.14	0.24	66.19	137.88
Tata Play Broadband	0.60	0.46	0.30	-33.41	-49.74
GPX Services	0.00	0.00	2.78	--	--
Fusionnet	0.01	-0.10	-0.01	94.14	-141.46
Total	48999.24	51630.91	52838.40	2.34%	7.84%

3.5 Public Sector Undertakings' share in the Access AGR of telecom services is 4.15% in the QE Jun-23.

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

LSA	Q.E. June, 2022		Q.E. March, 2023		Q.E. June, 2023	
Category	AGR	%	AGR	%	AGR	%
	(Rs. in crore)	share of AGR	(Rs.in crore)	share of AGR	(Rs. In crore)	share of AGR
Metro	5,022.74	10.25	5,384.61	10.43	5,463.91	10.34
A	18,512.57	37.78	19,511.15	37.79	19,480.40	36.87
B	18,276.08	37.30	19,079.12	36.95	19,837.17	37.54
C	7,187.86	14.67	7,656.02	14.83	8,056.92	15.25
Total	48999.24		51,630.91		52,838.40	

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 March, 2023		For Quarter Ending June, 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%	1	1.14%
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%	1	1.14%	2	2.27%
(b)	Percentage of calls answered by the operators (voice to voice) within ninety seconds	≥ 95%	23	26.14%	16	18.18%
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 improved in this quarter as compared to the previous quarter in respect of the following parameters: -

- i. %age of calls answered by the operators (voice to voice) within ninety seconds ≥ 95%

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

- i. Worst affected BSs due to down-time (%age) $\leq 2\%$
- ii. Accessibility of call centre/ customer care $\geq 95\%$

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

Parameter	Benchmark	Service Provider	Service Area	Performance in QE June 2023 (in %)
Worst affected BSs due to down-time (%age)	$\leq 2\%$	BSNL	Rajasthan	8.72%
Accessibility of call centre/ customer care	$\geq 95\%$	BSNL	Karnataka	93.99%
		VIL	West Bengal	92.11%
Percentage of calls answered by the operators (voice to voice) within ninety seconds	$\geq 95\%$	AIRTEL	Andhra Pradesh	88.34%
			Assam	88.94%
			Gujarat	90.99%
			Jammu & Kashmir	90.65%
			Karnataka	94.59%
			Kerala	85.46%
			Kolkata	83.31%
			North East	85.70%
			Punjab	92.09%
			Tamilnadu including Chennai	83.63%
			Uttar Pradesh (East)	93.74%
		West Bengal	81.33%	
		BSNL	Andhra Pradesh	33.19%
			Karnataka	53.40%
Kerala	89.20%			
Tamilnadu including Chennai	77.36%			

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

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

S.No	Parameters	Benchmarks	No of PMRs where Service Providers are not meeting the benchmarks			
			QE March, 2023		QE June, 2023	
			Out of 106 PMRs		Out of 107 PMRs	
			Nos.	%age	Nos.	%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%	2	1.89%	1	0.93%
	% Fault repaired within 5 days (for urban areas)	100%	3	2.83%	2	1.87%
(iii)	% Fault repaired by next working day (for rural and hilly areas)	≥ 75%	1	0.94%	1	0.93%
	% Fault repaired within 7 days (for rural and hilly areas)	100%	2	1.89%	1	0.93%
(iv)	'Mean time to Repair' (MTTR)	≤ 10 Hrs	2	1.89%	1	0.93%
(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	100% within 1 week of resolution of complaint	0	0.00%	0	0.00%
(ix)	Accessibility of call centre/ customer care	≥ 95%	1	0.94%	6	5.61%
	%age of calls answered by the operators (voice to voice) within ninety seconds	≥ 95%	2	1.89%	27	25.23%
(x)	Termination / closure of service	≤ 7 days	2	1.89%	1	0.93%
(xi)	Time taken for refund of deposits after closures	100% within 60 days	3	2.83%	3	2.80%

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 PMRs increased from 106 to 107 in QE June 2023 as VMIPL has started the service in Punjab LSA w.e.f. 20th May 2023.

4.4 The performance has improved 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%
- % Fault repaired within 5 days (for urban areas) 100%
- % Fault repaired within 7 days (for rural and hilly areas) 100%
- 'Mean time to Repair' (MTTR) ≤ 10Hs
- Termination / closure of service ≤ 7 days

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

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

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

Parameter	Benchmark	Service Provider	Service Area	Performance in Parameters not met
% of faults repaired by next working day- Urban	For urban areas by next working day $\geq 85\%$	MTNL	Mumbai	39.00%
% of faults repaired within 5 days - Urban	For urban areas 100%	MTNL	Delhi	99.62%
		MTNL	Mumbai	56.40%
% of faults repaired by next working day- Rural and hilly areas	$\geq 75\%$	MTNL	Mumbai	50.00%
% of faults repaired within 7 days- Rural and hilly areas	100%	MTNL	Mumbai	50.00%
Mean Time to Repair (MTTR)	≤ 10 hrs	MTNL	Mumbai	182.87
Accessibility of call centre/ customer care	$\geq 95\%$	BSNL	Andhra Pradesh	93.15%
			Gujarat	94.82%
			Himachal Pradesh	94.57%
			Karnataka	91.33%
			Kerala	93.76%
			Tamil Nadu including Chennai	90.22%
Percentage of calls answered by the operators (voice to voice) within ninety seconds	$\geq 95\%$	AIRTEL	Andhra Pradesh	85.14%
			Assam	84.83%
			Bihar	91.96%
			Delhi	86.81%
			Gujarat	88.50%
			Haryana	86.17%
			Himachal Pradesh	86.35%
			Karnataka	82.70%
Kerala	78.31%			

			Kolkata	88.85%
			Madhya Pradesh	88.44%
			Maharashtra	90.37%
			Mumbai	89.16%
			Punjab	84.85%
			Rajasthan	88.57%
			Uttar Pradesh (East)	87.49%
			Uttar Pradesh (West)	85.11%
			West Bengal	87.75%
	≥ 95%	BSNL	Andhra Pradesh	87.35%
			Assam	91.95%
			Gujarat	91.45%
			Himachal Pradesh	93.19%
			Karnataka	84.87%
			Kerala	90.57%
			Madhya Pradesh	93.41%
			Maharashtra	92.84%
			Tamil Nadu including Chennai	83.48%
Termination / Closure of service	≤ 7 days	MTNL	Mumbai	99.66%
Time taken for Refund of deposits after closures- within 60 days	100% within 60 days	MTNL	Mumbai	59.15%
	100% within 60 days	TATA	Andhra Pradesh	89.52%
	Maharashtra		98.97%	

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

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

- iii. 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 6 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 997 Service Providers providing broadband (wireline) service at the end of June, 2023. Total number of broadband (wireline) subscriber base of all the broadband service providers is 351,03,406 in quarter ending June, 2023 as compared to 334,91,351 in quarter ending March, 2023.
- 4.9 Out of 997 broadband service providers providing broadband (wireline) service, only 92 service providers are having subscriber base more than 10,000 subscribers and share 97.24% 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 3,25,52,152 at the end of March, 2023 (for 89 service providers) to 3,41,34,107 at the end of June, 2023 (for 92 service providers).
- 4.10 This report covers performance of 92 broadband service providers' vis-à-vis the QoS benchmarks prescribed by TRAI. 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	No. of PMRs where service providers are not meeting the benchmarks			
			QE March, 2023		QE June, 2023	
			Out of 124 PMRs		Out of 128* PMRs	
			Nos.	%age	Nos.	%age
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	0.81%	1	0.78%
2	Faults Repair/ Restoration Time					
2.2	% of faults repaired by next working day	>90%	1	0.81%	1	0.78%
2.3	% of faults repaired within 3 working day	=>99%	1	0.81%	1	0.78%
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	1.61%	5	3.91%
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	0.81%	1	0.78%
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%

S. No.	Parameters	Benchmarks	No. of PMRs where service providers are not meeting the benchmarks			
			QE March, 2023		QE June, 2023	
			Out of 124 PMRs		Out of 128* PMRs	
			Nos.	%age	Nos.	%age
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%
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	95.83%
2	Fault Repair/Restoration Time	% of faults repaired by next working day	>90%	Mahanagar Telephone Nigam Ltd.	All India	68.78%
		% of faults repaired within 3 working day	=>99%	Mahanagar Telephone Nigam Ltd.	All India	74.49%
3	Billing Performance	%age of cases to whom refund of deposits is made within 60 days of closures	100% within 60 days	Mahanagar Telephone Nigam Ltd.	All India	78.44%
				Tata Teleservices Limited	Andhra Pradesh	85.71%
					Karnataka	80.00%
				Tata Teleservices (Maharashtra) Ltd.	Maharashtra	95.08%
Mumbai	91.36%					
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	73.82%

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	Mar-23	Jun-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	358	360
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#	1737#
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	427	446
7	Number of total active Subscribers with pay DTH operators (in million)	65.25	65.50

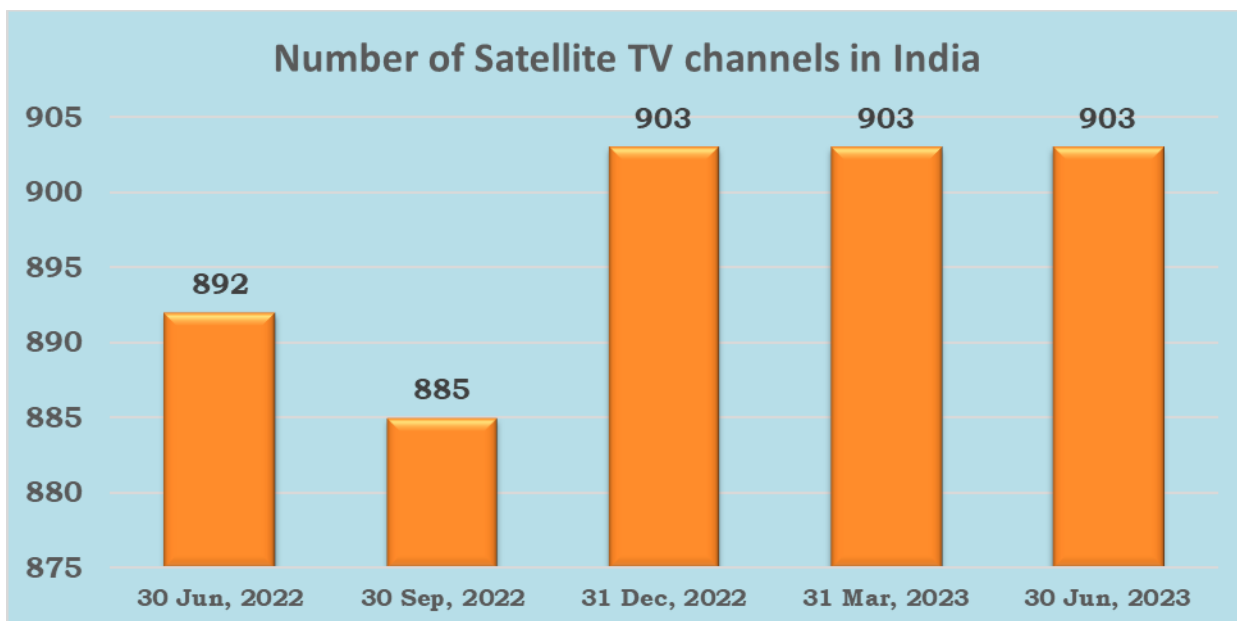
* <https://new.broadcastseva.gov.in/digigov-portal-web-app/webHP?requestType=ApplicationRH&actionVal=userInformationSystem&screenId=2>

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 360 satellite pay TV channels as on 30th June 2023. Out of 360 pay channels, 256 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

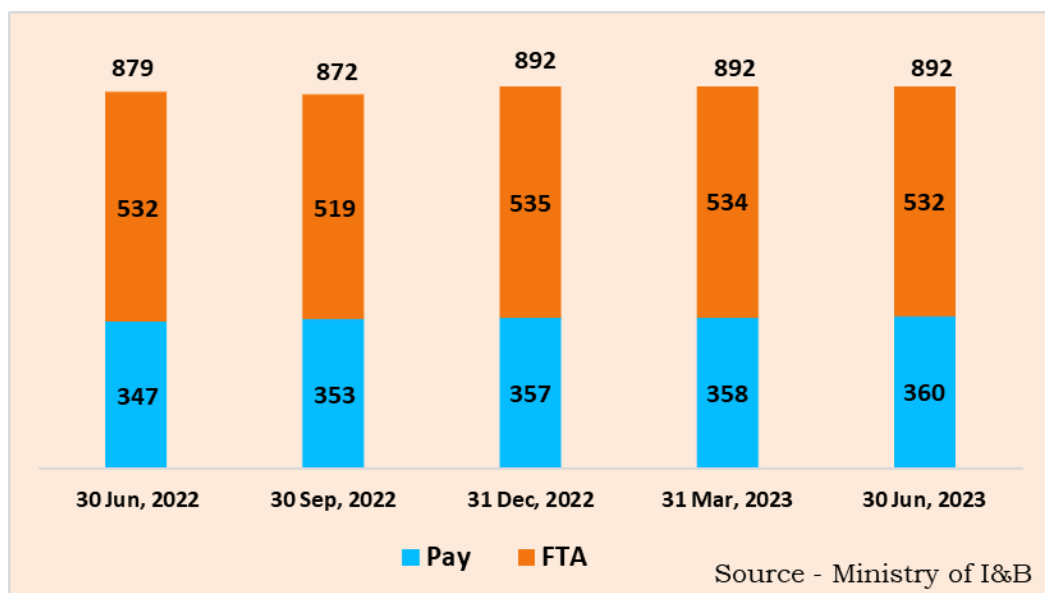


Chart 5.3 : Numbers of SD satellite pay TV channels and HD satellite pay TV channels

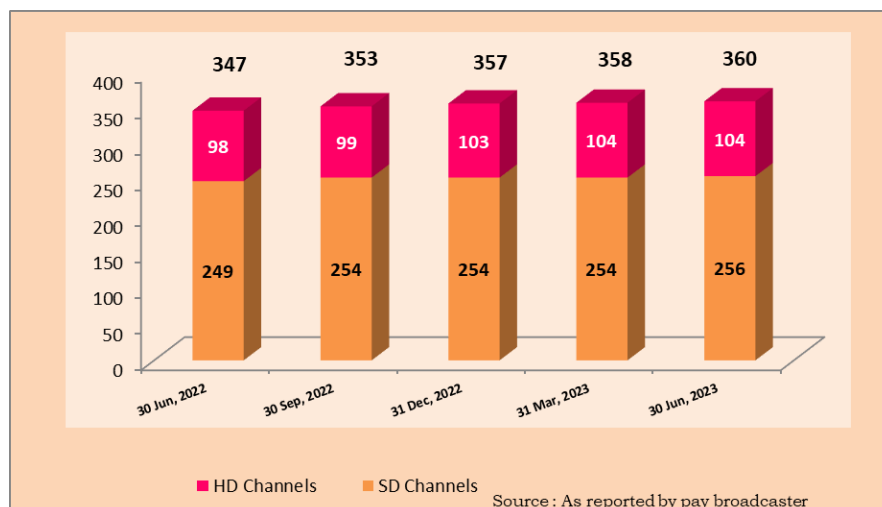


Table 5.3: Price-Range wise Analysis of Pay Channels as reported by the broadcaster to TRAI

Price range	Number of SD channels	Number of HD channels
Less than 1	58	---
1 to 5	97	13
5 to 12	47	25
12 to 15	08	05
15 to 19	07	08
19	37	52
>19	02	01
Total	256	104

Table 5.4: Genre wise Analysis of Pay Channels

S.No	Genre	Number of channels
1	General Entertainment	114
2	Movies	71
3	News and Current Affairs	62
4	Sports	32
5	Kids	28
6	Infotainment	26
7	Music	22
8	Devotional	03
9	Miscellaneous	02
Total		360

Table 5.5: Broadcaster wise number of pay channels as reported to TRAI

S.No	Name of Broadcaster	Number of channel(s)
1	Star India Private Limited	64
2	Zee Entertainment Enterprises Limited	48
3	Viacom 18 Media Private Limited	37
4	SUN TV Network Limited	31
5	Culver Max Entertainment Private Limited	22
6	TV 18 Broadcast Limited	19
7	Eenadu Television Private Limited	18
8	Zee Media Corporation Limited	16
9	Discovery Communications India	14
10	Bennett, Coleman & Company Limited	12
11	Disney Broadcasting (India) Limited	7
12	NGC Network (India) Pvt Limited	6
13	IN 10 Media Private Limited	5
14	Kalaingar TV Pvt Limited	5
15	Mavis Satcom Limited	4
16	Raj Television Network Limited	4
17	Tarang Broadcasting Company Limited	4
18	TV Today Network Limited	4
19	Warner Media India Private Limited	4
20	Celebrities Management Pvt Limited	3
21	New Delhi Television Limited	3
22	Sarthak Music Private Limited	3
23	Silverstar Communications Limited	3
24	AETN 18 Media Pvt Limited	2
25	Bangla Entertainment Private Limited	2
26	BBC Global News India Private Limited	2
27	Living Entertainment Enterprises Private Ltd	2
28	MSM World Wide Factual Media Private Limited	2
29	CSL Info Media Private Limited	1
30	Direct New Private Limited	1
31	Fame Media Private Limited	1
32	Greycells18 Media Limited	1
33	IBN Lokmat News Private Ltd	1
34	Information TV Private Limited	1
35	Lex Sportel Vision Private Limited	1
36	Lifestyle and Media Broadcasting Limited	1
37	Media World Wide Limited	1
38	Odisha Television Limited	1
39	Sidharth Broadcasting Private Limited	1
40	Suryansh Broadcasting Private Limited	1
41	Zee Akaash News Private Limited	1
42	Zoom Entertainment Network Limited	1
Total		360

Table 5.6: Number of pay channels being offered by major broadcasters including their group companies.

Group details					
S.No	Group Name	S.No	Name of the broadcasters	Number of Pay channels	Total
1	Star Group channels	1	Star India Private Limited	64	77
		2	Disney Broadcasting (India) Limited	07	
		3	NGC Network (India) Pvt Limited	06	
2	TV 18 Group channels	1	Viacom 18 Media Private Limited	37	59
		2	TV 18 Broadcast Limited	19	
		3	AETN 18 Media Pvt Limited	02	
		4	IBN Lokmat News Private Ltd	01	
3	Culver Max Entertainment Group channels	1	Culver Max Entertainment Private Limited	22	26
		2	Bangla Entertainment Private Limited	02	
		3	MSM Worldwide Factual Media Private Limited	02	
4	Times Network Group channels	1	Bennett, Coleman & Company Limited	12	13
		2	Zoom Entertainment Network Limited	01	
5	CMPL group channels	1	Celebrities Management Pvt Limited	03	04
		2	Media Worldwide Limited	01	
6	ZEEL Group channels	1	Zee Entertainment Enterprises Limited	48	50
		2	Living Entertainment Enterprises Private Ltd	02	
7	Discovery Group	1	Discovery Communications India	14	18
		2	Warner Media India Private Limited	04	
8	Sidharth TV Network Group channels	1	Sarthak Music Private Limited	03	04
		2	Sidharth Broadcasting Private Limited	01	

Group details					
S.No	Group Name	S.No	Name of the broadcasters	Number of Pay channels	Total
9	ZMCL Group channels	1	Zee Media Corporation Limited	16	17
		2	Zee Akaash News Private Ltd	01	
10	NDTV Group channels	1	New Delhi Television Limited	03	04
		2	Lifestyle and Media Broadcasting Limited	01	

B. Cable TV Sector

5.3 As on 30th June 2023, there are 1737 MSOs registered with MIB. 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 5.7: Subscriber base of major MSOs/HITS operators at the end of June, 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	9,097,013
2.	Siti Networks Ltd.	6,566,255
3.	Hathway Digital Ltd.	5,517,129
4.	Den Networks Ltd.	4,016,963
5.	Thamigzha Cable TV Communication Ltd. (TCCL)	3,937,770
6.	Kerala Communicators Cable Ltd (KCCL)	3,235,809
7.	NXT Digital Ltd. (HITS)	2,268,989
8.	KAL Cables	2,048,395
9.	VK Digital	1,791,852
10.	Tamil Nadu Arasu Cable TV (TACTV)	1,663,460
11.	Fastway Transmission Pvt. Ltd	1,646,956
12.	NXT Digital Ltd. (CATV)	1,133,338
13.	Asianet Digital Network	1,016,797

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 30th June 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 65.50 million. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). The total active subscriber base has increased from 65.25 million in QE Mar-23 to 65.50 million in Jun-23.
- 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 30th June 2023 is depicted in the following charts: -

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

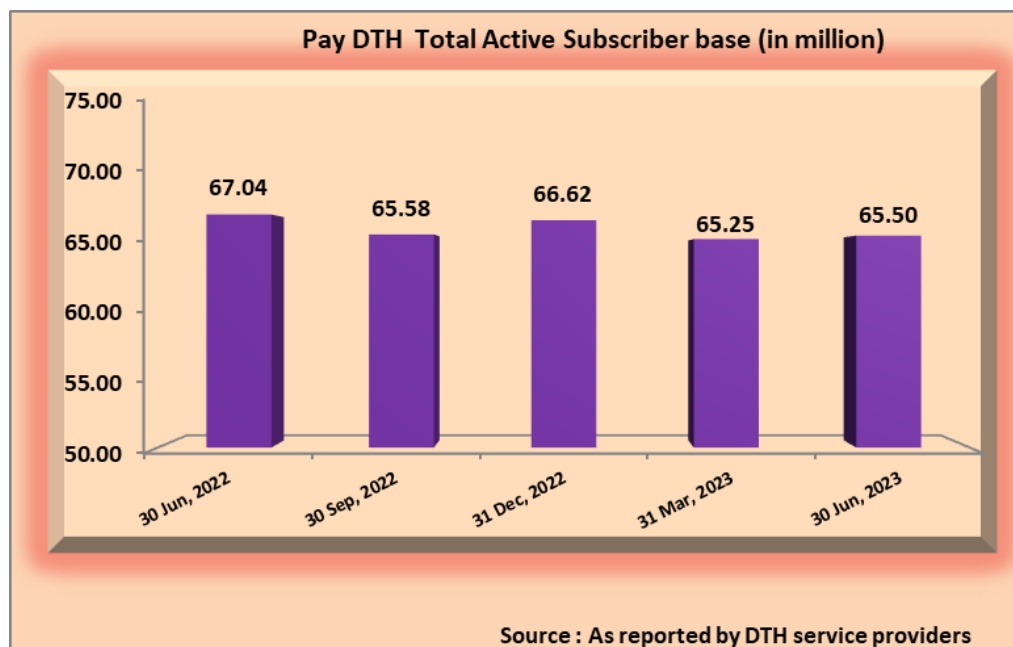
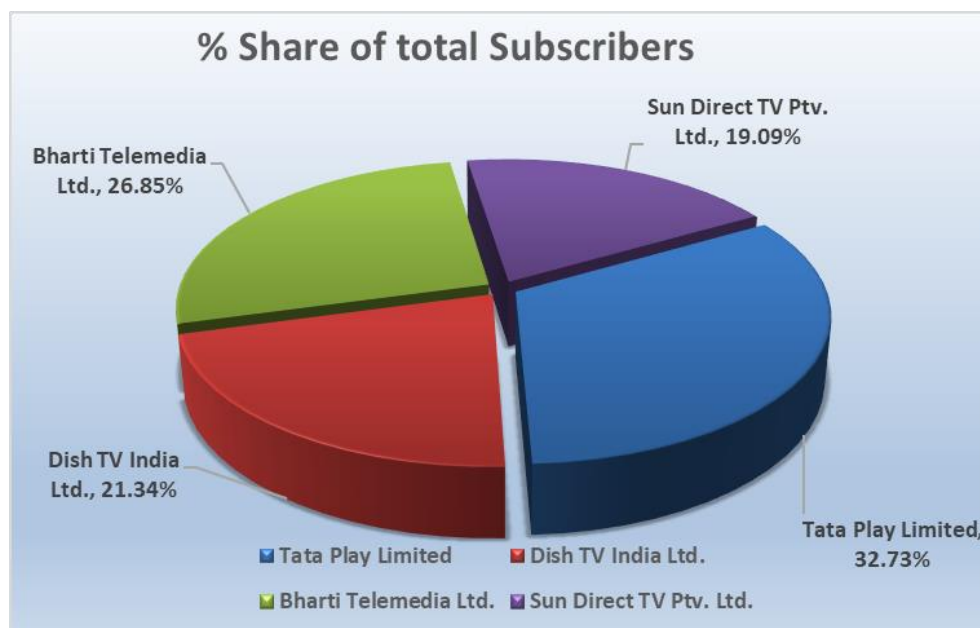


Chart 5.5 : Market share of DTH Operators



Source : As reported by DTH service providers

D. IPTV

As per information provided by the Ministry of Information and Broadcasting (MIB), as on 30.06.2023, there are 26 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 6,10,336 at the end of June 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 30th June 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 30th June, 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

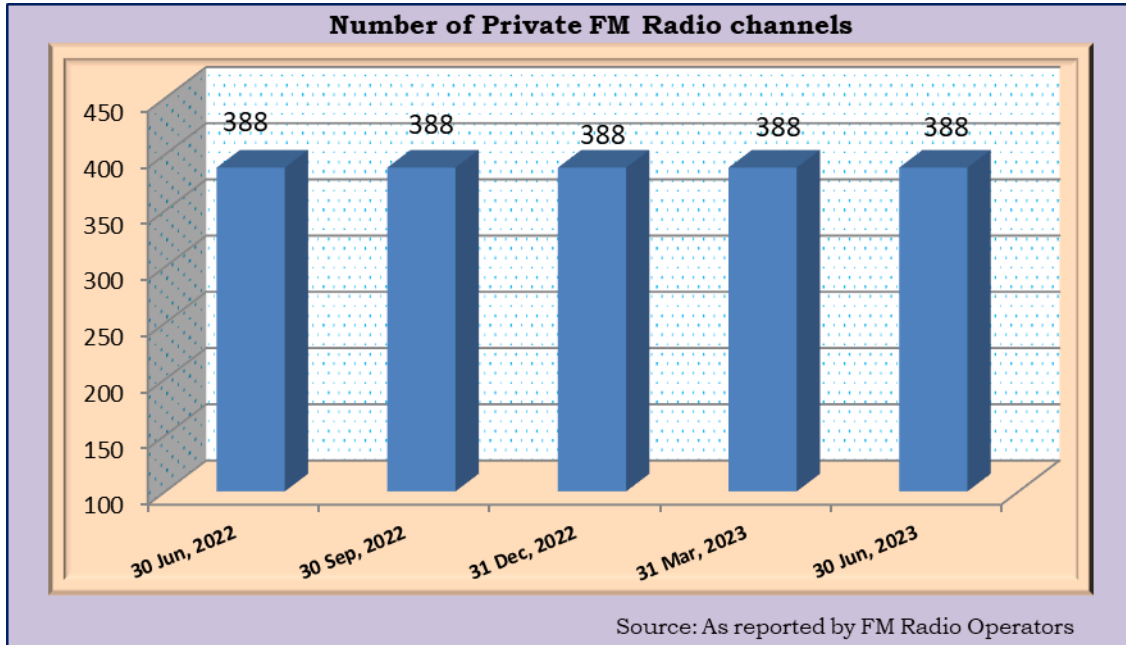
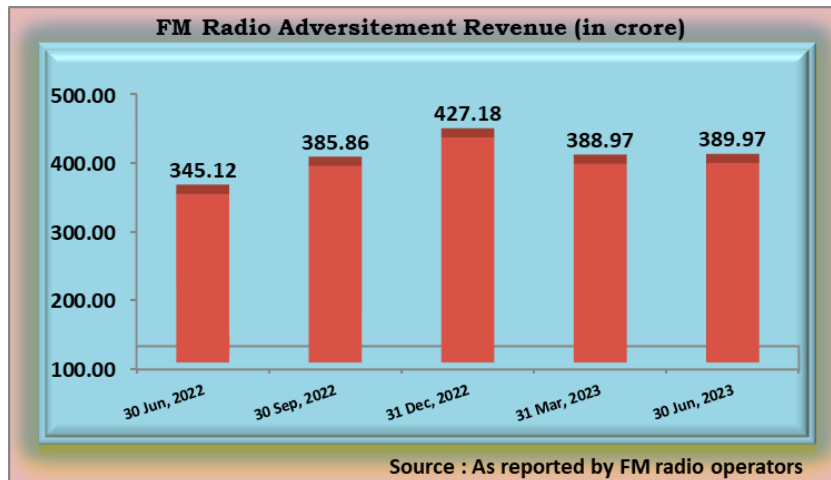


Table 5.8: FM Radio operators in terms of number of FM Radio channels they possess.

S.No.	Name of FM Operator	Number of Channels
1	Entertainment Network (India) Limited	73
2	Reliance Broadcast Network Limited	58
3	Music Broadcast Limited (MBL)	39
4	South Asia FM Limited	35
5	D B Corp Limited (Radio Division)	30
6	KAL Radio Limited	24
7	Rajasthan Patrika Pvt. Ltd	18
8	HT Media Ltd	14
9	Sambhaav Media Limited	13
10	Malar Publications Ltd.	10
11	Skyline Radio Network	10
12	Next Radio Limited	7
13	The Mathrubhumi Printing & Publishing Co.	6
14	The Malayala Manorama Co. Ltd.	5
15	Purvy Broadcasting Pvt Ltd	5
16	Ushodaya Enterprises Pvt Ltd	4
17	Digital Radio (Delhi) Broadcasting Ltd	3
18	SUN TV Network Ltd	3
19	TV Today Network Limited	3
20	Abhijit Realtors & Infra P Ltd	3
21	Digital Radio (Mumbai) Broadcasting Ltd	2
22	India Radio Ventures Pvt. Ltd.	2
23	Eastern Media Ltd	2
24	Pudhari Publicattions Pvt. Ltd.	2
25	Neutral Publishing House Ltd	2
26	PCM Cement Concrete Pvt Ltd	2
27	JCL Infra Limited	4
28	Digital Radio (Kolkata) Broadcasting Ltd	1
29	Clear Media (India) Pvt Limited	1
30	Ananda Offset Pvt Ltd.	1
31	HT Music & Entertainment Company Ltd	1
32	Udaya FM Pvt. Ltd.	1
33	Sarthak Films Private Limited	1
34	ITM Software & Entertainment Pvt Ltd	1
35	Gwalior Farms Private Limited	1
36	Renderlive Films and Entertainment Pvt. Ltd	1
	Total Number of Channels	388

5.8 The advertisement revenue reported by FM Radio operators during the quarter ending 30th June 2023 in respect of 388 private FM Radio channels is Rs 389.97 crore as against Rs 388.97 crore in respect of 388 private FM Radio channels for the previous quarter.

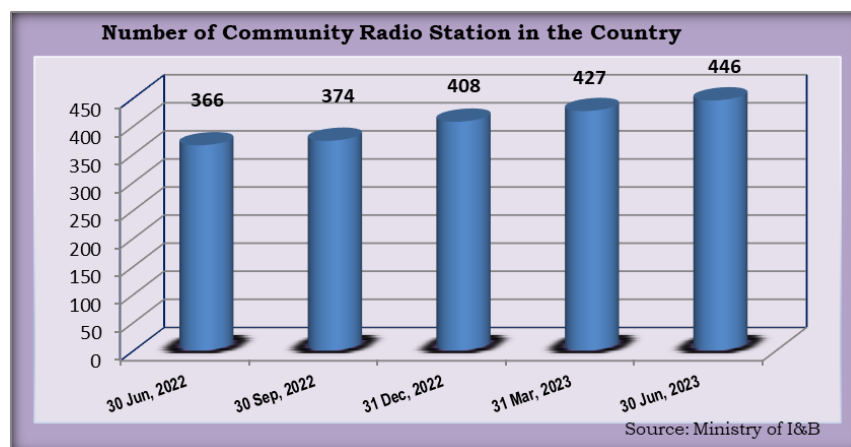
Chart 5.7: Details of Advertisement Revenue submitted by the private FM Radio broadcasters



F. Community Radio

5.9 As on 30th June 2023, 446 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
	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	
Andhra Pradesh	11770855	11363635	32404916	32770911			8010334	7557631			30263784	30650087	82,449,889	82,342,264	-107625
Assam	2002622	1912053	11006187	11150514			3184184	3193282			8800862	8941644	24,993,855	25,197,493	203638
Bihar	8393253	8058206	40323738	40594914			5775195	5862287			36728575	37941349	91,220,761	92,456,756	1235995
Delhi	16860622	16347957	17103766	17231813	193	23			1689688	1688927	18825690	19142853	54,479,959	54,411,573	-68386
Gujarat	22217191	21823572	11363192	11410888	47	47	5033390	5048755			27618299	27872065	66,232,119	66,155,327	-76792
Haryana	7350432	7235095	6553650	6563357	11	11	4565552	4465526			8170269	8219158	26,639,914	26,483,147	-156767
Himachal Pradesh	468009	433472	3424408	3439537	92	92	1592496	1610092			3313438	3310136	8,798,443	8,793,329	-5114
Jammu & Kashmir	362900	322864	5788180	5917428	0	0	827594	831303			5045033	5148627	12,023,707	12,220,222	196515
Karnataka	7232272	6676091	31217992	31577632	589	589	5987361	5414427			21467203	22181050	65,905,417	65,849,789	-55628
Kerala	14470640	14203668	7991307	8092740	113	113	9878402	9729281			10070654	10264886	42,411,116	42,290,688	-120428
Madhya Pradesh	17190019	16809837	15424526	15482919	0	0	5340998	5172636			38715471	39662102	76,671,014	77,127,494	456480
Maharashtra	24401860	23683451	21153731	21213764	0	0	6322365	6205219			39627049	40901415	91,505,005	92,003,849	498844
Mumbai	11420368	11132998	9844278	9931749	925	925			660482	303065	12376197	12424761	34,302,250	33,793,498	-508752
North East	941136	921680	5934222	5991059	0	0	1,365,085	1,281,663			4110061	4103288	12,350,504	12,297,690	-52814
Orissa	1630429	1597870	11185393	11385490	29	29	6,223,547	6,210,662			14119554	14216993	33,158,952	33,411,044	252092
Punjab	7185176	6900358	12298603	12267328	106	106	4,755,245	4,577,542			11423723	11508531	35,662,853	35,253,865	-408988
Rajasthan	10262160	9857476	22436534	22717238	155	155	6,111,223	5,843,850			24778828	25338835	63,588,900	63,757,554	168654
Tamil Nadu	16686494	16299143	27796556	28043824	269	262	9,989,037	7,883,597			24148978	24519217	78,621,334	76,746,043	-1875291
UP(E)	18771392	18336134	36684413	36841650	0	0	8,619,448	8,735,044			35366666	36253665	99,441,919	100,166,493	724574
UP(W)	16850342	16118017	18419382	18316748	8	8	5,445,784	5,309,788			22007333	22610183	62,722,849	62,354,744	-368105
Kolkata	5830683	5638643	5711563	5651788	0	0	2183653	2188790			10357855	10461233	24,083,754	23,940,454	-143300
West Bengal	14451612	13983917	16844336	17132063	147	147	2,472,605	2,499,081			22894729	22909991	56,663,429	56,525,199	-138230
Total	236,750,467	229,656,137	370,910,873	373,725,354	2,684	2,507	103,683,498	99,620,456	2,350,170	1,991,992	430,230,251	438,582,069	1,143,927,943	1,143,578,515	-349428

Annexure 1.2: Wireline Subscriber Base

Sl. No	Service Area	Bharti Airtel		Reliance Com.		Quadrant		Tata Tele.		MTNL		BSNL		Vodafone Idea		Reliance Jio		VMPL		APFPL		Total		Net Additions
		Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	Mar-23	Jun-23	
1	Andhra Pradesh	463880	499185	19577	19312			150693	232553			677375	615614	69555	63005	1075325	1162586				656424	2,456,405	3,248,679	792,274
2	Assam	18633	23428	0	0			0	0			110813	104603	2640	2610	151238	165170					283,324	295,811	12,487
3	Bihar	75020	85310	9	9			8869	10186			183542	165824	2110	2380	429093	474712					698,643	738,421	39,778
4	Delhi	1936257	1987573	20766	20504			136709	210145	1025773	1015628	-		87055	81325	856769	900015					4,063,329	4,215,190	151,861
5	Gujarat	203095	225566	2796	2725			75026	157715			332838	317980	59016	56946	540046	591915					1,212,817	1,352,847	140,030
6	Haryana	111826	122217	0	0			28827	45490			211535	207686	420	420	104916	117120					457,524	492,933	35,409
7	Himachal Pradesh	4508	5631	0	0			1585	1586			88613	89628	90	90	48812	54155					143,608	151,090	7,482
8	Jammu & Kashmir	80012	90911	0	0			0	0			86802	83621	30	30	182694	194433					349,538	368,995	19,457
9	Karnataka	1064579	1111447	19083	18556			219217	394316			877482	539849	152833	149318	781440	862439					3,114,634	3,075,925	-38,709
10	Kerala	90055	93941	3610	3447			18014	19942			1026253	1001964	7120	7130	236123	262324					1,381,175	1,388,748	7,573
11	Madhya Pradesh	439670	463302	14	5			18859	47732			267567	260750	34445	34575	559905	628688					1,320,460	1,435,052	114,592
12	Maharashtra	381032	408987	9353	8915			207645	232175			603067	581214	24161	22662	231804	249222					1,457,062	1,503,175	46,113
13	Mumbai	541934	564244	42777	39876			464355	615095	1,286,780	1,261,464			172330	169822	776731	812519					3,284,907	3,463,020	178,113
14	North East	0		0	0			0	0			73127	73005	510	510	140732	151119					214,369	224,634	10,265
15	Orissa	0		4	4			8406	10814			173215	169306	3930	3930	209516	233040					395,071	417,094	22,023
16	Punjab	228239	240097	1897	1925	337922	357961	13665	16270			360097	368887	2180	1980	268731	301849		13199			1,212,731	1,302,168	89,437
17	Rajasthan	196591	211128	3596	3522			13833	24842			279372	276340	15085	15075	331385	361562					839,862	892,469	52,607
18	Tamil Nadu	810621	843269	17762	17093			112911	145907			964498	949252	34918	34348	686240	748828					2,626,950	2,738,697	111,747
19	U.P.(E)	173386	185372	24	26			8023	11482			132975	121436	16570	16480	420010	468467					750,988	803,263	52,275
20	U.P.(W)	114686	121532	8	8			4893	6942			179140	177423	3526	3496	461312	516175					763,565	825,576	62,011
21	Kolkata	187078	194637	4359	4664			47021	63061			197829	193048	14535	14575	206254	464761					657,076	934,746	277,670
22	West Bengal	26370	33456	71	70			2601	2735			279683	178845	120	120	416893	230767					725,738	445,993	-279,745
	Total	7,147,472	7,511,233	145,706	140,661	337,922	357,961	1,541,152	2,248,988	2,312,553	2,277,092	7,105,823	6,476,275	703,179	680,827	9,115,969	9,951,866	0	13,199	0	656,424	28,409,776	30,314,526	1,904,750

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 31.03.2023	Number of PCOs as on 30.6.2023	Net PCO increase/ decrease as on 30.6.2023	Percentage Growth/ Decline as on 30.6.2023
1	Andhra Pradesh	Bharat Sanchar Nigam Limited	4153	3770	-383	-9.22%
2	Assam	Bharat Sanchar Nigam Limited	475	471	-4	-0.84%
3	Bihar	Bharat Sanchar Nigam Limited	255	245	-10	-3.92%
	Delhi	MTNL	2881	1977	-904	-31.38%
5	Gujarat	Bharat Sanchar Nigam Limited	2010	1929	-81	-4.03%
6	Haryana	Bharat Sanchar Nigam Limited	184	141	-43	-23.37%
7	Himachal Pradesh	Bharat Sanchar Nigam Limited	477	440	-37	-7.76%
8	Jammu & Kashmir	Bharat Sanchar Nigam Limited	132	121	-11	-8.33%
9	Karnataka	Bharat Sanchar Nigam Limited	3536	2781	-755	-21.35%
10	Kerala	Bharat Sanchar Nigam Limited	3800	2772	-1028	-27.05%
11	Kolkata	Bharat Sanchar Nigam Limited	754	601	-153	-20.29%
12	Madhya Pradesh	Bharat Sanchar Nigam Limited	782	777	-5	-0.64%
13	Maharashtra	Bharat Sanchar Nigam Limited	3269	2999	-270	-8.26%
	Mumbai	MTNL	6611	6081	-530	-8.02%
15	North East	Bharat Sanchar Nigam Limited	351	310	-41	-11.68%
16	Odisha	Bharat Sanchar Nigam Limited	3	3	0	0.00%
17	Punjab	Bharat Sanchar Nigam Limited	708	589	-119	-16.81%
		Quadrant Televentures Ltd.	342	322	-20	-5.85%
18	Rajasthan	Bharat Sanchar Nigam Limited	310	276	-34	-10.97%
19	TN including Chennai	Bharat Sanchar Nigam Limited	8538	7802	-736	-8.62%
20	UP - East	Bharat Sanchar Nigam Limited	1971	1288	-683	-34.65%
21	UP - West	Bharat Sanchar Nigam Limited	573	546	-27	-4.71%
22	West Bengal	Bharat Sanchar Nigam Limited	20	18	-2	-10.00%
	Total		42135	36259	-5876	-13.95%

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

S.NO	Name of Telecom Service Area	Service Provider	Number of VPTs as on 31.03.2023	Number of VPTs as on 30.6.2023	Net VPTs increase/ decrease as on 30.6.2023	Percentage Growth/ Decline as on 30.6.2023
1	Andhra Pradesh	BSNL	2,896	2,896	0	0.00%
2	Assam	BSNL	105	105	0	0.00%
3	Bihar	BSNL	6,114	6,114	0	0.00%
4	Delhi	BSNL				
5	Gujarat	BSNL	5,278	5,278	0	0.00%
6	Haryana	BSNL	462	462	0	0.00%
7	Himachal Pradesh	BSNL	1,875	1,875	0	0.00%
8	Jammu & Kashmir	BSNL	810	810	0	0.00%
9	Karnataka	BSNL	3,656	3,656	0	0.00%
10	Kerala	BSNL	331	331	0	0.00%
11	Kolkata	BSNL	130	130	0	0.00%
12	Madhya Pradesh	BSNL	10,100	10,100	0	0.00%
13	Maharashtra	BSNL	7,846	7,846	0	0.00%
14	Mumbai	BSNL				
15	North East	BSNL	1,182	1,182	0	0.00%
16	Odisha	BSNL	1,554	1,554	0	0.00%
17	Punjab	BSNL	4,493	4,493	0	0.00%
18	Rajasthan	BSNL				
19	TN including Chennai	BSNL	5,478	5,478	0	0.00%
20	UP - East	BSNL	568	568	0	0.00%
21	UP - West	BSNL	3,758	3,758	0	0.00%
22	West Bengal	BSNL	11,970	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 30.06.2023

S. No.	Name of Service Provider	Narrowband	Broadband	Total
1	Reliance Jio Infocomm Ltd	0	447752659	447752659
2	Bharti Airtel Ltd.	19969265	248059566	268028831
3	Vodafone Idea Ltd	11043432	124896076	135939508
4	Bharat Sanchar Nigam Ltd.	2882539	24588532	27471071
5	Atria Convergence Technologies Limited	0	2159293	2159293
6	Hathway Cable And Datacom Limited	0	1117981	1117981
7	ONEOTT iNTERTAINMENT LIMITED	0	1015500	1015500
8	Kerala Vision Broadband Ltd.	0	935679	935679
9	Excitel Broadband Private Limited	0	893352	893352
10	YOU Broadband India Ltd.	387029	496087	883116
11	GTPL Broadband Pvt. Ltd.	0	794600	794600
12	Netplus Broadband Services Pvt. Ltd	0	659299	659299
13	Andhra Pradesh State Fiber Net Limited	0	535761	535761
14	ALLIANCE BROADBAND SERVICES PVT. LTD.	0	533959	533959
15	RailTel Corporation of India Ltd.	0	523648	523648
16	Mahanagar Telephone Nigam Limited	48016	421036	469052
17	Asianet Satellite Communications Ltd.	0	457397	457397
18	Tata Play Broadband Private Limited	0	440827	440827
19	Intech Online Pvt. Ltd.	0	319385	319385
20	Quadrant Televentures Ltd.	81	258548	258629
21	Pioneer eLabs Limited	0	249979	249979
22	Blue Lotus Support Services Pvt Ltd. formerly Limras Eronet Broadband Service Pvt Ltd	0	242813	242813
23	Tikona Infinet Ltd.	0	205027	205027
24	Antariksh Softtech Private Limited	0	147281	147281
25	ANI NETWORK PVT LTD	0	142255	142255
26	Siti Broadband Services Pvt. Limited	0	138054	138054
27	Excell Media Pvt. Ltd.	0	134331	134331
28	Indinet Service Pvt. Ltd.	0	129407	129407
29	Wish Net Pvt. Ltd.	0	124554	124554
30	GTPL KCBPL Broadband Private Limited	0	115442	115442
31	Airnet Cable and Datacom Pvt. Ltd.	0	107584	107584
32	Five Network Solution (India) Ltd.	0	92659	92659
33	Vortex Netsol Pvt. Ltd.	0	86985	86985
34	Ishan Netsol Pvt. Ltd.	0	78483	78483
35	Fusionnet Web Services Pvt Ltd	0	73596	73596
36	Joister Infoserve Pvt. Ltd.	0	64787	64787
37	Microscan Infocommtech Private Limited	0	63074	63074

S. No.	Name of Service Provider	Narrowband	Broadband	Total
38	DEN Broadband Limited	0	62828	62828
39	K Net Solutions Pvt. Ltd.	0	58063	58063
40	Dwan Supports Pvt. Ltd.	0	43402	43402
41	Radinet Info Solutions Pvt. Ltd.	0	42260	42260
42	Snet Networks Pvt. Ltd.	0	39328	39328
43	DNA Infotel Pvt. Ltd.	0	38579	38579
44	Instanet Technologies Pvt. Ltd.	0	38194	38194
45	Meghbela Cable & Broadband Servies (P) Ltd	0	36381	36381
46	Multicraft Digital Technologies Private Limited	0	33361	33361
47	ADN Broadband Private Limited	0	32889	32889
48	IBUS VIRTUAL NETWORK SERVICES PRIVATE LIMITED	0	32165	32165
49	Readylink Internet Services Limited	0	31126	31126
50	Nuron Networks India Private Limited	0	30354	30354
51	Ethernet Xpress(I) Pvt. Ltd.	0	30083	30083
52	Shree Omkar Infocomm Pvt Ltd	0	28740	28740
53	Sristisanchar Webnet Limited	0	28498	28498
54	WAVE FIBER PRIVATE LIMITED (Formerly Coastal Broadband and Online Services Pvt. Ltd.)	0	28298	28298
55	Juweriyah Networks Pvt. Ltd.	0	27927	27927
56	Tata Communications Limited	200	27187	27387
57	INFOCUS NETWORKS Pvt Ltd.	0	25994	25994
58	Tata Teleservices(Maharashtra) Ltd.	126	25338	25464
59	Kernel Fibernet Online Network Pvt. Ltd.	0	25053	25053
60	Digital Networks Associates Pvt. Ltd.	0	24901	24901
61	Candor Infosolution Pvt. Ltd.	0	24493	24493
62	Shyam Spectra Private Limited	0	23978	23978
63	Spiderlink Networks Pvt. Ltd.	0	23599	23599
64	Tachyon Communications Private Limited	0	23472	23472
65	Airfiber Networks Pvt. Ltd.	0	22331	22331
66	Tata Teleservices Limited	21	22247	22268
67	Kings Broadband Pvt. Ltd	0	21823	21823
68	Honeycomb Telnet Private Limited	0	21180	21180
69	SIKKA BROADBAND PRIVATE LIMITED	0	20636	20636
70	Swiftmail Communications Ltd.	0	19619	19619
71	Stampede Communications Pvt. Ltd.	0	19568	19568
72	RI Networks Pvt Ltd	0	19284	19284
73	Genstar Network Solutions Pvt. Ltd.	0	19197	19197
74	Honesty Net Solutions (I) Pvt Ltd	0	18897	18897
75	WAN AND LAN INTERNET PRIVATE LIMITED	0	18588	18588
76	VORTEX INFOCOM PRIVATE LIMITED	0	18228	18228

S. No.	Name of Service Provider	Narrowband	Broadband	Total
77	Airlink Communications Pvt. Ltd.	0	17224	17224
78	RAINBOW COMMUNICATIONS INDIA PRIVATE LIMITED	0	17107	17107
79	QUEST CONSULTANCY PVT LTD	0	16989	16989
80	SRI SAI COMMUNICATION AND INTERNET PRIVATE LIMITED	0	16419	16419
81	Rajesh Digital & DataCom Pvt. Ltd.	0	15855	15855
82	Weebo Networks Pvt Ltd.	0	15467	15467
83	Yashash Cable Network (Pvt.) Ltd	0	15405	15405
84	Paradise Telecom Pvt. Ltd.	0	15149	15149
85	City Online Services Ltd.	0	14147	14147
86	BALAJI TELEWORKS DEVELOPMENTPRIVATE LIMITED	0	13933	13933
87	DDC Broad Band Pvt. Ltd	0	13358	13358
88	Pacenet Meghbela Broadband Pvt.Ltd.	0	13073	13073
89	DL GTPL Broadband Pvt. Ltd.	0	12216	12216
90	VIJAYALAKSHMI NET SERVICES PRIVATE LIMITED	0	11765	11765
91	Apple Broadband Services Pvt. Ltd.	0	11488	11488
92	Five Internet Solutions Pvt. Ltd.	0	11343	11343
93	Specific Net Pvt. Ltd	0	10914	10914
94	Net 9 Fibernet Pvt Ltd	0	10899	10899
95	Intermedia Cable Communication Pvt Ltd	0	10837	10837
96	Rural Broadband Pvt. Ltd.	0	10042	10042
97	NORTH EAST DATAA NETWORK PRIVATE LIMITED	0	9990	9990
98	Angel Air Network Solutions Pvt. Ltd.	0	9945	9945
99	Siliguri Internet & Cable TV Pvt. Ltd.	0	9721	9721
100	INFONET COMM ENTERPRISES PVT LTD	0	9662	9662
101	R.G. Technosolutions Pvt. Ltd.	0	9569	9569
102	MAHA MEDIACOM INTERNET PVT. LTD.	0	9469	9469
103	Orange Infocom PVT.LTD	0	9385	9385
104	Ani Broadband Service Pvt. Ltd.	0	9263	9263
105	Signum Digital Networks Pvt. Ltd	0	9244	9244
106	AT Broadband Pvt. Ltd.	0	9025	9025
107	Esto Broadband Pvt. Ltd.	0	9016	9016
108	HYOSEC SOLUTIONS Pvt. LTD	0	8693	8693
109	APNA TELELINK PVT. LTD.	0	8360	8360
110	Vizag Broad CastingCompany Pvt. Ltd.	0	7856	7856
111	Airconnect Internet Services Pvt. Ltd.	0	7847	7847
112	Multinet (Udaipur) Pvt. Ltd.	0	7640	7640
113	WSNS PVT. LTD.	0	7445	7445

S. No.	Name of Service Provider	Narrowband	Broadband	Total
114	Cityzone Infonet Pvt. Ltd.	0	7366	7366
115	Gigaline Teleservices (OPC) Pvt. Ltd	0	7336	7336
116	FOXTEL TELECOMMUNICATIONS PVT LTD	0	7325	7325
117	FUTURE CONNECT BROADBAND Pvt Ltd.	0	7196	7196
118	Prisac Aviation Technologies Pvt. Ltd.	0	7071	7071
119	Kappa Internet Services Pvt. Ltd.	0	7024	7024
120	Sify Technologies Ltd.	46	6804	6850
121	United Telecoms Ltd.	0	6801	6801
122	SSCN Pvt. Ltd.	0	6662	6662
123	Patel Internet Pvt. Ltd.	0	6642	6642
124	Elxer Communications (P)Ltd.	0	6602	6602
125	ROHAN MEDIA PRIVATE LIMITED	0	6494	6494
126	Skymax Broadband Services Pvt. Ltd.	0	6442	6442
127	QUALITY BROADBAND PRIVATE LIMITED	0	6387	6387
128	S S Netcom Pvt. Ltd.	0	6354	6354
129	7 Star Cablenet Pvt. Ltd	0	6249	6249
130	SANCHAR TELENETWORK PVT LTD	0	6051	6051
131	DEEPNET BROADBAND PRIVATE LIMITED	0	6007	6007
132	Southern Online Bio Technologies Ltd.	0	5971	5971
133	Lalat Internet Service Private Limited	0	5967	5967
134	Symbios Creations Pvt. Ltd.	0	5873	5873
135	SATELLITE NETCOM PRIVTAE LIMITED	5827	0	5827
136	OM-ASHA Net Pvt. Ltd.	0	5819	5819
137	TJ BROADBAND NETWORK PVT LTD	0	5785	5785
138	NEXTGEN BROADBAND PRIVATE LIMITED	0	5772	5772
139	SONALI INTERNET SERVICES PVT. LTD.	0	5654	5654
140	ADN K NET FIBER PRIVATE LIMITED	0	5645	5645
141	Praction Networks Private Limited	0	5520	5520
142	SFOUR CABLENET PVT LTD	0	5371	5371
143	ARKTEL NETWORKS PVT LTD	0	5366	5366
144	LM Energy and Software Pvt. Ltd.	1510	3812	5322
145	Sancfil Technologies Internet Services Pvt. Ltd.	0	5314	5314
146	DEHRADUN E NET SOLUTIONS PRIVATE LIMITED	0	5300	5300
147	Mangaluru Broadband Network Pvt Ltd	0	5300	5300
148	Dsouza Infotainment Pvt. Ltd.	0	5297	5297
149	Shine Communications Pvt. Ltd.	0	5277	5277
150	Wefe Technology Pvt. Ltd.	0	5203	5203
151	SNS Internet Services Pvt. Ltd.	0	5140	5140
152	GEOCITY NETWORK SOLUTIONS PVT. LTD.	0	5124	5124
153	HYFY Giga Fiber Pvt. Ltd.	0	4613	4613

S. No.	Name of Service Provider	Narrowband	Broadband	Total
154	Allnet Broadband Network Pvt Ltd	0	4515	4515
155	INRI COMMUNICATIONS PVT LTD	0	4493	4493
156	FIBRE AIR SERVICES Pvt Ltd.	0	4348	4348
157	Five Net Service Provider Pvt. Ltd.	0	4068	4068
158	Blazenet Ltd.	0	4017	4017
159	Bittel Telecom Private Limited	0	3977	3977
160	Vibhuti Networks Pvt. Ltd.	0	3951	3951
161	SUPER SONIC BROADBAND PVT LTD	0	3915	3915
162	Speed Online Net Pvt Ltd	0	3796	3796
163	Siddhant Broadband Pvt. Ltd.	0	3791	3791
164	SoftCall Cust-O-Care Pvt. Ltd..	0	3699	3699
165	Kumar Cable Digital Network Pvt. Ltd.	0	3640	3640
166	NEHA INFONET PVT LTD.	0	3575	3575
167	Falconet Internet Pvt Ltd	0	3560	3560
168	STN INFOTECH PVT. LTD.	0	3544	3544
169	Getway Broadband Pvt. Ltd.	0	3496	3496
170	Nirav Infoway Pvt. Ltd	0	3387	3387
171	Prathamesh Broadband Pvt. Ltd	0	3350	3350
172	Mukand Infotel Pvt. Ltd.	0	3335	3335
173	DREAMLINK TECHNOLOGIES PVT LTD	0	3298	3298
174	MicroNet Gigafiber Pvt Ltd	0	3270	3270
175	Userlinks Netcom Pvt. Ltd.	0	3255	3255
176	Net Access Internet India Private Limited	0	3239	3239
177	Krishinet Infocom Pvt. Ltd.	0	3225	3225
178	POWERNET TELECOM PVT LTD	0	3217	3217
179	Sri Nagar Net Tech Pvt. Ltd.	0	3191	3191
180	Rainbow Internet teleservices Pvt Ltd	0	3184	3184
181	delDSL Internet Pvt Ltd	0	3167	3167
182	Maharaj Netsol Pvt Ltd	0	3136	3136
183	Inet Fiber India Pvt. Ltd	0	3132	3132
184	AS Broadband Pvt. Ltd	0	3103	3103
185	Antarjal IT Communication Pvt. Ltd.	0	3001	3001
186	Netfox Networks Private Limited	0	2922	2922
187	Kovai Fibernet Pvt. Ltd.	0	2914	2914
188	Renu Giga Fiber Pvt. Ltd.	0	2904	2904
189	ajab media vision pvt. Ltd.	0	2900	2900
190	AAACLOUD TELEPHONY PRIVATE LIMITED	0	2822	2822
191	Netfirre Communications Pvt. Ltd.	0	2816	2816
192	Mega Hertz Network Solutions Pvt. Ltd.	0	2800	2800
193	Sherie Plexus ISP Pvt. Ltd.	0	2779	2779
194	NETVISION AWADH NETWORKS PVT LTD	0	2774	2774

S. No.	Name of Service Provider	Narrowband	Broadband	Total
195	VRD Web Services Pvt. Ltd.	0	2758	2758
196	NETWAY INTERNET PVT. LTD.	0	2739	2739
197	Niss Internet Services Pvt. Ltd.	0	2708	2708
198	Foxcell Communications Pvt. Ltd.	0	2703	2703
199	HIGHTECH BROADBAND SERVICES PVT. LTD	0	2687	2687
200	TGN NETWORKS PVT LTD	0	2679	2679
201	Exnet Broadband Pvt. Ltd.	0	2670	2670
202	TRANSMEDIA TECHNOLOGIES (AP) PVT LTD	0	2639	2639
203	Airgenie Communications Pvt. Ltd.	0	2616	2616
204	ADRI INFOCOM Pvt. Ltd.	0	2559	2559
205	Siti vision Data Solutions Pvt Ltd	0	2533	2533
206	Deenet Services Pvt Ltd	0	2475	2475
207	NET4U SERVICES PVT. LTD.	2461	0	2461
208	HBS Network Pvt. Ltd.	0	2460	2460
209	Myguru Online India (P)Ltd.	0	2440	2440
210	Chandra Net Pvt. Limited	0	2435	2435
211	Seven Star Digicomm Pvt. Ltd..	0	2426	2426
212	HIGHTEC NETWORK SOLUTIONS (OPC) PRIVATE LIMITED	0	2420	2420
213	WOW Solutions and Systems Pvt. Ltd	0	2358	2358
214	Johnson Telemarketers Pvt. Ltd.	0	2355	2355
215	SBR Telecom Pvt. Ltd.	0	2350	2350
216	Real Wire Express Network Pvt. Ltd.	0	2341	2341
217	Spider Broadband Pvt. Ltd..	0	2313	2313
218	Fiberzone communication Pvt Ltd	0	2302	2302
219	SCNSKY DIGITAL OPC PRIVATE LIMITED	0	2302	2302
220	VENKATA SAI INTERNET PRIVATE LIMITED	0	2294	2294
221	OUTOFBOX NETWORKS PRIVATE LIMITED	0	2290	2290
222	Bakliwal Telecom Services Pvt. Ltd.	0	2236	2236
223	Sai Prasad Internet Services Pvt. Ltd.	0	2217	2217
224	Karunay Internet Pvt. Ltd.	0	2189	2189
225	JDM Broadband Services Pvt. Ltd.	0	2175	2175
226	Suntech Sanchar Private Limited	0	2123	2123
227	Flashcom Network Pvt. Ltd.	0	2113	2113
228	TENG NETWORK SOLUTION PRIVATE LIMITED	2113	0	2113
229	Classic Internet and Cable Services Pvt. Ltd.	0	2100	2100
230	Amar Broadband Pvt. Ltd..	0	2081	2081
231	SMART NET INDIA PVT LTD	0	2066	2066
232	Jetspot Networks Pvt. Ltd.	0	2061	2061

S. No.	Name of Service Provider	Narrowband	Broadband	Total
233	Vision Smartlink Networking Pvt. Ltd.	0	2048	2048
234	SMARTLINK SOLUTIONS PVT. LTD.	0	2033	2033
235	LAKSHAY ISOLUTIONS INDIA PRIVATE LIMITED	0	2032	2032
236	Shikhar BroadbandEnterprises Pvt. Ltd.	0	2000	2000
237	Pink Broadband Services Pvt. Ltd.	0	1990	1990
238	Tejays Dynamic Ltd.	27	1954	1981
239	TRICHY CHANNEL NINE CABLENET PRIVATE LIMITED	0	1977	1977
240	BHORER ALO CABLE AND BROADBAND PRIVATE LIMITED	0	1974	1974
241	SATHYA WEBSERVICES PRIVATE LIMITED	0	1969	1969
242	Opticom Networks Pvt.Ltd	0	1961	1961
243	Megatel Networks Pvt. Ltd.	0	1951	1951
244	Southnet Broadband Pvt. Ltd.	0	1935	1935
245	Lbs Infoway India Pvt. Ltd.	0	1923	1923
246	CORREL IT SERVICE PVT LTD	0	1920	1920
247	CredenceIS Computing Pvt. Ltd.	0	1900	1900
248	North Point Services Pvt. Ltd.	0	1900	1900
249	KOLI'Z PRIVATE LIMITED	0	1870	1870
250	First Mile Digital Private Limited	0	1860	1860
251	IRISTEL Communication Private Limited (Erstwhile Known as Lotus Broadband Pvt. Ltd.)	0	1847	1847
252	Scud Communication Pvt. Ltd.	0	1826	1826
253	BLITS GLOBAL TECHNOLOGIES Pvt. LTD	0	1822	1822
254	D Nex technology Pvt. Ltd.	0	1820	1820
255	Sanchit Infocom Pvt Ltd	0	1818	1818
256	F2H Networks Pvt. Ltd.	0	1806	1806
257	MORE WIFI INTERNET PRIVATE LIMITED	0	1805	1805
258	Jeebr Internet Service Private Limited	0	1782	1782
259	Maulee Broadband Private limited	0	1770	1770
260	Qwistel Network Service Pvt Ltd	0	1770	1770
261	Bakcom Networks India Pvt. Ltd.	1752	0	1752
262	Merv Enterprises Pvt Ltd	0	1742	1742
263	A.S.C.S.C. DIGITAL PRIVATE LIMITED	0	1738	1738
264	DNS SKYLINK PVT. LTD.	0	1728	1728
265	Skyline Infonet Pvt. Ltd.	0	1712	1712
266	City Online AP Pvt. Ltd.	0	1708	1708
267	JB Jain Broadband Solutions Private Limited	0	1708	1708
268	Assistive networks & technologie Pvt Ltd	0	1701	1701
269	Syntego Technologies India Pvt. Ltd.	0	1694	1694
270	Maruthi Cable & Data Pvt. Ltd.	0	1687	1687

S. No.	Name of Service Provider	Narrowband	Broadband	Total
271	Galaxynet Connections Pvt. Ltd.	0	1683	1683
272	Protoact Digital Network Pvt. Ltd.	0	1683	1683
273	S P Internet Technologies Pvt. Ltd.	0	1683	1683
274	Mana Broadband Pvt. Ltd.	0	1682	1682
275	Osbnnet Broadband Pvt. Ltd.	0	1664	1664
276	GRAND BROADBAND SERVICES PRIVATE LIMITED	0	1658	1658
277	Sefaro Networks Pvt. Ltd.	0	1629	1629
278	Sadaa SmartlinksCommunication Pvt. Ltd.	0	1621	1621
279	KWIKZO TELECOMM Pvt. LTD	0	1582	1582
280	AMK SUNBEAM COMMUNICATION PRIVATE LIMITED	0	1580	1580
281	Charotar Telelink Pvt. Ltd..	0	1578	1578
282	Megahertz Internet Network Pvt. Ltd.	0	1577	1577
283	Onet Digital Networks Pvt. Ltd..	0	1574	1574
284	KARAD-D-INFRA GIGA NET PRIVATE LIMITED	0	1573	1573
285	Wizbyte Networks Private Limited	68	1494	1562
286	Thrishul Broadband Pvt. Ltd..	0	1550	1550
287	Skynet Datacom Pvt. Ltd.	0	1547	1547
288	Sphier Infotech PVT. LTD.	0	1539	1539
289	B2H Infonet Pvt. Ltd.	0	1534	1534
290	Capture Network Systems Pvt. Ltd.	0	1517	1517
291	INFINET BROADBAND PRIVATE LIMITED	0	1510	1510
292	Speednet Unique Network Pvt. Ltd.	0	1506	1506
293	Susneham Private Limited	0	1502	1502
294	Teligus Networks Pvt. Ltd	0	1502	1502
295	Uzaina Business India Pvt. Ltd.	0	1502	1502
296	MOVEX DIGITAL TECHNOLOGY PVT LTD	0	1495	1495
297	F/X Wireless Technology Services Pvt. Ltd.	0	1493	1493
298	Blu Ultraband Internet Services Private Limited	0	1481	1481
299	Mayekar Broadband Pvt. Ltd.	0	1476	1476
300	ALACRIY NET SYSTEM SERVICE PRIVATE LIMITED	0	1463	1463
301	VAYU ONLINE PRIVATE LIMITED	0	1462	1462
302	NGC Broadband Pvt. Ltd.	0	1444	1444
303	ERO WIDE COMM Pvt. Ltd.	0	1442	1442
304	S S Fiber Net OpticalCommunication Pvt. Ltd.	0	1439	1439
305	Ski Network Services Pvt. Ltd	0	1414	1414
306	Speedmaxx Digital Networks Pvt. Ltd.	0	1412	1412
307	Starlings Wireless Communications Pvt. Ltd.	0	1409	1409
308	Country Online Services Pvt. Ltd.	0	1408	1408

S. No.	Name of Service Provider	Narrowband	Broadband	Total
309	INET SEVICES PVT LTD	0	1407	1407
310	Elyzium Technologies Pvt. Ltd.	0	1390	1390
311	MGI NETWORKS PVT LTD	0	1389	1389
312	SIS NETWORKS PVT LTD	0	1382	1382
313	Smart Wi5 Pvt. Ltd.	0	1372	1372
314	Venessa Internet Pvt. Ltd.	0	1372	1372
315	Sundaram Broadband Pvt Ltd	0	1358	1358
316	Vizag BroadbandCommunications Pvt. Ltd.	0	1325	1325
317	MAULI SHIV CABLE INTERNET SERVICES PRIVATE LIMITED	0	1319	1319
318	R2 Net Solutions Pvt. Ltd.	0	1304	1304
319	DHL Broadband Net Pvt. Ltd.	0	1288	1288
320	GNANA 11 COMMUNICATION PVT LTD	0	1287	1287
321	Channel III Internet Pvt. Ltd.	0	1286	1286
322	Packenet Solutions Pvt. Ltd.	0	1286	1286
323	Jiffy Cable & Datacom Pvt. Ltd.	0	1269	1269
324	RK Broadband Hifi Services Pvt Ltd	1265	0	1265
325	Airwaves Internet Pvt. Ltd.	0	1255	1255
326	Aspirare Communications Pvt Ltd	0	1254	1254
327	psnet solutions pvt ltd	0	1251	1251
328	Shrisai Shavenk Technologies Pvt. Ltd.	0	1251	1251
329	Oxynet Telecommunications Pvt. Ltd	0	1249	1249
330	City Broadband Network Pvt Ltd	0	1248	1248
331	MAKS COMMUNICATIONS PVT.LTD.	0	1248	1248
332	Gigacast Network Pvt. Ltd.	0	1247	1247
333	VSJ INTERNET SERVICES PVT. LTD.	0	1243	1243
334	Nikita Broadband Pvt. Ltd	0	1230	1230
335	UNITED STARS NETWORK PRIVATE LIMITED	0	1221	1221
336	iAIRONET COMMUNICATION PVT LTD	0	1213	1213
337	MEGSAC Enterprises Private Limited	0	1201	1201
338	Sigaram Networks Pvt. Ltd.	0	1199	1199
339	Unitel Media Pvt. Ltd.	0	1199	1199
340	Mhase Internet Network (OPC) Pvt. Ltd.	0	1197	1197
341	Sharplink Wireless Solution Pvt. Ltd.	0	1194	1194
342	Poem Techno Pvt. Ltd.	0	1186	1186
343	FTTX Broadband P Ltd	0	1180	1180
344	REVOLUTION BROADBAND PVT LTD	0	1177	1177
345	Cyber City ExtremeBroadband Pvt. Ltd.	0	1162	1162
346	TECHNETSOL INFOTECH PRIVATE LIMITED	0	1160	1160
347	Veloxr Telecom Pvt. Ltd.	0	1159	1159

S. No.	Name of Service Provider	Narrowband	Broadband	Total
348	SkyComm Internet Service Private Limited	0	1151	1151
349	Grace Teleinfra Pvt Ltd	0	1150	1150
350	ARCLINK NETWORK Pvt Ltd.	0	1146	1146
351	Minnal DigitalNetwork (P) Ltd.	0	1138	1138
352	Sampath Venkateswara Communications Pvt. Ltd.	0	1133	1133
353	Navkar Netsol Pvt. Ltd..	0	1132	1132
354	Unigro Infranet Online Pvt. Ltd.	1124	0	1124
355	In Broadband Pvt.ltd	0	1121	1121
356	Green Tech Net Com Pvt. Ltd.	0	1118	1118
357	DNS INFONET Pvt Ltd	0	1113	1113
358	Rtel Internet services Pvt Ltd	0	1102	1102
359	ACN Fiber Pvt. Ltd.	0	1100	1100
360	SHAILDHAR TELECOM SERVICES Pvt. LTD	0	1098	1098
361	Spider Broadband & Cable Pvt. Ltd.	0	1087	1087
362	Hardwork Cable & Internet services Pvt. Ltd.	0	1072	1072
363	Stackbit Internet Services Pvt. Ltd.	0	1062	1062
364	GREEN ARROW TECHNOLOGY PRIVATE LIMITED	0	1050	1050
365	Hostaxis Network Pvt. Ltd.	0	1050	1050
366	EBENEZAR COMMUNICATIONS PVT. LTD.	0	1048	1048
367	Global (India) Tele Infra Pvt. Ltd.	0	1043	1043
368	SEYFERT NETWORKS PRIVATE LIMITED	0	1041	1041
369	Seyon Tele Infra Private Limited	0	1041	1041
370	Sukruti Gcn Networks Pvt. Ltd.	0	1041	1041
371	DIGHES INTERNET SERVICES OPC PRIVATE LIMITED	0	1031	1031
372	INTERJET INDIA PRIVATE LIMITED	0	1031	1031
373	Space Hitz Network Pvt Ltd	0	1026	1026
374	Netlinx Limited	0	1016	1016
375	SKY ONLINE TECHNSYSTEM PVT LTD	0	1016	1016
376	UK GIGAFIBER INTERNET SERVICES PRIVATE LIMITED	0	1016	1016
377	FASTNET COMMUNICATION PVT. LTD.	1014	0	1014
378	SRI NETT PRIVATE LIMITED	0	996	996
379	Ashley Internet Services Pvt. Ltd.	0	994	994
380	Treelink Broadband Pvt. Ltd.	0	990	990
381	MAHRTH INTERNET SERVICES PRIVATE LIMITED	986	0	986
382	Netfirst Communications Pvt. Ltd.	0	983	983
383	WNET TELECOM PRIVATE LIMITED	0	983	983
384	Corsica Solutions Private Limited	0	974	974
385	R.P.TECH-ZONE PRIVATE LIMITED	0	971	971

S. No.	Name of Service Provider	Narrowband	Broadband	Total
386	AHM Digital Network Pvt Ltd	0	970	970
387	CATLA IT&ENGG. CO. PVT LTD.	0	970	970
388	Sheng Li Telecom India Pvt. Ltd..	0	968	968
389	ARJUN BROADBAND PRIVATE LIMITED	0	960	960
390	Asg Telecom Pvt. Ltd	0	960	960
391	Macro Signal Pvt. Ltd	0	958	958
392	M Netplus Communication Services Pvt Ltd	0	946	946
393	Anushree Digital Network Pvt Ltd	0	944	944
394	Surround Networks Pvt Ltd	0	943	943
395	NetMagic Solutions(P) Ltd.	0	927	927
396	Sarvada net Pvt. Ltd	0	924	924
397	Trueinet Networks Pvt.Ltd	0	924	924
398	DA Smartzone Pvt. Ltd.	0	920	920
399	Gulbarga Mega Speed Pvt Ltd	0	911	911
400	ALWAR ONLINE PVT LTD	0	910	910
401	Click 4 Net InternetServices Pvt. Ltd.	0	907	907
402	Glo Internet Services Pvt Ltd	0	901	901
403	Briskcom Infoway Pvt. Ltd.	0	900	900
404	OM SHIV SAI INTERNET SERVICE (OPC) PVT. LTD	0	900	900
405	RADHIKA COMMUNICATION BROADBANDPRIVATE LIMITED	0	898	898
406	Shri Samarth Infobahn Pvt. Ltd.	893	0	893
407	Darer Internet Services Pvt. Ltd.	0	889	889
408	BTS TELECOM PVT LTD	0	887	887
409	MIT ONLINE OPC Pvt Ltd	0	882	882
410	IAXN TELECOM PVT LTD	0	881	881
411	Suniman Cable and Net Pvt Ltd	0	874	874
412	Ficus Telecom Pvt. Ltd.	0	873	873
413	Moradabad Internet Services Pvt. Ltd.	0	871	871
414	M/s NTT Communications India Network Services Private Ltd.	0	865	865
415	Sai Dwarawati Net Services Pvt. Ltd.	0	860	860
416	Mhatoba BroadbandPvt. Ltd	0	856	856
417	Reliance Communications Limited	854	0	854
418	Balaji Infra Ray Pvt. Ltd.	0	853	853
419	Skyber Broadband Service Pvt. Ltd	0	850	850
420	Wyris Network Pvt. Ltd.	0	846	846
421	PARAMOUNT INFINET PVT. LTD.	0	844	844
422	NETSAT COMMUNICATIONS PVT. LTD.	0	843	843
423	Clickian Network Pvt. Ltd.	0	832	832
424	Gleam Worldwide Services Pvt. Ltd.	0	825	825

S. No.	Name of Service Provider	Narrowband	Broadband	Total
425	SRI KRISHNA INTERNET SERVICE PVT LTD	0	824	824
426	Nettab Broadband Pvt Ltd	0	821	821
427	VICTORY DIGITAL NETWORK PRIVATE LIMITED	0	821	821
428	Ultimate Internet Services Pvt. Ltd.	0	814	814
429	Rathnaa Spectra Pvt. Ltd.	0	813	813
430	Sharva Telenet Private Limited	0	812	812
431	Sprioc Web Private Limited	0	811	811
432	Sivaan Infocom Pvt. Ltd	0	807	807
433	KESHAVA DIGITAL NETWORK PVT. LTD.	0	793	793
434	SVD Digital Networks Pvt. Ltd.	0	793	793
435	Primenet Global Ltd.	0	791	791
436	Telosy Telecom Pvt. Ltd.	0	791	791
437	AU Networks Pvt. Ltd.	0	789	789
438	Rida Communication Pvt. Ltd.	0	778	778
439	Vinayaga Communications Pvt Ltd.	0	778	778
440	Bapu Internet Services Pvt. Ltd.	0	768	768
441	Alegra Communication Pvt Ltd	0	763	763
442	Datawave IT solutions Pvt. Ltd.	0	763	763
443	Touchnet Broadband Services Pvt. Ltd.	0	757	757
444	SB Broadband Services Pvt. Ltd	0	756	756
445	HPS DIGITAL BROADBAND PVT LTD	750	0	750
446	SAI DWARAWATI NET SERVICES PVT. LTD.	0	750	750
447	Suraj Networks Pvt. Ltd.	0	748	748
448	Bluwaves Internet Services India Pvt. Ltd.	0	744	744
449	DURONTO NETWORKS (OPC) PRIVATE LIMITED	0	744	744
450	INFOLINK BROADBAND SERVICES PRIVATE LIMITED	0	739	739
451	Reticule Infotech Pvt. Ltd.	0	737	737
452	SG Broadband Internet Pvt. Ltd.	0	736	736
453	Dreamnet Gigafiber Pvt Ltd	0	732	732
454	GVREDDY TELECOMMUNICATIONS (OPC) PVT LTD	0	731	731
455	Shass Information and Quality Engineering Services Pvt. Ltd.	0	728	728
456	PJR NET SERVICE PRIVATE LIMITED	0	725	725
457	Software Technology Parks of India	11	714	725
458	Kosmic Broadband Pvt Ltd	0	723	723
459	Nandini Broadband Pvt. Ltd.	0	720	720
460	Spirenet Digital Communications Pvt. Ltd.	0	720	720
461	Uttam Infranet Pvt. Ltd..	0	719	719

S. No.	Name of Service Provider	Narrowband	Broadband	Total
462	Mahabal Net Service Provider	0	710	710
463	SERANS FIBERNET PRIVATE LIMITED	0	707	707
464	Cloudnet Communications Pvt. Ltd.	0	706	706
465	F2Connect Private Limited	0	704	704
466	FASTCOM TELELINK PRIVATE LIMITED	0	700	700
467	OUTRAGEOUS NETSOLE PRIVATE LIMITED	700	0	700
468	MAXNET DIGITAL PRIVATE LIMITED	0	698	698
469	Vimal Telecom Pvt. Ltd	0	694	694
470	Shineplus Networks Pvt. Ltd.	0	691	691
471	HINDAVI TELECOM PRIVATE LIMITED	0	689	689
472	HANSA BROADBAND SERVICES PRIVATE LIMITED	0	687	687
473	Power Grid Corporation of India Ltd.	0	686	686
474	Gloiosa Infotel IT Services Pvt Ltd.	0	682	682
475	N4U broadband pvt.ltd	0	670	670
476	PRIYANK INFOMATICS (OPC) PRIVATE LIMITED	0	670	670
477	Craze IT Solutions Pvt Ltd	0	667	667
478	BASS NETWORKS PRIVATE LIMITED	0	661	661
479	TOUCH NET INDIATELESERVICES PRIVATE LIMITED	0	658	658
480	Nextra Communications Private Limited	0	653	653
481	Development Logics Solutions Pvt. Ltd.	0	650	650
482	Spectram Telecom Pvt.Ltd	0	650	650
483	AKD NETWORK PRIVATE LIMITED	0	639	639
484	Rajesh Patel Net Services Pvt. Ltd.	0	638	638
485	ACME Diginet Corporation Pvt. Ltd.	0	634	634
486	Omata Net Pvt. Ltd.	0	634	634
487	Blue Net IT Solutions Pvt. Ltd.	0	631	631
488	Bass Jokernet Pvt. Ltd.	0	630	630
489	Aeroway Networks Pvt. Ltd.	0	626	626
490	VPM NETWORKS PRIVATE LIMITED	624	0	624
491	INCUBIX UNIFIED SOLUTIONS PRIVATE LIMITED	0	617	617
492	Daksh Broadband Services Pvt. Ltd.	0	616	616
493	Airnetz Broadband Services Pvt. Ltd.	0	613	613
494	Spark Telecommunication Private Limited	0	612	612
495	Datamax Technologies Pvt Ltd	0	611	611
496	Airway Communication Services India Pvt. Ltd.	0	608	608
497	LIMERICK TECHNOLOGIES PRIVATE LIMITED	0	608	608
498	Windsor Internet Pvt. Ltd.	0	608	608

S. No.	Name of Service Provider	Narrowband	Broadband	Total
499	Goodwill Smartlink Pvt. Ltd.	0	604	604
500	ALLIED IT INFRASTRUCTURE & SERVICES PRIVATE LIMITED	603	0	603
501	RAAGAV COMMUNICATIONS PVT LTD	0	603	603
502	Bandwidth Infinity Pvt. Ltd	0	601	601
503	Easy Solutions InternetServices Pvt. Ltd.	0	600	600
504	Graceway Infrastructure and Services Pvt. Ltd	0	600	600
505	RSBS Online Services Pvt. Ltd.	0	595	595
506	Gowio Networks Pvt. Ltd	0	591	591
507	VASANSHAH NETWORK PRIVATE LIMITED	0	588	588
508	GAURESH CABLENET SERVICES PRIVATE LIMITED	0	585	585
509	PRATIK NETWORKING SOLUTIONS PRIVATE LIMITED	0	583	583
510	R.P World Webnet Pvt.Ltd.	0	579	579
511	C. J. Online Pvt. Ltd.	0	575	575
512	SARVA AIRWORLD NETWORK PVT LTD	0	575	575
513	Alphanet Broadband Pvt Ltd	0	571	571
514	World Fibernet Private Ltd	0	570	570
515	Lakecity Intercom Private Limited	0	564	564
516	Nanjil Internet Services Pvt. Ltd.	0	560	560
517	Kad-Syscon NetworksPvt. Ltd	0	559	559
518	Gazillio Technologies Pvt. Ltd.	0	557	557
519	NC BROADBAND SERVICES PRIVATE LIMITED	0	550	550
520	Prayag BroadbandPvt. Ltd.	0	550	550
521	Digital2Virtual ISP Pvt. Ltd.	0	549	549
522	Panav Network and Communications Private Limited	0	548	548
523	Clicknet Communication Pvt. Ltd.	545	0	545
524	Fastnet Wire & Wireless Solutions Pvt. Ltd.	0	543	543
525	RNET GIGAFIBER Pvt. LTD	541	0	541
526	FIBER POWER CONNECTS PRIVATE LIMITED	0	540	540
527	CNS Infotel Services Pvt. Ltd..	0	537	537
528	Shree Manoranjan Broadband Pvt. Ltd.	0	532	532
529	7 Sai Net Solutions Pvt. Ltd.	0	530	530
530	Imperium Digital Network Pvt. Ltd.	0	530	530
531	Singh Televentures Pvt Ltd	0	530	530
532	Malang Solutions Pvt. Ltd.	0	527	527
533	COMPLIANCE BROADBAND PRIVATE LIMITED	0	525	525
534	DV INFOCOM PRIVATE LIMITED	0	520	520

S. No.	Name of Service Provider	Narrowband	Broadband	Total
535	MSINFINITY ETHERNET SOLUTIONS PRIVATE LIMITED	517	0	517
536	YES BROADBANDPRIVATE LIMITED	0	515	515
537	Monark Broadband Private Limited	0	514	514
538	CLOUDPATH TELECOM PVT LTD	0	511	511
539	Manish Infocom Pvt. Ltd.	0	511	511
540	NEONET COMMUNICATIONS PVT. LTD.	0	508	508
541	AL HUTAIB NETSOL PRIVATE LIMITED	0	505	505
542	Al-Mairah Braodband Pvt. Ltd.	0	505	505
543	Acegen Broadband Pvt. Ltd.	0	504	504
544	RACSANN TECHNOLOGIES PVT. LTD.	0	500	500
545	Royal Connect Solutions Pvt. Ltd	0	499	499
546	Cityline Networks Pvt Ltd	0	496	496
547	DE-CIX Interwire Internet Services Pvt. Limited	0	491	491
548	JMD INTERNET AND SERVICES PVT. LTD.	0	490	490
549	KOSHI BROADBAND COMMUNICATIONS (OPC) PVT LTD	0	487	487
550	Mall and Mall Digiworld Pvt. Ltd.	0	487	487
551	Feathers wireless network (opc) Pvt. Ltd.	0	480	480
552	Dhanam Internet Services India Pvt. Ltd.	0	479	479
553	LINK 4 DATA COMMUNICATION PVT LTD	0	476	476
554	Texas Connect Private Limited	0	475	475
555	Unisas Netserve Pvt. Ltd.	0	475	475
556	Wavetree Networks Pvt. Ltd.	0	471	471
557	GIGANET DIGITAL NET SERVICES PRIVATE LIMITED	0	469	469
558	KSK Broadband Pvt. Ltd.	0	468	468
559	Sparklink. Net Pvt. Ltd.	0	463	463
560	SANSOM NETTECH PRIVATE LIMITED	0	462	462
561	Gaba Associates internet service provider pvt ltd.	0	461	461
562	AT&T Global Network Service India Private Limited	0	460	460
563	SYNCFAC TO CONSULTING Pvt Ltd.	0	460	460
564	Wi-Link Network Pvt. Ltd	0	460	460
565	OPTO Communications Private Limited	0	456	456
566	OM INTERNET BROADBAND SERVICE Pvt. LTD	455	0	455
567	GTECH COMMUNICATION Pvt Ltd	0	451	451
568	MANA INTERNET SERVICES PRIVATE LIMITED	0	451	451
569	Sistemas Information Technology Pvt. Ltd.	0	451	451
570	Quick Link Broadband and Services Pvt. Ltd.	0	450	450
571	Smart Choice Wireless Network Pvt. Ltd.	450	0	450

S. No.	Name of Service Provider	Narrowband	Broadband	Total
572	ULTRAVISION INFOSERVE PVT LTD	0	450	450
573	DMDS SOLUTIONSPRIVATE LIMITED	0	448	448
574	Tanvi Broadband Pvt Ltd	0	446	446
575	Aeronet online services private limited	0	443	443
576	Gorkha Infotech Private Limited	0	442	442
577	KKM Broadband Internet Pvt. Ltd.	0	441	441
578	IQTERA COMMUNICATION PVT LTD	0	440	440
579	MREZHI INTERNET PRIVATE LIMITED	0	440	440
580	Daan Communications Private Limited	0	438	438
581	Unborn Networks Pvt. Ltd.	0	438	438
582	BPS COMMUNICATION AND SERVICES PRIVATE LIMITED	0	435	435
583	Wireline Solution India Pvt Ltd	0	433	433
584	Prompt Infracom Pvt. Ltd.	0	430	430
585	Hughes Communications India Ltd.	407	18	425
586	Gera Cable Internet Service Pvt. Ltd.	0	421	421
587	Earthlink Broadband Pvt. Ltd	0	420	420
588	Kataria Net Solutions Pvt. Ltd.	0	420	420
589	SAI KUMAR INFONET PRIVATE LIMITED	0	417	417
590	Sysnet Broadband Services Pvt. Ltd.	0	417	417
591	TRACKNET SERVICES PVT LTD	0	413	413
592	Spiretel Technologies Pvt Ltd	0	408	408
593	RUSH ME BROADBAND PRIVATE LIMITED	0	403	403
594	SIDDIQUI GLOBAL SERVICES PVT LTD	0	403	403
595	Alien DNS Pvt. Ltd.	0	401	401
596	HANUMAT NETWORKS PRIVATE LIMITED	0	397	397
597	Linkway Internet Pvt.Ltd.	0	395	395
598	BSL Technologies Pvt. Ltd.	0	393	393
599	TECHNOMEX INFOCOM SYSTEMS PVT LTD.	0	392	392
600	Simplex Broadband Pvt. Ltd.	0	391	391
601	TAIBA SUPER INTERNET PRIVATE LIMITED	386	0	386
602	CONSAM TELECOM PRIVATE LIMITED	0	385	385
603	FASTJET TELECOM PRIVATE LIMITED	0	384	384
604	Nandita Infocom Pvt. Ltd.	0	383	383
605	Terrafiber Networks Pvt. Ltd.	0	383	383
606	VORRUCKEN NETWORKS PRIVATE LIMITED	0	382	382
607	VIBELINK INFOTECH PRIVATE LIMITED	0	381	381
608	Skylink Fibernet Pvt. Ltd.	0	380	380
609	VDCN INFOTECH PRIVATE LIMITED	0	380	380
610	Visputes Internet Pvt. Ltd.	0	380	380

S. No.	Name of Service Provider	Narrowband	Broadband	Total
611	Suncity Broadband Pvt. Ltd.	0	376	376
612	Cybernet Introtech Pvt. Ltd.	0	375	375
613	Digiscope Networks Private Limited	0	374	374
614	NETZI BROADBAND SERVICES PVT LTD	373	0	373
615	POLY INFORMATICS PVT.LTD.	0	371	371
616	Starnet Global Pvt. Ltd.	0	370	370
617	VIVEK NETWORK PRIVATE LIMITED	0	369	369
618	Rocketwire Internet Solutions Pvt. Ltd.	0	365	365
619	DMP Internet ServicesPvt. Ltd	0	358	358
620	SSICON SYSTEMS PRIVATE LIMITED	0	357	357
621	Honey Broadband Services Pvt. Ltd.	0	354	354
622	PULSE TELESYSTEMS PRIVATE LIMITED	0	354	354
623	3J Global Services Pvt Ltd	0	353	353
624	WAY2NET IT SERVICES PVT LTD	0	353	353
625	SmchondheCommunication Pvt. Ltd	0	350	350
626	Sense Connect IT Pvt. Ltd.	0	347	347
627	airtechzone services india private limited	0	335	335
628	VERYS INFOTECH PRIVATE LIMITED	0	335	335
629	PRONET PRIVATE LIMITED	0	334	334
630	Sai Akshay Internet Services Pvt Ltd.	0	332	332
631	Yuvaa Communications Private Limited	0	332	332
632	Hipoint Connect Pvt. Ltd.	0	331	331
633	Twincity Communication Private Limited	0	328	328
634	I-Infolink Networks Pvt. Ltd.	0	327	327
635	AiriconCommunication Pvt. Ltd	0	325	325
636	Citylink Broadband Services Pvt. Ltd.	325	0	325
637	R N Broadband Online Pvt. Ltd	0	325	325
638	Voxterria Innovtions Pvt. Ltd.	0	324	324
639	SPARKLIGHT INTERNET PRIVATE LIMITED	0	321	321
640	Ncore Creative Technologies Pvt. Ltd	0	318	318
641	Hyber Networking Pvt. Ltd.	0	315	315
642	Futurenet broadband and internet services pvt ltd	311	0	311
643	Bluenet Broadband Services Pvt. Ltd.	0	310	310
644	AARADHY LIAISON SERVICES PRIVATE LIMITED	0	309	309
645	Gramin Broadband Network Pvt. Ltd.	0	307	307
646	METREXA BROADNET PRIVATE LIMITED	0	307	307
647	Srushti Broadband And Internet Services Pvt. Ltd.	0	304	304
648	TRIVNET NETWORKS PRIVATE LIMITED	0	304	304
649	JD Net Enterprises Pvt. Ltd	0	303	303
650	Barani Data Solutions Private Limited	302	0	302

S. No.	Name of Service Provider	Narrowband	Broadband	Total
651	Inter Net LY Pvt. Ltd.	0	302	302
652	Apex Netcom India Pvt. Ltd..	0	300	300
653	Excel UG Pvt. Ltd	0	297	297
654	SBS BROADBAND AND CABLE PVT. LTD.	0	296	296
655	Proline Datatech Services Pvt. Ltd.	0	295	295
656	Onepipe Telecom Pvt. Ltd	0	293	293
657	FLITZEN BROADBAND Pvt Ltd.	0	292	292
658	Skyhunt IT Park Pvt. Ltd.	0	290	290
659	Zoram Infonet Pvt. Ltd.	0	290	290
660	SMARTLINK BROADBAND SERVICES PVT LTD	0	287	287
661	Verizon Communications India Pvt. Ltd.	0	283	283
662	Vizcon Digital Pvt. Ltd.	280	0	280
663	Elecon Information Technology Ltd.	0	277	277
664	Speedster Communications Pvt. Ltd	0	275	275
665	J-Link Infotainment Pvt. Ltd.	0	270	270
666	HELM CONSULTANTS PVT LTD	0	269	269
667	Digital Telco Network India Pvt. Ltd.	0	267	267
668	GPALV BROADBAND PRIVATE LIMITED	0	267	267
669	AIRONET BROADBAND PRIVATE LIMITED	0	265	265
670	SWANAND INTERNET SERVICES PRIVATE LIMITED	0	264	264
671	SIDDHBALI INFOTECH PVT LTD.	0	260	260
672	Singh Internet Services Pvt. Ltd.	0	260	260
673	BBRG Communication and Internet Pvt. Ltd.	0	258	258
674	Vardaan Netservices Pvt. Ltd.	0	255	255
675	Ruhban Telecommunication Private Limited	0	254	254
676	LINKWAVE TECHNOLOGIES PVT LTD	0	252	252
677	CHANNEL 3 INFO MEDIA PRIVATE LIMITED	0	250	250
678	SPEEDGLOBAL TELECOM NETWORK PRIVATE LIMITED	0	250	250
679	Nivak Communications Pvt. Ltd	0	249	249
680	Breitband Technologies Private Limited	0	248	248
681	GIGA BEAM BROADBAND PVT.LTD.	0	247	247
682	SNT Broadband Pvt. Ltd.	0	247	247
683	Linkio Fibernet Private Limited	0	245	245
684	MRRIDSYS TECHNOLOGIES PVT LTD	0	245	245
685	Sreedevi Communications Private Limited	0	245	245
686	STN Communication & Advertising Pvt. Ltd.	0	244	244
687	Auspice Infratel Pvt. Ltd.	0	241	241
688	King Netsol Pvt. Ltd.	27	214	241
689	SWAMIVATVRUKSHA NET (OPC) PVT LTD	0	240	240

S. No.	Name of Service Provider	Narrowband	Broadband	Total
690	TEJNET GIGAFIBER PRIVATE LIMITED	0	240	240
691	WAY2AIR NET SOLUTION PVT. LTD.	0	240	240
692	AEROLINK BROADBAND PRIVATE LIMITED	0	238	238
693	Microsense Pvt Ltd	0	237	237
694	Netrexo Communications Private Limited	0	237	237
695	EYE FASTNET SERVICE PRIVATE LIMITED	0	236	236
696	JTM Internet Pvt. Ltd	0	236	236
697	ABNSERVICES PVT LTD	0	235	235
698	KHUSHI CABLE AND TELEINFRA PRIVATE LIMITED	0	235	235
699	Ecreado Network Solutions Pvt. Ltd.	0	233	233
700	LINKUNIVERSE COMMUNICATION PRIVATE LIMITED	0	230	230
701	MANAS INTERNET TECHNOLOGY PRIVATE LIMITED	0	230	230
702	Pegasuswave Private Limited	0	230	230
703	FoFo Networks Private Limited	0	229	229
704	Hipath Netcom Services Pvt. Ltd.	0	228	228
705	Magnuss Broadband Service Pvt. Ltd.	0	228	228
706	Orange City InternetServices Pvt. Ltd.	0	228	228
707	ZEES BROAD BAND PRIVATE LIMITED	0	228	228
708	KALYAN BROADBAND PRIVATE LIMITED	0	227	227
709	VN ETHERNET INDIA PRIVATE LIMITED	227	0	227
710	RIHANT INFOTECH PVT. LTD	0	226	226
711	Ekowebtech IT Services Private Limited	0	225	225
712	METAWAVES PRIVATE LIMITED	0	225	225
713	OS IT SERVICES PRIVATE LIMITED	0	224	224
714	AIT Internet Services Pvt. Ltd.	0	222	222
715	Rmax Broadband Pvt. Ltd.	0	222	222
716	INYCB Network Pvt. Ltd.	0	221	221
717	Peer Networks Private Limited	0	221	221
718	Vrednus Network Pvt. Ltd.	0	221	221
719	O V NETWORKS PVT LTD	0	220	220
720	ACEBROWSE PVT LTD	0	219	219
721	CIT SOLUTIONS PVT. LTD.	0	217	217
722	Costel Networks Pvt. Ltd.	0	212	212
723	iBus Network & Infrastructure (P) Ltd.	0	212	212
724	TRIGART INTERNET PVT. LTD.	0	212	212
725	Anish Infoline Pvt. Ltd.	0	211	211
726	Enhancelink CoreportPvt. Ltd	0	211	211
727	Tca Network Pvt Ltd	0	211	211

S. No.	Name of Service Provider	Narrowband	Broadband	Total
728	SPACELINK INTERNET (OPC) PRIVATE LIMITED	0	209	209
729	NAS INTERNET SERVICES PVT LTD	0	207	207
730	Airwire Infocom Pvt. Ltd.	0	206	206
731	Saibaba Broadband Pvt. Ltd.	0	206	206
732	SRI RAM BROADBAND SERVICES PRIVATE LIMITED	0	206	206
733	BRAMBHANI TRADERS PVT.LTD.	0	205	205
734	PRSHREE Networks Private Limited	0	205	205
735	S.V.C CABLE NET PRIVATE LIMITED	0	205	205
736	Aayu Infonet Pvt. Ltd.	0	203	203
737	VAIDIK NETSOL OPC PVT LTD	0	202	202
738	VELOCITY INTERNET INDIA PRIVATE LIMITED	202	0	202
739	ZR NET OPC PVT LTD	202	0	202
740	JAYBHOLE CABLE VISION PRIVATE LIMITED	0	201	201
741	LINKED NET TECHNO SERVICES PRIVATE LIMITED	0	201	201
742	Pune Teleinfra Pvt. Ltd..	0	201	201
743	Dhadam Hospitality & Services Pvt. Ltd.	0	200	200
744	Ishani Broadband Pvt Ltd	0	200	200
745	arrow touch wireless internet private limited	0	198	198
746	TELEMANTRRA SALES CORPORATION PRIVATE LIMITED	0	198	198
747	Sath Technologies Pvt. Ltd.	0	195	195
748	YNET TELECOM SOLUTIONS PVT LTD	0	193	193
749	LEROY NETWORKS AND SERVICES PRIVATE LIMITED	0	192	192
750	Neton Icom Pvt. Ltd.	0	190	190
751	Data Ingenious Global Ltd	0	189	189
752	FRIDDEN INFOWAY PVT. LTD..	0	189	189
753	Wi5 Internet Services Pvt. Ltd.	0	189	189
754	Cheetah Networks Pvt. Ltd.	0	188	188
755	YNET BROADBAND SERVICES PRIVATE LIMITED	0	188	188
756	NEAM COMMUNICATIONS PRIVATE LIMITED	0	187	187
757	M-TEL Networks (P) Ltd	0	186	186
758	BT Global Communication India Pvt. Ltd.	0	185	185
759	PMG Networks Pvt. Ltd.	0	185	185
760	Optisky Fibernet Pvt. Ltd.	0	183	183
761	AIRMAX INTERNET PVT LTD	0	181	181

S. No.	Name of Service Provider	Narrowband	Broadband	Total
762	VMO BROADBAND PVT LTD	0	180	180
763	White Stallion Networks Pvt. Ltd.	0	179	179
764	SAIDEEP BROADBAND PRIVATE LIMITED	0	175	175
765	Sator Square Ventures Private Limited	0	175	175
766	Rae Internet Service Provider Pvt Ltd	0	171	171
767	CINFOGEN PRIVATE LIMITED	0	170	170
768	Promptnet Broadband Pvt. Ltd.	0	170	170
769	Vaishnavaibhavi Internet Solutions Private Limited	0	170	170
770	Oistel Telecom Pvt. Ltd.	0	166	166
771	Fibernetisp Pvt. Ltd.	0	165	165
772	Wifi Inter-connect Pvt. Ltd.	0	162	162
773	Digitizer Access Network Private Limited	0	160	160
774	Shreepad Communication Pvt. Ltd.	0	160	160
775	smart plus multi services pvt ltd	0	160	160
776	ARP INFONET PVT. LTD.	0	159	159
777	ATMA MALIK 1313 INTERNET SERVICES PVT. LTD.	0	159	159
778	Viking Network Pvt. Ltd	0	157	157
779	Chaitali Communications (OPC) Pvt.Ltd	0	156	156
780	Noob Technologies Pvt.Ltd	0	152	152
781	Varsha Datacom Services Pvt. Ltd.	0	152	152
782	NEXTGEN COMPUSOFT PVT LTD	0	151	151
783	iGEN Networks Private Limited	0	150	150
784	Prateek Netconnect Pvt. Ltd	0	150	150
785	Netwire Internet Solutions Pvt. Ltd.	0	148	148
786	Patil ISP Services (OPC) Pvt. Ltd.	74	74	148
787	JBN Online Pvt. Ltd.	0	147	147
788	Netstra Communications Pvt.. Ltd.	0	147	147
789	Antariksh Broadband & Wireless Solution Pvt. Ltd.	0	146	146
790	SHEEN TELECOM CONSULTANTS PVT LTD	0	144	144
791	CLOUDINSTA24 SERVICES PRIVATE LIMITED	0	143	143
792	VISHWAKARMA BROADBAND PRIVATE LIMITED	0	143	143
793	Ezeenet Internet Solutions Pvt. Ltd.	0	142	142
794	Delix Net Solutions Pvt. Ltd	0	141	141
795	SHREEB NETWORK PVT LTD	0	140	140
796	Teleglobal Communicacions pvt Ltd	139	0	139
797	Achiever Communication and Services Pvt. Ltd.	0	137	137
798	GauravCommunication Pvt. Ltd	0	137	137
799	Vision Hi-Speed Technology Pvt. Ltd.	0	137	137
800	Pyramid Infocom Pvt. Ltd.	136	0	136

S. No.	Name of Service Provider	Narrowband	Broadband	Total
801	KISHAN WEALTH MANAGEMENT PRIVATE LIMITED	0	135	135
802	Mediatech Communication Pvt. Ltd.	0	135	135
803	Mahadev Telventures Pvt Ltd	0	134	134
804	Galvin Broadband (OPC) Pvt. Ltd.	0	130	130
805	V NETCARE PRIVATE LIMITED	0	130	130
806	Airfiber IT Solutions Pvt. Ltd.	0	129	129
807	Shree Siddhivinayak Cable And Internet Service Provider Private Limited.	0	129	129
808	Wingsnet Internet Pvt.Ltd	0	129	129
809	CARE BROADBAND PRIVATE LIMITED	0	127	127
810	KB Digital Network Pvt.Ltd.	0	127	127
811	Excogitate Technologies Pvt. Ltd.	0	126	126
812	MLC INTERNET PVT LTD	0	126	126
813	Linkup Networks Pvt. Ltd.	0	125	125
814	A-Net Communication India Pvt.Ltd.	0	123	123
815	NT CYBRONET PRIVATE LIMITED	0	123	123
816	KARRY BROADBAND PRIVATE LIMITED	0	122	122
817	Jasnet Networks Pvt. Ltd.	24	96	120
818	LEVOTEL BIGNET SOLUTIONS PRIVATE LIMITED	0	118	118
819	NIVID TELECOM INDIA PRIVATE LIMITED	0	118	118
820	V NET NETWORKS PVT. LTD	0	118	118
821	Hari Om Netsol Pvt. Ltd.	117	0	117
822	Rita Infocom Pvt. Ltd.	0	117	117
823	ASVISH TECHNOLOGY PARTNER (OPC) PVT LTD	0	116	116
824	Sharktel Infocom Pvt. Ltd.	0	116	116
825	Telstra Telecommunications Private Limited	0	114	114
826	Pronoc Technologies Pvt. Ltd.	0	113	113
827	Blenda Internet ServicesIndia Pvt. Ltd.	0	111	111
828	Joshi Internet Services Pvt. Ltd.	0	111	111
829	Japra Tele Link Pvt. Ltd.	0	110	110
830	Jetato Skynet Services Pvt. Ltd.	0	110	110
831	NR IT Service Pvt. Ltd.	0	109	109
832	Durga Broadband Pvt. Ltd.	0	108	108
833	MICRONOVA TELE SYSTEMS PRIVATE LTD.	0	107	107
834	AATTIZEN TELECOM PRIVATE LIMITED	0	106	106
835	E I DOT Com Pvt. Ltd.	0	106	106
836	Skynet Broadband Pvt. Ltd.	0	105	105
837	Fabnet Services Private Limited	0	104	104
838	Thangam Communications Pvt.Ltd.	0	104	104

S. No.	Name of Service Provider	Narrowband	Broadband	Total
839	Rohela Broadband Network Pvt. Ltd.	0	103	103
840	Khetan Cable Network (P) Ltd	0	102	102
841	Orange Business Services India Network Pvt. Ltd.	0	102	102
842	ROYAL WIRELESS SERVICES PVT LTD	0	102	102
843	SHILOM NETWORK SERVICES PRIVATE LIMITED	0	102	102
844	Invensys Networks Pvt.Ltd.	0	101	101
845	NSD Internet Private Limited	0	101	101
846	Netlife Network Pvt. Ltd..	0	100	100
847	swami Samarth Broadband Service Pvt Ltd	0	100	100
848	Clickr Services Private Limited	0	99	99
849	FLIX BROADBAND SERVICES PRIVATE LIMITED	0	99	99
850	Broad Net India Pvt. Ltd.	0	97	97
851	JAGUAR BYTE TECHNOLOGY PRIVATE LIMITED	0	97	97
852	SADBUDHHI SOLUTIONS PVT LTD	0	97	97
853	SHIVKRANTI INTERNET SERVICES PVT. LTD.	0	97	97
854	Denet Connect Services Pvt Ltd	0	96	96
855	NETKLIKS COMMUNICATIONS PRIVATE LIMITED	0	96	96
856	VIDHI NETSOL PRIVATE LIMITED	0	96	96
857	AXOMNET BROADBAND Pvt. LTD.	0	95	95
858	Winnet Broadband Pvt. Ltd.	0	95	95
859	Datawings Teleinfra Private Limited	0	94	94
860	ITech Hive Pvt. Ltd	0	94	94
861	Magica Networking Solutions Pvt. Ltd.	0	94	94
862	Satpar Infotech Pvt Ltd	0	93	93
863	TENTEQ BROADBAND PVT. LTD.	0	93	93
864	PAWAN BROADBAND INDIA PVT LTD	0	91	91
865	R3ESOLUTION Pvt Ltd.	0	91	91
866	S A Internet Solution Pvt Ltd	0	90	90
867	INFINITY WIRELESS SERVICES PVT. LTD.	0	89	89
868	Gaxiom Networking Solutions Private Limited	0	88	88
869	Inic Communications Private Limited	0	88	88
870	Heramb T-10 Network Pvt. Ltd..	0	85	85
871	Pier Communication Pvt. Ltd	0	85	85
872	Aircables Internet Services Pvt. Ltd.	0	84	84
873	ANODIC TELENETWORK PVT LTD	0	84	84
874	ASHOKA NETSOL PVT LTD	0	84	84
875	GIGHZ IT SOLUTIONS PRIVATE LIMITED	0	84	84

S. No.	Name of Service Provider	Narrowband	Broadband	Total
876	Kelnet Communication Services Pvt. Ltd	0	84	84
877	Sankrish Infocom Private Limited	0	83	83
878	Suryasspeed Network Pvt Ltd	0	83	83
879	NENCY CABLE PVT LTD	0	81	81
880	Elyzium Globenet Pvt. Ltd.	0	80	80
881	SPEEDNET INFORMEDIA PVT LTD	0	80	80
882	SPEEDNET OPTICAL NETWORK Pvt Ltd.	0	78	78
883	PATHCOM COMMUNICATIONS PRIVATE LIMITED	0	78	78
884	SGCI Pvt. Ltd.	0	78	78
885	Omkar Net Services Pvt. Ltd.	0	76	76
886	GAYATRI TELECOM PVT LTD	0	75	75
887	G-Max IT Services Pvt. Ltd.	0	75	75
888	Creative BroadbandServices Pvt. Ltd	0	74	74
889	Shri Vinayagaa Internet Pvt Ltd	0	74	74
890	IT Spectrum Media Pvt Ltd	0	73	73
891	NR Data Service Pvt Ltd.	0	72	72
892	Samruddhi Communication Pvt. Ltd.	0	72	72
893	Sanavi Infotech (OPC) Pvt. Ltd.	0	72	72
894	SHERAWAT INFOTECH PRIVATE LIMITED	0	72	72
895	Veer Point Pvt. Ltd.	0	71	71
896	Bilal Internet Services Private Limited	0	70	70
897	MABA SAFENET BROADBAND SERVICES PVT LTD	0	70	70
898	SBDR NETWORK SOLUTIONS PRIVATE LIMITED	0	70	70
899	Tamana Winet Pvt. Ltd.	0	70	70
900	Amity Hua Electronics Pvt. Ltd.	0	67	67
901	Jai Mata Di Telectronix Pvt. Ltd.	0	67	67
902	Aspire Broadband Pvt. Ltd.	0	66	66
903	Ekdant Communication Pvt. Ltd.	0	65	65
904	JETONE FIBER PRIVATE LIMITED	0	64	64
905	Mark Networks SolutionsIndia Pvt. Ltd.	0	64	64
906	WINUX COMMUNICATIONS PVT LTD	0	64	64
907	GOMTESH INFOTECH PVT. LTD.	0	63	63
908	RAMYAA INTERNET SERVICES PRIVATE LIMITED	0	63	63
909	U-FIBER BROADBAND PRIVATE LIMITED	0	61	61
910	Broadstar Net India Pvt. Ltd.	0	60	60
911	Kim Broadband Services Pvt. Ltd.	0	60	60
912	Skytrack Broadband Pvt. Ltd	0	60	60
913	FIBERMAX PRIVATE LIMITED	0	59	59

S. No.	Name of Service Provider	Narrowband	Broadband	Total
914	GURU NETCOM PVT. LTD.	0	59	59
915	NEXAEDGE INDIA Pvt Ltd.	0	59	59
916	VR INTERNET PRIVATE LIMITED	0	57	57
917	Infiber Broadnet Pvt. Ltd.	0	56	56
918	Playernet Technologies Private Limited	0	56	56
919	SMPL Networks Pvt. Ltd.	0	56	56
920	Malachandra Broadband Services Private Limited	0	55	55
921	Trivoz Digital Networks Pvt. Ltd.	0	55	55
922	Aamak Network Pvt. Ltd.	0	54	54
923	Bloglytics Internet Pvt.Ltd	0	54	54
924	FutureNet Telecom Private Limited	54	0	54
925	BEURACK VELOCITY INFOCOM PVT LTD	0	53	53
926	NAS Broadband Pvt. Ltd	0	53	53
927	S.G.I.C SERVICES PRIVATE LIMITED	0	53	53
928	ADS Royalnet Communication Private Limited	0	52	52
929	Ajay Cable & Broadband Service OPC Pvt. Ltd	0	52	52
930	Hansin IT Services Private Limited	0	52	52
931	KKD Broadband Pvt Ltd	0	52	52
932	VIDARBHA WI-FI AND NETWORK SERVICES PVT LTD.	0	52	52
933	VIVA Communications Pvt Ltd	0	52	52
934	DNet E Solutions Pvt. Ltd.	0	51	51
935	Gigalo Communication Pvt Ltd	8	43	51
936	MAXWEB MULTIMEDIA PRIVATE LIMITED	0	51	51
937	BRIZZ BROADBAND PRIVATE LIMITED	0	50	50
938	ACHARE BROADBAND (OPC) PRIVATE LIMITED	0	49	49
939	Highnet Broadband & Technologies Pvt. Ltd.	0	49	49
940	Fastx Broadband Pvt. Ltd.	0	48	48
941	Nextra Teleservices Pvt. Ltd.	0	48	48
942	Quantasoul Aiologix Pvt. Ltd.	0	47	47
943	A M Broadband Pvt.Ltd	0	47	47
944	Fibernet Solutions (OPC) Pvt. Ltd.	0	47	47
945	GIGANETWORK INFO PRIVATE LIMITED	0	47	47
946	Gponospace Internet India Pvt. Ltd.	0	47	47
947	ZITA TELECOM PRIVATE LIMITED	0	47	47
948	NM Paribas Private Limited	0	46	46
949	HAPPY BYTES BROADBAND (OPC) PRIVATE LIMITED	0	45	45
950	KORD BROADBAND SERVICES PRIVATE LIMITED	0	45	45
951	PADMESH BROADBAND PRIVATE LIMITED	0	45	45

S. No.	Name of Service Provider	Narrowband	Broadband	Total
952	Priveka Web Services Pvt. Ltd.	0	45	45
953	DREAMCABLES AND INTERNET SERVICES PRIVATE LIMITED	0	44	44
954	MARUTI INTERACTIVE NETWORK PRIVATE LIMITED	0	44	44
955	Tiruppur Broadwave Pvt. Ltd.	0	44	44
956	Ziptel IT Solutions Pvt. Ltd.	26	15	41
957	BRIGHTNET INTERNET SOLUTIONS (OPC) PRIVATE LIMITED	0	40	40
958	Jmohit Cable Vision Pvt. Ltd.	0	40	40
959	WAGHESHWAR NETVISION PRIVATE LIMITED	40	0	40
960	Froze Communications Pvt. Ltd.	0	39	39
961	Ultrawave Internet Access Pvt. Ltd.	4	35	39
962	IndrayaniCommunication Pvt. Ltd	0	38	38
963	Edge Telecommunications Pvt. Ltd.	37	0	37
964	DFAB INTERNET SERVICES PRIVATE LIMITED	0	36	36
965	nwt internet services private limited	0	36	36
966	R.P. World Telecom Pvt. Ltd.	0	36	36
967	ANSH NET SOL PRIVATE LIMITED	0	35	35
968	Cfiber Communications Pvt. Ltd	0	35	35
969	FASTHOOK NETWORKS PVT LTD	0	35	35
970	Speedobits Internet Private Limited	0	35	35
971	STABLE NETWORK PVT LTD	0	34	34
972	Tarantula WebNetworks Pvt. Ltd.	0	34	34
973	CABLECOM NETWORK PRIVATE LIMITED	0	33	33
974	DYSINT NETWORKS PRIVATE LIMITED	0	33	33
975	INTRO TELECOM Pvt Ltd.	0	32	32
976	Bajpai Telecom Pvt. Ltd.	0	30	30
977	RISING INTERNET PRIVATE LIMITED	0	29	29
978	ST BROADBAND CABLE SERVICE PRIVATE LIMITED	0	29	29
979	Streamax Broadband Services Pvt. Ltd	0	29	29
980	Doonbroadband Pvt. Ltd.	0	28	28
981	Skynet Zone Wifi Services (P) Ltd.	0	28	28
982	WE INTERNET LIMITED	0	27	27
983	DENSIS ONLINE PVT LTD	0	26	26
984	Spacetrade Internet Pvt Ltd	0	26	26
985	DRONAGIRI INFOTECH PVT LTD	0	25	25
986	SAMVAD TELECOM	19	6	25
987	Sudhana Telecommunication Pvt Ltd.	0	25	25
988	TREELINK NETWORK PVT LTD	0	25	25

S. No.	Name of Service Provider	Narrowband	Broadband	Total
989	AVD INFOCOM PRIVATE LIMITED	0	24	24
990	TLN COMMUNICATION PRIVATE LIMITED	0	24	24
991	Pacific Internet India Pvt. Ltd.	0	23	23
992	Praveen Telecom Pvt. Ltd.	0	23	23
993	Saagars Channel Pvt. Ltd.	0	23	23
994	LIVE FIBERNET SERVICE PRIVATE LIMITED	0	22	22
995	Smartware Technologies Pvt. Ltd.	0	22	22
996	Unified Voice Communication Pvt. Ltd.	0	22	22
997	Aerocast Networks Pvt Ltd.	0	21	21
998	FURIOUSPEED PRIVATE LIMITED	0	21	21
999	Pintwire Infomatics Pvt. Ltd.	0	21	21
1000	Stromnet Broadband Services Private Limited	0	19	19
1001	Mesh Infranet Pvt. Ltd.	0	18	18
1002	SEVENNET BROADBAND SERVICES PRIVATE LIMITED	0	18	18
1003	Sun Broadband and Data Services PVT. LTD.	0	18	18
1004	FUTURE INTERNET PRIVATE LIMITED	0	17	17
1005	DAVA TELECOM PRIVATE LIMITED	0	17	17
1006	ERNET India	0	17	17
1007	TELESECURE COMMUNICATIONS PRIVATE LIMITED	0	17	17
1008	CL INTERNET SERVICE PRIVATE LIMITED	0	16	16
1009	Mpr Infonet Systems Private Limited	0	16	16
1010	AIASN INTERNET SERVICE PRIVATE LIMITED	0	15	15
1011	GJ2 INTERNET PRIVATE LIMITED	0	15	15
1012	Hienet Internet Services Pvt. Ltd.	0	15	15
1013	Manumata Fiber Net Solutions PVT LTD	0	15	15
1014	Microtel Internet Network Pvt. Ltd.	0	15	15
1015	SAMAIRA INFOTECH PVT. LTD.	0	15	15
1016	ANGROW NETCOMM PRIVATE LIMITED	0	14	14
1017	GENIUS NETWORK PRIVATE LIMITED	0	14	14
1018	Haze Internet Services Private Limited	0	14	14
1019	Marutham Networks Pvt. Ltd.	0	14	14
1020	RAJNET CARE PRIVATE LIMITED	0	14	14
1021	SAI LEELA'S INTERNET SERVICE PVT. LTD.	0	14	14
1022	SPEEDPULSE DIGITAL NETWORK PRIVATE LIMITED	0	14	14
1023	Orbitedge Broadband Private Limited	0	12	12
1024	HELLO NETWORK SERVICE Pvt Ltd.	0	11	11
1025	10G TELECOM PVT LTD	0	10	10
1026	Dataexpress Pvt. Ltd	0	10	10
1027	Hybrid Hash Pvt. Ltd.	0	10	10

S. No.	Name of Service Provider	Narrowband	Broadband	Total
1028	Mastek Infosystems OPC Pvt. Ltd.	0	10	10
1029	Upnet Communications Pvt. Ltd.	0	10	10
1030	VISHVA INFRATEL PRIVATE LIMITED	0	10	10
1031	Ceralink Communication Pvt Ltd	9	0	9
1032	Jet Netcom Broadband Pvt. Ltd.	0	9	9
1033	WORLD PHONE INTERNET SERVICES PVT LTD	0	9	9
1034	Fibmesh IN Limited	0	8	8
1035	GOLCON TECHNOLOGIES PRIVATE LIMITED	0	8	8
1036	Tatanet Services Ltd	0	8	8
1037	Uttradoon Networks Pvt. Ltd.	0	8	8
1038	BRAVISHMAH INFOTECH PRIVATE LIMITED	0	7	7
1039	CIFY IT Services Pvt. Ltd.	0	7	7
1040	Riyaz Internet Services Pvt. Ltd.	0	7	7
1041	Clear Beam Communication Pvt. Ltd.	0	6	6
1042	Kartik Network Pvt. Ltd.	0	6	6
1043	SB LINK INFOSERVE PRIVATE LIMITED	0	6	6
1044	Aristo Telenet Pvt Ltd	0	5	5
1045	Blueline ISP Pvt. Ltd	0	5	5
1046	EI BROADBAND PVT LTD.	5	0	5
1047	YOTTA NETWORK SERVICES PRIVATE LIMITED	0	5	5
1048	ZAPTIC PRIVATE LIMITED	0	5	5
1049	A TO Z INFOLINK PVT. LTD.	0	4	4
1050	CLOUD8IN TECHNOLOGIES PRIVATE LIMITED	0	4	4
1051	Elitel Solutions Private Limited	0	4	4
1052	ESP Fibernet Pvt. Ltd.	0	4	4
1053	UBERCORE DATA LABS PVT LTD	0	4	4
1054	AGILE NETLINK PRIVATE LIMITED	0	3	3
1055	Cloudcast Digital Ltd.	0	3	3
1056	Critel Technologies Pvt. Ltd.	0	3	3
1057	ESTO MEDIA PRIVATE LIMITED	0	3	3
1058	METICULOUS NETWORKS PRIVATE LIMITED	0	3	3
1059	GBLINK NETWORKSOLUTIONS PRIVATE LIMITED	0	2	2
1060	GEGA BROADBAND SOLUTION PRIVATE LIMITED	0	2	2
1061	Isyan Communication Pvt. Ltd	0	2	2
1062	My Digital NetworkLtd.	0	2	2
1063	Red Fiber Telecom Pvt Ltd	0	2	2

S. No.	Name of Service Provider	Narrowband	Broadband	Total
1064	Sabse Internet Service Provider Pvt. Ltd.	0	2	2
1065	Sai Technix Pvt Ltd	0	2	2
1066	SSKY CONNEECT Pvt Ltd.	0	2	2
1067	Winet Infratel Pvt. Ltd.	0	2	2
1068	ACHILLES INTERNET SERVICES PRIVATE LIMITED	0	1	1
1069	FLYFAST CONNECTIONS Pvt. LTD	0	1	1
1070	MINDAGE BROADCASTING Pvt. LTD	0	1	1
1071	Nelco Ltd.	0	1	1
1072	Nuozen Telecom Pvt. Ltd.	0	1	1
1073	Sahiba Silk Mills Pvt. Ltd.	0	1	1
1074	SHYAM DATA & VOICE SERVICES PVT LTD	0	1	1
1075	TEJNET BROADBAND Pvt Ltd.	0	1	1
1076	VERIZONE BROADBAND SERVICES PRIVATE LIMITED	0	1	1
	Total	34359579	861471942	895831521
	Total (in million)	34.360	861.472	895.832

*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 30th June, 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	10066	21717	2997851	321175
2	Assam	786	1718	693807	189738
3	Bihar	34016	38810	6302637	1160765
4	Delhi	692	11554	2825512	199663
5	Gujarat	7247	15995	1967500	1277309
6	Haryana	6590	9914	1084884	90277
7	Himachal Pradesh	1119	2272	48095	16701
8	Jammu & Kashmir	1517	3229	270687	25953
9	Karnataka	8562	26649	1144085	160847
10	Kerala	3965	8244	2038940	271896
11	Kolkata	494	7603	2812657	144373
12	Madhya Pradesh	19437	37546	3610440	432850
13	Maharashtra	16858	25750	5684084	367241
14	Mumbai	937	14052	12934043	277542
15	North East	1460	2927	114127	99834
16	Odisha	3611	5721	933145	224280
17	Punjab	9711	12500	785150	84115
18	Rajasthan	2724	7953	2398805	268257
19	Tamil Nadu (including Chennai Service Area)	2198	7530	1530367	203374
20	Uttar Pradesh East	19528	77768	3781404	455276
21	Uttar Pradesh West	10843	41978	2116008	208363
22	West Bengal	3366	5078	3905406	470680
	Total	165727	386508	59979634	6950508

* 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. June-23

S. No.	Name of Service Providers reported IP Telephony Minutes as on 30th June 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

S.No.	DOT Licensed Service	Area Served	Service Provider	Subscriber Base	
				31.03.2023	30.06.2023
1	Andhra Pradesh	Hyderabad	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2,986	2,717
			QuickCall	1,025	977
		Visakhapatnam	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	4,030	3,945
			Total	8,041	7,639
2	Delhi	Delhi	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7,585	7,006
			Procall Ltd.	3,756	3,570
		Total	11,341	10,576	
3	Gujarat	Ahmedabad	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,121	1,118
		Amrela	Inative Networks Pvt. Ltd.	-	-
		Bharuch	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,456	1,437
			Inative Networks Pvt. Ltd.	-	-
		Dahej	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,460	1,442
		Jamnagar	Inative Networks Pvt. Ltd.	360	360
		Kutch	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	205	205
			Inative Networks Pvt. Ltd.	-	-
		Surat	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,898	1,878
			Inative Networks Pvt. Ltd.	895	895
Vadodara	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,775	1,756		
	Inative Networks Pvt. Ltd.	360	360		
Total	9,530	9,451			
4	Karnataka	Bangalore	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7,648	7,469
			QuickCall	480	474
		Total	8,128	7,943	
5	Kerala	Ernakulam	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,159	994
		Kerala	Wiwonet Solutions Pvt. Ltd	1,053	1,107
		Total	2,212	2,101	
6	Kolkata	Kolkata	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,565	1,527
7	Madhya Pradesh	Indore	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,912	1,838
8	Maharashtra	Khandala	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	493	480
			Pune	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,623
			Smartalk Pvt Ltd.	678	649
		Total	2,794	2,750	
9	Mumbai	Mumbai	Airtalk Solutions & Services Pvt. Ltd.	785	882
			Arya Omnitalk Radio Trunking Services Pvt.Ltd.	10,039	9,310
			Bhilwara Telenet Services Pvt.Ltd.	883	883
			Smartalk Pvt Ltd.	1,013	768
		Total	12,720	11,843	
10	Rajasthan	Jaipur	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	841	813
			Procall Ltd.	490	490
		Total	1,331	1,303	
11	Tamil Nadu	Chennai	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7,915	7,497
			QuickCall	331	371
		Total	8,246	7,868	
Grand Total				67,820	64,839

**Annexure 2.1: Wireless Revenue Service - Service Area wise Statistics for
QE Jun, 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	93.06%	174	11	466	459	925
Gujarat	93.14%	148	13	393	385	778
Karnataka	87.66%	167	14	464	458	922
MH	93.67%	155	13	406	399	805
TN (incl. Chennai)	90.67%	167	10	427	425	852

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	90.63%	121	8	424	427	851
Kerala	96.04%	159	6	319	321	640
MP	94.94%	140	13	461	460	921
Punjab	93.57%	150	8	418	414	832
Rajasthan	95.03%	148	12	472	474	945
UP(E)	96.30%	118	11	592	603	1195
UP(W)	96.23%	133	10	485	491	977
WB	97.64%	139	14	518	524	1043

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	97.12%	151	24	539	549	1088
Bihar	95.35%	130	11	649	678	1327
HP	96.98%	165	10	492	491	983
J&K	38.09%	171	22	616	589	1205
NE	97.07%	166	38	510	505	1016
Odisha	95.98%	141	17	557	570	1127

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	92.68%	108	10	414	405	820
Delhi	66.79%	138	8	471	441	912
Mumbai	76.99%	134	9	427	389	816

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)					POI	Metering and Billing					Response time to the		Termination / closure of	
		BS Accumulated down-time (not available for service) (%age)	Worst affected BSs due to down-time (%age)	Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable	SDDCH/ Paging Channel Congestion/ RRC Congestion (%age)	TCH, RAB and E-RAB Congestion (%age)	Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)]	Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)]	Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality	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%	=>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	0.16%	0.67%	99.56%	0.21%	0.23%	0.70%	0.88%	96.61%	0.16%	0.14%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	88.34%	100.00%	100.00%
	BSNL	0.79%	1.78%	98.79%	0.63%	0.72%	1.56%	1.69%	98.81%	0.12%	0.26%	0	0.00%	0.00%	100.00%	100.00%	100.00%	97.95%	33.19%	100.00%	100.00%
	RJIL	0.12%	0.20%	99.72%	0.03%	0.00%	0.19%	0.29%	99.96%	0.00%	0.08%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.20%	98.61%	100.00%	100.00%
	VIL	0.10%	0.66%	99.36%	0.22%	0.27%	1.61%	2.31%	97.94%	0.01%	0.14%	0	0.00%	0.00%	99.24%	100.00%	100.00%	99.11%	98.80%	100.00%	100.00%
Assam	AIRTEL	0.27%	0.97%	99.17%	0.13%	0.35%	1.82%	2.50%	96.05%	0.19%	0.21%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	88.94%	100.00%	100.00%
	BSNL	1.78%	0.57%	98.54%	0.77%	1.71%	1.87%	2.06%	98.44%	1.65%	1.74%	0	0.02%	0.00%	100.00%	100.00%	100.00%	98.42%	98.50%	100.00%	100.00%
	RJIL	0.38%	1.42%	99.73%	0.01%	0.00%	0.39%	0.51%	99.95%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.94%	98.59%	100.00%	100.00%
Bihar	AIRTEL	0.67%	1.83%	99.46%	0.20%	0.54%	1.88%	2.91%	97.79%	0.09%	0.11%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.13%	99.90%	100.00%	100.00%
	BSNL	0.12%	0.04%	98.28%	0.29%	0.54%	1.14%	1.31%	97.29%	0.27%	0.20%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	95.74%	100.00%	100.00%
	RJIL	1.93%	0.63%	95.66%	0.35%	0.30%	1.86%	2.37%	98.60%	0.00%	0.00%	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	VIL	0.15%	0.34%	99.63%	0.01%	0.00%	0.23%	0.34%	99.96%	0.00%	0.07%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.12%	98.88%	100.00%	100.00%
Delhi	AIRTEL	0.15%	0.97%	99.69%	0.09%	0.31%	1.33%	2.01%	99.51%	0.05%	0.14%	0	0.00%	0.00%	100.00%	100.00%	100.00%	97.76%	99.95%	100.00%	100.00%
	BSNL	0.18%	0.89%	99.52%	0.10%	0.18%	1.28%	1.79%	95.20%	0.34%	0.20%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	95.08%	100.00%	100.00%
	RJIL	0.06%	0.19%	97.54%	0.11%	0.85%	1.26%	1.41%	98.49%	NA	NA	0	0.00%	0.00%	100.00%	100.00%	100.00%	97.92%	99.39%	100.00%	100.00%
	VIL	0.09%	0.21%	99.68%	0.03%	0.00%	0.16%	0.28%	99.95%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.28%	99.19%	100.00%	100.00%
Gujarat	AIRTEL	0.05%	0.11%	99.83%	0.16%	0.16%	1.33%	1.89%	99.46%	0.14%	0.22%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.06%	100.00%	100.00%	100.00%
	BSNL	0.29%	1.91%	99.27%	0.21%	0.26%	1.45%	1.89%	95.97%	0.10%	0.17%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	90.99%	100.00%	100.00%
	RJIL	0.94%	0.44%	98.02%	0.11%	0.62%	1.45%	1.94%	98.25%	0.12%	0.20%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.89%	96.52%	100.00%	100.00%
	VIL	0.18%	0.33%	99.72%	0.01%	0.00%	0.12%	0.25%	99.96%	0.00%	0.07%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.80%	98.90%	100.00%	100.00%
Haryana	AIRTEL	0.07%	0.25%	99.60%	0.13%	0.34%	1.47%	1.97%	96.81%	0.13%	0.17%	0	0.01%	0.00%	100.00%	100.00%	100.00%	99.34%	99.99%	100.00%	100.00%
	BSNL	0.18%	1.43%	99.72%	0.07%	0.09%	1.06%	1.46%	95.33%	0.15%	0.14%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	95.19%	100.00%	100.00%
	RJIL	0.12%	0.38%	99.73%	0.00%	0.00%	0.13%	0.29%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.35%	99.01%	100.00%	100.00%
	VIL	0.13%	0.50%	99.65%	0.18%	0.35%	1.77%	2.80%	98.32%	0.08%	0.12%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.66%	99.99%	100.00%	100.00%
Himachal Pradesh	AIRTEL	0.25%	1.81%	99.83%	0.26%	0.23%	0.93%	1.20%	95.33%	0.17%	0.12%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	95.16%	100.00%	100.00%
	BSNL	1.93%	0.37%	98.77%	0.62%	1.38%	1.93%	2.16%	97.29%	0.00%	0.00%	0	0.01%	0.00%	100.00%	100.00%	100.00%	96.47%	98.50%	100.00%	100.00%
	RJIL	0.15%	0.37%	99.62%	0.02%	0.00%	0.15%	0.31%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.30%	99.07%	100.00%	100.00%
Jammu & Kashmir	VIL	0.08%	0.16%	99.35%	0.19%	0.30%	1.79%	2.27%	95.64%	0.16%	0.22%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.86%	99.96%	100.00%	100.00%
	AIRTEL	0.33%	1.96%	99.53%	0.06%	0.06%	0.62%	1.09%	97.19%	0.15%	0.13%	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	90.65%	100.00%	100.00%
	BSNL	1.86%	0.61%	98.71%	0.77%	1.68%	1.89%	2.22%	96.73%	0.02%	0.12%	0	0.00%	0.00%	100.00%	100.00%	100.00%	97.00%	99.98%	100.00%	100.00%
	RJIL	0.12%	0.35%	99.74%	0.00%	0.00%	0.14%	0.30%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.27%	99.37%	100.00%	100.00%
Karnataka	VIL	0.29%	1.13%	99.27%	0.27%	0.47%	1.67%	2.17%	97.88%	0.18%	0.16%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.86%	99.98%	100.00%	100.00%
	AIRTEL	0.27%	0.86%	99.76%	0.14%	0.13%	0.84%	1.20%	95.81%	0.16%	0.15%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	94.59%	100.00%	100.00%
	BSNL	1.47%	0.50%	98.57%	0.41%	0.30%	1.49%	1.62%	97.96%	0.68%	0.76%	0	0.00%	0.00%	99.81%	100.00%	100.00%	93.99%	53.40%	100.00%	100.00%
	RJIL	0.11%	0.19%	99.73%	0.02%	0.00%	0.16%	0.31%	99.96%	0.00%	0.08%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.43%	98.44%	100.00%	100.00%
Kerala	VIL	0.09%	0.71%	99.68%	0.33%	0.08%	1.52%	1.92%	98.82%	0.10%	0.14%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.37%	100.00%	100.00%	100.00%
	AIRTEL	0.13%	0.28%	99.76%	0.24%	0.29%	1.41%	2.22%	97.13%	0.14%	0.50%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	85.46%	100.00%	100.00%
	BSNL	0.33%	0.24%	98.86%	0.48%	0.53%	1.93%	2.38%	98.57%	0.06%	0.16%	0	0.00%	0.01%	100.00%	100.00%	100.00%	97.10%	89.20%	100.00%	100.00%
	RJIL	0.05%	0.11%	99.71%	0.01%	0.00%	0.00%	0.43%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.37%	97.87%	100.00%	100.00%
VIL	0.05%	0.06%	99.77%	0.20%	0.23%	0.48%	0.74%	98.95%	0.06%	0.14%	0	0.01%	0.00%	100.00%	100.00%	100.00%	97.79%	99.96%	100.00%	100.00%	

Annexure 4.1 (Contd.)

Kolkata	AIRTEL	0.08%	0.00%	99.68%	0.23%	0.19%	1.41%	2.42%	97.82%	0.20%	0.29%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	83.31%	100.00%	100.00%	
	BSNL	0.32%	0.45%	98.85%	0.11%	0.21%	1.44%	1.59%	96.93%	0.08%	0.28%	0	0.00%	0.00%	99.00%	100.00%	100.00%	97.08%	97.12%	100.00%	100.00%	
	RJIL	0.02%	0.02%	99.73%	0.01%	0.00%	0.10%	0.36%	99.97%	0.00%	0.05%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.61%	98.29%	100.00%	100.00%	
	VIL	0.08%	0.39%	99.89%	0.17%	0.11%	1.19%	1.64%	97.62%	0.09%	0.14%	0	0.02%	0.01%	100.00%	100.00%	100.00%	99.35%	99.96%	100.00%	100.00%	
Madhya Pradesh	AIRTEL	0.12%	0.59%	99.22%	0.14%	0.22%	1.61%	2.00%	97.02%	0.10%	0.18%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	95.73%	100.00%	100.00%	
	BSNL	1.21%	0.34%	98.66%	0.49%	1.08%	1.79%	2.02%	98.80%	0.00%	0.00%	0	0.00%	0.02%	100.00%	100.00%	100.00%	98.92%	98.58%	100.00%	100.00%	
	RJIL	0.25%	0.91%	99.66%	0.01%	0.00%	0.30%	0.41%	99.96%	0.00%	0.08%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.87%	99.32%	100.00%	100.00%	
Maharashtra	AIRTEL	1.00%	0.67%	99.30%	0.22%	0.64%	1.45%	1.72%	97.00%	0.01%	0.21%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	95.95%	99.98%	100.00%	100.00%
	BSNL	1.69%	0.62%	97.62%	0.50%	0.84%	1.69%	2.61%	97.15%	0.10%	0.18%	0	0.02%	0.01%	100.00%	100.00%	100.00%	99.44%	97.54%	100.00%	100.00%	
	RJIL	0.34%	1.41%	99.69%	0.01%	0.00%	0.25%	0.35%	99.96%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.81%	99.03%	100.00%	100.00%	
	VIL	0.18%	0.16%	98.36%	0.94%	1.22%	1.79%	2.76%	96.89%	0.25%	0.12%	0	0.01%	0.00%	100.00%	100.00%	100.00%	95.08%	99.99%	100.00%	100.00%	
Mumbai	AIRTEL	0.34%	0.23%	99.24%	0.14%	0.19%	1.47%	1.82%	96.45%	0.32%	0.20%	0	0.03%	0.00%	100.00%	100.00%	100.00%	100.00%	95.47%	100.00%	100.00%	
	MTNL	0.40%	1.90%	98.20%	0.20%	0.10%	1.92%	2.20%	98.11%	NA	NA	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	99.95%	100.00%	100.00%	
	RJIL	0.27%	1.00%	99.65%	0.01%	0.00%	0.12%	0.24%	99.95%	0.00%	0.11%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.05%	99.16%	100.00%	100.00%	
	VIL	0.07%	0.09%	99.74%	0.04%	0.34%	1.89%	2.60%	98.67%	0.14%	0.20%	0	0.02%	0.01%	99.96%	100.00%	100.00%	98.79%	99.99%	100.00%	100.00%	
North East	AIRTEL	0.53%	0.88%	99.01%	0.30%	0.97%	1.58%	2.00%	98.51%	0.23%	0.21%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	85.70%	100.00%	100.00%	
	BSNL	1.05%	0.61%	97.74%	0.78%	1.40%	1.88%	1.94%	97.00%	0.00%	0.00%	0	0.05%	0.05%	100.00%	100.00%	100.00%	96.00%	96.80%	100.00%	100.00%	
	RJIL	1.20%	0.94%	99.71%	0.02%	0.00%	0.53%	0.77%	99.95%	0.00%	0.10%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.08%	98.69%	100.00%	100.00%	
	VIL	1.45%	1.72%	99.38%	0.48%	0.60%	1.86%	2.56%	98.07%	0.14%	0.12%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.03%	99.92%	100.00%	100.00%	
Odisha	AIRTEL	0.03%	0.03%	99.56%	0.15%	0.33%	1.43%	1.70%	97.16%	0.11%	0.01%	0	0.02%	0.00%	100.00%	100.00%	100.00%	100.00%	95.38%	100.00%	100.00%	
	BSNL	1.26%	0.64%	96.57%	0.60%	1.60%	1.91%	1.93%	96.40%	0.00%	0.00%	0	0.00%	0.00%	100.00%	100.00%	100.00%	96.45%	98.71%	100.00%	100.00%	
	RJIL	0.15%	0.49%	99.69%	0.01%	0.00%	0.27%	0.44%	99.96%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.60%	98.78%	100.00%	100.00%	
Punjab	AIRTEL	0.22%	1.45%	99.84%	0.09%	0.15%	1.61%	2.13%	98.93%	0.04%	0.12%	0	0.02%	0.02%	100.00%	100.00%	100.00%	99.23%	99.88%	100.00%	100.00%	
	BSNL	0.18%	1.43%	99.64%	0.12%	0.15%	0.96%	1.23%	96.74%	0.10%	0.23%	0	0.05%	0.00%	100.00%	100.00%	100.00%	100.00%	92.09%	100.00%	100.00%	
	RJIL	0.69%	0.51%	98.84%	0.42%	0.27%	1.82%	2.07%	97.71%	0.00%	0.01%	0	0.01%	0.00%	100.00%	100.00%	100.00%	95.62%	99.44%	100.00%	100.00%	
	VIL	0.14%	0.41%	99.65%	0.00%	0.00%	0.03%	0.19%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.37%	99.06%	100.00%	100.00%	
Rajasthan	AIRTEL	0.06%	0.34%	99.95%	0.13%	0.04%	0.48%	0.96%	99.31%	0.11%	0.31%	0	0.01%	0.00%	100.00%	100.00%	100.00%	99.41%	99.99%	100.00%	100.00%	
	BSNL	1.04%	8.72%	98.89%	0.78%	1.11%	1.55%	1.89%	98.69%	0.00%	0.00%	0	0.02%	0.01%	100.00%	100.00%	100.00%	99.52%	97.77%	100.00%	100.00%	
	RJIL	0.21%	0.68%	99.71%	0.01%	0.00%	0.23%	0.37%	99.96%	0.00%	0.07%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.45%	99.35%	100.00%	100.00%	
	VIL	0.19%	1.79%	99.43%	0.27%	0.36%	1.75%	2.78%	97.33%	0.16%	0.20%	0	0.00%	0.01%	100.00%	100.00%	100.00%	99.07%	99.99%	100.00%	100.00%	
Tamilnadu including Chennai	AIRTEL	0.09%	0.25%	99.81%	0.12%	0.14%	1.25%	1.88%	97.37%	0.15%	0.16%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	83.63%	100.00%	100.00%	
	BSNL	0.92%	0.59%	99.27%	0.47%	0.45%	1.79%	2.62%	98.11%	0.00%	0.00%	0	0.00%	0.00%	100.00%	100.00%	100.00%	96.65%	77.36%	100.00%	100.00%	
	RJIL	0.07%	0.13%	99.74%	0.01%	0.00%	0.16%	0.34%	99.96%	0.00%	0.07%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.20%	97.95%	100.00%	100.00%	
Uttar Pradesh (East)	AIRTEL	0.27%	1.46%	99.35%	0.77%	0.63%	1.61%	2.17%	97.91%	0.09%	0.13%	0	0.02%	0.00%	100.00%	100.00%	100.00%	98.76%	99.99%	100.00%	100.00%	
	BSNL	0.43%	1.56%	99.59%	0.20%	0.29%	1.07%	1.35%	96.08%	0.09%	0.29%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	93.74%	100.00%	100.00%	
	RJIL	1.23%	0.62%	99.40%	0.96%	0.14%	1.85%	2.26%	96.85%	0.06%	0.19%	0	0.01%	0.00%	100.00%	100.00%	100.00%	95.60%	99.65%	100.00%	100.00%	
	VIL	0.27%	1.23%	99.66%	0.00%	0.00%	0.21%	0.34%	99.97%	0.00%	0.06%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.32%	98.94%	100.00%	100.00%	
Uttar Pradesh (West)	AIRTEL	0.18%	0.51%	99.47%	0.27%	0.50%	1.71%	2.33%	98.26%	0.13%	0.25%	0	0.00%	0.01%	100.00%	100.00%	100.00%	99.43%	99.99%	100.00%	100.00%	
	BSNL	0.18%	0.86%	99.78%	0.14%	0.12%	1.24%	1.70%	95.56%	0.19%	0.11%	0	0.04%	0.00%	100.00%	100.00%	100.00%	100.00%	95.10%	100.00%	100.00%	
	RJIL	1.84%	0.59%	97.58%	0.74%	0.98%	1.80%	2.08%	97.04%	0.00%	0.01%	0	0.00%	0.01%	100.00%	100.00%	100.00%	98.75%	98.25%	100.00%	100.00%	
West Bengal	AIRTEL	0.18%	0.78%	99.71%	0.01%	0.00%	0.25%	0.39%	99.97%	0.00%	0.07%	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.29%	99.05%	100.00%	100.00%	
	BSNL	0.13%	1.00%	99.52%	0.42%	0.47%	1.64%	2.31%	97.29%	0.08%	0.15%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.97%	99.98%	100.00%	100.00%	
	AIRTEL	0.26%	1.87%	98.81%	0.20%	0.59%	1.96%	2.79%	96.23%	0.42%	0.70%	0	0.06%	0.00%	100.00%	100.00%	100.00%	100.00%	81.33%	100.00%	100.00%	
	BSNL	0.49%	0.62%	95.36%	0.98%	1.34%	1.85%	2.08%	97.61%	0.28%	1.65%	0	0.00%	0.01%	98.00%	100.00%	100.00%	97.00%	97.45%	100.00%	100.00%	
West Bengal	RJIL	0.12%	0.24%	99.68%	0.02%	0.00%	0.36%	0.50%	99.95%	0.00%	0.09%	0	0.00%	0.00%	100.00%	100.00%	100.00%	98.57%	97.94%	100.00%	100.00%	
	VIL	0.15%	0.81%	99.84%	0.18%	0.15%	1.92%	2.82%	97.93%	0.11%	0.17%	0	0.02%	0.01%	100.00%	100.00%	100.00%	92.11%	99.92%	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			Mean Time to Repair (MTTR)	Metering and Billing (POI) Congestion (No. of Poles not meeting benchmark)	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%	> =95 %	<= 7 days
Andhra Pradesh	AIRTEL	0.59	89.20%	100.00%	100.00%	100.00%	9.81	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	93.15%	87.35%	100.00%	100.00%	
	BSNL	5	98.00%	100.00%	98.00%	100.00%	5	0	0.00%	0.00%	100.00%	100.00%	100.00%	96.77%	100.00%	100.00%	100.00%		
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	98.86%	99.28%	100.00%	89.52%		
	TATA	3.35	95.56%	100.00%	100.00%	100.00%	5.31	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
	VIL	0.07	100.00%	100.00%	NA	NA	1.53	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%	84.83%	100.00%	100.00%	100.00%	
	BSNL	3	93.00%	100.00%	86.00%	100.00%	4	0	0.00%	0.00%	100.00%	100.00%	100.00%	96.59%	91.95%	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	3.23	0	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA		
	AIRTEL	0.62	93.67%	100.00%	100.00%	100.00%	3.35	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	91.96%	100.00%	100.00%	100.00%	
Bihar	BSNL	6	95.00%	100.00%	89.00%	100.00%	3	0	0.01%	0.00%	98.00%	100.00%	100.00%	97.41%	96.33%	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%	100.00%	100.00%	100.00%		
	TATA	0.24	100.00%	100.00%	100.00%	100.00%	2.15	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
	VIL	1.16	100.00%	100.00%	NA	NA	1.27	0	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA		
	AIRTEL	0.5	99.06%	100.00%	100.00%	100.00%	9.91	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	86.81%	100.00%	100.00%	100.00%	
Delhi	MTNL	1.8	88.00%	99.62%	NA	NA	3.79	0	0.00%	NA	100.00%	100.00%	100.00%	98.54%	99.58%	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	3.51	97.60%	100.00%	100.00%	100.00%	3.95	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
	VIL	0.15	100.00%	100.00%	NA	NA	9.19	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA		
	AIRTEL	0.12	87.43%	100.00%	100.00%	100.00%	9.04	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	88.50%	100.00%	100.00%	100.00%	
Gujarat	BSNL	4	96.00%	100.00%	94.00%	100.00%	4	0	0.00%	0.00%	100.00%	100.00%	100.00%	94.82%	91.45%	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	1.99	96.46%	100.00%	100.00%	100.00%	2.72	0	0.00%	NA	100.00%	100.00%	100.00%	98.41%	99.67%	100.00%	100.00%		
	VIL	0.11	100.00%	100.00%	NA	NA	9.3	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA		
	AIRTEL	0.76	95.33%	100.00%	100.00%	100.00%	5.82	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	86.17%	100.00%	100.00%	100.00%	
Haryana	BSNL	5	89.00%	100.00%	86.00%	100.00%	6	0	0.02%	0.00%	98.00%	100.00%	100.00%	96.81%	95.15%	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	0.08	100.00%	100.00%	100.00%	100.00%	3.07	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
	VIL	2.54	100.00%	100.00%	NA	NA	1.14	0	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA		
	AIRTEL	0.44	90.54%	100.00%	100.00%	100.00%	6.32	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	86.35%	100.00%	100.00%	100.00%	
Himachal Pradesh	BSNL	7	96.00%	100.00%	97.00%	100.00%	6	0	0.00%	0.00%	98.92%	100.00%	100.00%	94.57%	93.19%	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%	NA	NA		
	AIRTEL	0.24	92.50%	100.00%	100.00%	100.00%	8.85	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	96.28%	100.00%	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%	96.57%	95.27%	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%	NA	NA		
	AIRTEL	0.75	91.79%	100.00%	100.00%	100.00%	9.88	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	82.70%	100.00%	100.00%	100.00%	
	BSNL	7	95.00%	100.00%	93.00%	100.00%	7	0	0.09%	0.00%	98.00%	100.00%	100.00%	91.33%	84.87%	100.00%	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	0.2	100.00%	100.00%	100.00%	100.00%	5.65	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%		
	VIL	0.07	100.00%	100.00%	NA	NA	8.34	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA		

Annexure 4.2 (Contd.)

Kerala	AIRTEL	0.63	90.37%	100.00%	100.00%	100.00%	9.93	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	78.31%	100.00%	100.00%	
	BSNL	4	93.00%	100.00%	92.00%	100.00%	7	0	0.02%	0.00%	98.00%	100.00%	100.00%	93.76%	90.57%	100.00%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.09%	100.00%	100.00%	100.00%	
	TATA	0.02	100.00%	100.00%	100.00%	100.00%	3.55	0	0.00%	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	VIL	0.54	100.00%	100.00%	NA	NA	1.57	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA	
Kolkata	AIRTEL	0.48	94.08%	100.00%	100.00%	100.00%	9.32	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	88.85%	100.00%	100.00%	
	BSNL	6	91.00%	100.00%	NA	NA	8	0	0.00%	0.00%	99.00%	100.00%	100.00%	96.69%	95.66%	100.00%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	98.77%	99.23%	100.00%	100.00%	
	TATA	1.41	98.32%	100.00%	100.00%	100.00%	2.41	0	0.00%	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	VIL	0.26	100.00%	100.00%	NA	NA	6.18	0	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA	
Madhya Pradesh	AIRTEL	0.82	85.02%	100.00%	100.00%	100.00%	2.33	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	88.44%	100.00%	100.00%	
	BSNL	7	90.00%	100.00%	84.00%	100.00%	7	0	0.01%	0.00%	98.00%	100.00%	100.00%	95.08%	93.41%	100.00%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	98.50%	100.00%	100.00%	100.00%	
	TATA	0.21	100.00%	100.00%	100.00%	100.00%	0.45	0	0.00%	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	VIL	0.07	100.00%	100.00%	NA	NA	1.2	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA	
Maharashtra	AIRTEL	0.08	86.27%	100.00%	100.00%	100.00%	9.4	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	90.37%	100.00%	100.00%	
	BSNL	6	87.00%	100.00%	79.00%	100.00%	8	0	0.01%	0.00%	100.00%	100.00%	100.00%	95.13%	92.84%	100.00%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.62%	100.00%	100.00%	100.00%	
	TATA	1.47	97.24%	100.00%	100.00%	100.00%	2.35	0	0.00%	0.00%	NA	100.00%	100.00%	100.00%	98.97%	100.00%	98.97%	
	VIL	0.51	100.00%	100.00%	NA	NA	5.1	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA	
Mumbai	AIRTEL	0.05	86.73%	100.00%	100.00%	100.00%	9.16	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	89.16%	100.00%	100.00%	
	MTNL	1.4	39.00%	56.40%	50.00%	50.00%	182.87	0	0.00%	0.00%	99.40%	100.00%	100.00%	99.94%	98.22%	99.66%	59.15%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.79%	100.00%	100.00%	100.00%	
	TATA	3.03	96.25%	100.00%	100.00%	100.00%	3.15	0	0.00%	0.00%	NA	100.00%	100.00%	100.00%	99.33%	98.96%	100.00%	100.00%
	VIL	0.08	100.00%	100.00%	NA	NA	1.51	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA	
North East	BSNL	4	91.00%	100.00%	97.00%	100.00%	7	0	0.01%	0.00%	100.00%	100.00%	100.00%	97.72%	95.11%	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%	
	VIL	0	100.00%	100.00%	NA	NA	0	0	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA	
	BSNL	4	92.00%	100.00%	93.00%	100.00%	8	0	0.09%	0.00%	99.00%	100.00%	100.00%	98.25%	97.87%	100.00%	100.00%	
Odisha	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	98.44%	100.00%	100.00%	100.00%	
	TATA	4.82	99.13%	100.00%	100.00%	100.00%	2.27	0	0.00%	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	VIL	0.39	100.00%	100.00%	NA	NA	1.19	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA	
	AIRTEL	0.64	86.70%	100.00%	100.00%	100.00%	9.83	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	84.85%	100.00%	100.00%	
Punjab	BSNL	6	90.00%	100.00%	89.00%	100.00%	7	0	0.08%	0.00%	99.00%	100.00%	100.00%	96.82%	95.01%	100.00%	100.00%	
	QTL	6.5	91.00%	100.00%	100.00%	100.00%	7.63	0	0.01%	0.00%	100.00%	100.00%	100.00%	96.87%	95.15%	100.00%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.73%	100.00%	100.00%	100.00%	
	TATA	0.03	100.00%	100.00%	100.00%	100.00%	2.76	0	0.00%	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	VIL	0.19	100.00%	100.00%	NA	NA	0.46	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA	
	VM IPL	0	100.00%	100.00%	NA	NA	0	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	100.00%	
Rajasthan	AIRTEL	0.79	86.92%	100.00%	100.00%	100.00%	8.83	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	88.57%	100.00%	100.00%	
	BSNL	5	95.00%	100.00%	94.00%	100.00%	6	0	0.05%	0.00%	98.50%	100.00%	100.00%	96.90%	95.12%	100.00%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	97.01%	100.00%	100.00%	100.00%	
	TATA	2.6	100.00%	100.00%	100.00%	100.00%	2.24	0	0.00%	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Tamilnadu including Chennai	VIL	0.31	100.00%	100.00%	NA	NA	2.6	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA	
	AIRTEL	0.86	89.95%	100.00%	100.00%	100.00%	9.9	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	96.08%	100.00%	100.00%	
	BSNL	4	95.00%	100.00%	94.00%	100.00%	5	0	0.04%	0.00%	100.00%	100.00%	100.00%	90.22%	83.48%	100.00%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	98.26%	100.00%	100.00%	100.00%	
	TATA	0.12	100.00%	100.00%	100.00%	100.00%	4.61	0	0.00%	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Uttar Pradesh (East)	VIL	0.53	100.00%	100.00%	NA	NA	1.56	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA	
	AIRTEL	0.67	92.47%	100.00%	100.00%	100.00%	8.82	0	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	87.49%	100.00%	100.00%	
	BSNL	6	88.00%	100.00%	85.00%	100.00%	7	0	0.00%	0.00%	100.00%	100.00%	100.00%	96.49%	95.32%	100.00%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	NA	NA	NA	98.33%	100.00%	100.00%	100.00%	
	TATA	0.56	100.00%	100.00%	100.00%	100.00%	0.78	0	0.00%	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Uttar Pradesh (West)	VIL	0.14	100.00%	100.00%	NA	NA	2.11	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA	
	AIRTEL	0.46	92.74%	100.00%	100.00%	100.00%	3.91	0	0.01%	0.00%	100.00%	100.00%	100.00%	100.00%	85.11%	100.00%	100.00%	
	BSNL	6	92.00%	100.00%	91.00%	100.00%	6	0	0.08%	0.00%	99.00%	100.00%	100.00%	96.97%	95.29%	100.00%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	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%	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
West Bengal	VIL	1.36	100.00%	100.00%	NA	NA	4.37	0	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%	87.75%	100.00%	100.00%	
	BSNL	3	87.00%	100.00%	90.00%	100.00%	5	0	0.01%	0.00%	98.00%	100.00%	100.00%	97.44%	96.65%	100.00%	100.00%	
	RJIL	0	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	0.00%	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%	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
VIL	2.5	100.00%	100.00%	NA	NA	0.35	0	NA	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA		

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

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 %age	Packet loss (for wired broadband access) in %age	Network latency (for wired broadband access)		
			%age of connections provided within 15 days of registration of demand	% of faults repaired by next working day	% of faults repaired within 3 working days	%age of bills disputed	%age of billing complaints resolved within 4 weeks	%age of cases to whom refund of 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 for international connectivity having bandwidth utilisation >90% during peak hours (TCBH)	% International bandwidth utilisation during peak hours (TCBH)	Broadband Connection Speed available (download) from ISP node to user			User reference point at POP/ISP Gateway node to (GSP/NIN)	User reference point at ISP Gateway node to international nearest NAP port abroad (terrestrial)	User reference point at ISP Gateway node to international nearest NAP port abroad (satellite)
			100%	>90%	=>99%	<2%	100% within 4 weeks	100% within 60 days	>60%	>80%	0	0	<90%	>80%			>98%	<1%	<120 ms
1	ADN BROADBAND PRIVATE LIMITED	Delhi	100.00	98.98	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	67.30	92.00	99.68	0.57	2.00	150.00	0.00
2	Airfiber Networks Pvt. Ltd.	Karnataka	100.00	96.50	99.90	0.00	100.00	100.00	93.00	99.00	0.00	0.00	76.64	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	93.00	99.00	0.00	0.00	65.90	99.00	100.00	0.50	22.00	245.00	0.00
3	Airlink Communications Pvt. Ltd	All India	100.00	90.50	99.05	0.00	100.00	100.00	99.00	100.00	0.00	0.00	88.83	98.82	99.86	0.41	80.00	275.00	0.00
4	Airtel Cable and Datacom Pvt. Ltd.	Maharashtra	100.00	96.89	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	4.60	100.00	100.00	0.41	1.66	138.00	(1.00)
		Mumbai	100.00	95.28	99.60	0.00	100.00	100.00	95.96	98.99	0.00	0.00	22.76	100.00	100.00	0.13	1.66	138.00	(1.00)
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	97.80	99.50	0.00	2.00	4.00	1.00
6	Andhra Pradesh State Fiber Net Ltd.	Andhra Pradesh	100.00	95.11	100.00	0.00	100.00	100.00	85.63	92.34	0.00	0.00	72.96	89.12	100.00	0.47	83.00	213.00	306.00
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	Antariksh Softtech Pvt. Ltd.*	Maharashtra	100.00	92.00	99.00	0.00	100.00	100.00	87.00	89.33	0.00	0.00	0.00	90.00	99.00	0.10	24.00	0.00	0.00
		Mumbai	100.00	92.00	99.00	0.00	100.00	100.00	87.00	89.33	0.00	0.00	0.00	90.00	99.00	0.10	24.00	0.00	0.00
9	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
10	Asianet Satellite Communications Ltd.	All India	100.00	90.47	99.85	0.55	100.00	100.00	61.13	80.93	0.00	0.00	71.63	92.00	99.87	0.82	56.00	229.00	0.00
11	Atria Convergence Technologies Ltd.	All India	100.00	95.61	99.39	0.95	100.00	100.00	68.44	73.82	0.00	0.00	44.32	97.62	100.00	0.00	2.00	29.00	0.00
12	Balaji Teleworks Development Pvt Ltd	All India	100.00	95.00	99.60	0.00	100.00	100.00	75.00	86.00	0.00	0.00	86.05	89.00	99.31	0.00	80.00	279.00	0.00
13	Bharat Sanchar Nigam Ltd.	All India	100.00	94.08	99.76	0.11	100.00	100.00	87.69	90.83	0.00	0.00	62.50	94.40	98.90	0.50	56.20	86.10	0.00
14	Bharti Airtel Ltd.	All India	100.00	92.63	99.74	0.01	100.00	100.00	84.33	89.67	0.00	0.00	37.36	100.00	99.77	0.00	50.23	49.85	0.00
15	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	99.50	0.01	25.00	240.00	0.00
16	Candor Infosolution Pvt. Ltd.	Bihar	100.00	99.00	100.00	0.25	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	0.09	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	0.72	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
17	CityOnline 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	99.86	0.30	14.00	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	99.86	0.57	18.00	280.00	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	97.81	99.70	0.00	100.00	100.00	77.37	84.60	0.00	0.00	71.78	93.00	99.73	0.62	80.00	329.00	0.00
20	Digital Network Associates Pvt. Ltd.	Maharashtra	100.00	91.45	99.33	0.00	100.00	100.00	69.44	84.30	0.00	0.00	80.00	83.00	99.86	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 GTPB Broadband Pvt. Ltd.	Gujarat	100.00	93.33	99.66	0.00	100.00	100.00	83.66	93.33	0.00	0.00	85.33	90.00	99.54	0.00	15.00	300.00	0.00
		Maharashtra	100.00	95.33	100.00	0.00	100.00	100.00	91.67	95.00	0.00	0.00	85.33	90.00	99.59	0.00	15.00	300.00	0.00
22	DNA Infotel Pvt Ltd	Maharashtra	100.00	91.44	99.33	0.00	100.00	100.00	84.29	84.29	0.00	0.00	80.00	83.00	99.86	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	97.21	99.53	0.25	100.00	100.00	86.33	88.67	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	94.28	99.60	0.00	100.00	100.00	95.95	97.44	0.00	0.00	68.53	97.60	99.82	0.50	8.30	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	91.27	99.63	0.00	100.00	100.00	62.97	82.33	0.00	0.00	78.33	100.00	99.86	0.00	4.00	199.00	0.00
27	Five Internet Solutions Pvt. Ltd.*	Punjab	100.00	99.00	99.00	0.00	100.00	100.00	86.00	93.66	0.00	0.00	72.00	95.00	99.35	0.00	30.00	100.00	680.00
28	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
29	Fusionnet Web Services Pvt. Ltd.	All India	100.00	96.75	99.53	0.00	100.00	100.00	94.60	96.00	0.00	0.00	55.07	100.00	100.00	0.00	5.00	250.00	0.00
30	Genstar Network Solutions Pvt. Ltd.	Mumbai	100.00	98.00	100.00	0.00	100.00	100.00	83.00	87.00	0.00	0.00	83.00	99.00	98.82	0.00	1.00	47.00	80.00
31	GTPL Broadband Pvt. Ltd.	All India	100.00	91.96	99.42	0.00	100.00	100.00	78.87	88.50	0.00	0.00	46.34	94.00	99.21	0.00	11.00	300.00	0.00
32	GTPL KCBPL Broadband Pvt. Ltd.	Kolkata	100.00	99.91	100.00	0.00	100.00	100.00	89.00	89.66	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	91.33	90.99	0.00	0.00	80.00	98.00	100.00	0.00	10.00	250.00	310.00
		West Bengal	100.00	99.76	100.00	0.00	100.00	100.00	89.00	89.66	0.00	0.00	80.00	98.01	100.00	0.00	10.00	250.00	310.00
33	Hathway Cable & Datacom Pvt. Ltd.	All India	100.00	93.07	99.49	1.14	100.00	100.00	91.68	93.19	0.00	0.00	78.63	90.00	99.73	0.24	8.00	57.00	0.00
34	Honesty Net Solutions (I) Pvt Ltd	All India	100.00	94.33	100.00	0.00	100.00	100.00	69.00	100.00	0.00	0.00	0.00	95.00	99.84	0.02	0.00	66.00	0.00
35	Honeycomb Telnet Pvt. Ltd.*	All India	100.00	92.00	99.00	0.00	100.00	100.00	85.00	88.67	0.00	0.00	0.00	90.00	99.11	0.10	24.00	0.00	0.00
36	Indinet Service Pvt. Ltd	All India	100.00	95.67	100.00	0.00	100.00	100.00	88.00	93.33	0.00	0.00	80.80	95.00	98.63	0.50	47.00	249.00	(1.00)
37	Infocus Networks Pvt. Ltd.*	Mumbai	100.00	96.67	100.00	0.00	100.00	100.00	89.33	95.50	0.00	0.00	0.00	90.00	98.63	0.95	2.00	0.00	(1.00)
38	Instanet Technologies Pvt. Ltd.	Maharashtra	100.00	95.37	100.00	0.16	100.00	100.00	71.34	83.30	0.00	0.00	63.00	90.00	100.00	0.00	4.00	255.00	0.00
39	Intech Online Pvt. Ltd.	Maharashtra	100.00	90.34	99.19	0.82	100.00	100.00	95.63	95.91	0.00	0.00	29.10	89.00	99.86	0.07	15.00	89.33	455.00
		Mumbai	100.00	90.86	99.58	0.37	100.00	100.00	95.70	95.91	0.00	0.00	42.14	89.00	99.86	0.04	1.00	76.00	450.00
40	Intermedia Cable Communication Pvt Ltd	Maharashtra	100.00	94.00	99.30	0.00	100.00	100.00	90.50	93.03	0.00	0.00	86.03	89.00	99.82	0.00	72.00	316.00	0.00
41	Ishan Netsol Pvt Ltd	All India	100.00	91.05	100.00	0.00	100.00	100.00	66.74	83.84	0.00	0.00	70.14	91.00	98.04	0.00	100.00	225.00	0.00
42	Joister Infoserve Pvt. Ltd.	Maharashtra	100.00	92.00	100.00	0.00	100.00	100.00	82.00	92.00	0.00	0.00	88.00	99.00	100.00	0.99	1.00	225.00	0.00
		Mumbai	100.00	93.00	100.00	0.00	100.00	100.00	81.00	90.00	0.00	0.00	89.00	99.00	100.00	0.97	1.00	47.00	0.00
43	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	79.00	99.00	100.00	0.00	1.00	47.00	80.00
44	K NET Solutions Private Limited	Tamilnadu	100.00	93.12	99.33	0.00	100.00	100.00	84.57	85.57	0.00	0.00	0.00	100.00	99.89	0.00	15.08	257.99	0.00
45	Kerala Vision Broad Band Ltd.	All India	100.00	91.29	99.00	0.00	100.00	100.00	69.37	87.47	0.00	0.00	42.22	99.00	99.40	0.00	16.00	265.66	0.00
46	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
47	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	99.68	0.10	30.00	310.00	650.00
48	Mahanagar Telephone Nigam Ltd.	All India	95.83	68.78	74.49	0.00	100.00	78.44	97.55	97.66	0.00	0.00	50.00	89.70	99.32	0.50	35.70	297.26	0.00
49	Meghbela Cable & Broadband Services (P) Ltd	All India	100.00	95.00	100.00	1.56	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
50	Microscan Infocommtech Private Limited	Maharashtra	100.00	96.74	99.54	0.00	100.00	100.00	100.00	100.00	0.00	0.00	13.38	100.00	100.00	0.41	4.20	255.00	(1.00)
		Mumbai	100.00	92.58	99.71	0.00	100.00	100.00	100.00	100.00	0.00	0.00	19.89	100.00	100.00	0.38	2.95	240.00	(1.00)
51	Multicraft Digital Technologies Private Limited	All India	100.00	99.37	100.00	0.00	100.00	100.00	99.00	99.00	0.00	0.00	89.33	92.00	100.00	0.00	116.00	0.00	0.00
52	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
53	Netplus Broadband Services Pvt. Ltd	All India	100.00	100.00	100.00	1.40	100.00	100.00	87.61	95.74	0.00	0.00	78.07	96.12	100.00	0.10	43.67	199.33	0.00
54	Nuron Networks Private Limited	Karnataka	100.00	91.00	99.00	0.00	100.00	100.00	96.00	100.00	0.00	0.00	0.00	90.00	100.00	0.10	16.00	22.00	21.00
55	ONEOTT ENTERTAINMENT LTD	All India	100.00	97.00	99.00	1.29	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
56	Pacenet Meghbela Broadband Pvt. Ltd.	Kolkata	100.00	95.00	100.00	1.70	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
57	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
58	Pioneer Elabs Limited	All India	100.00	92.30	99.48	0.77	100.00	100.00	76.60	88.30	0.00	0.00	0.00	90.60	100.00	0.87	97.00	314.00	726.00
59	Quadrant Televentures Ltd.	All India	100.00	93.90	99.33	0.36	100.00	100.00	88.50	92.10	0.00	0.00	78.70	100.00	100.00	0.00	18.00	251.00	0.00
60	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

Annexure 4.3 (Contd.)

61	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	74.30	90.00	99.59	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	74.30	90.00	99.59	0.00	20.00	300.00	400.00
		Rajasthan	100.00	90.64	99.97	0.00	100.00	100.00	91.47	97.68	0.00	0.00	74.30	90.00	99.59	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	74.30	90.00	99.59	0.00	20.00	300.00	400.00
62	RailTel Corporation of India Ltd.	All India	100.00	98.00	100.00	0.00	100.00	100.00	95.66	100.00	0.00	0.00	34.09	100.00	99.86	0.83	90.00	320.00	0.00
63	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	99.53	0.50	14.00	275.00	0.00
64	Rajesh Digital & Datacom Pvt. Ltd.	Mumbai	100.00	99.00	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
65	Readylink Internet Services Limited	Tamilnadu	100.00	99.00	100.00	0.24	100.00	100.00	91.00	93.00	0.00	0.00	66.00	83.00	100.00	0.00	23.00	85.00	0.00
66	Reliance Jio Infocomm Ltd	All India	100.00	95.70	99.65	0.00	100.00	100.00	95.44	97.35	0.00	0.00	55.02	100.00	99.98	0.01	21.34	71.33	(1.00)
678	Ri Networks Pvt Ltd	All India	100.00	92.70	99.24	0.00	100.00	100.00	89.18	90.64	0.00	0.00	81.15	100.00	100.00	0.50	50.00	300.00	300.00
68	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	125.00	600.00
69	Shyam Spectra Private Limited	All India	100.00	97.55	99.33	0.41	100.00	100.00	81.00	84.00	0.00	0.00	21.32	97.33	99.27	0.00	4.20	0.00	(1.00)
70	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
71	SITI Broadband Services Pvt. Ltd.	All India	100.00	90.37	99.23	0.00	100.00	100.00	89.67	93.67	0.00	0.00	70.17	95.00	99.34	0.90	2.00	90.00	0.00
72	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
73	Specific Net Pvt. Ltd	Maharashtra	100.00	97.34	100.00	0.36	100.00	100.00	72.36	91.27	0.00	0.00	75.93	88.27	98.67	0.67	70.52	66.35	(1.00)
74	Spiderlink Networks Pvt. Ltd.	Rajasthan	100.00	94.32	99.17	0.00	100.00	100.00	87.91	92.43	0.00	0.00	70.00	98.00	100.00	0.00	30.00	225.00	0.00
75	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	77.64	90.00	99.63	0.00	20.00	260.00	0.00
76	Sristi Sanchar Webnet Limited	Kolkata	100.00	96.50	100.00	0.00	100.00	100.00	90.00	100.00	0.00	0.00	80.93	90.46	99.08	0.00	60.00	208.00	199.00
77	Stampepe 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
78	Swiftmail Communications Ltd.	All India	100.00	95.00	100.00	0.00	100.00	100.00	70.00	90.00	0.00	0.00	0.00	90.00	99.03	0.10	0.00	80.00	100.00
79	Tachyon Communications Private Limited	Uttar Pradesh (East)	100.00	98.00	100.00	0.66	100.00	100.00	88.00	94.00	0.00	0.00	58.12	99.00	100.00	0.00	35.00	70.00	(1.00)
80	Tata Play Broadband Private Limited (formerly Tata Sky Broadband Pvt.Ltd.)	All India	100.00	94.43	99.49	0.00	100.00	100.00	82.24	85.53	0.00	0.00	47.66	100.00	99.98	0.00	1.00	0.00	0.00
81	Tata Teleservices Limited	Andhra Pradesh	100.00	95.49	99.83	0.01	100.00	85.71	97.92	97.92	0.00	0.00	64.14	94.77	99.93	0.00	53.00	97.67	0.00
		Bihar	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	90.33	100.00	0.00	66.00	115.67	0.00
		Delhi	100.00	96.95	99.39	0.00	100.00	100.00	97.92	97.92	0.00	0.00	64.14	92.00	99.73	0.00	54.67	121.00	0.00
		Gujarat	100.00	95.16	100.00	0.00	100.00	100.00	96.08	96.08	0.00	0.00	64.14	97.33	99.86	0.00	32.00	70.67	0.00
		Karnataka	100.00	96.44	99.16	0.00	100.00	80.00	97.96	97.96	0.00	0.00	64.14	94.50	99.65	0.00	52.33	109.67	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	97.93	99.62	0.00	46.67	103.67	0.00
		Kolkata	100.00	100.00	100.00	0.00	100.00	100.00	100.00	100.00	0.00	0.00	64.14	84.73	99.85	0.00	33.00	73.00	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	91.33	100.00	0.00	85.33	98.00	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	93.00	99.59	0.00	68.00	113.00	0.00
		Tamilnadu	100.00	99.14	100.00	0.04	100.00	100.00	98.61	98.61	0.00	0.00	64.14	91.00	99.49	0.00	22.33	49.67	0.00
82	Tata Teleservices(Maharashtra) Ltd.	Maharashtra	100.00	97.79	99.75	0.02	100.00	95.08	98.35	98.97	0.00	0.00	72.00	99.79	99.76	0.00	51.00	113.00	0.00
		Mumbai	100.00	98.08	99.57	0.00	100.00	91.36	98.64	98.95	0.00	0.00	72.00	93.82	99.78	0.00	30.00	50.00	0.00
83	Tikona Infinet Ltd.	All India	100.00	94.04	99.42	1.04	100.00	100.00	64.30	81.00	0.00	0.00	79.49	94.84	100.00	0.00	3.33	0.00	0.00
84	Vijaylakshmi 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	75.00	100.00	99.63	0.00	20.00	250.00	350.00
85	Vortex Infocom Private Limited*	Maharashtra	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
86	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
87	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
88	WAVE FIBER PRIVATE LIMITED	Andhra Pradesh	100.00	93.67	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
89	Weebo Networks Pvt Ltd.	All India	100.00	98.10	100.00	0.00	100.00	100.00	84.33	98.30	0.00	0.00	88.00	85.00	98.95	0.44	100.00	300.00	600.00
90	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	0.00	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	50.19	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	50.19	100.00	100.00	0.30	23.00	0.00	0.00
		Kolkata	100.00	98.78	100.00	0.00	100.00	100.00	98.10	98.12	0.00	0.00	50.19	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	50.19	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	50.19	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	50.19	100.00	100.00	0.30	12.00	0.00	0.00
91	Yashash Cable Network Pvt Ltd	Karnataka	100.00	95.00	99.34	0.00	100.00	100.00	88.13	93.38	0.00	0.00	57.12	84.00	99.18	0.01	29.00	219.00	0.00
92	You Broadband India Ltd.	All India	100.00	97.59	99.53	0.00	100.00	100.00	94.67	97.45	0.00	0.00	75.24	86.84	98.86	0.00	8.00	276.00	0.00

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)

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
1	AETN 18 Media Pvt Limited	1	The History Channel	SD
		2	Histry TV 18 HD	HD
2	Bangla Entertainment Private Limited	3	SONY AATH	SD
		4	SONY Marathi	SD
3	BBC Global News India Private Limited	5	BBC World News	SD
		6	Cbeebies	SD
4	Bennett, Coleman & Company Limited	7	Zoom	SD
		8	Romedy Now	SD
		9	MN + (HD)	HD
		10	Mirror Now	SD
		11	ET NOW	SD
		12	Times Now	SD
		13	Times Now Navbharat HD	HD
		14	Movies Now HD	HD
		15	MNX HD	HD
		16	ET Now Swedesh	SD
		17	MNX	SD
5	Celebrities Management Pvt Limited	18	Times Now World (HD)	HD
		19	Travel XP HD	HD
		20	Travel XP Tamil	SD
6	CSL Info Media Private Limited	21	Foodxp	SD
		22	JAN TV PLUS	SD
7	Culver Max Entertainment Private Limited	23	Sony YAY!	SD
		24	SONY MAX	SD
		25	SONY SAB	SD
		26	SONY ENTERTAINMENT CHANNEL (SET)	SD
		27	SONY PIX	SD
		28	SONY MAX 2	SD

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
		29	SONY PAL	SD
		30	SONY ENTERTAINMENT CHANNEL HD	HD
		31	PIX HD	HD
		32	MAX HD	HD
		33	SONY Sports Ten 2 HD	HD
		34	SONY Sports Ten 3 HD	HD
		35	SONY Sports Ten 2	SD
		36	SONY Sports Ten 1	SD
		37	SONY Sports Ten 3	SD
		38	SONY Sports Ten 1 HD	HD
		39	SONY Wah	SD
		40	SAB HD	HD
		41	SONY Sports Ten 4	SD
		42	SONY Sports Ten 4 HD	HD
		43	SONY Sports Ten 5	SD
		44	SONY Sports Ten 5 HD	HD
8	Direct New Private Limited	45	News X	SD
9	Discovery Communications India	46	Animal Planet	SD
		47	Discovery Channel	SD
		48	DTAMIL	SD
		49	Discovery Kids Channel	SD
		50	Discovery Science	SD
		51	Discovery Turbo	SD
		52	Investigation Discovery	SD
		53	Discovery HD	HD
		54	Animal Planet HD	HD
		55	TLC HD	HD
		56	Investigation Discovery HD	HD
		57	TLC	SD
		58	EUROSPORT HD	HD

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
		59	EUROSPORT	SD
10	Disney Broadcasting (India) Limited	60	Disney Junior	SD
		61	Super Hangama (Marvel HQ)	SD
		62	Disney International HD	HD
		63	Hungama TV	SD
		64	The Disney Channel	SD
		65	UTV Bindass	SD
		66	The Disney Channel HD	HD
11	Eenadu Television Private Limited	67	ETV Telegu	SD
		68	ETV Andhra Pradesh	SD
		69	ETV - Telangana	SD
		70	ETV Cinema	SD
		71	ETV Life	SD
		72	ETV Plus	SD
		73	ETV Abhiruchi	SD
		74	ETV HD	HD
		75	ETV Plus HD	HD
		76	ETV Cinema HD	HD
		77	ETV Balbharat Telugu	SD
		78	ETV Balbharat Hindi	SD
		79	ETV Balbharat kannada	SD
		80	ETV Balbharat Malayalam	SD
		81	ETV Balbharat Tamil	SD
		82	ETV Balbharat English	SD
		83	ETV Balbharat HD	HD
84	ETV Balbharat SD	SD		
12	Fame Media Private Limited	85	4tv News	SD
13	Greycells18 Media Limited	86	Topper TV	SD
14	IN 10 Media Private Limited	87	EPIC TV	SD
		88	Filamchi	SD

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
		89	Gubbare	SD
		90	Showbox	SD
		91	Ishara TV	SD
15	Information TV Private Limited	92	India News	SD
16	IBN Lokmat News Private Ltd	93	News 18 Lokmat	SD
17	Kalaignar TV Pvt Limited	94	Kalaignar TV	SD
		95	Kalaignar Isai Aruvi	SD
		96	Kalaignar Siripolli	SD
		97	Kalaignar Murasu	SD
		98	Kalaignar Seithigal	SD
18	Living Entertainment Enterprises Private Ltd	99	ZEE ZEST HD	HD
19	Lifestyle and Media Broadcasting Limited	100	LF HD	HD
		101	Good Times	SD
20	Lex Sportel Vision Private Limited	102	1SPORTS	SD
21	Mavis Satcom Limited	103	J Movies	SD
		104	Jaya Max	SD
		105	Jaya Plus	SD
		106	Jaya TV HD	HD
22	MSM World Wide Factual Media Private Limited	107	SONY BBC EARTH	SD
		108	SONY BBC EARTH HD	HD
23	Media World Wide Limited	109	Travel XP	SD
24	New Delhi Television Limited	110	NDTV 24*7	SD
		111	NDTV India	SD
		112	NDTV Profit	SD
25	NGC Network (India) Pvt Limited	113	Fox Life	SD
		114	National Geographic Channel (NGC)	SD
		115	Fox Life HD	HD
		116	Nat Geo Wild	SD
		117	National Geographic HD	HD
		118	Nat Geo Wild HD	HD
26	Odisha Television Limited	119	Tarang HD	HD

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
27	Raj Television Network Limited	120	Raj Digital Plus	SD
		121	Raj Musix	SD
		122	Raj News	SD
		123	Raj TV	SD
28	Silverstar Communications Limited	124	Mega 24	SD
		125	Mega Musiq	SD
		126	Mega TV	SD
29	Star India Private Limited	127	Star Sports 3	SD
		128	Star Sports 1 Tamil	SD
		129	Star Sports Select 2	SD
		130	Star Bharat	SD
		131	Star Gold 2 (Movies OK)	SD
		132	Star Sports 1 Hindi	SD
		133	Star Gold	SD
		134	Star Jalsha	SD
		135	Star Movies	SD
		136	Star Gold Select	SD
		137	Star Plus	SD
		138	Star Pravah	SD
		139	Star Sports 1	SD
		140	Star Sports 2	SD
		141	Jalsha Movies	SD
		142	Star Sports HD 2	HD
		143	Star Sports HD 1	HD
		144	Star Bharat HD	HD
		145	Star Gold HD	HD
		146	Star Movies HD	HD
147	Star Plus HD	HD		
148	Star Sports 1 HD Hindi	HD		
149	Star Sports Select 1	SD		
150	Star Movies Select HD	HD		
151	Star Sports First	SD		

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
		152	MAA Gold	SD
		153	MAA Movies	SD
		154	MAA Music	SD
		155	MAA TV	SD
		156	Star Pravah HD	HD
		157	Star Jalsha HD	HD
		158	Jalsha Movies HD	HD
		159	Star Sports Select HD 1	HD
		160	Star Sports Select HD 2	HD
		161	MAA HD	HD
		162	Star Gold Select HD	HD
		163	MAA Movies HD	HD
		164	Star Sport 1 Telugu	SD
		165	Star Sport 1 Kannada	SD
		166	Star Utsav	SD
		167	Star Utsav Movies	SD
		168	Star Gold Romance	SD
		169	Star Gold Thrills	SD
		170	Pravah Pictures	SD
		171	Star Kiran	SD
		172	Star Movies Select	SD
		173	Star Gold 2 HD	HD
		174	Star Sports 1Tamil HD	HD
		175	Star Sports 1Telugu HD	HD
		176	Star Kiran HD	HD
		177	Pravah Pictures HD	HD
		178	Vijay TV	SD
		179	Vijay Super	SD
		180	Vijay HD	HD
		181	Vijay Takkar (Vijay Music)	SD
		182	Asianet	SD

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
		183	Asianet Plus	SD
		184	Asianet Movies	SD
		185	Suvarna Plus	SD
		186	Star Suvarna HD	HD
		187	Asianet HD	HD
		188	Star Suvarna	SD
		189	Vijay Super HD	HD
		190	Asianet Movies HD	HD
30	SUN TV Network Limited	191	Adithya TV	SD
		192	Chintu TV	SD
		193	Chutti TV	SD
		194	Gemini Comedy	SD
		195	Gemini Life	SD
		196	Gemini Movies	SD
		197	Gemini Music	SD
		198	Gemini TV	SD
		199	KTV	SD
		200	Surya Movies	SD
		201	Kushi TV	SD
		202	SUN Life	SD
		203	Sun Music	SD
		204	Sun News	SD
		205	Surya Music	SD
		206	SUN TV	SD
		207	Surya Comedy	SD
		208	Surya TV	SD
		209	Udaya Comedy	SD
		210	Udaya Movies	SD
		211	Udaya Music	SD
		212	Udaya TV	SD
		213	Kochu TV	SD
		214	Sun TV HD	HD

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
		215	KTV HD	HD
		216	Sun Music HD	HD
		217	Gemini TV HD	HD
		218	Gemini Music HD	HD
		219	Gemini Movies HD	HD
		220	Surya TV HD	HD
		221	Udaya TV HD	HD
31	Suryansh Broadcasting Private Limited	222	Flowers	SD
32	Sidharth Broadcasting Private Limited	223	Sidharth TV	SD
33	Sarthak Music Private Limited	224	Sidharth Bhakti	SD
		225	Jay Jagannath	SD
		226	Sidharth Gold	SD
34	Tarang Broadcasting Company Limited	227	Prarthana	SD
		228	Tarang	SD
		229	Tarang Music	SD
		230	Alankar	SD
35	TV 18 Broadcast Limited	231	CNN News 18	SD
		232	CNBC Bazaar	SD
		233	CNBC TV 18 Prime HD	HD
		234	CNBC Awaaz	SD
		235	News 18 Tamil Nadu	SD
		236	News 18 Kerala	SD
		237	News 18 Assam / North East	SD
		238	News 18 India	SD
		239	CNBC TV 18	SD
		240	News 18 Bihar Jharkhand	SD
		241	News 18 Madhya Pradesh / Chattisgarh	SD
		242	News 18 Rajasthan	SD
		243	News 18 Uttar Pradesh/ Uttaranchal	SD

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
		244	News 18 Jammu/Kashmir/Ladakh/Himachal	SD
		245	News 18 Kannada	SD
		246	News 18 Bangla	SD
		247	News 18 Punjab / Haryana	SD
		248	News 18 Gujarati	SD
		249	News 18 Odia	SD
36	TV Today Network Limited	250	Aaj Tak	SD
		251	India Today	SD
		252	AAJ Tak HD	HD
		253	Good News Today	SD
37	Viacom 18 Media Private Limited	254	Colors	SD
		255	Comedy Central (HD)	HD
		256	MTV	SD
		257	NICK	SD
		258	NICK JR	SD
		259	SONIC	SD
		260	VH 1 (HD Distribution)	HD
		261	Colors Infinity HD	HD
		262	Colors Infinity	SD
		263	Colors HD	HD
		264	NICKS HD+	HD
		265	Colors Cineplex	SD
		266	MTV Beats	SD
		267	Colors Kannada HD	HD
		268	Colors Marathi HD	HD
		269	Colors Bangla HD	HD
		270	Colors Super	SD
		271	Colors Cineplex Bollywood	SD
		272	Sports18 1	SD
		273	Sports 18 1 HD	HD

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
		274	Colors Bangla	SD
		275	Colors Gujarati	SD
		276	Colors Kannada	SD
		277	Colors Marathi	SD
		278	Colors Odia	SD
		279	MTV Beats HD	HD
		280	Colors Tamil	SD
		281	Colors Cineplex HD	HD
		282	VH 1	SD
		283	Colors Tamil HD	HD
		284	MTV HD	HD
		285	Colors Rishtey	SD
		286	Colors Kannada Cinema	SD
		287	Colors Gujarati Cinema	SD
		288	Comedy Central	SD
		289	Colors Bangla Cinema	SD
		290	Colors Cineplex Superhit	SD
38	Warner Media India Private Limited	291	Cartoon Network	SD
		292	CNN International	SD
		293	POGO	SD
		294	Cartoon Network HD+	HD
39	Zee Akaash News Private Limited	295	Zee 24 Ghanta	SD
40	Zee Entertainment Enterprises Limited	296	Zee Bollywood	SD
		297	Zee Action	SD
		298	Zee Bangla Cinema	SD
		299	Zee Café HD	HD
		300	Zee Café	SD
		301	Zee Cinema	SD
		302	Zee Talkies	SD
		303	Zee TV	SD
		304	Zing	SD

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
		305	& Picture	SD
		306	Zee Bangla	SD
		307	Zee Marathi	SD
		308	Zee Zest	SD
		309	Zee TV HD	HD
		310	Zee Cinema HD	HD
		311	& TV	SD
		312	& TV HD	HD
		313	Zee Kannada	SD
		314	Zee Telugu	SD
		315	& Pictures HD	HD
		316	Zee Cinemalu	SD
		317	Zee Yuva	SD
		318	Zee Marathi HD	HD
		319	& Prive HD	HD
		320	Zee Bangla HD	HD
		321	Zee Tamil HD	HD
		322	Zee Cinemalu HD	HD
		323	Zee Telugu HD	HD
		324	Zee Tamil	SD
		325	Zee Kannada HD	HD
		326	Zee Anmol Cinema	SD
		327	& Flix HD	HD
		328	& Flix	SD
		329	Zee Keralam HD	HD
		330	Zee Keralam	SD
		331	Zee Anmol	SD
		332	Big Magic	SD
		333	Zee Ganga	SD
		334	Zee Classic	SD
		335	&Xplore HD	HD
		336	ZEE Sarthak	SD

S.N.	Name of the broadcaster	S.N	Name of the channel	Declared as SD or HD
		337	Zee Talkies HD	HD
		338	Zee Punjabi	SD
		339	Zee Thirai	SD
		340	Zee Picchar	SD
		341	Zee Thirai HD	HD
		342	Zee Picchar HD	HD
		343	Zee Biskope	SD
41	Zee Media Corporation Limited	344	Zee 24 Taas	SD
		345	Zee Delhi NCR Haryan (Zee Odisha)	SD
		346	Zee Business	SD
		347	Zee Punjab Haryana Himachal	SD
		348	Zee Madhya Pradesh Chattisgarh	SD
		349	Zee Salaam	SD
		350	Zee 24 Kalak	SD
		351	WION	SD
		352	Zee Uttar Pradesh Uttrakhand	SD
		353	Zee Hindustan	SD
		354	Zee Bihar Jharkhand	SD
		355	Zee News	SD
		356	Zee Rajasthan News	SD
		357	Zee News HD	HD
		358	Zee Kannada News	SD
		359	Zee Telugu News	SD
42	Zoom Entertainment Network Limited	360	Movies Now	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-6000002 (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 June 2023	
S.No.	Name of IPTV Operators
1	M/s Hyderabad Cable Digital Service Pvt. Ltd.
2	M/s Bhoomika Digital Cable Services Pvt. Ltd.
3	M/s Peak Air Pvt. Ltd.
4	M/s Katalysts Productions Pvt. Ltd.
5	M/s Andhra Pradesh State Fibernet Limited
6	M/s Triple Play Teleservices (P) Ltd.
7	M/s WI Bro Solutions Pvt. Ltd
8	M/s Extreme Teleconnect Pvt. Ltd.
9	M/s Delinet Broadband Pvt. Ltd
10	M/s Den Networks Ltd.
11	M/s Hathway Digital Limited
12	M/s City Online Media Pvt. Ltd.
13	M/s Act Digital Home Entertainment Pvt. Ltd.
14	M/s Kabel First India Pvt. Ltd.
15	M/s ACN Cable Pvt. Ltd.
16	M/s UCN Network Pvt. Ltd.
17	M/s Atria Convergence Technologies Ltd.
18	M/s Skypro Communications
19	M/s E2 Info Solutions
20	M/s Assistive Netspeed Technologies Pvt. Ltd.
21	M/s Bangalore Broadband Network Private Limited
22	M/s Creative Cable Network
23	M/s Wired Entertainment
24	M/s V.K. Digital Network Private Ltd.
25	M/s AAA Cloud Telephony Private Limited
26	M/s Dombivali Optical Network Cable Pvt. Ltd

Annexure 5.5: List of 113 cities with operational private FM Radio Channels in India (As on 30th June 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

S.No.	City	Category	Channels
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

S.No.	City	Category	Channels
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

S.No.	City	Category	Channels
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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