



Telecom Regulatory Authority of India

The Indian Telecom Services Performance Indicators October – December, 2021

New Delhi, India

4th May, 2022

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Snapshot

(Data as on Q.E. 31 st December, 2021)	
Telecom Subscribers (Wireless+Wireline)	
Total Subscribers	1,178.41 Million
% change over the previous quarter	-0.90%
Urban Subscribers	655.20 Million
Rural Subscribers	523.21 Million
Market share of Private Operators	89.14%
Market share of PSU Operators	10.86%
Tele-density	85.91%
Urban Tele-density	137.26%
Rural Tele-density	58.50%
Wireless Subscribers	
Total Wireless Subscribers	1,154.62 Million
% change over the previous quarter	-0.98%
Urban Subscribers	633.34 Million
Rural Subscribers	521.28 Million
Market share of Private Operators	89.81%
Market share of PSU Operators	10.19%
Tele-density	84.17%
Urban Tele-density	132.68%
Rural Tele-density	58.28%
Total Wireless Data Usage during the quarter	34,608 PB
Number of Public Mobile Radio Trunk Services (PMRTS)	63,417
Number of Very Small Aperture Terminals (VSAT)	2,88,848
Wireline Subscribers	
Total Wireline Subscribers	23.79 Million
% change over the previous quarter	2.84%
Urban Subscribers	21.86 Million
Rural Subscribers	1.93 Million
Market share of PSU Operators	43.50%
Market share of Private Operators	56.50%
Tele-density	1.73%
Rural Tele-density	0.22%
Urban Tele-density	4.58%
No. of Village Public Telephones (VPT)	68,606
No. of Public Call Office (PCO)	73,634

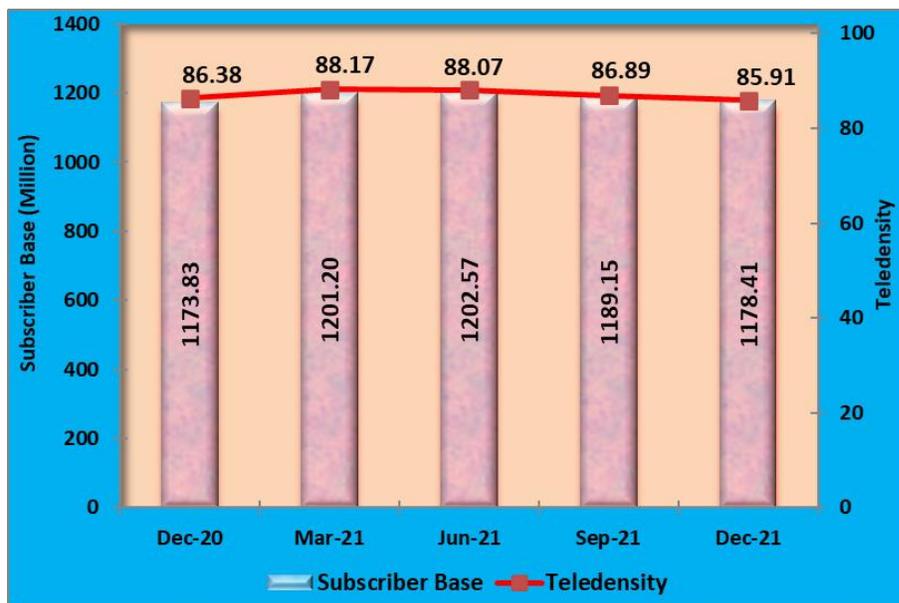
Telecom Financial Data	
Gross Revenue (GR) during the quarter	Rs.69,695 Crore
% change in GR over the previous quarter	3.56%
Adjusted Gross Revenue (AGR) during the quarter	Rs.55,151 Crore
% change in AGR over the previous quarter	3.07%
Share of Public sector undertakings in Access AGR	5.22%
Internet/Broadband Subscribers	
Total Internet Subscribers	829.30 Million
% change over previous quarter	-0.60%
Narrowband subscribers	37.21 Million
Broadband subscribers	792.09 Million
Wired Internet Subscribers	26.58 Million
Wireless Internet Subscribers	802.72 Million
Urban Internet Subscribers	496.20 Million
Rural Internet Subscribers	333.10 Million
Total Internet Subscribers per 100 population	60.46
Urban Internet Subscribers per 100 population	103.95
Rural Internet Subscribers per 100 population	37.25
Broadcasting & Cable Services	
Number of private satellite TV channels permitted by the Ministry of I&B for uplinking only/downlinking only/both uplinking and downlinking	909
Number of Pay TV Channels as reported by broadcasters	350
Number of private FM Radio Stations (excluding All India Radio)	386
Number of total active subscribers with pay DTH operators	68.52 Million
Number of Operational Community Radio Stations	343
Number of pay DTH Operators	4
Revenue & Usage Parameters	
Monthly ARPU of Wireless Service	Rs.114.16
Minutes of Usage (MOU) per subscriber per month - Wireless Service	854 Minutes
Total Outgoing Minutes of Usage for Internet Telephony	150.25 Million
Wireless Data Usage	
Average Wireless Data Usage per wireless data subscriber per month	14.97 GB
Average revenue realization per subscriber per GB wireless data during the quarter	Rs.9.91

* For ARPU explanation please refer to footnote on Page 52

Executive Summary

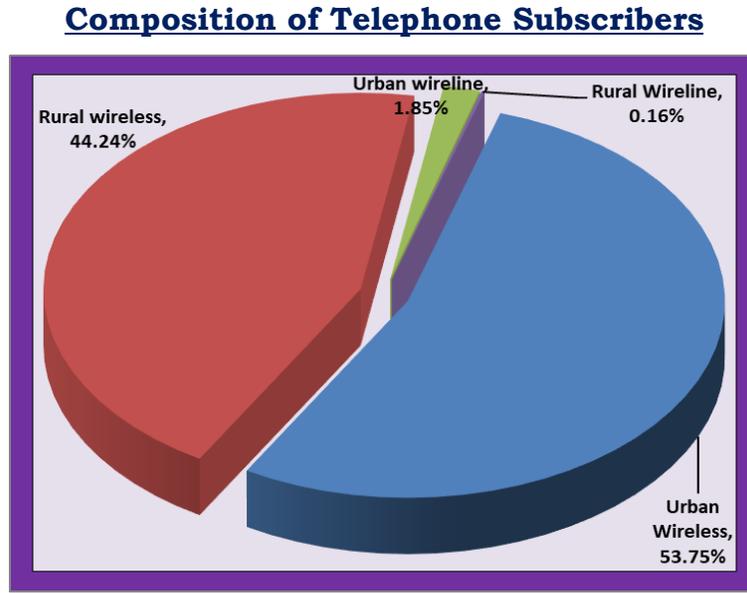
1. The number of telephone subscribers in India decreased from 1,189.15 million at the end of Sep-21 to 1,178.41 million at the end of Dec-21, registering a decline rate of 0.90% over the previous quarter. This reflects Year-On-Year (Y-O-Y) growth rate of 0.39% over the same quarter of the last year. The overall Tele-density in India decreased from 86.89% as in QE Sep-21 to 85.91% as in QE Dec-21.

Trends in Telephone subscribers and Tele-density in India



2. Telephone subscribers in Urban areas decreased from 659.09 million at the end of Sep-21 to 655.20 million at the end of Dec-21 and Urban Tele-density also decreased from 138.72% to 137.26% during the same period.
3. Rural telephone subscribers decreased from 530.06 million at the end of Sep-21 to 523.21 million at the end of Dec-21 and Rural Tele-density also decreased from 59.33% to 58.50% during the same period.

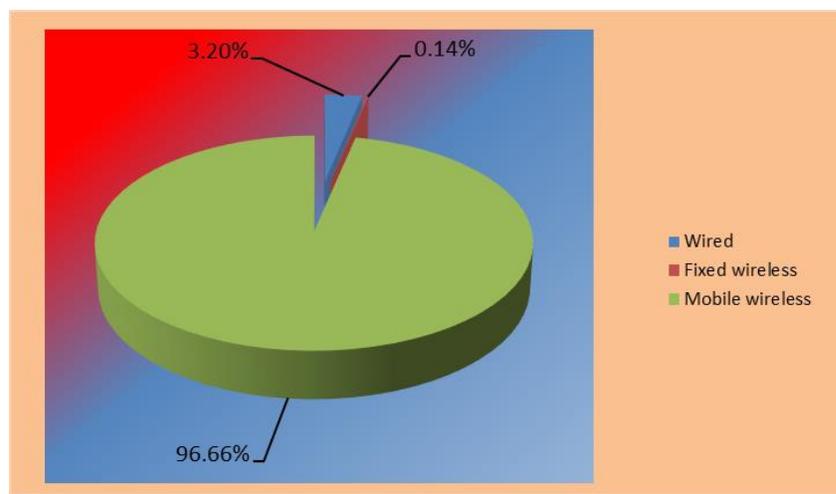
4. Out of the total subscription, the share of Rural subscription decreased from 44.57% at the end of Sep-21 to 44.40% at the end of Dec-21.



5. With a net decrease of 11.40 million subscribers during the quarter, the total wireless subscriber base decreased from 1,166.02 million at the end of Sep-21 to 1,154.62 million at the end of Dec-21, registering a decline rate of 0.98% over the previous quarter. On Y-O-Y basis, wireless subscriptions increased at the rate of 0.07% during the year.
6. Wireless Tele-density decreased from 85.20% at the end of Sep-21 to 84.17% at the end of Dec-21 with quarterly decline rate of 0.98%.
7. Wireline subscribers increased from 23.13 million at the end of Sep-21 to 23.79 million at the end of Dec-21 with a quarterly growth rate of 2.84% and, on Y-O-Y basis, wireline subscriptions also increased by 18.63% at the end of QE Dec-21.

8. Wireline Tele-density increased from 1.69% at the end of Sep-21 to 1.73% at the end of Dec-21 with quarterly growth rate of 2.60%.
9. Total number of Internet¹ subscribers decreased from 834.29 million at the end of Sep-21 to 829.30 million at the end of Dec-21, registering a quarterly decline rate of 0.60%. Out of 829.30 million internet subscribers, number of Wired Internet subscribers are 26.58 million and number of Wireless Internet subscribers are 802.72 million.

Composition of internet subscription



10. The Internet subscriber base is comprised of Broadband² Internet subscriber base of 792.09 million and Narrowband³ Internet subscriber base of 37.21 million.
11. The broadband Internet subscriber base decreased by 0.35% from 794.88 million at the end of Sep-21 to 792.08 million at the end of Dec-21. The narrowband Internet subscriber base also declined by

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

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

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

(Source-ITU)

5.57% from 39.41 million at the end of Sep-21 to 37.21 million at the end of Dec-21.

12. Monthly Average Revenue per User (ARPU)⁴ for wireless service increased by 5.55%, from Rs.108.16 in QE Sep-21 to Rs.114.16 in QE Dec-21. On Y-O-Y basis, monthly ARPU for wireless service increased by 12.31% in this quarter.
13. Prepaid ARPU per month increased from Rs.102.16 in QE Sep-21 to Rs.107.98 in QE Dec-21, however, Postpaid ARPU per month decreased from Rs.212.28 in QE Sep-21 to Rs.210.33 in QE Dec-21.
14. On all India average, the overall Minutes of Usage (MOU)⁵ per subscriber per month for wireless service increased by 3.33% from 827 in QE Sep-21 to 854 in QE Dec-21.
15. Prepaid MOU per subscriber per month increased from 837 in QE Sep-21 to 868 in QE Dec-21. Postpaid MOU per subscriber per month decreased from 649 in QE Sep-21 to 638 in QE Dec-21.
16. Gross Revenue⁶ (GR) and Adjusted Gross Revenue⁷ (AGR) of Telecom Service Sector for the Q.E. Dec-21 has been Rs.69,695/-

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

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

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

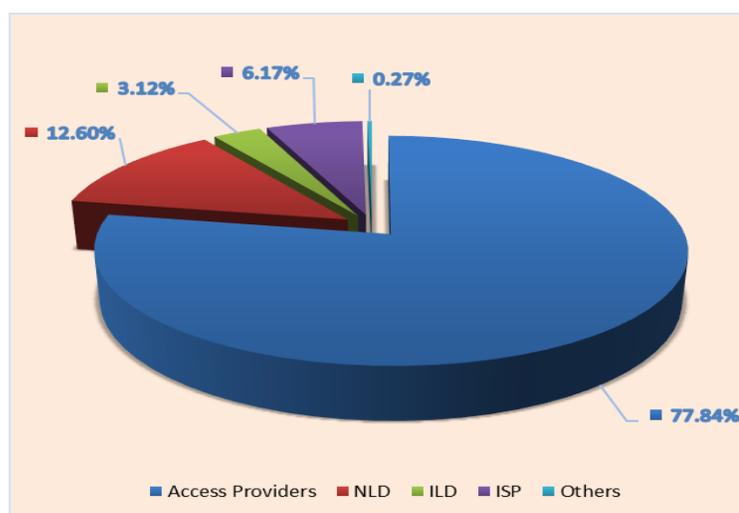
⁷ Adjusted Gross Revenue: The following shall be excluded from the Gross Revenue to arrive at the AGR:

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

Crore and Rs.55,151/- Crore respectively. GR increased by 3.56% and AGR increased by 3.07% in Q.E. Dec-21, as compared to previous quarter.

17. The Y-O-Y growth in GR and AGR in Q.E. Dec-21 over the same quarter in last year has been -2.64% and 15.81% respectively.
18. Pass-through⁸ charges increased from Rs.13,790 Crore in QE Sep-21 to Rs.14,544 Crore in QE Dec-21 with quarterly growth rate of 5.47%. The Y-O-Y decline rate of 39.31% has been recorded in pass-through charges for QE Dec-21.
19. The License Fee⁹ increased from Rs.4,271 Crore for the QE Sep-21 to Rs.4,541 Crore for the QE Dec-21. The quarterly and the Y-O-Y growth rates of license fee are 6.34% and 19.21% respectively in this quarter.

Service-wise composition of Adjusted Gross Revenue



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

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

20. Access services contributed 77.84% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Adjusted Gross Revenue (AGR), License Fee, Spectrum Usage Charges (SUC)¹⁰ and Pass Through Charges increased by 3.30%, 1.20%, 1.19%, 1.11% and 12.10% respectively in QE Dec-21.
21. The performance of wireline service providers in terms of QoS during the quarter vis-à-vis that in the previous quarter is given below: -

Parameters showing improvement in QoS	Parameters showing deterioration in QoS
<ul style="list-style-type: none"> ❖ “Fault repair” Fault incidences No. of faults per 100 subs/month) ≤ 7 ❖ % Fault repaired by next working day (for urban areas) ≥ 85% ❖ “Mean time to Repair” (MTTR) ≤10Hs ❖ %age of calls answered by the operators (voice to voice) within 90 seconds ≥ 95% ❖ Time taken for refund of deposits after closures 100% within 60 days 	<ul style="list-style-type: none"> ❖ “Accessibility of call centre/ customer care ≥ 95%

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

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

(Source – DoT License Agreement)

Parameters showing improvement in QoS	Parameters showing deterioration in QoS
<ul style="list-style-type: none"> ❖ Worst affected BSs due to down-time (%age) ❖ Up Link (UL) Packet Drop Rate or UL-PDR $\leq 2\%$ ❖ Resolution of billing/charging/validity complaints 100% within 6 weeks ❖ %age of calls answered by the operators (voice to voice) within 90 Seconds 	<ul style="list-style-type: none"> ❖ %age requests for Termination / Closure of service complied within 7 days

23. A total number of 909 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/both uplinking and downlinking.
24. As per the reporting done by broadcasters in pursuance of the Tariff Order dated 3rd March 2017 as amended, out of 893 permitted satellite TV channels which are available for downlinking in India, there are 350 satellite pay TV channels. Out of 350 pay channels, 253 are SD satellite pay TV channels and 97 are HD satellite pay TV channels.
25. Since the introduction of DTH Sector in the year 2003, Indian DTH (direct-to-home) services have displayed a phenomenal growth. During the QE 31st December 2021, there were 4 pay DTH service providers in the country.
26. Pay DTH has attained total active subscriber base of around 68.52 million in QE 31st December 2021. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan).
27. Apart from the radio channels operated by All India Radio – the public broadcaster, as per the data reported by FM Radio operators to TRAI, as on 31st December 2021, there are 386 operational

- private FM Radio channels in 113 cities operated by 36 private FM Radio operators.
28. The advertisement revenue reported by FM Radio operators during the quarter ending 31st December 2021 in respect of 386 private FM Radio channels is Rs 421.74 crore as against Rs 294.78 crore in respect of 385 private FM Radio channels for the previous quarter i.e. 30th September, 2021.
 29. As per data received from MIB, as on 31st December 2021, 343 Community Radio Stations are operational in the country.

Trends at a Glance

A. Access Service (Wireline + Wireless)									
	QE Dec 2020	QE Mar 2021	QE Jun 2021	QE Sep 2021	QE Dec 2021	%age change over Dec-2020	%age change over Mar-2021	%age change over Jun-2021	%age change over Sep-2021
						(12 months)	(9 months)	(6 months)	(3 months)
1) Subscriber Base (in million)									
Wireline	20.05	20.24	21.74	23.13	23.79	18.63%	17.53%	9.44%	2.84%
Wireless	1153.77	1180.96	1180.83	1166.02	1154.62	0.07%	-2.23%	-2.22%	-0.98%
Total	1173.83	1201.20	1202.57	1189.15	1178.41	0.39%	-1.90%	-2.01%	-0.90%
Rural	525.92	537.42	536.47	530.06	523.21	-0.52%	-2.65%	-2.47%	-1.29%
Urban	647.91	663.77	666.10	659.09	655.20	1.13%	-1.29%	-1.64%	-0.59%
2) Tele-density									
Wireline	1.48	1.49	1.59	1.69	1.73	17.53%	16.73%	8.94%	2.60%
Wireless	84.90	86.68	86.48	85.20	84.17	-0.85%	-2.89%	-2.66%	-1.20%
Total	86.38	88.17	88.07	86.89	85.91	-0.54%	-2.56%	-2.45%	-1.13%
Rural	59.05	60.27	60.10	59.33	58.50	-0.93%	-2.93%	-2.67%	-1.39%
Urban	138.34	141.03	140.86	138.72	137.26	-0.78%	-2.67%	-2.55%	-1.05%
3) Service Provider wise Subscribers Base (in Million) (wireless+wireline)									
Bharti Airtel	343.27	357.17	357.05	359.77	361.35	5.27%	1.17%	1.20%	0.44%
Vodafone Idea	284.78	284.23	273.88	270.56	266.05	-6.58%	-6.40%	-2.86%	-1.67%
Reliance Jio	411.53	426.25	440.59	429.48	421.05	2.31%	-1.22%	-4.43%	-1.96%
BSNL	125.88	125.28	122.88	121.28	121.95	-3.12%	-2.65%	-0.76%	0.55%
MTNL	6.28	6.20	6.15	6.07	6.01	-4.23%	-3.03%	-2.25%	-1.02%
Tata Tele.	1.66	1.63	1.61	1.60	1.60	-3.56%	-1.80%	-0.68%	0.10%
Reliance Com.	0.23	0.22	0.21	0.20	0.19	-19.78%	-15.20%	-10.55%	-5.21%
Quadrant	0.20	0.22	0.21	0.20	0.21	4.35%	-2.16%	3.12%	6.45%
Total	1173.83	1201.20	1202.57	1189.15	1178.41	0.39%	-1.90%	-2.01%	-0.90%

B. Internet Services									
	QE Dec 2020	QE Mar 2021	QE Jun 2021	QE Sep 2021	QE Dec 2021	%age change over Dec-2020 (12 months)	%age change over Mar-2021 (9 months)	%age change over Jun-2021 (6 months)	%age change over Sep-2021 (3 months)
1) Subscriber's Base (in million)									
A. Wired Internet Subscribers	25.54	26.00	23.58	24.47	26.58	4.08%	2.24%	12.74%	8.62%
B. Wireless Internet Subscribers	769.64	799.31	810.13	809.82	802.72	4.30%	0.43%	-0.91%	-0.88%
i. Mobile Wireless (Mobile & Dongle)	768.99	798.63	809.48	808.54	801.58	4.24%	0.37%	-0.98%	-0.86%
ii. Fixed Wireless (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	0.66	0.68	0.66	1.28	1.14	73.95%	68.95%	74.28%	-10.66%
Total Internet Subscribers	795.18	825.30	833.71	834.29	829.30	4.29%	0.48%	-0.53%	-0.60%
2) No. of Internet Subs per 100 Population	58.51	60.73	61.06	60.96	60.46	3.32%	-0.45%	-0.98%	-0.82%
C. Usage and Revenue for Wireless Services									
Traffic (MOU) (minutes of uses/subscriber/month)	785	818	813	827	854	8.80%	4.50%	5.12%	3.33%
ARPU (Rs./sub/month)	102	104	105	108	114	12.31%	10.21%	9.08%	5.55%
D. Telecom Financial Data									
	QE Dec 2020	QE Mar 2021	QE Jun 2021	QE Sep 2021	QE Dec 2021	%age change over Dec-2020 (12 months)	%age change over Mar-2021 (9 months)	%age change over Jun-2021 (6 months)	%age change over Sep-2021 (3 months)
1. Telecom Sector									
i) Gross Revenue (Rs.in Crores)	71588	66784	64801	67300	69695	-2.64%	4.36%	7.55%	3.56%
ii) Adjusted Gross Revenue (Rs. in Crores)	47623	48587	51335	53510	55151	15.81%	13.51%	7.43%	3.07%
2. Access Services									
Adjusted Gross Revenue (Rs. in Crores)	38273	38608	40840	42422	42930	12.17%	11.19%	5.12%	1.20%

Introduction

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending 31st December, 2021. 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, Pr. Advisor (F&EA), TRAI may be contacted on Tel. +91-11-23221856, Fax. +91-11-23235249 and e-mail: mptangirala@traigov.in

Chapter 1 :

Subscription Data

-
- 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 decreased from 1,189.15 million at the end of September-21 to 1,178.41 million at the end of December-21, registering a decline rate of 0.90% over the previous quarter. This reflects year-on-year (Y-O-Y) growth rate of 0.39% over the same quarter of last year. The overall Tele-density in India decreased from 86.89% as on 30th September, 2021 to 85.91% as on 31st December, 2021 with quarterly decline rate of 1.13%.

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

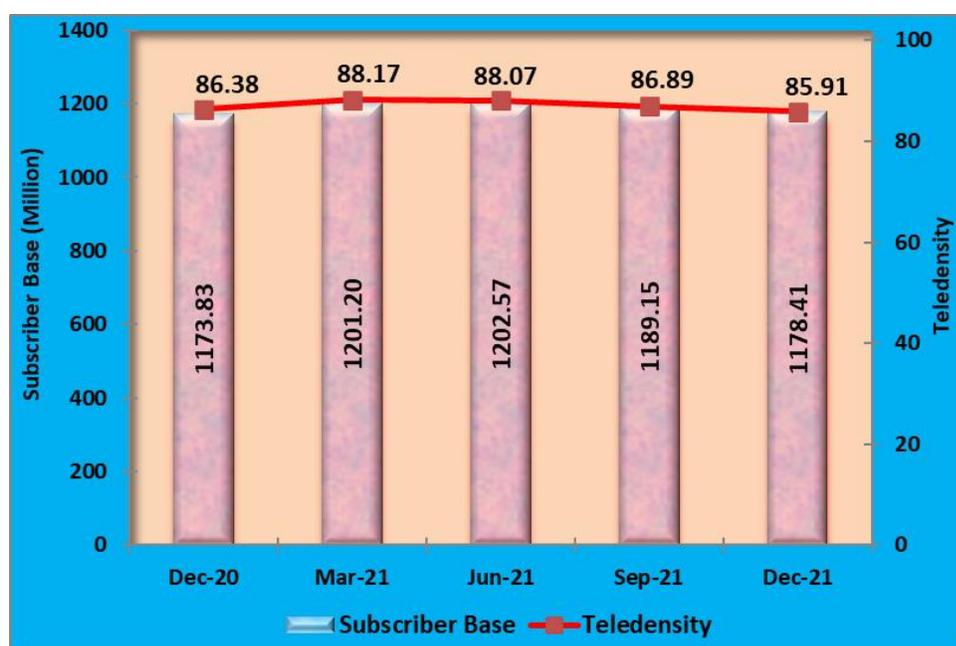
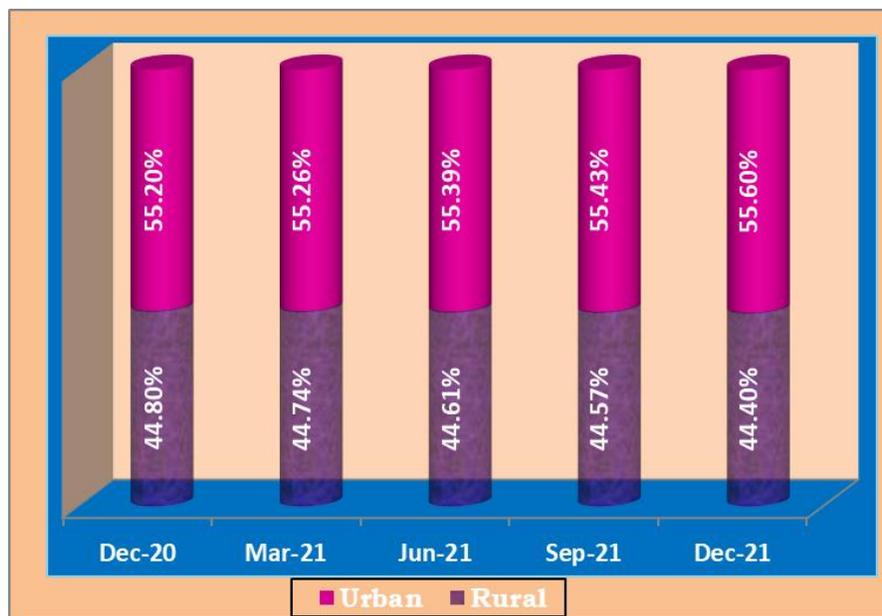


Table 1.1: Subscriber Base & Tele-density - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Dec-20	525.92	647.91	59.05	138.34
Mar-21	537.42	663.77	60.27	141.03
Jun-21	536.47	666.10	60.10	140.86
Sep-21	530.06	659.09	59.33	138.72
Dec-21	523.21	655.20	58.50	137.26

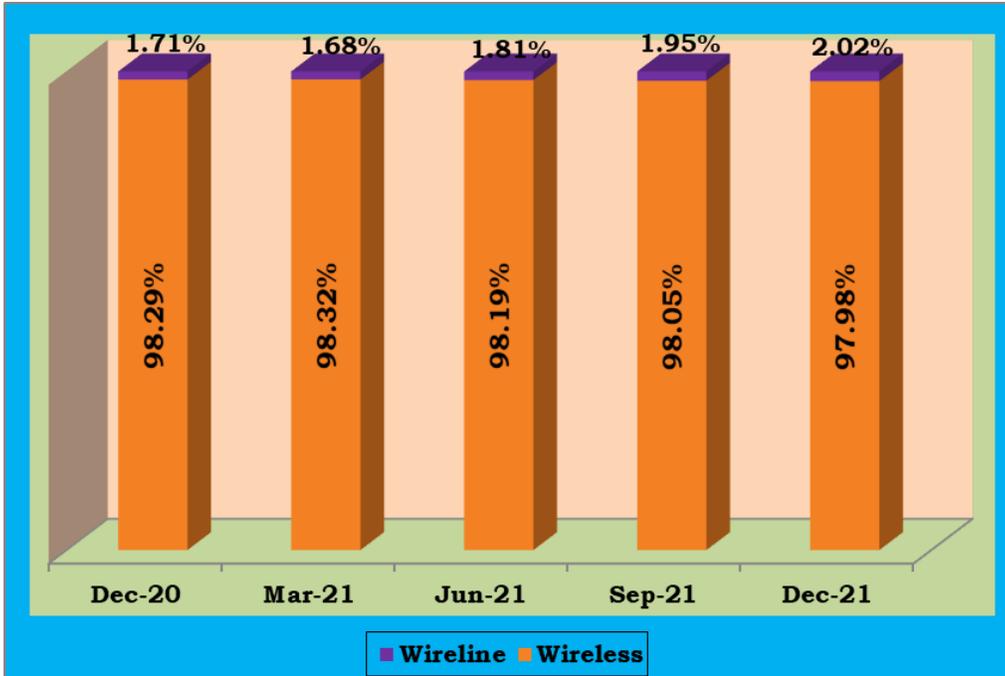
- 1.2 Telephone subscription in Urban areas decreased from 659.09 million at the end of September-21 to 655.20 million at the end of December-21 and Urban Tele-density also decreased from 138.72% to 137.26% at the end of the quarter.
- 1.3 Rural telephone subscription decreased from 530.06 million at the end of September-21 to 523.21 million at the end of December-21 and Rural Tele-density also decreased from 59.33% to 58.50% at the end of the quarter.
- 1.4 The Y-O-Y growth rates of Urban and Rural telephone subscriptions from December-20 to December-21 are 1.13% and -0.52% respectively. The Y-O-Y growth rates of Urban and Rural Tele-density from December-20 to December-21 are -0.78% and -0.93% respectively.

Chart 1.2: Market Share - Rural & Urban Subscribers



- 1.5 Share of subscriptions of rural areas in the total telephone subscriptions decreased from 44.57% at the end of September-21 to 44.40% at the end of December-21.

Chart 1.3: Composition of Access subscription - Wireline & Wireless



1.6 Share of wireline subscription in total telephone subscription increased from 1.95% at the end of September-21 to 2.02% at the end of December-21.

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

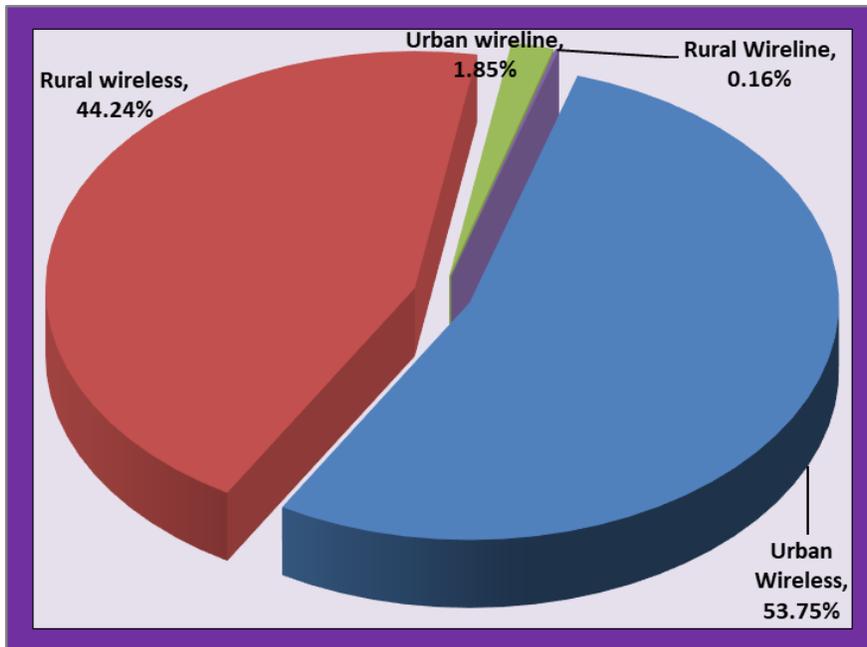


Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base

Service Area	Subscribers (million)			
	Sep-21	Dec-21	Net Additions	Rate of Growth
Andhra Pradesh	88.16	86.78	-1.38	-1.56%
Assam	24.53	24.42	-0.11	-0.45%
Bihar	87.31	87.82	0.51	0.58%
Delhi	56.11	56.40	0.29	0.51%
Gujarat	69.71	68.50	-1.21	-1.74%
Haryana	28.32	27.96	-0.36	-1.26%
Himachal Pradesh	10.51	10.46	-0.05	-0.43%
Jammu & Kashmir	11.94	12.07	0.12	1.04%
Karnataka	69.26	68.82	-0.44	-0.64%
Kerala	45.41	45.67	0.26	0.56%
Madhya Pradesh	79.76	78.34	-1.42	-1.79%
Maharashtra	95.19	93.78	-1.40	-1.47%
Mumbai	38.28	37.28	-1.00	-2.62%
North East	12.17	12.15	-0.02	-0.15%
Odisha	34.04	33.48	-0.57	-1.66%
Punjab	38.76	38.61	-0.15	-0.38%
Rajasthan	65.31	63.98	-1.33	-2.04%
Tamil Nadu	83.80	83.24	-0.56	-0.67%
Uttar Pradesh(E)	102.40	101.03	-1.37	-1.34%
Uttar Pradesh(W)	64.97	64.75	-0.22	-0.34%
Kolkata	25.58	25.21	-0.37	-1.44%
West Bengal	57.63	57.66	0.03	0.06%
All India	1,189.15	1,178.41	-10.75	-0.90%

1.7 All service areas, except Bihar, Delhi, Jammu & Kashmir, Kerala and West Bengal showed decline in their subscriber base during the quarter ending December-21. Jammu & Kashmir service area showed maximum growth of 1.04% during the quarter.

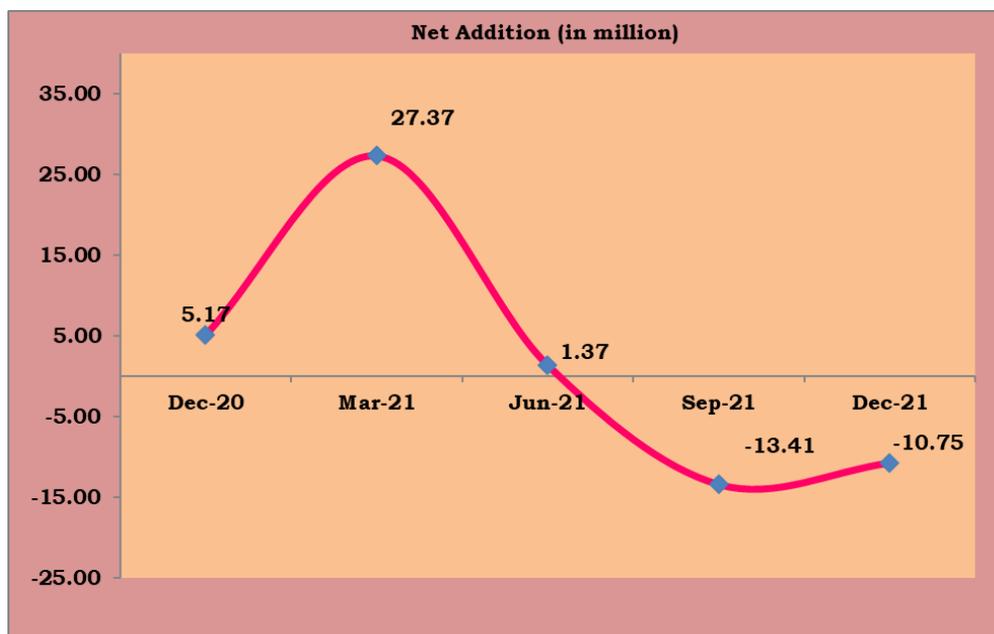
Table 1.3: Service Area wise Rural-Urban Subscribers at QE Dec-21

Service Area	Number of Subscribers (in million)
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	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	86.78	42.48	44.30	48.95%
Assam	24.42	15.24	9.18	62.41%
Bihar	87.82	57.31	30.51	65.26%
Delhi	56.40	1.81	54.59	3.21%
Gujarat	68.50	26.82	41.68	39.15%
Haryana	27.96	12.28	15.68	43.91%
Himachal Pradesh	10.46	6.96	3.50	66.53%
Jammu & Kashmir	12.07	5.60	6.47	46.37%
Karnataka	68.82	26.45	42.37	38.43%
Kerala	45.67	20.43	25.24	44.74%
Madhya Pradesh	78.34	35.06	43.27	44.76%
Maharashtra	93.78	42.77	51.02	45.60%
Mumbai	37.28	1.14	36.14	3.06%
North East	12.15	6.31	5.84	51.93%
Odisha	33.48	21.77	11.71	65.01%
Punjab	38.61	12.99	25.62	33.64%
Rajasthan	63.98	34.55	29.43	54.00%
Tamil Nadu	83.24	24.13	59.11	28.99%
U.P.(E)	101.03	61.91	39.12	61.28%
U.P.(W)	64.75	30.57	34.18	47.22%
Kolkata	25.21	1.60	23.61	6.35%
West Bengal	57.66	35.04	22.62	60.76%
All India	1,178.41	523.21	655.20	44.40%

1.8 Only eight service areas have more than 50% share of rural subscribers in their total number of subscribers. Himachal Pradesh service area has maximum share of rural subscribers of 66.53% in its total telephone subscribers.

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



1.9 The net decrease in telephone subscription is 10.75 million during QE December-21 as compared to the net addition of 13.41 million during QE September-21.

Table 1.4 : Service Area wise Tele-density

Service Area/ States	As on 30 th Sep, 2021			As on 31 st Dec, 2021		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Andhra Pradesh	80.62	121.68	97.17	78.56	120.54	95.55
Assam	51.41	169.75	69.62	51.02	168.58	69.15
Bihar	41.38	120.48	53.59	41.46	120.66	53.71
Delhi	-	-	269.76	-	-	269.86
Gujarat	74.44	122.18	97.61	72.90	119.53	95.60
Haryana	71.63	129.14	95.36	70.35	127.16	93.87
Himachal Pradesh	107.44	440.70	141.68	104.48	458.79	140.90
J&K	57.95	153.51	86.76	58.18	155.20	87.51
Karnataka	71.45	144.13	103.23	70.10	143.79	102.41

Service Area/ States	As on 30 th Sep, 2021			As on 31 st Dec, 2021		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Kerala	206.67	97.10	127.42	211.14	97.06	128.01
Madhya Pradesh	43.34	135.76	69.47	42.47	132.71	68.03
Maharashtra (incl. Mumbai)*	68.57	144.56	105.45	67.28	141.59	103.35
North East	61.30	111.49	78.29	61.36	110.26	77.99
Orissa	61.87	144.13	77.19	60.62	142.21	75.85
Punjab	73.56	185.67	122.39	72.66	185.07	121.72
Rajasthan	60.52	141.31	81.86	58.72	139.08	79.97
Tamil Nadu	67.51	141.95	107.26	66.38	141.28	106.45
Uttar Pradesh (incl. UPE & UPW)*	50.72	124.36	68.66	50.05	122.92	67.83
West Bengal (incl. Kolkata)*	57.76	129.07	83.64	57.84	127.51	83.20
All India	59.33	138.72	86.89	58.50	137.26	85.91

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

Notes:-

1. Tele-density figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country are taken from projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 – 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
2. Delhi Service area, apart from the State of Delhi, includes wireless subscribers of the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).
3. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

1.10 Kerala service area has the highest Rural Tele-density of 211.14 followed by Himachal Pradesh service area of 104.48. Bihar service area has the lowest Rural Tele-density of 41.46 followed by Madhya Pradesh service area with rural tele-density of 42.47 in QE December-21.

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

Sl. No.	States/UT	Total Telephone Subscription (million)		
		Total	Rural	Urban
1	Andhra Pradesh	45.35	25.01	20.34
2	Arunachal Pradesh	1.30	0.80	0.50
3	Assam	24.42	15.24	9.18
4	Bihar	64.95	44.95	20.00
5	Chhattisgarh	20.50	9.90	10.60
6	Goa	2.46	0.83	1.62
7	Gujarat	67.58	26.50	41.09
8	Haryana	33.91	12.33	21.59
9	Himachal Pradesh	10.46	6.96	3.50
10	Jharkhand	22.87	12.35	10.51
11	Karnataka	68.82	26.45	42.37
12	Kerala	45.59	20.41	25.17
13	Madhya Pradesh	57.84	25.16	32.67
14	Maharashtra Incl. Mumbai	128.60	43.08	85.53
15	Manipur	2.34	1.06	1.28
16	Meghalaya	2.43	1.43	1.00
17	Mizoram	1.40	0.63	0.77
18	Nagaland	1.59	0.91	0.68
19	Odisha	33.48	21.77	11.71
20	Punjab	36.71	12.95	23.76
21	Rajasthan	63.98	34.55	29.43
22	Sikkim	0.99	0.58	0.41
23	Tamil Nadu	82.07	23.80	58.28
24	Telangana	41.42	17.46	23.96
25	Tripura	3.09	1.48	1.61
26	Uttar Pradesh (UPE + UPW)	160.74	86.02	74.72
27	Uttarakhand	13.08	6.46	6.62
28	West Bengal Incl. Kolkata	81.37	35.87	45.50
Union Territories				
1	Andaman & Nicobar Islands	0.51	0.18	0.33
2	Chandigarh	1.90	0.04	1.86
3	Dadra and Nagar Haveli and Daman and Diu	0.92	0.32	0.60
4	Delhi	42.41	1.76	40.65
5	Jammu & Kashmir	11.53	5.37	6.15
6	Ladakh	0.54	0.22	0.32
7	Lakshdweep	0.08	0.02	0.06
8	Puduchery	1.17	0.33	0.83
Total		1178.41	523.21	655.20

Table 1.6 : State/UT wise total Tele-density

Sl.No.	State/UT	Total Tele-density (%)
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		Total	Rural	Urban
1	Andhra Pradesh	85.67	124.91	233.96
2	Arunachal Pradesh	84.34	69.33	128.52
3	Assam	69.15	51.02	168.58
4	Bihar	52.12	41.08	131.67
5	Chhattisgarh	68.84	45.38	133.09
6	Goa	156.88	208.86	139.14
7	Gujarat	95.86	72.48	121.02
8	Haryana	113.85	70.63	175.02
9	Himachal Pradesh	140.90	104.48	458.79
10	Jharkhand	58.81	42.91	104.10
11	Karnataka	102.41	70.10	143.79
12	Kerala	128.02	210.94	97.08
13	Madhya Pradesh	67.74	41.43	132.58
14	Maharashtra Incl. Mumbai	102.68	66.41	141.64
15	Manipur	73.45	48.95	125.23
16	Meghalaya	73.48	54.45	146.84
17	Mizoram	113.94	112.80	114.89
18	Nagaland	71.97	74.06	69.34
19	Odisha	75.85	60.62	142.21
20	Punjab	120.34	72.44	188.14
21	Rajasthan	79.97	58.72	139.08
22	Sikkim	145.02	159.87	128.05
23	Tamil Nadu (incl. Chennai)	107.16	66.33	143.12
24	Telangana	109.37	87.06	134.48
25	Tripura	75.26	58.08	103.40
26	Uttar Pradesh (UPE +UPW)	69.02	48.51	134.46
27	Uttarakhand	113.77	86.92	162.88
28	West Bengal Incl. Kolkata	82.59	57.16	127.22
Union Territories				
1	Andaman & Nicobar Islands	127.05	81.01	186.99
2	Chandigarh	156.32	-	-
3	Dadra and Nagar Haveli and Daman and Diu	79.68	139.29	64.77
4	Delhi	202.90	-	-
5	Jammu & Kashmir	85.46	57.11	150.86
6	Ladakh	180.99	106.69	352.78
7	Lakshdweep	121.63	-	-
8	Puduchery	72.92	69.62	74.33
Total		85.91	58.50	137.26

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

Service Provider	Subscriber base (millions)			Rate of Growth (%)	Market Share in QE Sep-21 (%)	Market Share in QE Dec-21 (%)
	Sep-21	Dec-21	Net Additions			
Reliance Jio	429.48	421.05	-8.43	-1.96	36.12	35.73
Bharti Airtel	359.77	361.35	1.59	0.44	30.25	30.66
Vodafone Idea Ltd	270.56	266.05	-4.51	-1.67	22.75	22.58
BSNL	121.28	121.95	0.67	0.55	10.20	10.35
MTNL	6.07	6.01	-0.06	-1.02	0.51	0.51
Tata Teleservices	1.60	1.60	0.00	0.10	0.13	0.14
Quadrant	0.20	0.21	0.013	6.45	0.02	0.02
Reliance Com.	0.20	0.19	-0.01	-5.21	0.02	0.02
Total	1,189.15	1,178.41	-10.75	-0.90	100	100

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

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

1.11 M/s Reliance Jio Infocomm Ltd is the market leader with 35.73% in the access segment in terms of number of subscribers with 421.05 million subscribers at the end of December-21 followed by M/s Bharti Airtel Ltd with 361.35 million subscribers.

1.12 In term of net addition, Bharti Telemedia Ltd became the biggest gainer with net addition of 1.59 million telephone subscribers during the QE Dec-21.

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	421.05	180.00	42.75%	34.40%
Bharti Airtel	361.35	170.15	47.09%	32.52%
Vodafone Idea Ltd	266.05	134.33	50.49%	25.67%
BSNL	121.95	38.63	31.68%	7.38%
MTNL	6.01	0.05	0.75%	0.01%
Tata Teleservices	1.60	0.04	2.38%	0.01%
Quadrant	0.21	0.02	11.19%	0.005%
Reliance Com.	0.19	0.00	0.10%	0.00%
Total	1,178.41	523.21	44.40%	100

1.13 M/s Vodafone Idea Ltd is the telecom service provider with highest proportion of rural telephone subscribers of 50.49% followed by Bharti Airtel of 47.09% to their total telephone subscribers at the end of December-21.

Section B : Wireless Service

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

[As on 31st December, 2021]

Sl.No.	Service Provider	Licensed Service Areas
1	Bharti Airtel Ltd	All India
2	Reliance Jio Infocom Ltd	All India
3	Vodafone Idea Ltd	All India
4	BSNL	All India (except Delhi & Mumbai)
5	MTNL	Delhi & Mumbai
6	Reliance Communications Ltd / Reliance Telecom Ltd	All India (except Assam & North East)/Kolkata, Madhya Pradesh, West Bengal, Himachal Pradesh, Bihar, Odisha, Assam & North East

Source : DoT website

UL Access Services Licensees Virtual Network Operators (VNOs) who are providing services as on 31st December, 2021

1	Surftelecom Pvt. Ltd	All India
2	AdPay Mobile Payment India Pvt. Ltd	Tamil Nadu including Chennai

Source : As reported by telecom service providers

1.14 Number of total wireless (Mobile and WLL (F)) subscribers decreased from 1,166.02 million at the end of September-21 to 1,154.62 million at the end of December-21, thereby showing a quarterly decline rate of 0.98%. During the quarter, net decrease of 11.40 million wireless subscribers has been recorded.

1.15 The total wireless subscriber base recorded a Y-O-Y growth rate of 0.07% in QE December-21 over the same quarter in the previous year.

1.16 Wireless Teledensity in the country decreased from 85.20% at the end of September-21 to 84.17% at the end of December-21.

Chart 1.6: Wireless Subscriber Base and Teledensity

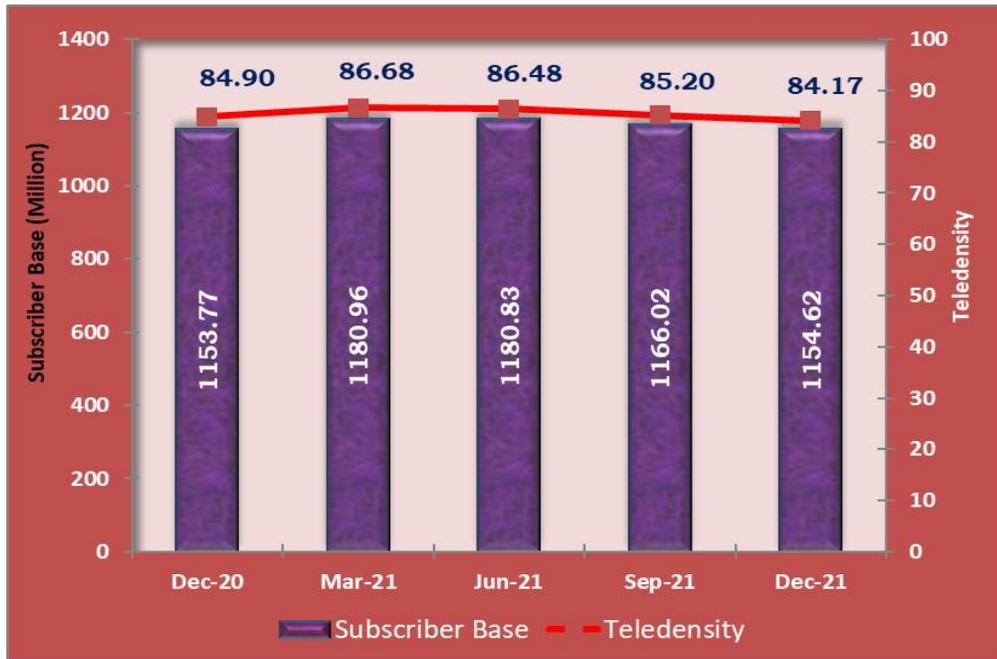


Table 1.10: Wireless Subscriber Base & Tele-density - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Dec-20	524.11	629.67	58.85	134.44
Mar-21	535.75	645.20	60.08	137.08
Jun-21	534.54	646.29	59.89	136.67
Sep-21	528.13	637.89	59.11	134.26
Dec-21	521.28	633.34	58.28	132.68

1.17 Number of Rural Wireless subscribers decreased from 528.13 million at the end of September-21 to 521.28 million at the end of December-21 and number of urban wireless subscribers also decreased from 637.89 million to 633.34 million during the quarter. Quarterly decline rates of Rural and Urban wireless subscriptions are 1.30% and 0.71% respectively during QE Dec-21.

1.18 The share of rural wireless subscription decreased from 45.29% to 45.15% in total wireless subscription during QE December-21.

Chart 1.7: Wireless Market Share - Rural & Urban

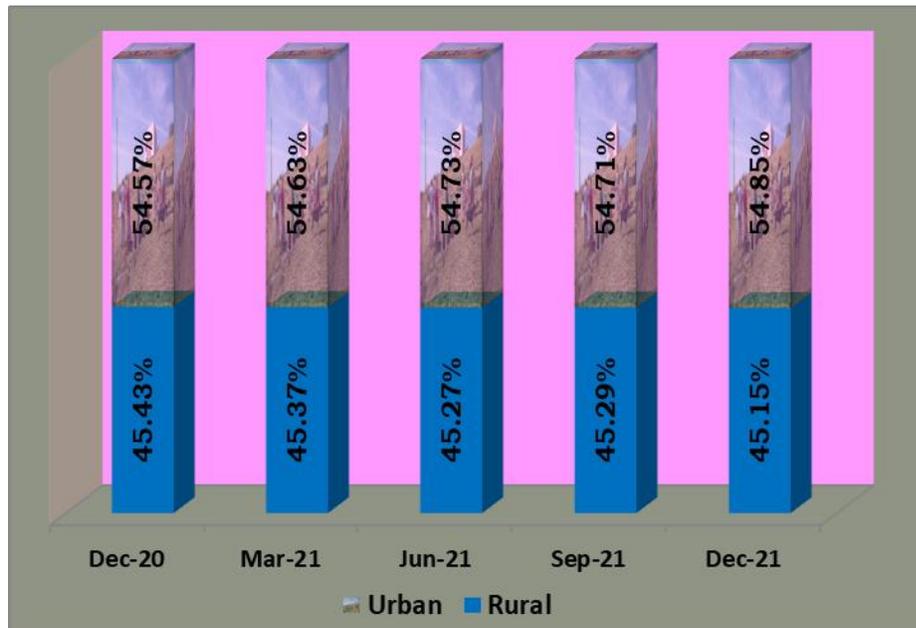


Table 1.11: Growth in Wireless Subscriber base

Service Provider	Subscriber Base (millions)			Rate of Growth (%)	Market Share Sep-21	Market Share Dec-21
	Sep-21	Dec-21	Net Additions			
Reliance Jio	424.84	415.72	-9.12	-2.15%	36.43%	36.00%
Bharti Airtel	354.47	355.77	1.30	0.37%	30.40%	30.81%
Vodafone Idea Ltd	269.99	265.51	-4.48	-1.66%	23.15%	23.00%
BSNL	113.45	114.36	0.91	0.80%	9.73%	9.90%
MTNL	3.27	3.26	-0.01	-0.38%	0.28%	0.28%
Reliance Com.	0.01	0.004	0.00	-37.90%	0.001%	0.00%
Total	1,166.02	1,154.62	-11.40	-0.98%	100	100

1.19 M/s RJIL Limited is the market leader with a wireless subscriber base of 415.72 million which translates into market share of 36% w.r.t total wireless subscriber base. M/s Bharti Airtel Ltd. is at 2nd position with a total subscriber base of 355.77 million and market share of 30.81%. M/s Bharti Airtel Limited has reported the net additions of 1.30 million subscribers.

1.20 In terms of net additions during QE December-21, except M/s Bharti Airtel Limited, BSNL, and Reliance Com. all service providers have showed negative growth in their wireless subscribers.

Table 1.12: Service Area wise Wireless Subscriber base

Service Area	Subscriber base (in million)			
	Sep-21	Dec-21	Net Additions	Rate of change (%)
Andhra Pradesh	86.40	84.91	-1.48	-1.72%
Assam	24.35	24.23	-0.12	-0.49%
Bihar	86.94	87.41	0.48	0.55%
Delhi	52.40	52.60	0.19	0.37%
Gujarat	68.69	67.47	-1.21	-1.77%
Haryana	28.01	27.64	-0.36	-1.30%
Himachal Pradesh	10.39	10.35	-0.05	-0.46%
Jammu & Kashmir	11.69	11.80	0.11	0.93%
Karnataka	66.83	66.28	-0.55	-0.83%
Kerala	44.11	44.37	0.26	0.59%
Madhya Pradesh	78.86	77.37	-1.49	-1.89%
Maharashtra	93.82	92.41	-1.41	-1.50%
Mumbai	35.21	34.18	-1.03	-2.92%
North East	12.03	12.00	-0.03	-0.22%
Orissa	33.75	33.18	-0.58	-1.71%
Punjab	37.98	37.80	-0.18	-0.47%
Rajasthan	64.69	63.33	-1.36	-2.10%
Tamil Nadu	81.56	80.95	-0.61	-0.74%
U.P.(E)	101.87	100.46	-1.41	-1.38%
U.P.(W)	64.46	64.21	-0.25	-0.39%
Kolkata	24.69	24.35	-0.34	-1.38%
West Bengal	57.29	57.31	0.01	0.03%
All India	1,166.02	1,154.62	-11.40	-0.98%

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	84.91	42.31	42.60	49.82
Assam	24.23	15.22	9.01	62.82
Bihar	87.41	57.27	30.14	65.52
Delhi	52.60	1.81	50.79	3.44
Gujarat	67.47	26.76	40.72	39.65
Haryana	27.64	12.23	15.42	44.23
Himachal Pradesh	10.35	6.91	3.44	66.76
Jammu & Kashmir	11.80	5.58	6.22	47.29
Karnataka	66.28	26.35	39.93	39.76
Kerala	44.37	19.79	24.58	44.60
Madhya Pradesh	77.37	35.04	42.33	45.29
Maharashtra	92.41	42.61	49.80	46.11
Mumbai	34.18	1.14	33.04	3.34
North East	12.00	6.30	5.70	52.47
Orissa	33.18	21.73	11.45	65.50
Punjab	37.80	12.88	24.92	34.07
Rajasthan	63.33	34.51	28.82	54.49
T.N. (incl. Chennai)	80.95	23.88	57.08	29.49
U.P.(E)	100.46	61.88	38.59	61.59
U.P.(W)	64.21	30.54	33.66	47.57
Kolkata	24.35	1.60	22.75	6.58
West Bengal	57.31	34.95	22.36	60.99
All India	1,154.62	521.28	633.34	45.15

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 30 th September, 2021			As on 31 st December, 2021		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
A.P.	80.32	117.30	95.23	78.25	115.92	93.50
Assam	51.35	166.77	69.11	50.96	165.43	68.61
Bihar	41.35	119.14	53.36	41.44	119.20	53.47
Delhi	-	-	251.93	-	-	251.66
Gujarat	74.26	119.41	96.17	72.73	116.77	94.16
Haryana	71.36	127.01	94.32	70.06	125.00	92.81
H.P.	106.65	432.71	140.15	103.68	450.54	139.34
J&K	57.80	147.86	84.96	58.03	149.19	85.59
Karnataka	71.19	136.19	99.61	69.83	135.51	98.63
Kerala	200.00	94.59	123.76	204.48	94.54	124.36
M.P.	43.31	133.05	68.69	42.45	129.82	67.19
Maharashtra (incl. Mumbai)*	68.32	137.69	101.94	67.04	134.58	99.82
North East	61.19	108.97	77.36	61.23	107.65	77.02
Orissa	61.76	141.03	76.52	60.52	138.97	75.16
Punjab	72.95	180.80	119.92	72.05	180.01	119.17
Rajasthan	60.45	138.55	81.08	58.64	136.20	79.16
Tamil Nadu	66.82	137.18	104.39	65.67	136.41	103.53
Uttar Pradesh (incl. UPE&UPW)*	50.69	122.71	68.23	50.02	121.16	67.38
West Bengal (incl. Kolkata)*	57.62	125.93	82.41	57.70	124.42	81.99
All India	59.11	134.26	85.20	58.28	132.68	84.17

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

Table 1.15 : State/UT wise Wireless Subscriber Base

Sl. No.	States/UT	Wireless Subscribers (in million)		
		Total	Rural	Urban
1	Andhra Pradesh	44.36	24.88	19.47
2	Arunachal Pradesh	1.29	0.80	0.49
3	Assam	24.23	15.22	9.01
4	Bihar	64.77	44.93	19.84
5	Chhattisgarh	20.28	9.89	10.39
6	Goa	2.38	0.81	1.57
7	Gujarat	66.56	26.43	40.13
8	Haryana	33.51	12.27	21.23
9	Himachal Pradesh	10.35	6.91	3.44
10	Jharkhand	22.64	12.34	10.30
11	Karnataka	66.28	26.35	39.93
12	Kerala	44.29	19.77	24.52
13	Madhya Pradesh	57.09	25.15	31.94
14	Maharashtra	124.20	42.94	81.27
15	Manipur	2.31	1.06	1.25
16	Meghalaya	2.40	1.43	0.97
17	Mizoram	1.37	0.63	0.75
18	Nagaland	1.58	0.91	0.66
19	Odisha	33.18	21.73	11.45
20	Punjab	36.09	12.84	23.25
21	Rajasthan	63.33	34.51	28.82
22	Sikkim	0.98	0.58	0.40
23	Tamil Nadu	79.84	23.55	56.29
24	Telangana	40.55	17.42	23.13
25	Tripura	3.05	1.48	1.58
26	Uttar Pradesh	159.69	85.97	73.72
27	Uttarakhand	12.89	6.45	6.45
28	West Bengal	80.20	35.80	44.40
Union Territories				
1	Andaman & Nicobar Islands	0.48	0.17	0.31
2	Chandigarh	1.71	0.04	1.67
3	Dadra and Nagar Haveli and Daman and Diu	0.91	0.32	0.59
4	Delhi	38.82	1.76	37.06
5	Jammu & Kashmir	11.27	5.36	5.91
6	Ladakh	0.53	0.22	0.31
7	Lakshdweep	0.08	0.02	0.06
8	Puduchery	1.11	0.32	0.79
Total		1154.62	521.28	633.34

Table 1.16 : State/UT wise Wireless Tele-density

Sl.No.	State/UT	Wireless Tele-density (%)		
		Total	Rural	Urban
1	Andhra Pradesh	83.78	73.18	102.83
2	Arunachal Pradesh	83.35	68.95	125.74
3	Assam	68.61	50.96	165.43
4	Bihar	51.98	41.06	130.64
5	Chhattisgarh	68.10	45.34	130.44
6	Goa	152.29	203.93	134.66
7	Gujarat	94.40	72.31	118.19
8	Haryana	112.49	70.34	172.13
9	Himachal Pradesh	139.34	103.68	450.54
10	Jharkhand	58.23	42.87	102.01
11	Karnataka	98.63	69.83	135.51
12	Kerala	124.38	204.30	94.55
13	Madhya Pradesh	66.87	41.41	129.61
14	Maharashtra	99.17	66.20	134.58
15	Manipur	72.47	48.86	122.39
16	Meghalaya	72.50	54.38	142.31
17	Mizoram	112.10	112.71	111.59
18	Nagaland	71.32	74.02	67.90
19	Odisha	75.16	60.52	138.97
20	Punjab	118.31	71.84	184.08
21	Rajasthan	79.16	58.64	136.20
22	Sikkim	144.17	159.80	126.28
23	Tamil Nadu	104.24	65.65	138.23
24	Telangana	107.07	86.85	129.84
25	Tripura	74.41	57.94	101.40
26	Uttar Pradesh	68.57	48.48	132.66
27	Uttarakhand	112.14	86.75	158.58
28	West Bengal	81.41	57.05	124.15
Union Territories				
1	Andaman & Nicobar Islands	118.75	74.40	176.48
2	Chandigarh	140.71	-	-
3	Dadra and Nagar Haveli and Daman and Diu	79.17	138.46	64.34
4	Delhi	185.74	-	-
5	Jammu & Kashmir	83.54	56.98	144.80
6	Ladakh	179.37	105.92	349.21
7	Lakshdweep	115.65	-	-
8	Puduchery	69.57	67.69	70.37
All India Tele-density		84.17	58.28	132.68

Table 1.17 : Rural Wireless Subscriber base and Market Share (as on 31.12.2021)

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	415.72	179.93	43.28%	34.52%
Bharti Airtel*	355.77	170.15	47.83%	32.64%
Vodafone Idea Ltd	265.51	134.33	50.59%	25.77%
BSNL	114.36	36.83	32.20%	7.06%
MTNL	3.26	0.05	1.38%	0.01%
Reliance Com.	0.004	0.00	0.00%	0.00%
Total	1,154.62	521.28	45.15%	100

Note: 1. M/s Reliance Com. has not reported number of its rural wireless subscribers and hence its rural wireless subscription has been taken as NIL.

2. M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd for QE December, 2021.

Wireless Data Usage

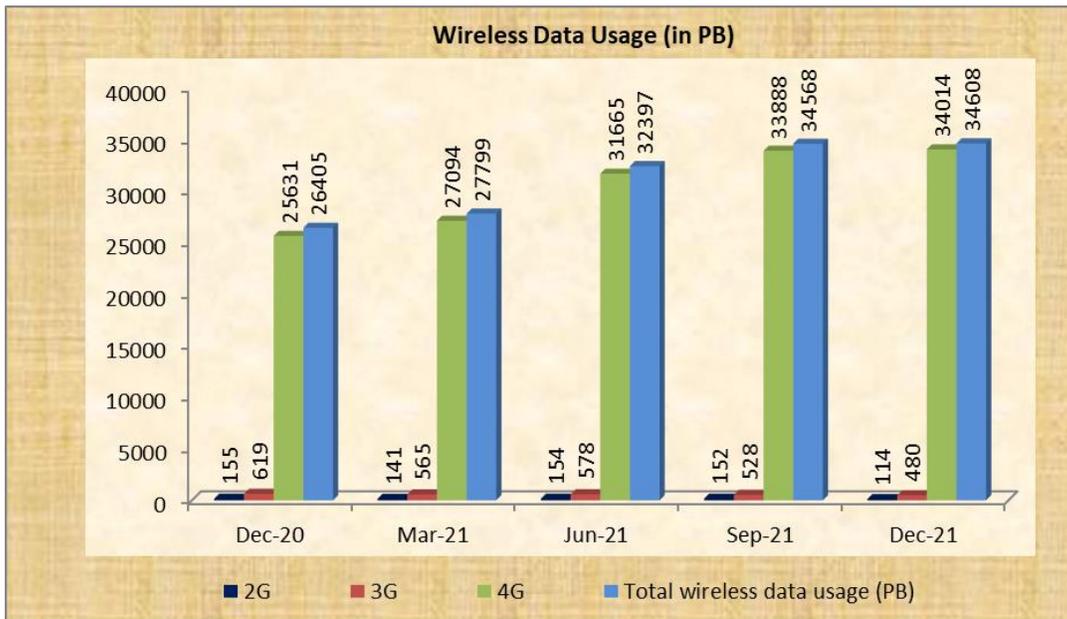
1.22 Volume of total wireless data usage increased from 34,568 PB during Q.E. September-21 to 34,608 PB during Q.E. December-21 with quarterly growth rate of 0.11%. Out of total data wireless usage, 2G data usage was 114 PB, 3G data usage was 480 PB and 4G data usage was 34,014 PB during the quarter.

1.23 Total number of wireless data subscribers decreased from 808.55 million at the end of September-21 to 801.58 million at the end of December-21.

1.24 The contribution of 2G, 3G and 4G data usage in total volume of wireless data usage are about 0.33%, 1.39% and 98.28% respectively during the QE December-21.

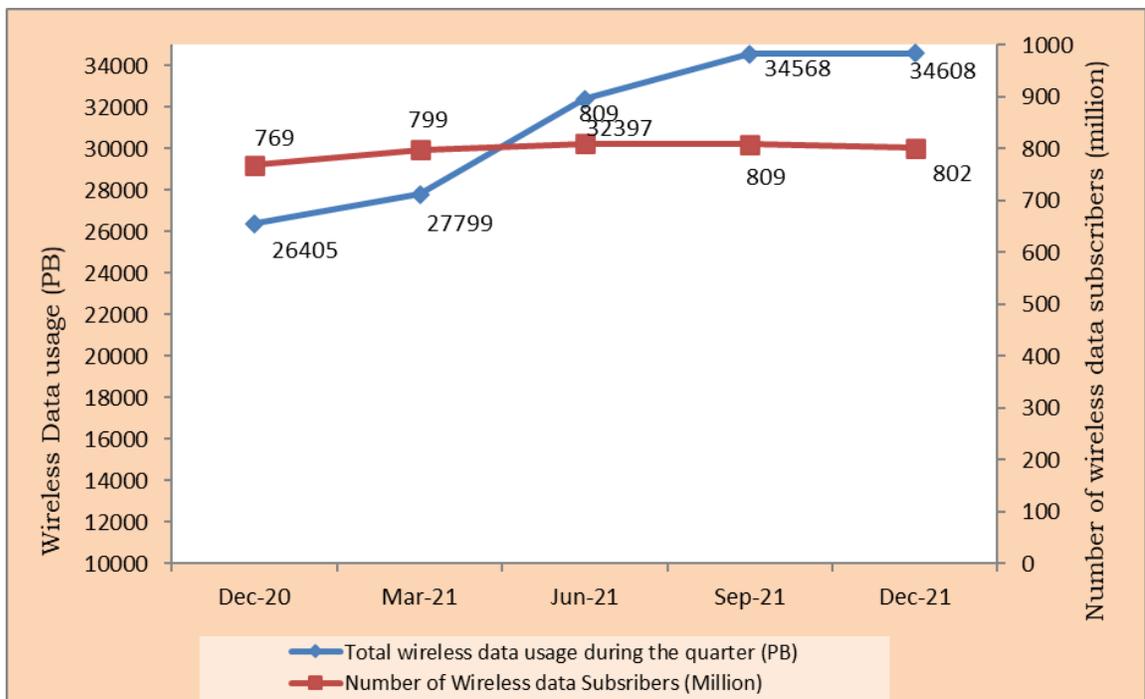
1.25 Technology-wise trend of growth in volume of wireless data usage is depicted in the following chart.

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 Dec-21.

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



Section C : Wireline Service

Table 1.18 : Service Providers providing Wireline Service

[As on 31st December, 2021]

Sl. No.	Name of the Service Provider	Area of Operation
1	Bharti Airtel Ltd	Andhra Pradesh, Delhi, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Punjab, Rajasthan, Tamil Nadu, UP-East and UP-West.
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, 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, 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, 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, UP-East, UP-West and West Bengal.

1.27 Total number of Wireline subscribers increased from 23.13 million at the end of Sep-21 to 23.79 million at the end of Dec-21 with quarterly growth rate of 2.84%. Overall Wireline Teledensity in the country increased from 1.69% at the end of Sep-21 to 1.73% at the end of Dec-21.

1.28 Urban wireline subscriber base increased by 3.09% from 21.20 million at the end of Sep-21 to 21.86 million at the end of Dec-21. Rural wireline subscription also increased by 0.03%, from 1.9289 million to 1.9294 million during the same period.

Chart 1.10: Wireline Subscriber Base and Tele-density

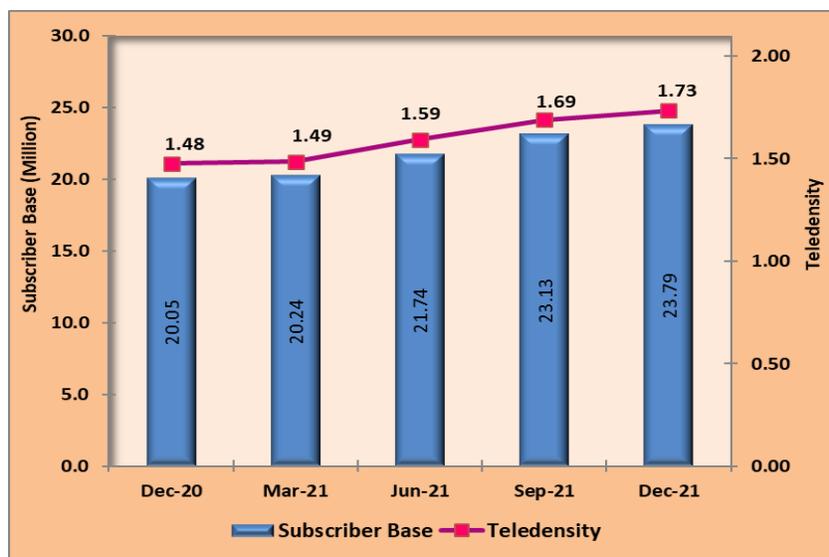


Table 1.19: Wireline Subscriber Base & Tele-density - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density (%)	
	Rural	Urban	Rural	Urban
Dec-20	1.81	18.24	0.20	3.89
Mar-21	1.67	18.57	0.19	3.95
Jun-21	1.93	19.80	0.22	4.19
Sep-21	1.93	21.20	0.22	4.46
Dec-21	1.93	21.86	0.22	4.58

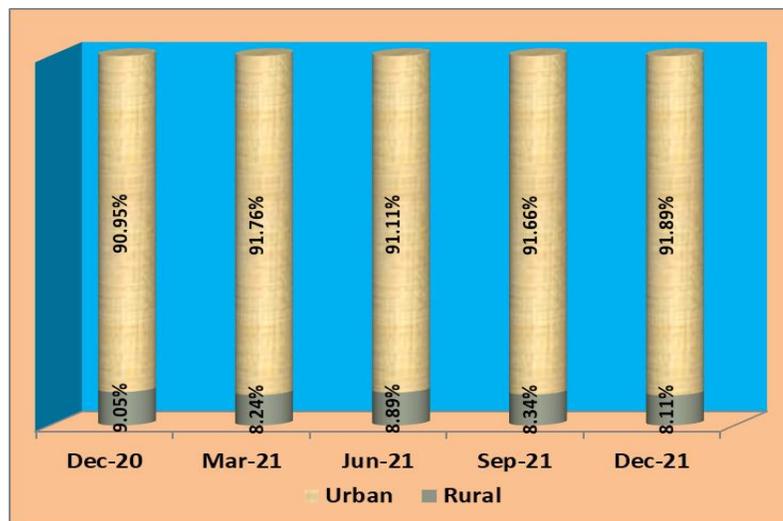
Table 1.20 : Service Provider wise Wireline Subscriber base (Rural - Urban) – As on 31.12.2021

Service Provider	Subscriber Base (million)			Percentage of Rural subscribers	Share of Rural subscription
	Rural	Urban	Total		
BSNL	1.80	5.79	7.59	23.72%	93.38%
Bharti	0.00	5.58	5.58	--	0.00%
MTNL	0.00	2.75	2.75	--	0.00%
Tata Tele.	0.04	1.56	1.60	2.38%	1.97%

Service Provider	Subscriber Base (million)			Percentage of Rural subscribers	Share of Rural subscription
	Rural	Urban	Total		
Reliance Com.	0.0002	0.18	0.18	0.10%	0.01%
Quadrant	0.02	0.19	0.21	11.19%	1.23%
Vodafone Idea	0.00	0.53	0.53	--	0.00%
Reliance Jio	0.066	5.27	5.33	1.24%	3.42%
Total	1.93	21.86	23.79	8.11%	100

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 decreased from 8.34% in QE Sep-21 to 8.11% in QE Dec-21.

Table 1.21 : Service Provider wise growth in Wireline Subscriber base

Service Provider	Subscriber Base (million)			Rate of change (%)	Market share-Sep-21(%)	Market share-Dec-21(%)
	Sep-21	Dec-21	Net Addition			
Reliance Jio	4.65	5.33	0.69	14.79%	20.08%	22.42%
Quadrant	0.20	0.21	0.01	6.45%	0.86%	0.89%
Bharti Airtel	5.30	5.58	0.28	5.31%	22.91%	23.46%
Vodafone Idea	0.57	0.53	-0.03	-5.68%	2.45%	2.24%
MTNL	2.80	2.75	-0.05	-1.77%	12.12%	11.58%
Tata Tele.	1.60	1.60	0.00	0.10%	6.90%	6.71%
BSNL	7.83	7.59	-0.24	-3.03%	33.85%	31.92%
Reliance Com	0.19	0.18	-0.01	-4.17%	0.82%	0.77%
Total	23.13	23.79	0.66	2.84%	100	100

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

Service Area	Sep-21	Dec-21	Net Additions	Rate of Change (%)
Andhra Pradesh	1.76	1.87	0.11	6.01
Assam	0.18	0.19	0.01	5.59
Bihar	0.37	0.40	0.03	9.08
Delhi	3.71	3.80	0.09	2.53
Gujarat	1.03	1.03	0.00	0.33
Haryana	0.31	0.32	0.01	2.17
Himachal Pradesh	0.11	0.12	0.00	1.98
Jammu & Kashmir	0.25	0.26	0.02	6.37
Karnataka	2.43	2.54	0.11	4.59
Kerala	1.30	1.30	0.00	-0.29
Madhya Pradesh	0.90	0.96	0.06	7.02
Maharashtra	1.36	1.37	0.01	0.57
Mumbai	3.07	3.10	0.02	0.81
North East	0.14	0.15	0.01	5.15
Orissa	0.29	0.30	0.01	3.41
Punjab	0.78	0.81	0.03	3.94

Service Area	Sep-21	Dec-21	Net Additions	Rate of Change (%)
Rajasthan	0.62	0.65	0.03	4.76
Tamil Nadu	2.24	2.29	0.05	2.18
U.P.(E)	0.53	0.57	0.03	5.91
U.P.(W)	0.51	0.54	0.03	6.53
Kolkata	0.88	0.85	-0.03	-3.17
West Bengal	0.34	0.35	0.02	5.20
All India	23.13	23.79	0.66	2.84

1.31 Bihar service area showed maximum growth of 9.08% and Kolkata service area showed maximum decline of 3.17% in their wireline subscriber base during the quarter ending Dec-21.

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

Service Area	Total Subscribers	Rural Subscribers	Urban Subscribers	% of Rural Subscribers
Andhra Pradesh	1.87	0.17	1.70	9.07
Assam	0.19	0.02	0.17	9.60
Bihar	0.40	0.03	0.37	8.38
Delhi	3.80	0.00	3.80	0.01
Gujarat	1.03	0.06	0.96	6.22
Haryana	0.32	0.05	0.27	15.95
Himachal Pradesh	0.12	0.05	0.06	45.70
Jammu & Kashmir	0.26	0.01	0.25	5.37
Karnataka	2.54	0.10	2.44	3.92
Kerala	1.30	0.64	0.66	49.52
Madhya Pradesh	0.96	0.02	0.94	2.23
Maharashtra	1.37	0.16	1.21	11.45
Mumbai	3.10	0.00	3.10	0.06
North East	0.15	0.01	0.14	8.62
Orissa	0.30	0.04	0.27	11.96
Punjab	0.81	0.11	0.70	13.45

Service Area	Total Subscribers	Rural Subscribers	Urban Subscribers	% of Rural Subscribers
Rajasthan	0.65	0.04	0.61	6.44
Tamil Nadu	2.29	0.26	2.03	11.16
U.P.(E)	0.57	0.03	0.53	5.59
U.P.(W)	0.54	0.03	0.51	5.10
Kolkata	0.85	0.00	0.85	0.00
West Bengal	0.35	0.09	0.27	24.50
All India	23.79	1.93	21.86	8.11

1.32 Kerala service area has the maximum share 49.52% of rural wireline subscriber in its total wireline subscriber base at the end of Dec-21.

Table 1.24: Service Area wise Wireline Tele-density

Service Area	As on 30 th September, 2021			As on 31 st December, 2021		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Andhra Pradesh	0.30	4.38	1.94	0.31	4.62	2.06
Assam	0.06	2.99	0.51	0.06	3.15	0.54
Bihar	0.02	1.33	0.23	0.02	1.46	0.25
Delhi	-	-	17.83	-	-	18.20
Gujarat	0.18	2.77	1.44	0.17	2.77	1.44
Haryana	0.28	2.13	1.04	0.29	2.16	1.06
Himachal Pradesh	0.79	7.99	1.53	0.79	8.24	1.56
Jammu & Kashmir	0.15	5.65	1.81	0.15	6.01	1.92
Karnataka	0.26	7.94	3.62	0.26	8.28	3.78
Kerala	6.67	2.51	3.66	6.66	2.53	3.65
Madhya Pradesh	0.03	2.71	0.78	0.03	2.89	0.84
Maharashtra (incl. Mumbai)*	0.25	6.97	3.51	0.24	7.01	3.53
North East	0.11	2.52	0.92	0.13	2.60	0.97
Orissa	0.11	3.10	0.67	0.10	3.25	0.69
Punjab	0.61	4.87	2.46	0.61	5.07	2.55
Rajasthan	0.07	2.76	0.78	0.07	2.88	0.82
Tamil Nadu (incl. Chennai)	0.69	4.77	2.87	0.70	4.86	2.93

Service Area	As on 30 th September, 2021			As on 31 st December, 2021		
	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)	Rural Tele-density (%)	Urban Tele-density (%)	Total Tele-density (%)
Uttar Pradesh (incl. UPE & UPW)*	0.03	1.66	0.43	0.03	1.76	0.45
West Bengal (incl. Kolkata)*	0.14	3.14	1.22	0.14	3.09	1.21
All India	0.22	4.46	1.69	0.22	4.58	1.73

* Population data/projections are available state-wise only

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

2. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

Table 1.25: State/UT wise Wireline Subscriber base

Sl. No.	States/UT	Wireline Subscribers (in million)		
		Total	Rural	Urban
1	Andhra Pradesh	1.00	0.13	0.87
2	Arunachal Pradesh	0.02	0.004	0.01
3	Assam	0.19	0.02	0.17
4	Bihar	0.18	0.02	0.16
5	Chhattisgarh	0.22	0.01	0.21
6	Goa	0.07	0.02	0.05
7	Gujarat	1.02	0.06	0.96
8	Haryana	0.41	0.05	0.36
9	Himachal Pradesh	0.12	0.05	0.06
10	Jharkhand	0.22	0.01	0.21
11	Karnataka	2.54	0.10	2.44
12	Kerala	1.30	0.64	0.65
13	Madhya Pradesh	0.74	0.01	0.73
14	Maharashtra Incl. Mumbai	4.40	0.14	4.26
15	Manipur	0.03	0.002	0.03
16	Meghalaya	0.03	0.002	0.03
17	Mizoram	0.02	0.001	0.02
18	Nagaland	0.01	0.000	0.01
19	Odisha	0.30	0.04	0.27
20	Punjab	0.62	0.11	0.51
21	Rajasthan	0.65	0.04	0.61
22	Sikkim	0.006	0.0002	0.01
23	Tamil Nadu	2.24	0.25	1.99
24	Telangana	0.87	0.04	0.83
25	Tripura	0.03	0.004	0.03
26	Uttar Pradesh (UPE+UPW)	1.05	0.05	1.00
27	Uttarakhand	0.19	0.01	0.17
28	West Bengal Incl. Kolkata	1.17	0.07	1.10
Union Territories				
1	Andaman & Nicobar Islands	0.03	0.02	0.02
2	Chandigarh	0.19	0.002	0.19
3	Dadra and Nagar Haveli and Daman and Diu	0.006	0.002	0.004
4	Delhi	3.59	0.00	3.59
5	Jammu & Kashmir	0.26	0.01	0.25
6	Ladakh	0.005	0.002	0.003
7	Lakshdweep	0.004	0.002	0.002
8	Puduchery	0.05	0.01	0.04
Total		23.79	1.93	21.86

Table 1.26: State/UT wise Wireline Tele-density

Sl.No.	State/UT	Wireline Tele-density		
		Total (%)	Rural (%)	Urban (%)
1	Andhra Pradesh	3.53	0.50	8.97
2	Arunachal Pradesh	0.99	0.39	2.78
3	Assam	0.54	0.06	3.15
4	Bihar	0.14	0.02	1.03
5	Chhattisgarh	0.74	0.04	2.65
6	Goa	4.60	4.93	4.48
7	Gujarat	1.45	0.17	2.83
8	Haryana	1.36	0.29	2.88
9	Himachal Pradesh	1.56	0.79	8.24
10	Jharkhand	0.58	0.05	2.09
11	Karnataka	3.78	0.26	8.28
12	Kerala	3.64	6.64	2.52
13	Madhya Pradesh	0.87	0.02	2.97
14	Maharashtra Incl. Mumbai	3.51	0.21	7.05
15	Manipur	0.97	0.09	2.84
16	Meghalaya	0.99	0.07	4.53
17	Mizoram	1.85	0.10	3.29
18	Nagaland	0.66	0.04	1.44
19	Odisha	0.69	0.10	3.25
20	Punjab	2.03	0.60	4.06
21	Rajasthan	0.82	0.07	2.88
22	Sikkim	0.86	0.07	1.77
23	Tamil Nadu	2.92	0.69	4.89
24	Telangana	2.30	0.21	4.65
25	Tripura	0.85	0.15	1.99
26	Uttar Pradesh (UPE + UPW)	0.45	0.03	1.80
27	Uttarakhand	1.63	0.17	4.30
28	West Bengal incl. Kolkata	1.19	0.11	3.07
Union Territories				
1	Andaman & Nicobar Islands	8.30	6.61	10.51
2	Chandigarh	15.60	116.40	15.48
3	Dadra and Nagar Haveli and Daman and Diu	0.51	0.83	0.43
4	Delhi	17.16	0.21	17.26
5	Jammu & Kashmir	1.93	0.13	6.06
6	Ladakh	1.61	0.77	3.58
7	Lakshdweep	5.98	136.29	3.71
8	Puduchery	3.35	1.93	3.95
Total		1.73	0.22	4.58

Public Call Offices (PCO)

1.33 Total number of PCOs in the country decreased from 81,723 at the end of Sep-21 to 73,634 at the end of Dec-21. Detailed table of service provider wise PCOs is available at **Annexure-1.3**.

Chart 1.12: Trend of Number of PCOs



1.34 Number of PCOs continued show declining trend over the year. It has recorded a overall quarterly decline rate of 9.90% and on Y-O-Y basis decline rate of 46.26% at the QE Dec-21.

Table 1.27: Rate of change & Market share of PCOs

Service Provider	Sep-21	Dec-21	Rate of change (%)	Market share (%) (Sep-21)
BSNL	58,029	51,522	-11.21%	69.97%
MTNL	19,316	17,796	-7.87%	24.17%
Bharti	3,917	3,877	-1.02%	5.27%
Quadrant	461	439	-4.77%	0.60%
Total	81,723	73,634	-9.90%	100

Village Public Telephones (VPTs)

1.35 There are 5,93,731 inhabited villages in India as per census 2001. During the Q.E. Dec-21, 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 Dec-21 as were at the end of Sep-21.

1.37 As per the information received in TRAI, at the end of Dec-21, 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 Dec-21. **Part-I** consists of information of Internet service (narrowband+broadband), **Part-II** consists of broadband service and **Part-III** covers narrowband service.

Part-I: Internet Service (broadband + narrowband)

1.39 As per reports received from 639 operators as compared to 584 operators in last quarter, total number of internet subscribers decreased from 834.29 million at the end of Sep-21 to 829.30 million at the end of Dec-21 with quarterly decline rate of 0.60%. Out of total 829.30 million internet subscribers, 792.08 million were broadband subscribers and 37.21 million were narrowband subscribers.

1.40 Wired Internet subscribers increased from 24.47 million at the end of Sep-21 to 26.58 million at the end of Dec-21 with quarterly growth rate of 8.62%. Wireless Internet subscribers decreased from 809.82 million at the end of Sep-21 to 802.72 million at the end of Dec-21 with quarterly decline rate of 0.88%.

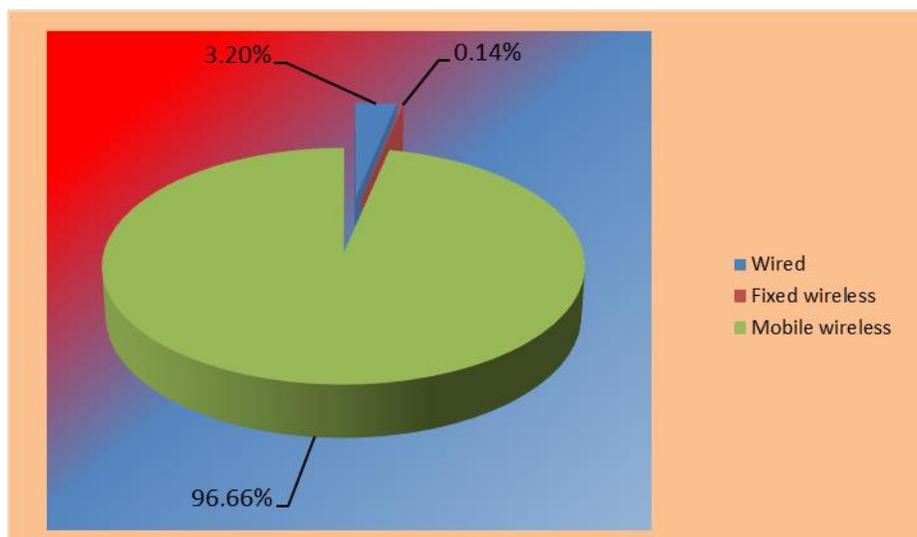
1.41 The number of Broadband subscribers decreased from 794.88 million at the end of Sep-21 to 792.08 million at the end of Dec-21 with quarterly decline rate of 0.35%. Number of Narrowband subscribers also declined from 39.41 million at the end of Sep-21 to 37.21 million at the end of Dec-21 with quarterly decline rate of 5.57%.

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			
	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21
Broadband	24.39	26.43	1.28	1.13	769.22	764.52	770.49	765.65	794.88	792.08
Narrowband	0.08	0.14	0.01	0.01	39.32	37.06	39.33	37.07	39.41	37.21
Total	24.47	26.58	1.28	1.14	808.54	801.58	809.82	802.72	834.29	829.30

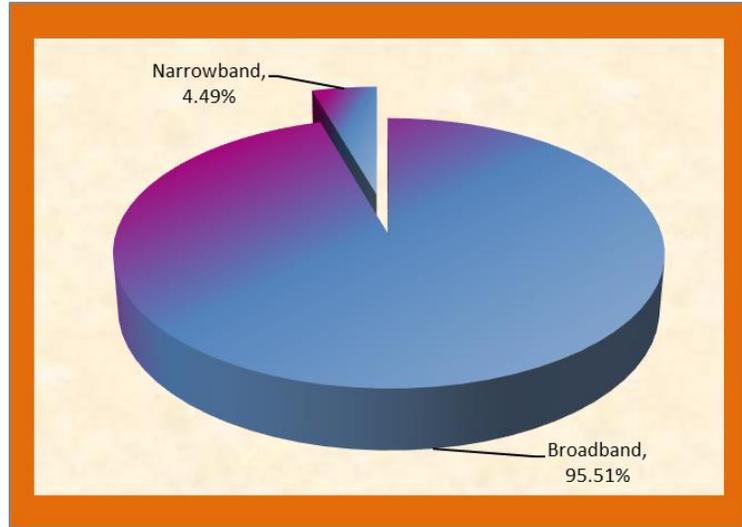
1.42 The following charts present the composition of Internet Subscribers by mode of access and composition of Broadband & Narrowband subscription as on 31st December, 2021.

Chart 1.14: Composition of Internet subscription



1.43 Out of total internet subscribers, 96.66% subscribers are using Mobile devices for access of internet service. Wired internet subscribers are only 3.20% in total internet subscribers at the end of Dec-21.

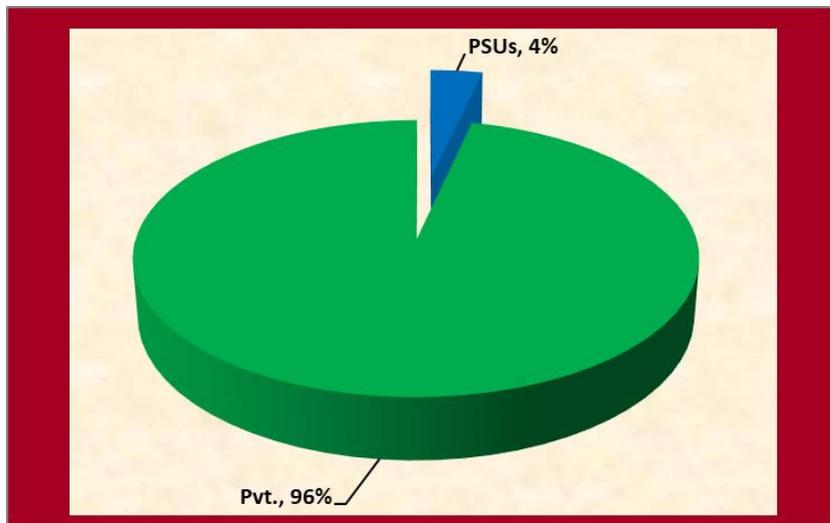
Chart 1.15 : Composition of Broadband & Narrowband subscription



1.44 Out of total internet subscribers, 95.51% subscribers are using broadband for access of internet.

1.45 Share of private internet service providers in total internet subscriber base is 96%, at QE Dec-21. 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 (Dec-21)		Total (Sep-2021)	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Andhra Pradesh	1.45	1.42	26.58	33.85	28.03	35.27	28.58	35.63
Assam	0.51	0.21	9.15	6.21	9.66	6.42	9.74	6.37
Bihar	2.34	0.71	34.35	20.84	36.69	21.56	36.56	21.37
Delhi	0.26	2.80	0.53	35.40	0.79	38.20	0.79	44.30
Gujarat	0.52	0.68	15.72	33.97	16.24	34.64	16.49	34.83
Haryana	0.40	0.85	7.70	12.20	8.10	13.04	8.19	10.64
Himachal Pradesh	0.11	0.09	3.95	2.28	4.06	2.37	4.28	2.30
Jammu & Kashmir	0.17	0.11	3.61	4.52	3.79	4.63	3.78	4.61
Karnataka	1.04	1.14	16.95	30.60	17.99	31.74	18.38	31.74
Kerala	0.54	0.51	13.92	16.15	14.46	16.66	13.42	16.75
Kolkata	0.05	0.67	1.21	16.11	1.26	16.77	1.28	16.73
Madhya Pradesh	1.27	0.89	22.28	32.06	23.54	32.96	24.06	33.40
Maharashtra	1.43	1.16	28.46	40.39	29.90	41.56	30.14	41.47
Mumbai	0.01	1.58	1.04	27.11	1.06	28.70	1.13	29.42
North East	0.17	0.12	4.51	4.17	4.68	4.29	4.84	4.46
Orissa	0.58	0.20	13.32	7.19	13.90	7.40	14.36	7.50
Punjab	0.35	0.47	8.78	17.99	9.13	18.46	9.27	18.58
Rajasthan	0.94	0.72	20.32	22.05	21.26	22.78	22.23	23.18
Tamil Nadu	0.89	1.49	14.85	39.81	15.74	41.30	16.01	41.68
UP (East)	2.68	1.83	32.42	31.00	35.10	32.83	35.45	28.45
UP (West)	1.08	0.87	16.31	24.73	17.39	25.59	17.21	25.27
West Bengal	1.49	0.42	18.85	18.62	20.34	19.04	20.40	18.99
Grand Total	18.27	18.94	314.83	477.26	333.10	496.20	336.60	497.69
	37.21		792.09		829.30		834.29	

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

S.No.	State(s)	Narrowband		Broadband		Total (Dec 2021)	
		Rural	Urban	Rural	Urban	Rural	Urban

1	Andhra Pradesh	1.14	0.96	23.42	26.78	24.55	27.75
2	Arunachal Pradesh	0.02	0.01	2.51	2.39	2.53	2.41
3	Assam	0.51	0.21	9.15	6.21	9.66	6.42
4	Bihar	2.00	0.52	32.47	19.03	34.47	19.55
5	Chattisgarh	0.06	0.09	0.69	1.32	0.75	1.41
6	Goa	0.01	0.01	0.22	0.17	0.22	0.18
7	Gujarat	0.51	0.67	15.46	33.50	15.97	34.17
8	Haryana	0.40	0.85	7.70	12.20	8.10	13.04
9	Himachal Pradesh	0.11	0.09	3.95	2.28	4.06	2.37
10	Jharkhand	0.34	0.19	1.88	1.81	2.21	2.01
11	Karnataka	1.04	1.14	16.95	30.60	17.99	31.74
12	Kerala	0.54	0.46	13.88	16.15	14.42	16.61
13	Madhya Pradesh	1.20	0.80	21.59	30.74	22.79	31.54
14	Maharashtra incl. Mumbai	1.44	2.74	29.29	67.33	30.73	70.07
15	Manipur	0.03	0.02	0.54	0.47	0.57	0.49
16	Meghalaya	0.04	0.02	0.31	0.30	0.34	0.32
17	Mizoram	0.01	0.01	0.29	0.32	0.30	0.33
18	Nagaland	0.02	0.02	0.46	0.36	0.48	0.37
19	Odisha	0.58	0.20	13.32	7.19	13.90	7.40
20	Punjab	0.34	0.45	8.74	16.80	9.08	17.25
21	Rajasthan	0.94	0.72	20.32	22.05	21.26	22.78
22	Sikkim	0.01	0.02	0.32	0.33	0.33	0.35
23	Tamil Nadu incl. Chennai	0.88	1.47	14.58	39.27	15.46	40.73
24	Telangana	0.31	0.45	3.16	7.07	3.47	7.52
25	Tripura	0.05	0.04	0.40	0.33	0.45	0.37
26	Uttar Pradesh (UPE+UPW)	3.62	2.54	45.04	51.42	48.66	53.95
27	Uttarakhand	0.14	0.16	3.70	4.31	3.84	4.48
28	West Bengal incl. Kolkata	1.53	1.06	19.70	34.30	21.23	35.36
Union Territories							
1	Andaman & Nicobar Islands	0.00	0.00	0.04	0.10	0.04	0.11
2	Chandigarh	0.01	0.02	0.04	1.19	0.05	1.21
3	Dadar & Nagar Haweli (incl. Daman & Diu)	0.01	0.01	0.26	0.47	0.27	0.47
4	Delhi	0.26	2.80	0.53	35.40	0.79	38.20
5	Jammu & Kashmir	0.17	0.11	3.43	4.44	3.60	4.55
6	Ladakh	0.00	0.00	0.18	0.08	0.19	0.08
7	Lakshdweep	0.00	0.04	0.04	0.00	0.04	0.05
8	Puduchery	0.01	0.02	0.27	0.54	0.28	0.56
	Total	18.27	18.94	314.83	477.26	333.10	496.20
	Grand Total	37.21		792.09		829.30	

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

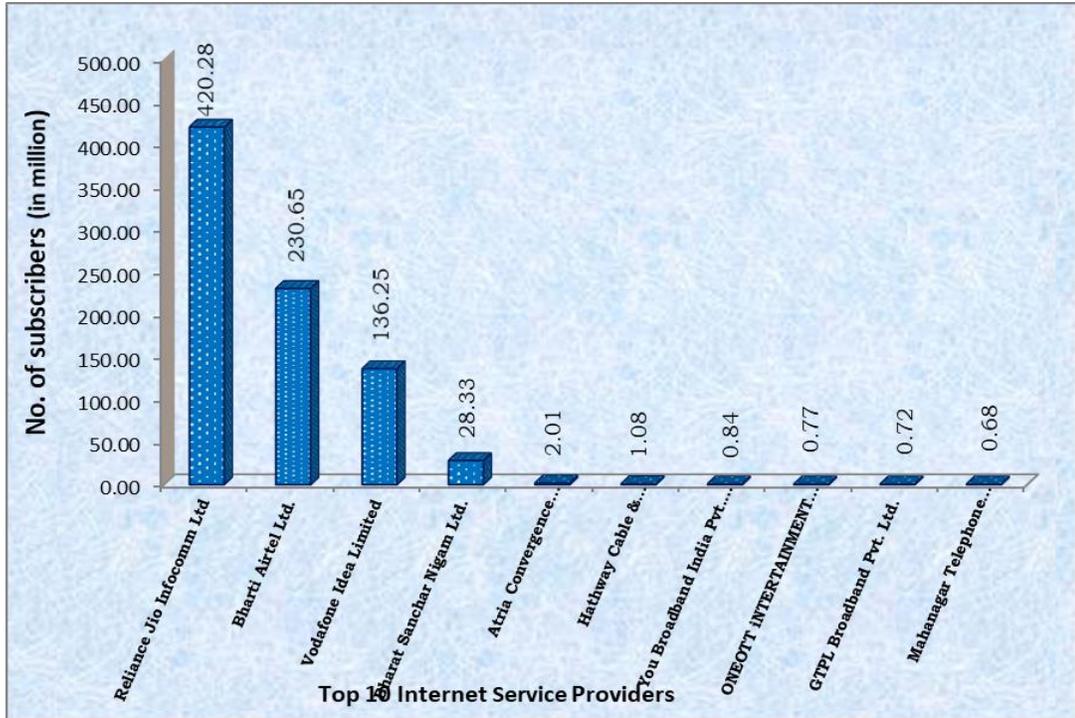
S.No	ISP	No. of Subscribers (In million)	Share (%)
1	Reliance Jio Infocomm Ltd	420.28	50.68%
2	Bharti Airtel Ltd.	230.65	27.81%
3	Vodafone Idea Limited	136.25	16.43%
4	Bharat Sanchar Nigam Ltd.	28.33	3.42%
5	Atria Convergence Technologies Pvt. Ltd.	2.01	0.24%
6	Hathway Cable & Datacom Pvt. Ltd.	1.08	0.13%
7	You Broadband India Pvt. Ltd.	0.84	0.10%
8	ONEOTT iNTERTAINMENT LTD (Planet E-Shop Holdings India Ltd.)	0.77	0.09%
9	GTPL Broadband Pvt. Ltd.	0.72	0.09%
10	Mahanagar Telephone Nigam Ltd.	0.68	0.08%
Total of Top 10 ISPs		821.61	99.07
Others		7.69	0.93
Grand Total		829.30	100

1.47 Reliance Jio holds the top position with 50.68% of market share of internet subscribers followed by Bharti Airtel Ltd with 27.81% at the QE Dec-21. M/s Vodafone Idea Ltd held the third position in respect of internet subscriber base with market share of 16.43%.

1.48 Out of total 639 internet service providers, top 10 Service Providers together hold 99.07% of total internet subscriber base at the QE Dec-21. Detailed table of number of internet subscriber base (broadband and narrowband) of all the service providers is available at **Annexure-1.5**.

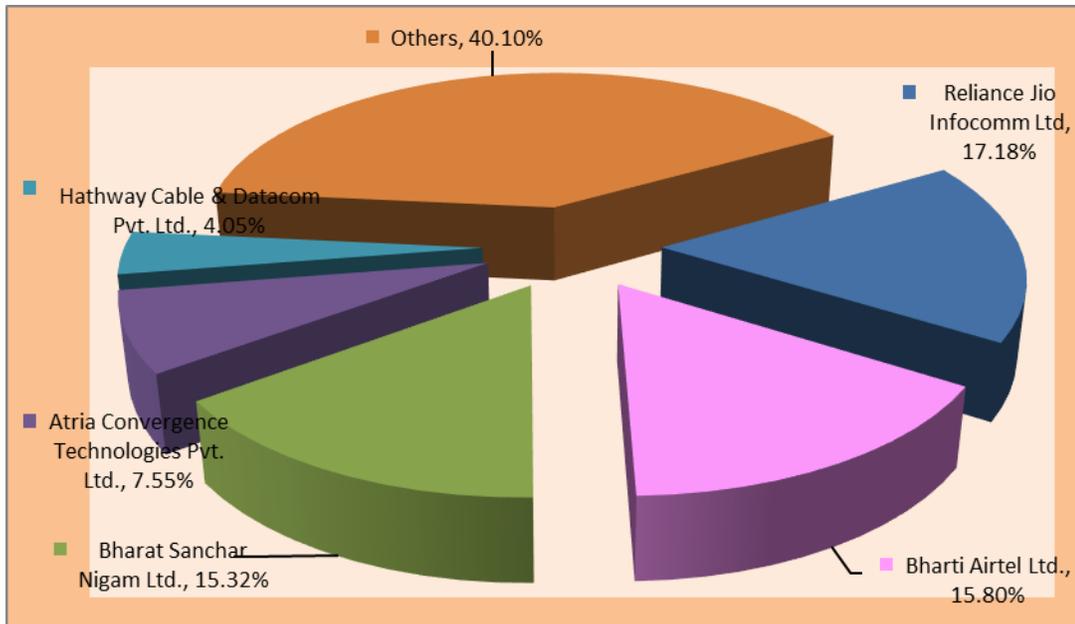
1.49 The following chart depicts the internet subscriber base of top ten Internet Service Providers (ISPs) in the QE Dec-21.

Chart 1.17 : Subscriber base of top ten ISPs



1.50 Out of total 26.58 million wired internet subscribers, Reliance Jio Infocomm Ltd holds 17.18% market share with 4.57 million subscribers, followed by Bharti with 4.20 million subscribers.

Chart 1.18 : Composition of Wired Internet subscribers



1.51 In wireless internet segment, Reliance Jio holds 51.79% market share with 415.72 million subscribers followed by Bharti Airtel Ltd with 28.21% of 226.45 million wireless internet subscribers at the QE Dec-21.

Chart 1.19 : Composition of Wireless Internet subscription

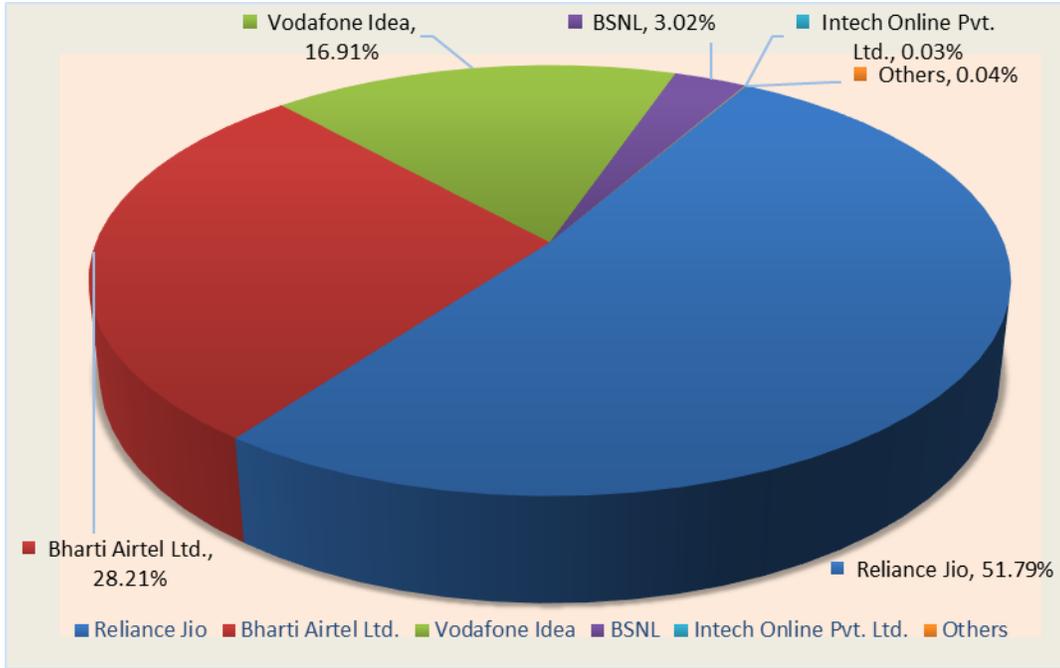


Chart 1.20 : Technology trend for Wireless Internet Access

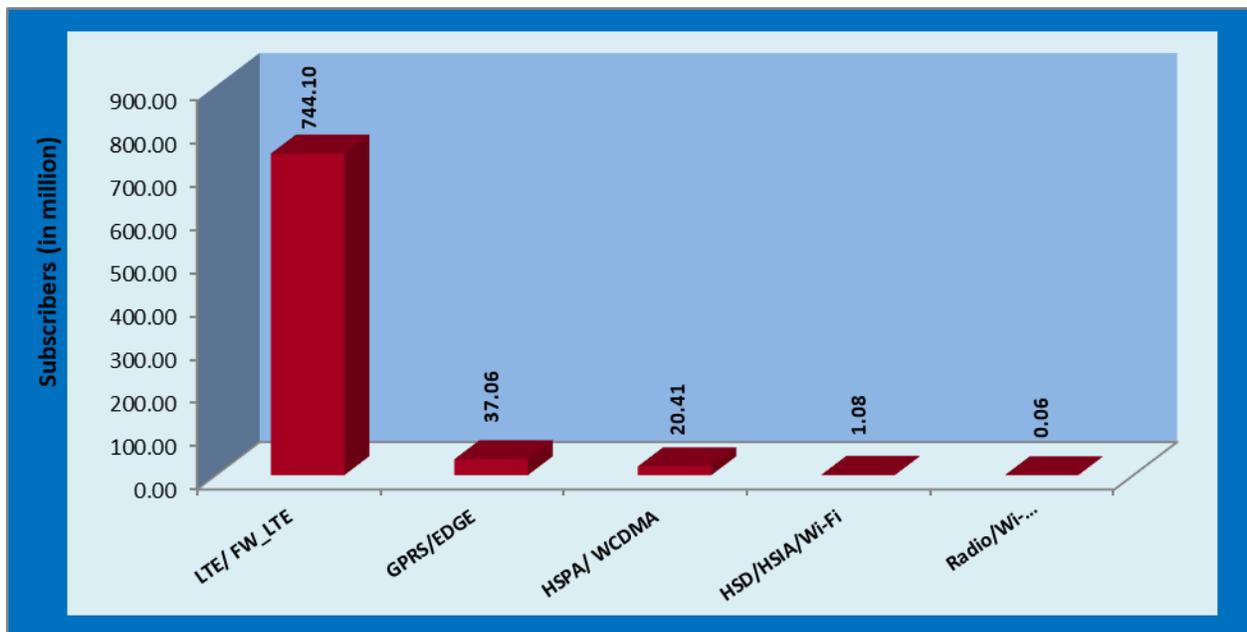
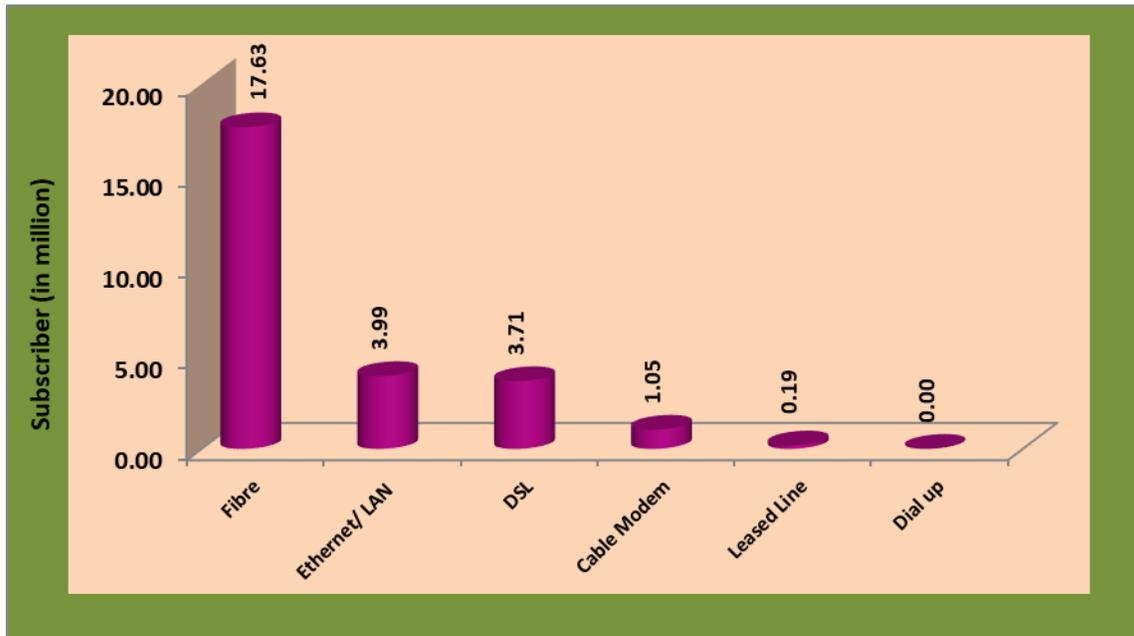


Chart 1.21: Technology trend for Wired Internet Access



1.52 Top five service areas in terms of internet subscriptions (wired+wireless) are Maharashtra (71.45 million), U.P.(East) (67.94 million), Andhra Pradesh including Telengana (63.29 million), Bihar (58.24 million) and Tamil Nadu (57.03 million).

Table 1.32 : Service Area wise number of Internet Subscribers per 100 population at the end of Dec-21

Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	28.03	35.27	63.29	51.84	95.95	69.69
Assam	9.66	6.42	16.08	32.33	117.91	45.52
Bihar	36.69	21.56	58.24	26.54	85.25	35.62
Delhi	0.79	38.20	38.99	-	-	186.58
Gujarat	16.24	34.64	50.88	44.15	99.34	71.01
Haryana	8.10	13.04	21.14	46.43	105.75	70.99
Himachal Pradesh	4.06	2.37	6.43	60.90	310.55	86.56
Jammu & Kashmir	3.79	4.63	8.42	39.39	111.02	61.04
Karnataka	17.99	31.74	49.73	47.68	107.73	74.01
Kerala	14.46	16.66	31.12	149.42	64.07	87.22
Madhya Pradesh	23.54	32.96	56.50	28.52	101.07	49.07
Maharashtra	29.90	41.56	71.45	47.43	114.14	79.81

Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Mumbai	1.06	28.70	29.75			
North East	4.68	4.29	8.97	45.48	81.00	57.56
Orissa	13.90	7.40	21.30	38.73	89.79	48.25
Punjab	9.13	18.46	27.59	51.08	133.34	86.98
Rajasthan	21.26	22.78	44.04	36.13	107.64	55.04
Tamil Nadu	15.74	41.30	57.03	43.29	98.70	72.94
UP (East)	35.10	32.83	67.94	28.41	97.98	45.39
UP (West)	17.39	25.59	42.99			
Kolkata	1.26	16.77	18.03	34.10	98.77	57.64
West Bengal	20.34	19.04	39.38			
Total	333.10	496.20	829.30	37.25	103.95	60.46

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

Notes:

- No. of total internet subscribers per 100 population is derived from the subscriber data provided by the operators and the and the projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 - 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
- Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

Table 1.33 : State/UT wise number of Internet Subscribers per 100 population at the end of Dec-21

S.N.	State(s)	Total Subscribers (In million)			Tele-density (%)		
		Rural	Urban	Total	Rural	Urban	Total
1	Andhra Pradesh	24.55	27.75	52.30	72.21	146.52	98.79
2	Arunachal Pradesh	2.53	2.41	4.94	219.37	614.03	319.43
3	Assam	9.66	6.42	16.08	32.33	117.91	45.52
4	Bihar	34.47	19.55	54.02	31.50	128.73	43.35
5	Chattisgarh	0.75	1.41	2.17	3.45	17.76	7.28
6	Goa	0.22	0.18	0.40	56.37	15.37	25.80
7	Gujarat	15.97	34.17	50.14	43.70	100.64	71.12
8	Haryana	8.10	13.04	21.14	46.43	105.75	70.99
9	Himachal Pradesh	4.06	2.37	6.43	60.90	310.55	86.56
10	Jharkhand	2.21	2.01	4.22	7.69	19.86	10.85
11	Karnataka	17.99	31.74	49.73	47.68	107.73	74.01
12	Kerala	14.42	16.61	31.03	149.03	64.05	87.14
13	Madhya Pradesh	22.79	31.54	54.33	37.53	127.99	63.64
14	Maharashtra	30.73	70.07	100.80	47.37	116.04	80.48
15	Manipur	0.57	0.49	1.06	26.23	47.89	33.19
16	Meghalaya	0.34	0.32	0.66	13.09	46.89	20.05
17	Mizoram	0.30	0.33	0.64	54.96	49.73	52.10
18	Nagaland	0.48	0.37	0.86	39.26	38.27	38.83
19	Odisha	13.90	7.40	21.30	38.73	89.79	48.25
20	Punjab	9.08	17.25	26.33	50.80	136.62	86.33
21	Rajasthan	21.26	22.78	44.04	36.13	107.64	55.04
22	Sikkim	0.33	0.35	0.68	91.11	109.88	99.87
23	Tamil Nadu incl. Chennai	15.46	40.73	56.19	43.10	100.04	73.37
24	Telangana	3.47	7.52	10.99	17.31	42.20	29.02
25	Tripura	0.45	0.37	0.81	17.47	23.75	19.85
26	Uttar Pradesh (UPE+UPW)	48.66	53.95	102.61	27.44	97.09	44.06
27	Uttarakhand	3.84	4.48	8.31	51.59	110.12	72.28
28	West Bengal incl. Kolkata	21.23	35.36	56.59	33.83	98.86	57.43
Union Territories							
1	Andaman & Nicobar Islands	0.04	0.11	0.14	17.08	60.41	35.91
2	Chandigarh	0.05	1.21	1.26	-	-	103.36
3	Dadar & Nagar Haweli (incl. Daman & Diu)	0.27	0.47	0.74	115.25	51.37	64.16
4	Delhi	0.79	38.20	38.99	-	-	186.58
5	Jammu & Kashmir	3.60	4.55	8.15	38.28	111.58	60.45
6	Ladakh	0.19	0.08	0.26	89.45	85.30	88.20
7	Lakshdweep	0.04	0.05	0.09	-	-	128.03
8	Puduchery	0.28	0.56	0.84	57.56	50.16	52.37
Total		333.10	496.20	829.30	37.25	103.95	60.46

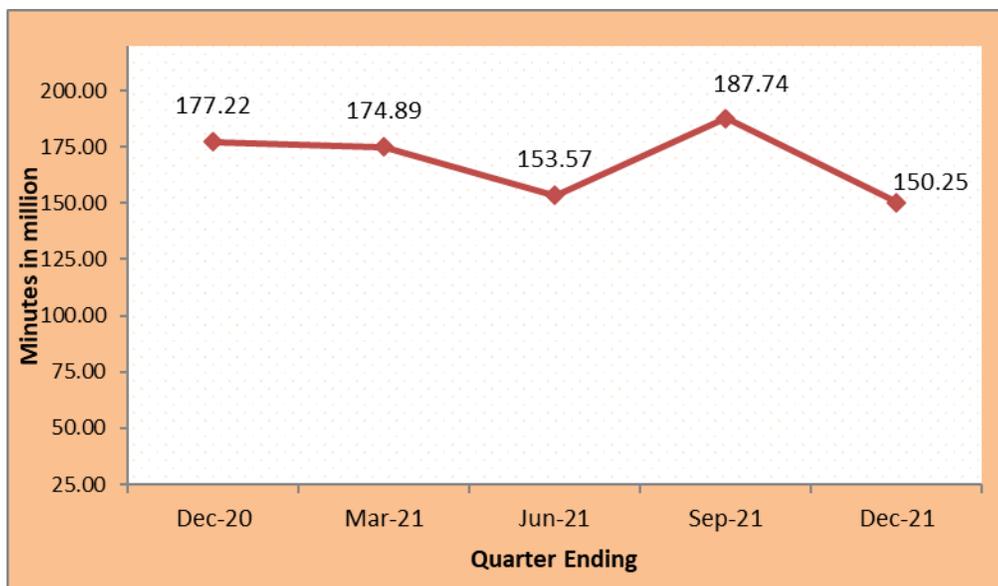
ISP Connectivity

1.53 The International Internet bandwidth owned by various service providers is reported to be 26,391 Gbps during the quarter ending Dec-21 as compared to 25,921 Gbps during the previous quarter.

Internet Telephony

1.54 As per the reports received from 13 service providers, providing Internet Telephony services, the total outgoing minutes of usage for internet telephony decreased from 187.74 million minutes at the end of Sep-21 to 150.25 million minutes at the end of Dec-21. List of Internet Telephony Service providers is available at **Annexure-1.6**.

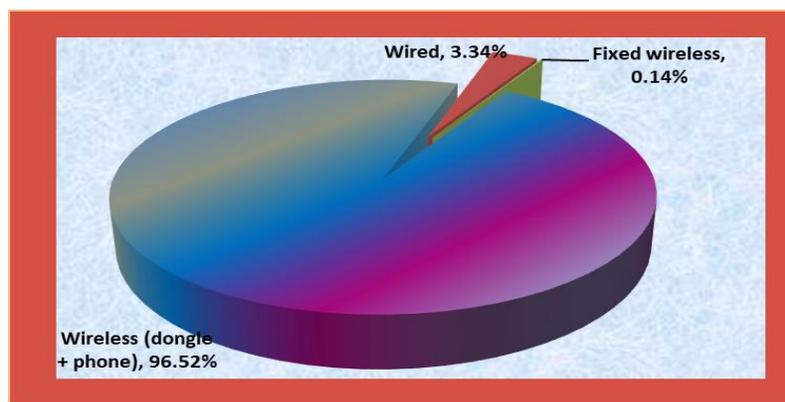
Chart 1.22 : Trends in MOU for Internet Telephony



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

- 1.55 The total number of broadband subscribers decreased from 794.88 million at the end of Sep-21 to 792.08 million at the end of Dec-21. Out of which number of wired broadband subscribers are 26.43 million and wireless broadband subscribers are 765.65 million.
- 1.56 Top five broadband (wired+wireless) service providers in term of subscribers are Reliance Jio (420.28 million), Bharti Airtel (210.07 million), Vodafone Idea Ltd (122.62 million), BSNL (25.54 million) and Atria Convergence (2.01 million).
- 1.57 In wired broadband segment, Reliance Jio Infocomm Ltd. holds 17.27% market share with 4.57 million subscribers followed by Bharti Airtel Ltd. with 4.20 million subscribers in QE Dec-21.
- 1.58 In wireless broadband segment, Reliance Jio holds 54.30% market share with 415.72 million subscribers followed by Bharti Airtel Ltd 26.89% with 205.87 million subscribers in QE Dec-21.
- 1.59 Top five service areas in respect of broadband subscriptions at Q.E. Dec-21 are Maharashtra (68.85 million, U.P.-East (63.43 million), Andhra Pradesh including Telengana (60.43 million), Bihar (55.19 million and Tamil Nadu (54.65 million).

Chart 1.23 : Composition of Broadband subscription – Technology wise



1.60 Mobile Device Users (dongle+phone) constitute 96.52% of total broadband subscribers at the end of Dec-21.

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

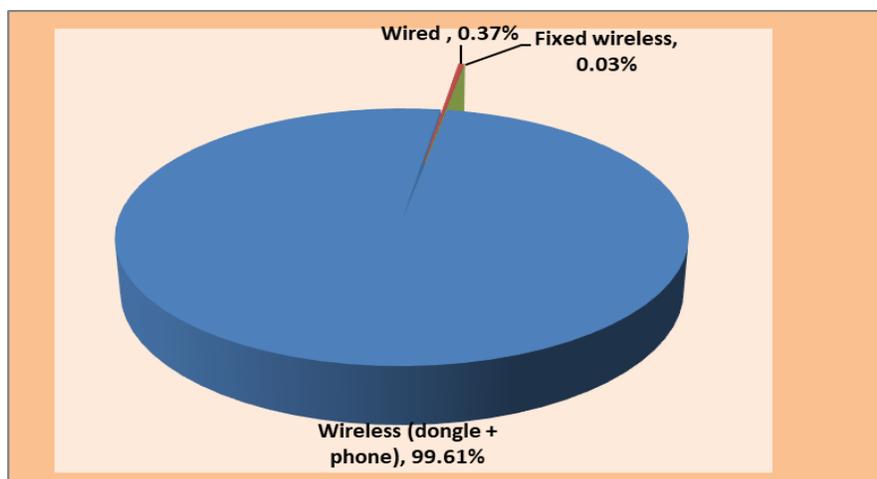
1.61 Total number of narrowband subscribers declined from 39.41 million at the end of Sep-21 to 37.21 million at the end of Dec-21 with the quarterly decline rate of 5.57%. Out of 37.21 million narrowband subscribers, Wired Narrowband subscribers are 0.14 million and Wireless Narrowband subscribers are 37.07 million.

1.62 The top five narrowband (wired+wireless) service providers in term of subscriber base are Bharti Airtel (20.59 million), Vodafone Idea Ltd (13.63 million), BSNL (2.79 million), Airtel Cable & Datacom Private Limited (0.09 million) and MTNL (0.06 million) at the end of Dec-21.

1.63 In wired narrowband segment, Airtel Cable & Datacom Pvt. Limited hold 63.21% market share with 0.086 million subscribers followed by You Broadband India Pvt Ltd with 0.014 million subscribers.

1.64 In wireless narrowband segment, Bharti Airtel holds 55.55% market share with 20.59 million subscribers followed by Vodafone Idea Ltd with 13.63 million subscribers.

Chart 1.24 : Composition of Narrowband subscription – Technology wise



Section E : Other Value Added Services - PMRTS & VSATVSAT

Public Mobile Radio Trunk Services (PMRTS)

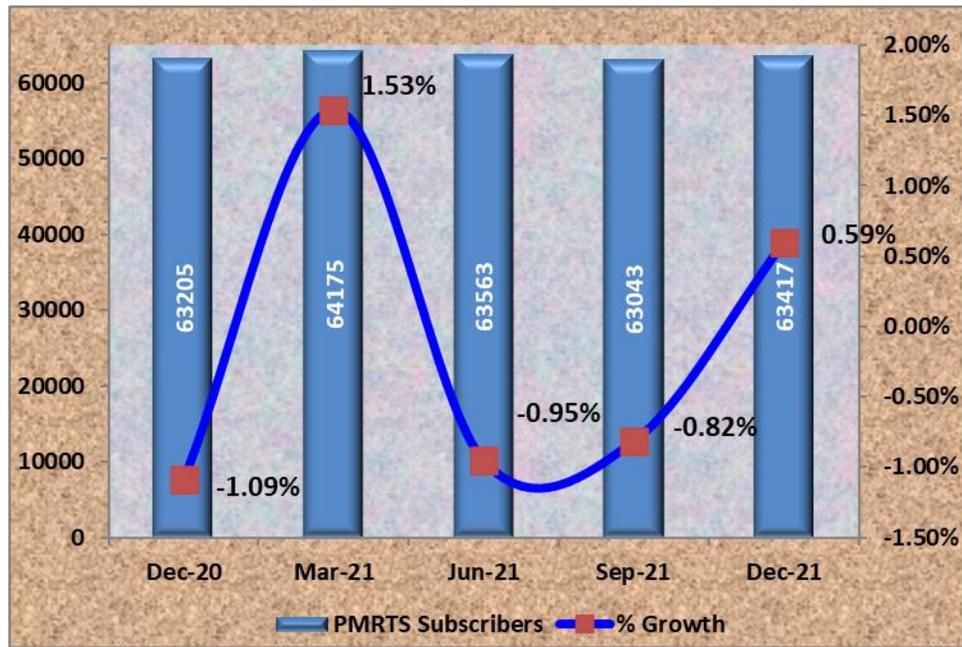
1.65 The subscriber base of PMRTS increased from 63,043 at the end of Sep-21 to 63,417 at the end of Dec-21 with quarterly growth rate of 0.59%.

Table 1.34 : PMRTS Subscriber base - Service Provider wise

Sl. No	Name of the Service Provider	Subscriber Base as on 30.09.2021	Subscriber Base as on 31.12.2021	Net Addition	% Growth in subscribers in QE Dec-21
1	Arya Omnitalk Radio Trunking Services Pvt. Ltd.	51,985	52,294	309	0.59%
2	Procall Ltd.	3,450	3,475	25	0.72%
3	Quick Call	2,044	2,026	-18	-0.88%
4	Inative Networks Pvt Ltd	1,820	1,820	0	0.00%
5	Smartalk Pvt Ltd	1,554	1,578	24	1.54%
6	Bhilwara Telenet Services Pvt Ltd	864	872	8	0.93%
7	Wiwonet Solutions Pvt Ltd	851	857	6	0.71%
8	Airtalk Solutions & Services Pvt Ltd	475	495	20	4.21%
Total		63,043	63,417	374	0.59%

1.66 Detailed table on Service Area wise subscriber base of PMRTS as on 31st December, 2021 is available at **Annexure-1.7**.

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



Very Small Aperture Terminal (VSAT)

1.67 The total number of VSAT subscribers decreased from 289,557 at the end of Sep-21 to 288,848 at the end of Dec-21. Net decrease during the quarter has been 709 at the decline rate of 0.24%.

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 (%) Dec-21
		Sep-21	Dec-21			
1	Hughes Communications Ltd.	132,727	135,374	2647	1.99%	46.87%
2	Nelco Ltd.	75,535	76,166	631	0.84%	26.37%
3	Bharti Airtel Limited	63,908	60,211	-3697	-5.78%	20.85%
4	HCL Comnet	7,784	7,784	0	0.00%	2.69%
5	BSNL	7,002	6,709	-293	-4.18%	2.32%
6	Infotel Satcom	2,551	2,554	3	0.12%	0.88%
7	Cloudcast Digital Ltd	50	50	0	0.00%	0.02%
Total		2,89,557	2,88,848	-709	-0.24	100

1.68 Hughes Communications Ltd. is the market leader having 135,374 subscribers with market share of 46.87% followed by Nelco Ltd. having 76,166 subscribers with market share of 26.37% at the end of Dec-21.

1.69 In term of net addition, Hughes Communication Limited added maximum number of VSAT subscribers (2647 subscribers) during the QE Dec-21. Bharti Airtel Limited and BSNL have registered decline in their VSAT subscribers during the quarter.

Chapter 2 :

Revenue and Usage

Wireless Services

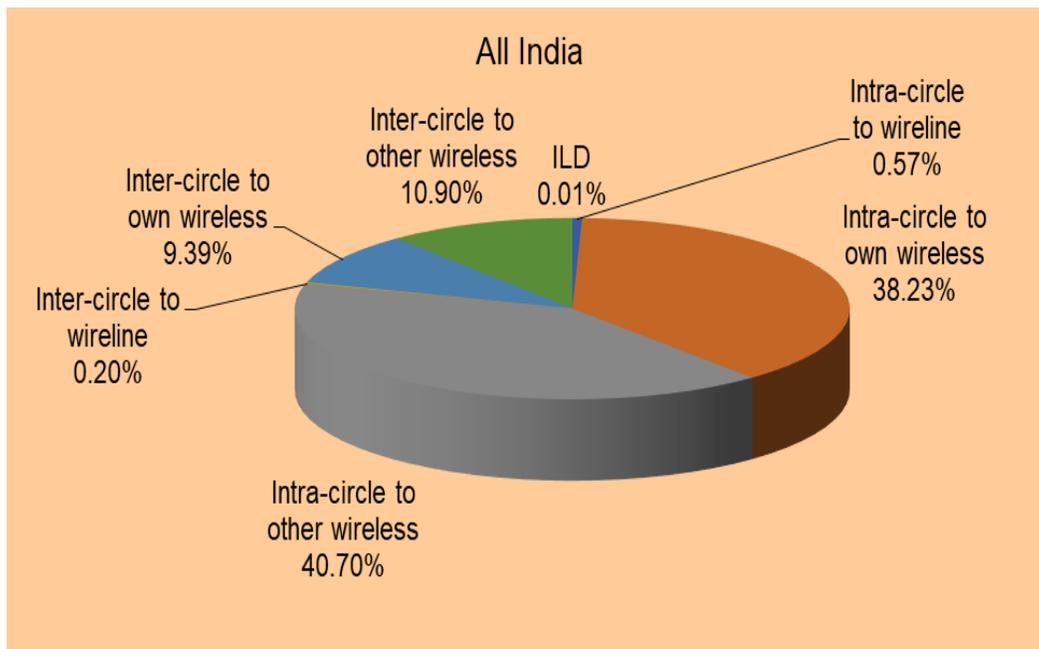
-
- For all the parameters, Metros indicate data for Delhi, Mumbai & Kolkata. Data for Chennai service area has been included in Circle A, as part of TN.
 - ARPU arrived after adjusting interconnect usage charges and roaming settlement charges.
 - The data contained in this section covers the licensees, who have been providing service during the entire period from 1st October, 2021 to 31st December, 2021 in the various service areas.

Table 2.1: Key Indicators – Wireless Services

Parameter	Dec-21	Sep-21	Dec-20	QoQ %age change	YoY %age change
Share of Prepaid (%)	93.62%	94.21%	95.21%	-0.63	-1.67
Incoming MOU per subscriber per month	427.19	413.28	393.32	3.37	8.61
Outgoing MOU per subscriber per month	427.28	413.66	392.06	3.29	8.98
No. of Outgoing SMS per subscriber per month	14.13	14.71	15.85	-3.97	-10.88
Average Revenue Per User (ARPU) per month (₹)	114.16	108.16	101.65	5.55	12.31

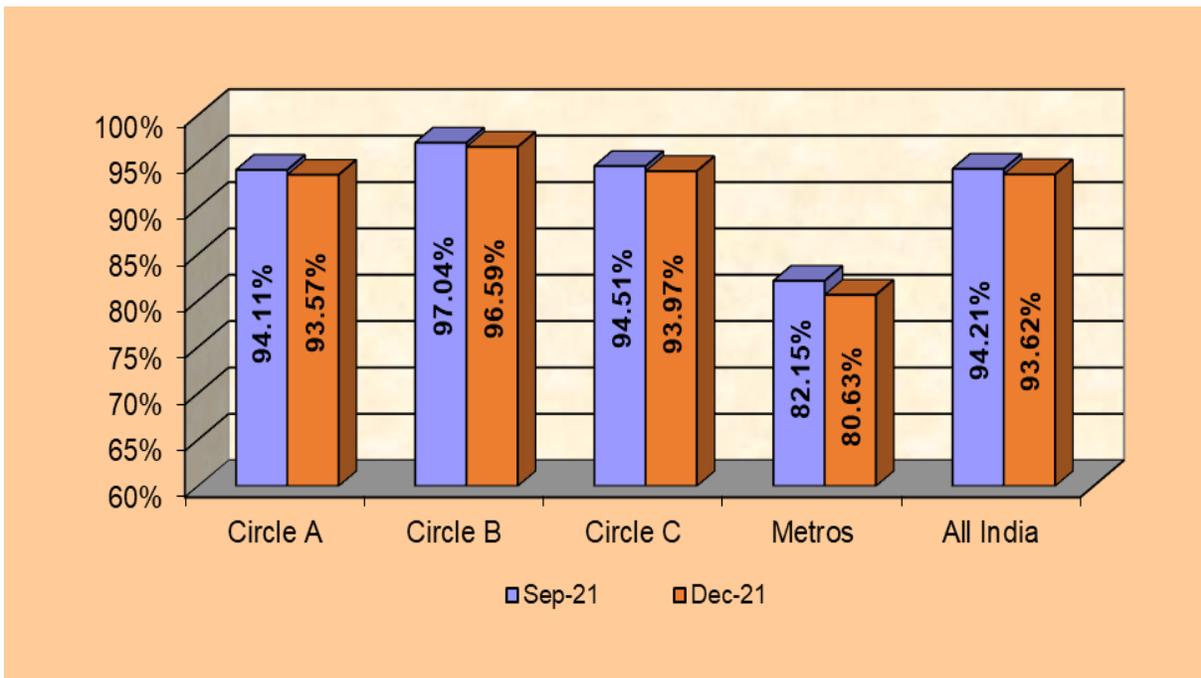
2.1 The following chart presents % break-up of outgoing minutes from Home Service Area (HSA) in the QE Dec-21.

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



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

Chart 2.2: Proportion of prepaid subscribers



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

- 2.3 The market share of pre-paid segment has decreased from 94.21% at the end of September-2021 to 93.62% at the end of December-2021.
- 2.4 The ARPU per month (all India blended) increased from Rs.108.16 in QE Sep-21 to Rs.114.16 in QE Dec-21 with quarterly growth rate of 5.55%. Year-on-Year basis, ARPU per month increased by 12.31% in this quarter.
- 2.5 The ARPU per month for pre-paid segment is Rs.107.98 and ARPU per month for postpaid segment is Rs.210.33 in QE Dec-21.
- 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-21

Circle Category	ARPU per month (in Rs.)
-----------------	-------------------------

	Post-paid	Pre-paid	Blended
Circle A	253.02	123.31	131.26
Circle B	198.48	102.56	105.60
Circle C	180.63	106.31	110.57
Metros	183.67	76.07	95.93
All India	210.33	107.98	114.16
All private SPs	214.60	115.07	121.40
BSNL/MTNL	134.58	46.35	49.18

2.7 The following table presents the composition of ARPU per month for QE Dec-21.

Table 2.3: Composition of ARPU per month - Wireless Services

S. No.	Item	Revenue (excl. service tax) per subscriber per month (in Rs.)	Share of total revenue from subscribers
1	Usage from Home Service Area		
1.1.	Rental Revenue	0.77	0.6%
1.2.	Revenue from calls	14.35	11.7%
1.3.	Revenue from SMS	0.15	0.1%
1.4.	Revenue from data usage	102.94	84.2%
1.5.	Revenue from other VAS	1.37	1.1%
1.6.	Other revenue	2.02	1.7%
2	Usage outside Home Service Area		
2.1.	Revenue from out-roamers	0.71	0.6%
3	Total revenue from subscribers (1+2)	122.30	100%
4	Net inter-operator settlement charges receivable *	-8.13	
5	Net Revenue (ARPU) per month (3+4)	114.16	

* includes Interconnect Usages Charges and roaming settlement charges

#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.8.13 accounted for 6.65% of the total revenue from subscribers per month in the Q.E. December-2021.

- 2.9 On an all India average, the overall MOU per subscriber per month increased by 3.33% from 827 in Q.E. Sep-21 to 854 in Q.E. Dec-21.
- 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. Dec-21.

Table 2.4: MOU per subscriber per month - QE Dec-21

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	320	292	611	391	381	773	387	376	763
Circle B	409	376	784	424	432	856	423	431	854
Circle C	485	424	910	527	558	1085	524	550	1075
Metro	233	193	427	478	444	922	433	398	831
All India	338	300	638	433	435	868	427	427	854

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

- 2.11 The overall ratio of incoming MOUs and outgoing MOUs for the Q.E. Dec-21 is 50:50.
- 2.12 Average number of Outgoing SMS per subscriber per month is 14 in QE December-2021. 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. December-2021.

Table 2.5: No. of Outgoing SMS per subscriber per month during QE Dec-21

Circle category	Outgoing SMS per subscriber per month		
	Post-paid	Pre-paid	Blended

Circle A	43	13	15
Circle B	34	11	12
Circle C	18	17	17
Metro	41	11	16
All India	37	13	14

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

Chart 2.3 : Minutes of Usage by Out-roamers as a % of Total Minutes of Usage during Q.E. Dec-2021

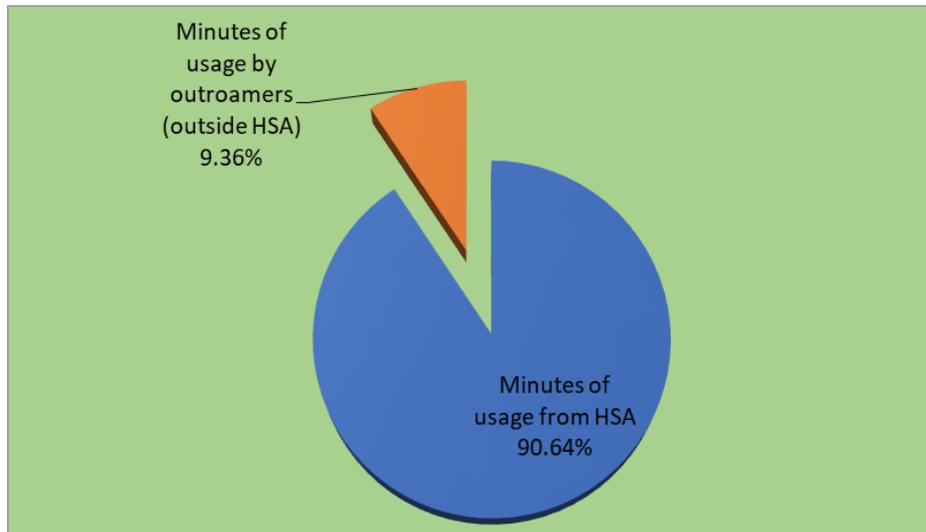
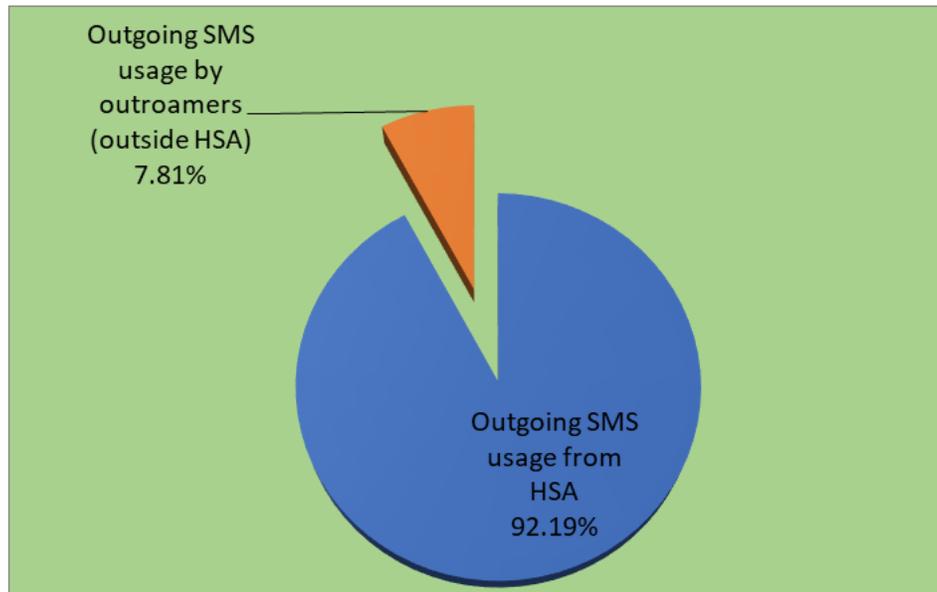


Chart 2.4: Outgoing SMS Usage by Out-roamers as a % of Total No. of Outgoing SMS Usage during Q.E. Dec-2021



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. Dec-21.

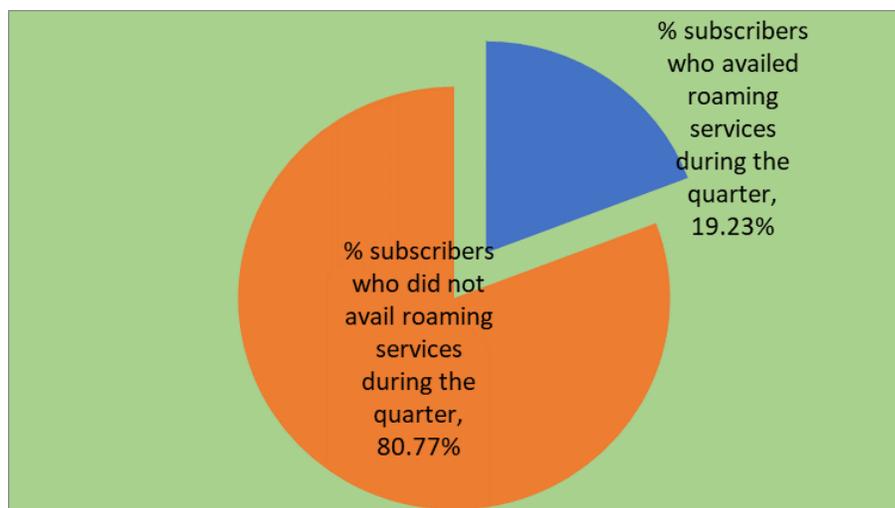
Table 2.6: % Break-up of Outgoing minutes from Home Service Area (HSA) during the Q.E. Dec-2021

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	0.65	40.24	45.07	0.18	6.38	7.46	0.01
Circle B	0.52	37.45	41.67	0.18	9.14	11.03	0.01
Circle C	0.34	41.32	34.99	0.20	11.37	11.78	0.00
Metros	0.94	28.17	32.58	0.37	17.13	20.78	0.04
All India	0.57	38.23	40.70	0.20	9.39	10.90	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. Dec-21.

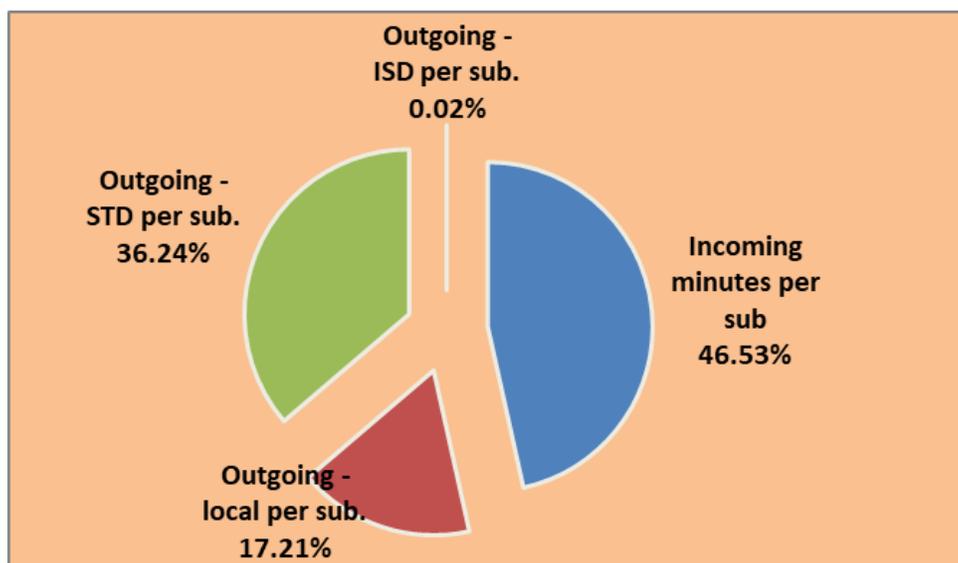
Chart 2.5: % Share of outroamers as a percentage of total subscribers

during Q. E. December – 2021



2.15 The usage pattern of outroamers i.e. usage from outside the home service area shows that incoming minutes accounts for 46.53% of the total minutes of usage by outroamers in QE December - 2021 as against 46.12% in the September - 2021 quarter. The chart given below presents the break-up of minutes of usage of outroamers.

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



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

8. Average Revenue per Outgoing Minute of usage from HSA

$$= \frac{\text{Revenue from Calls}}{\text{No. of outgoing minutes from HSA}}$$

Table 2.7: Average revenue per outgoing minute from HSA in QE Dec-21

(In Rs. per minute)

Circle Category	Postpaid	Prepaid	Blended
Circle A	0.05	0.04	0.04
Circle B	0.03	0.04	0.04
Circle C	0.01	0.03	0.03
Metros	0.06	0.03	0.03
All India	0.04	0.04	0.04

2.17 All India average revenue per outgoing minute is the same as in previous quarter, i.e., Re. 0.04 in Q.E. September-2021.

Table 2.8: Trends of Key Parameters - Wireless Services

Parameter	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21
1. ARPU (Rs. Per month)	101.65	103.58	104.66	108.16	114.16
2. Average revenue Realization per subscriber per GB wireless data (in Rs.)	11.01	10.77	9.80	9.53	9.91
3. MOU per subscriber per month	785	818	813	827	854
4. Outgoing MOU per subscriber per month					
4.1 Local (Intra-circle)	300	306	313	312	319
4.2 NLD (inter-circle)	92	100	94	102	108
4.3 ILD	0.06	0.06	0.05	0.05	0.05
5. Average no. of Outgoing SMS per subscriber per month	16	16	15	15	14
6. Average revenue per outgoing minute from HSA (in Rs.)	0.05	0.05	0.04	0.04	0.04

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

Chapter 3 :

Financial Data of Telecom Service Sector

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

Particulars	QE Dec-20 (Rs. in Crore)	QE Sep-21 (Rs. in Crore)	QE Dec-21 (Rs. in Crore)	Q-O-Q % Change	Y-O-Y % Change
Gross Revenue (GR)	71,588	67,300	69,695	3.56	-2.64
Adjusted Gross Revenue (AGR)	47,623	53,510	55,151	3.07	15.81
Pass Through Charges (GR-AGR)	23,966	13,790	14,544	5.47	-39.31
License Fee (LF)	3,809	4,271	4,541	6.34	19.21
Spectrum Usage Charges (SUC)	1,538	1,741	1,760	1.12	14.47

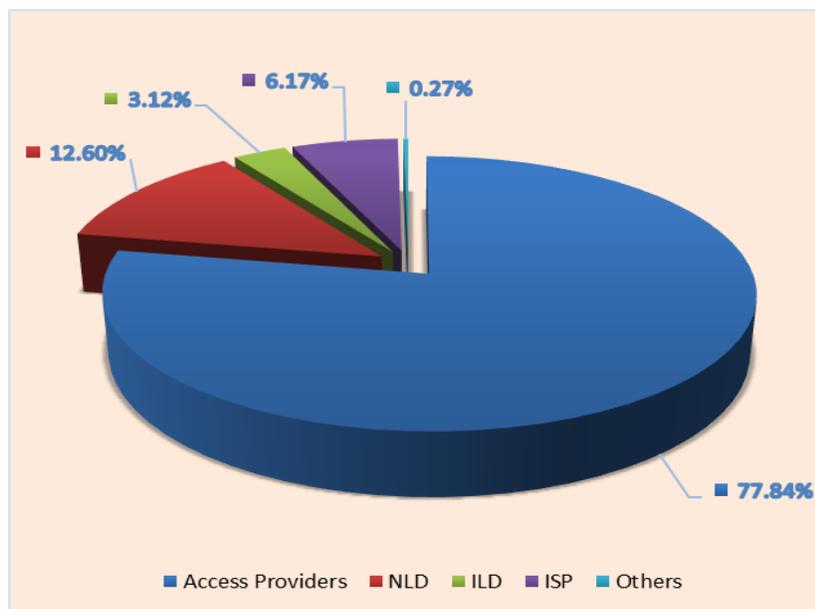
- 3.1 Gross Revenue (GR) increased by 3.56% and Adjusted Gross Revenue (AGR) increased by 3.07% during QE Dec-21. On YoY basis GR decreased by 2.64% however, AGR increased by 15.81% in QE Dec-21.
- 3.2 Pass through charges increased by 5.47% in QE Dec-21, however, on YoY basis it is decreased by 39.31%.
- 3.3 Pass-through charges as a percentage of Gross Revenue are 20.87% in QE Dec-21 as against 20.49% in the previous quarter.

Table 3.2: Service-wise Gross Revenue, Adjusted Gross Revenue, License Fee and Spectrum Charges for QE Dec-21

(in Rs. Crore)

Service	GR	AGR	LF	Spectrum Usage Charges
Access Providers	54,269.50	42,930.10	3,434.83	1,755.99
NLD	7,585.90	6,948.33	555.92	-
ILD	3,054.09	1,719.27	137.14	-
ISP	4,624.36	3,401.76	403.22	-
Others	161.14	151.21	10.26	4.02
Total	69,694.98	55,150.68	4,541.36	1,760.02

Chart 3.1: Composition of Adjusted Gross Revenue



3.4 Access services contributed 77.84% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Pass Through Charges, Adjusted Gross Revenue (AGR), License Fee and Spectrum Usage Charges (SUC)¹¹ increased by 3.30%, 12.10%, 1.20%, 1.19%, and 1.11% respectively in QE Dec-21.

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

Service Provider	QE Dec-21	QE Sep-21	% Change
Reliance Jio	19063.75	18467.47	3.13
Bharti Airtel	14484.48	14730.85	-1.67
Vodafone Idea	6541.83	6337.58	3.22
BSNL	1984.94	1934.73	2.60
Tata Tele.	530.21	554.33	-4.35
MTNL	254.78	331.56	-23.16
Reliance Com.	61.69	53.40	15.53

¹¹ 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)

Service Provider	QE Dec-21	QE Sep-21	% Change
Quadrant	13.22	2.22	495.16
V-Con Mobile & Infra Pvt. Ltd.	-4.80	9.57	-150.12
Grand Total (Access)	42930.10	42421.72	1.20

3.5 Public Sector Undertakings' share in the Access AGR of telecom services is 5.22% in the QE Dec-21.

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

Category	AGR of Access Services for QE Dec-21 (in crore)	%age share of AGR
Metro	4,454.48	10.38
A	16,416.80	38.24
B	15,950.15	37.15
C	6,108.68	14.23
Total	42,930.10	100

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.14-11/2009-FA, dated 9th August, 2010.
3. The figures have been re-grouped wherever considered necessary for analysis purpose.
4. Percentage of contribution of Five TSPs of Public Sector (BSNL, MTNL, Rail Tel, Power Grid, Oil India and Bharat Broadband) to AGR in NLD Service and two TSPs of Public Sector (BSNL/MTNL) in Access Services and BSNL in ILD Services.
5. For all the parameters metros indicate data for Delhi, Mumbai and Kolkata. Data for Chennai Service Area has been included as part of Tamil Nadu
6. From this quarter onwards ISPs is not included in 'Others'.

Chapter 4 : Quality of Service (QoS)

Section A: Quality of Service Performance of Wireless Service Providers

Table 4.1: QoS Summary - Wireless Service

Summary of Performance of Service providers against identified parameters

S. No.	Parameters	Benchmark	Performance in respect of UASL/CMTS Licensees for the Parameters and Benchmarks			
			For Quarter Ending September, 2021		For Quarter Ending December, 2021	
			Out Of 88 (Nos.)	Out Of 88 (%)	Out Of 88 (Nos.)	Out Of 88 (%)
I.	Network Related Parameters					
1	Network Availability					
(i)	BS Accumulated down-time (not available for service) (%age)	≤ 2%	0	0%	0	0%
(ii)	Worst affected BSs due to down-time (%age)	≤ 2%	2	2.27%	0	0%
2	Connection Establishment (Accessibility)					
(i)	Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable(within licensee's own network)	≥ 95%	0	0%	0	0%
(ii)	SDCCH/ Paging Channel Congestion/ RRC Congestion (%age)	≤ 1%	0	0%	0	0%
(iii)	TCH, RAB and E-RAB congestion (%age)	≤ 2%	0	0%	0	0%
3	Connection Maintenance (Retain ability)					
(i)	Network QoS DCR Spatial Distribution Measure [Network_QSD (90,90)]	≤ 2%	1	1.14%	1	1.14%
(ii)	Network QoS DCR Temporal Distribution Measure [Network_QTD (97,90)]	≤ 3%	1	1.14%	1	1.14%
4	Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality	≥ 95%	0	0%	0	0%
5	Point of Interconnection (POI)	≤ 0.5%	0	0%	0	0%

	Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)					
6	Down Link (DL) Packet Drop Rate or DL-PDR	≤ 2%	0	0%	0	0%
7	Up Link (UL) Packet Drop Rate or UL-PDR	≤ 2%	1	1.14%	0	0%
II.	Customer Service Quality Parameters					
8	Metering and Billing					
(i)	Metering and billing credibility - post paid	≤ 0.1%	0	0%	0	0%
(ii)	Metering and billing credibility - pre paid	≤ 0.1%	0	0%	0	0%
(iii)	Resolution of billing/charging/validity complaints	98% within 4 weeks	0	0%	0	0%
	Resolution of billing/charging/validity complaints	100% within 6 weeks	1	1.14%	0	0%
(iv)	Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints	within 1 week of resolution of complaint	0	0%	0	0%
9	Response time to the customer for assistance					
(i)	Accessibility of call centre/ customer care	≥ 95%	0	0%	0	0%
(ii)	%age of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	8	9.09%	3	3.41%
10	Termination / closure of service					
(i)	%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	0	0%	8	9.09%
(ii)	Time taken for refund of deposits after closures	100% within 60 days	0	0%	0	0%

- 4.1 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters: -
- i. Worst affected BSs due to down-time (%age)
 - ii. Up Link (UL) Packet Drop Rate or UL-PDR ≤ 2%

- iii. Resolution of billing/charging/validity complaints 100% within 6 weeks
- iv. %age of calls answered by the operators (voice to voice) within 90 Seconds

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

- ❖ %age requests for Termination / Closure of service complied within 7 days

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

Parameter	Benchmark	Service Provider	Service Area	Performance in QE Dec 2021 (in %)
Network QoS DCR Spatial Distribution Measure [Network_ QSD (90,90)]	≤ 2%	BSNL	West Bengal	3.24
Network QoS DCR Temporal Distribution Measure [Network_ QTD (97,90)]	≤ 3%	BSNL	West Bengal	4.6
Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	BSNL	Andhra Pradesh	70.1
			Karnataka	78.17
			Kerala	90.5
%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	VIL	Andhra Pradesh	86.06
			Haryana	97.72
			Karnataka	97.46
			Kolkata	95.23
			Maharashtra	95.79
			Punjab	96.99
			Uttar Pradesh East	94.99
West Bengal	87.13			

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

Section B: Quality of Service Performance of Wireline Service Providers

Table 4.3: QoS Summary - Wireline Service

Summary of Performance of service providers against identified parameters

S. No.	Parameters	Benchmark	No of license areas where operators not meeting the benchmarks			
			September, 2021		December, 2021	
			Out of 101 In Nos.	Out of 101 In %age	Out of 101 In Nos.	Out of 101 In %age
(i)	“Fault repair” Fault incidences No. of faults per 100 subs/month)	≤ 7	1	0.99%	0	0.00%
(ii)	% Fault repaired by next working day (for urban areas)	≥ 85%	5	4.95%	4	3.96%
	% Fault repaired within 5 days (for urban areas)	≥100%	2	1.98%	2	1.98%
(iii)	% Fault repaired by next working day (for rural and hilly areas)	≥ 75%	0	0.00%	0	0.00%
	% Fault repaired within 7 days (for rural and hilly areas)	≥100%	0	0.00%	0	0.00%
(iv)	“Mean time to Repair”(MTTR)	≤10Hs	5	4.95%	3	2.97%
(v)	“Point of Interconnection” (POI) Congestion (No. of PoIs not meeting benchmark)	≤ 0.5%	0	0.00%	0	0.00%
(vi)	“Metering and Billing” Metering and billing credibility - post-paid	≤ 0.1%	0	0.00%	0	0.00%
	Metering and Billing credibility -pre-paid	≤ 0.1%	0	0.00%	0	0.00%
(vii)	Resolution of billing/charging /Credit & validity complaints	98% within 4 weeks	0	0.00%	0	0.00%
	Resolution of billing/charging / Credit & validity complaints	100% within 6 weeks	0	0.00%	0	0.00%
(viii)	Period of applying credit /waiver/adjustment to customer's	1 week of resolution of complaint	0	0.00%	0	0.00%

(ix)	“Response time to the customer for assistance” Accessibility of call centre/ customer care	≥ 95%	0	0.00%	1	0.99%
	%age of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	17	16.83%	11	10.89%
(x)	“Termination / closure of service”- %age of request for Termination / closure of service complied within 7 days	100% within 7 days	1	0.99%	1	0.99%
(xi)	Time taken for refund of deposits after closures	100% within 60 days	6	5.94%	5	4.95%

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

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

- i. “Fault repair” Fault incidences No. of faults per 100 subs/month) ≤ 7
- ii. % Fault repaired by next working day (for urban areas) $\geq 85\%$
- iii. “Mean time to Repair” (MTTR) $\leq 10\text{Hs}$
- iv. %age of calls answered by the operators (voice to voice) within 90 seconds $\geq 95\%$
- v. Time taken for refund of deposits after closures 100% within 60 days

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

- i. “Accessibility of call centre/ customer care $\geq 95\%$

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

Parameters	Benchmarks	Service Provider	Service areas	Parameters not met
% of faults repaired by next working day	For urban areas by next working day: $\geq 85\%$	MTNL	Delhi	60.35%
			Mumbai	74.30%
		TTSL	Andhra Pradesh	71.62%
			Gujarat	84.66%
% of faults repaired within 5 days	For urban areas: $\geq 100\%$	MTNL	Delhi	83.79%
			Mumbai	90.00%
Mean Time to Repair (MTTR)	≤ 10 Hrs	MTNL	Delhi	25.19
			Mumbai	20.31
		TTSL	Andhra Pradesh	15.71
Accessibility of call centre/ customer care	$\geq 95\%$	BSNL	North East	94.82%
Percentage of calls answered by the operators (voice to voice) within 90 seconds	$\geq 95\%$	Bharti Airtel	Andhra Pradesh	93.97%
			Haryana	94.79%
			Jammu & Kashmir	94.45%
			Kolkata	94.13%
			Kerala	91.10%
			Maharashtra	94.58%
			Punjab	94.37%
			Tamil Nadu	94.50%
		UP-E	94.62%	
		BSNL	North East	94.51%
Tata	Delhi	89.00%		
%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	MTNL	Mumbai	98.39%
Time taken for refund of deposits after closures	100% within 60 days	BSNL	Himachal Pradesh	92.60%
			Kolkata	0.00%
			Punjab	99.50%
			Rajasthan	11.00%
		MTNL	Mumbai	30.52%

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

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

- 4.7 There are 575 Service Providers providing broadband (wireline) service at the end of Dec, 2021. Total number of broadband (wireline) subscriber base of all the broadband service providers is 2,64,29,851 in quarter ending December, 2021 as compared to 2,43,87,708 in quarter ending September, 2021.
- 4.8 Out of 575 broadband service providers providing broadband (wireline) service, only 80 service providers are having subscriber base more than 10,000 subscribers and share 97.87% 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 2,39,27,405 at the end of September, 2021 (for 77 service providers) to 2,51,32,423 at the end of December, 2021 (for 80 service providers).
- 4.9 This report covers performance of 67 broadband service providers' vis-à-vis the QoS benchmarks prescribed by TRAI. Service providers namely M/s Genstar Network Solutions Pvt. Ltd., M/s HYFY Giga Fiber Pvt. Ltd., M/s Kerala Vision Broadband Ltd., M/s. Kernel Fibernet Online Network Pvt Ltd. and M/s Weebo Networks Pvt Ltd. (5 new entrants) and M/s Airfiber Networks Pvt Ltd., M/s Angel Air Network Solutions Pvt. Ltd., M/s Dwan Supports Pvt. Ltd., M/s Excell Media Pvt. Ltd., M/s Ortel Communication Ltd., M/s Sristi Sanchar Webnet Ltd., M/s Stampede Communications Pvt. Ltd. and M/s Wan and Lan Internet Pvt. Ltd. (8 ISPs) have not submitted their Performance Monitoring Report (PMR) in this quarter.

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

S. No.	Parameters	Benchmark	Quarter Ending		Quarter Ending	
			September, 2021		December, 2021	
			Out of 126	Out of 126	Out of 118	Out of 118
1	Service Provisioning	100% in =<15 working days				
1.2	%age of connections provided within 15 days of registration of demand	100%	2	1.59%	2	1.69%
2	Faults Repair					
2.2	% of faults repaired by next working day (>90%)	>90%	5	3.97%	2	1.69%
2.3	% of faults repaired within 3 working day	=>99%	4	3.17%	3	2.54%
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	1.59%	2	1.69%
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%	2	1.59%	0	0.00%
5	Bandwidth utilisation/ throughput					
5.2	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	0	0	0.00%	0	0.00%
5.4	No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	0	0	0.00%	0	0.00%
5.7	% International bandwidth utilization during peak hours (TCBH) (Enclose MRTG) <90%	<90%	0	0.00%	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					

S. No.	Parameters	Benchmark	Quarter Ending		Quarter Ending	
			September, 2021		December, 2021	
			Out of 126	Out of 126	Out of 118	Out of 118
6.3	Service availability /uptime (for all users) in %age	>98%	2	1.59%	0	0.00%
7	Packet loss (for wired broadband access) in %age	<1%	0	0.00%	0	0.00%
8	Network latency (for wired broadband access)					
8.1	User reference point at POP/ISP Gateway node to IGSP/NIXI	<120 ms	0	0.00%	0	0.00%
8.2	User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	<350 ms	0	0.00%	0	0.00%
8.3	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)	<800 ms	0	0.00%	0	0.00%

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

Sl. No.	Parameters	Benchmark	Name of the Service Provider not meeting the Benchmark
1	Service Provisioning		
1.2	%age of connections provided within 15 days of registration of demand	100%	MTNL - Delhi & Mum (75.52%) United Telecoms - Mah.(Goa) (99.00%)
2	Faults Repair		
2.2	% of faults repaired by next working day (>90%)	>90%	MTNL - Delhi & Mum (62.69%) Tata (TTML) - Mah. & Mum. (90.00%)
2.3	% of faults repaired within 3 working day	=>99%	MTNL - Delhi & Mum. (81.98%), Tata (TTSL) - All India (96.00%), TATA(TTML) - Mah. & Mum. (97.00%)
3	Billing Performance		
3.5	%age of cases to whom refund of deposits is made within 60 days of closures	100% within 60 days	BSNL - All India (91.00%) MTNL - Delhi & Mum (64.43%)

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

Chapter 5 :

Performance of Cable TV, DTH and Radio Broadcasting Services

Table 5.1: Key Parameters - Broadcasting & Cable TV Services

S.No	Parameter	Sep-21	Dec-21
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	906	909*
2	Number of Pay TV Channels as reported by broadcasters	348	350
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	1745	1753#
4	Number of FM Radio Stations (excluding All India Radio)	385	386
5	Number of pay DTH Operators	4	4
6	Number of Operational Community Radio Stations	339	343
7	Number of total active Subscribers with pay DTH operators (in million)	68.89	68.52

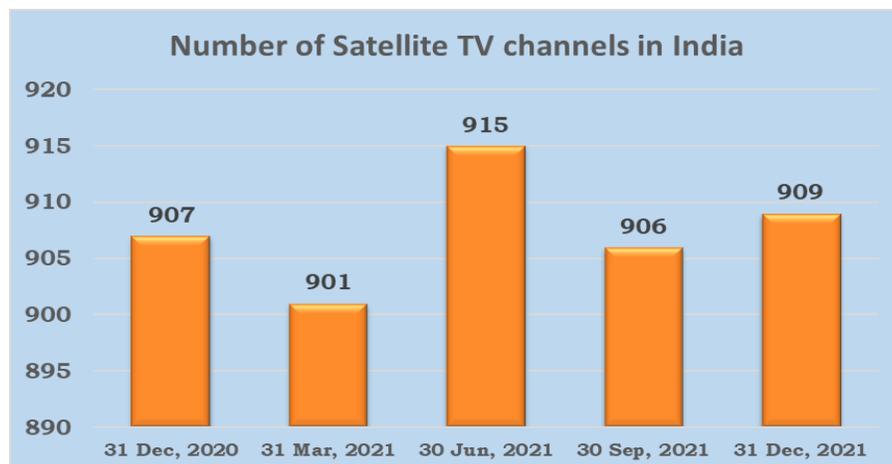
Source - https://mib.gov.in/all_broadcasting_documents

* Source- MIB (broadcastseva.gov.in/webpage-User-tvchannels)-as on 31.10.2021

A. Satellite TV Channels

5.1 A total of **909** private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/both uplinking & 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

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

Type of Permission	Number of channels	Remarks
Uplinking only	16	TV channels uplinked from India but downlinked abroad only
Downlinking only	70	TV channels uplinked from abroad but downlinked only in India
Both Uplinking & downlinking	823	TV channels uplinked from India and also downlinked only in India
Total	909	

Out of 909 permitted satellite TV channels, 893 channels are available for downlinking in India.

Pay TV Channels

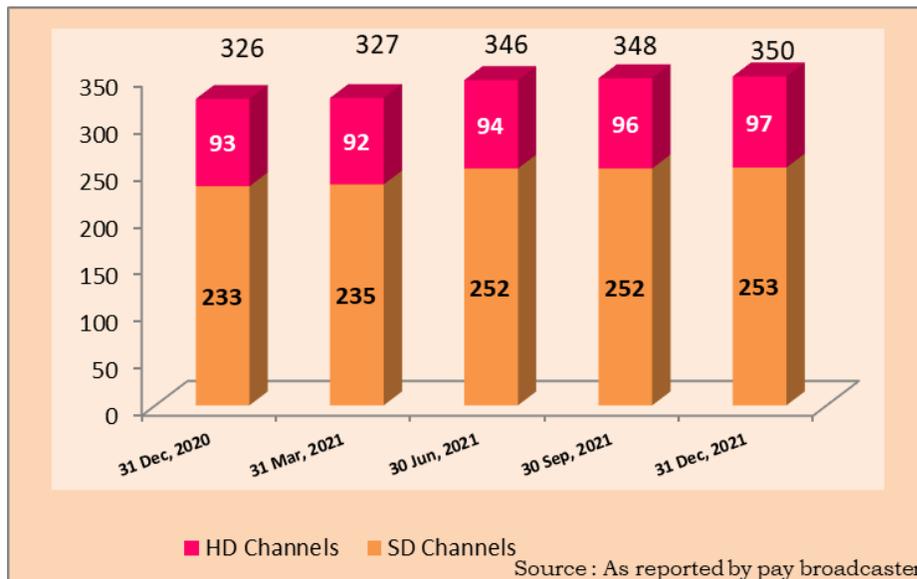
5.2 As per the reporting done by broadcasters in pursuance of the Tariff Order dated 3rd March 2017 as amended, out of 893 permitted satellite TV channels which are available for downlinking in India, Out of **350** pay channels, **253** are SD satellite pay TV channels and **97** are HD satellite pay TV channels. Apart from these pay channels reported to TRAI, all other channels, available for downlinking in India, are considered as Free to Air (FTA) channels. A list of pay TV channels offered by broadcasters for subscribers as reported to TRAI is attached as Annexure-5.1. Chart-5.2 depicts total number of Pay

satellite TV channels and FTA satellite TV channels available for downlinking in India during last one year. **Chart-5.3** depicts total number of SD satellite Pay TV channels and HD satellite Pay TV channels during last one year.

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



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



B. Cable TV Sector

5.3 As on 31st December 2021, there are 1753 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 5.3: Subscriber base of major MSOs/HITS operators at the end of December, 2021 (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 Ltd	7,906,424
2.	Siti Networks Ltd	7,443,265
3.	Hathway Digital Ltd	5,480,327
4.	Den Networks Ltd	4,600,430
5.	Thamizhaga Cable TV Communication Pvt Ltd	3,864,781
6.	Kerala Communicators Cable Ltd	3,010,793
7.	Tamil Nadu Arasu Cable TV Corporation Ltd	2,746,828
8.	NXT Digital Ltd (HITS)	2,245,427
9.	KAL Cables Pvt. Ltd	2,098,600
10.	Fastway Transmissions Pvt Ltd	2,074,462
11.	V K Digital Network Pvt. Ltd	1,913,630
12.	NXT Digital Ltd (Cable TV)	1,254,212
13.	Asianet Digital Network Pvt. Ltd	1,174,814

C. Direct-to-Home (DTH) Sector

5.4 Since its introduction in the year 2003, Indian DTH service have displayed a phenomenal growth. During the quarter ending 31st December, 2021, there were 4 pay DTH service providers in India. A list of DTH Operators is attached as **Annexure 5.3**.

5.5 Pay DTH has attained total active subscriber base of around 68.52 million. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). The total active subscriber base has decreased from 68.89 million in September 2021 to 68.52 million in December 2021.

5.6 Quarterly growth in the DTH sector in terms of the total active subscriber base and market share of DTH operators in terms of percentage of total active subscribers during the quarter ending 31st December 2021 is depicted in the following charts: -

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

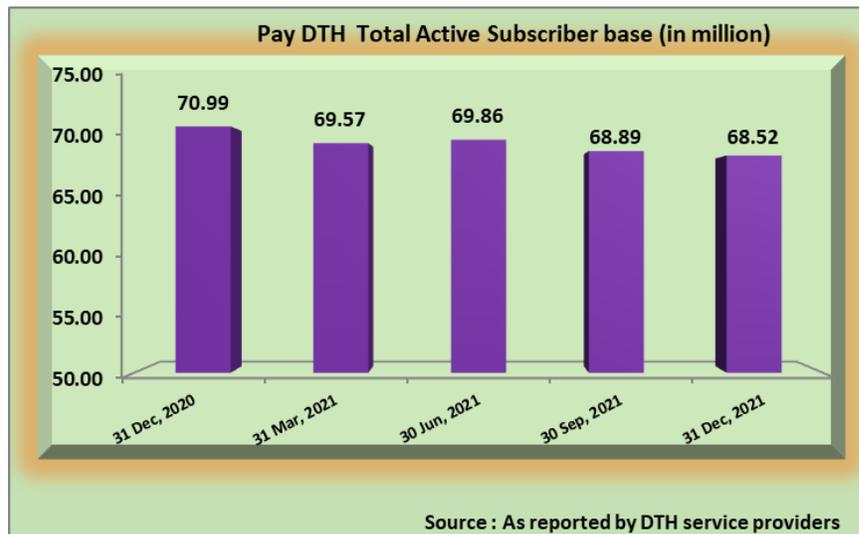
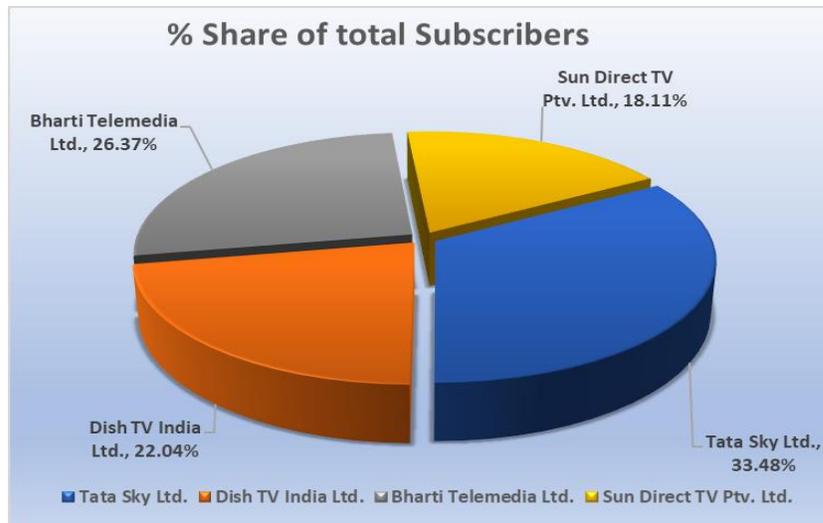


Chart 5.5 : Market share of DTH Operators

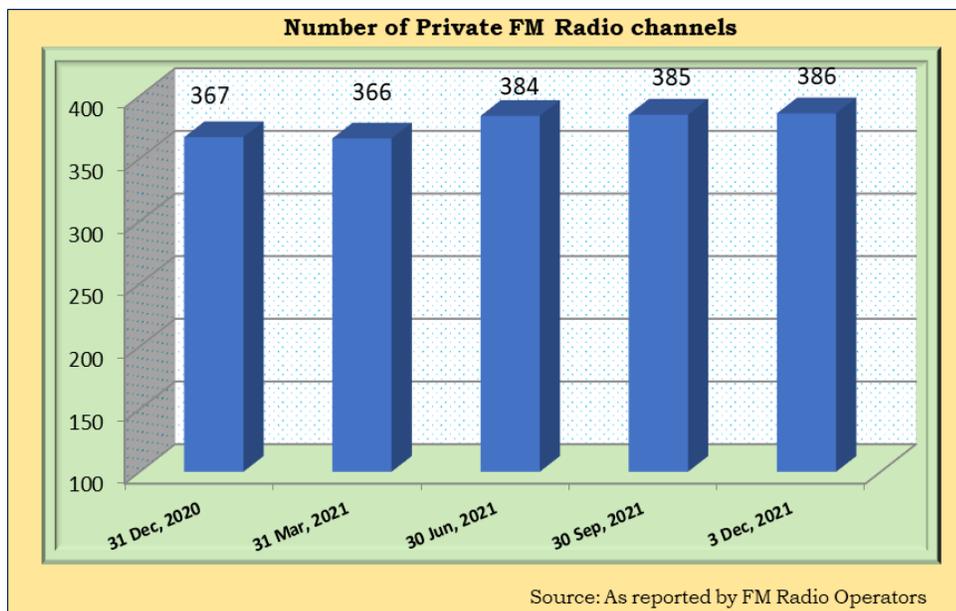


Source : As reported by DTH service providers

D. FM Radio Services

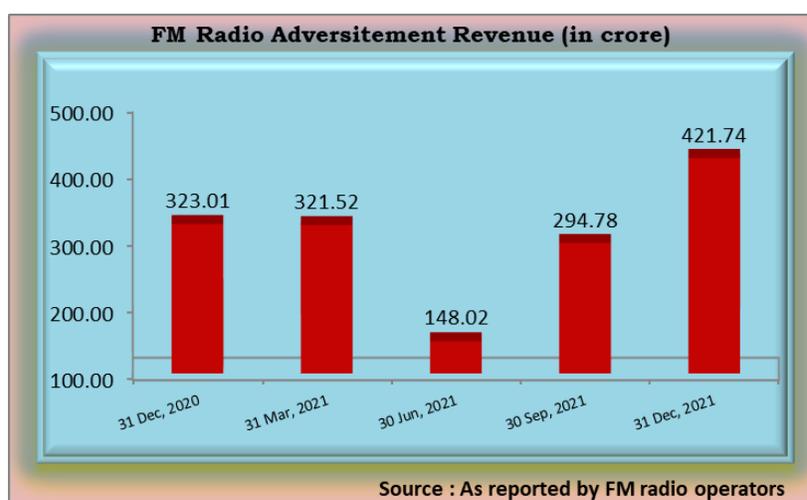
5.7 Apart from the radio channels operated by All India Radio – the public broadcaster, as per the data reported by FM Radio operators to TRAI, as on 31st December 2021, there are 386 operational private FM Radio channels in 113 cities operated by 36 private FM Radio operators. During the quarter ending 31st December 2021, one new private FM Radio channel in the city of Leh by M/s Sambhaav Media Limited and one new private FM Radio channel in the city of Kargil by M/s JCL Infra Private Limited have become operational. Further, M/s Sarthak Films Private Limited has reported about closing the operation of its one FM Radio station in the city of Rourkela, Odisha. A list of 113 existing cities with operational private FM radio channels in India, as on 31st December, 2021 is placed at **Annexure 5.4**. The following **chart 5.6** depicts the quarterly growth in private FM Radio stations.

Chart 5.6 : Number of Private FM Radio channels



5.8 The advertisement revenue reported by FM Radio operators during the quarter ending 31st December 2021 in respect of 386 private FM Radio channels is Rs 421.74 crore as against Rs 294.78 crore in respect of 385 private FM Radio channels for the previous quarter i.e. 30th September, 2021.

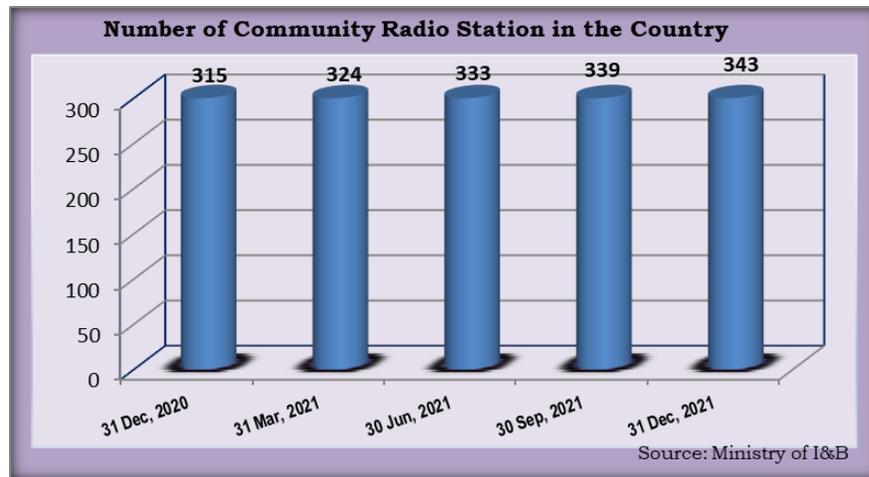
Chart 5.7: Details of Advertisement Revenue submitted by the private FM Radio broadcasters



F. Community Radio

5.9 As on 31st December, 2021, there are 343 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
	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	
Andhra Pradesh	14768586	14241991	31193079	31441078	936	0	9043969	9250321			31390404	29977838	86,396,974	84,911,228	-1485746
Assam	2896364	2751705	9666469	9863684	0	0	3097802	3148812			8692859	8469432	24,353,494	24,233,633	-119861
Bihar	10973747	10577260	36289924	36617800	145	0	5543665	6055483			34130700	34164308	86,938,181	87,414,851	476670
Delhi	15812011	15994885	15829346	16083381	327	208			2155755	2153573	18605915	18363659	52,403,354	52,595,706	192352
Gujarat	24305580	23790340	11842855	11706924	167	109	5676308	5557094			26862748	26419800	68,687,658	67,474,267	-1213391
Haryana	8027162	7912039	5685403	5758268	49	19	4950543	5008936			9344716	8964965	28,007,873	27,644,227	-363646
Himachal Pradesh	605149	581906	3327816	3346476	93	93	2700415	2731558			3759318	3685363	10,392,791	10,345,396	-47395
Jammu & Kashmir	454075	460394	5513460	5585762	0	0	1306794	1314310			4417890	4440438	11,692,219	11,800,904	108685
Karnataka	8531587	8249302	30292369	30515006	1209	691	7059485	6883854			20946637	20628775	66,831,287	66,277,628	-553659
Kerala	16550717	16408387	7379352	7655543	307	185	10714520	10713151			9463239	9590349	44,108,135	44,367,615	259480
Madhya Pradesh	20787588	20461601	15459137	15204073	0	0	6007209	6016461			36605321	35689111	78,859,255	77,371,246	-1488009
Maharashtra	29368881	28665552	20110593	20034296	0	0	6576590	6626836			37765173	37083113	93,821,237	92,409,797	-1411440
Mumbai	11579610	11587899	9469184	9457931	2124	1380			1113968	1103707	13040989	12027759	35,205,875	34,178,676	-1027199
North East	1268515	1217071	5437472	5541403	0	0	1353900	1355620			3969330	3889037	12,029,217	12,003,131	-26086
Orissa	2069538	2002780	10990316	11054462	150	66	6344305	6230390			14346857	13887968	33,751,166	33,175,666	-575500
Punjab	8864450	8871081	11480248	11698618	222	144	5388005	5340564			12244618	11889299	37,977,543	37,799,706	-177837
Rajasthan	11626794	11463411	21589292	21437654	222	183	6033689	6339200			25442295	24090835	64,692,292	63,331,283	-1361009
Tamil Nadu	18421575	18029076	27595251	28022805	468	317	9941356	9999921			25600655	24899646	81,559,305	80,951,765	-607540
UP(E)	20781191	20531856	36561974	35978842	0	0	11132440	11135129			33392337	32816775	101,867,942	100,462,602	-1405340
UP(W)	19343161	19033068	17902978	17844869	146	21	5676052	5707962			21534971	21620210	64,457,308	64,206,130	-251178
Kolkata	6457356	6313538	5553511	5551034	23	2	2332993	2282912			10351062	10207503	24,694,945	24,354,989	-339956
West Bengal	16496690	16369180	15295963	15369706	506	316	2571430	2659841			22929592	22910130	57,294,181	57,309,173	14992
Total	269,990,327	265,514,322	354,465,992	355,769,615	7,094	3,734	113,451,470	114,358,355	3,269,723	3,257,280	424,837,626	415,716,313	1,166,022,232	1,154,619,619	-11402613

Annexure 1.2: Wireline Subscriber Base

Sl. No	Service Area	Bharti Airtel		Reliance Com.		Quadrant		Tata Tele.		MTNL		BSNL		Vodafone Idea		Reliance Jio		Total		Net Additions
		Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	Sep-21	Dec-21	
1	Andhra Pradesh	309830	331146	20879	20421			155394	156777			689207	685587	61415	61800	525501	612321	1,762,226	1,868,052	105,826
2	Assam		0		0				0			103859	102699	3450	3090	72561	84138	179,870	189,927	10,057
3	Bihar		0	20	20			7804	7821			180193	178530	1770	1740	178590	213702	368,377	401,813	33,436
4	Delhi	1671190	1726905	30932	29875			136965	138496	1300197	1292016		-	93659	86377	476030	529284	3,708,973	3,802,953	93,980
5	Gujarat	135718	141669	3697	3466			77684	77024			457252	426891	45017	43306	306146	336570	1,025,514	1,028,926	3,412
6	Haryana	37733	39709	0	0			35433	33788			182657	182248	360	360	53861	60652	310,044	316,757	6,713
7	Himachal Pradesh	0	0	0	0			1620	1587			89944	87852	30	30	22017	26389	113,611	115,858	2,247
8	Jammu & Kashmir	30018	34236	0	0			0	0			108505	104446	0	30	110386	126060	248,909	264,772	15,863
9	Karnataka	824939	876762	24527	23731			242814	245416			873892	871076	98712	93657	364046	429875	2,428,930	2,540,517	111,587
10	Kerala	72949	74927	5105	4838			18681	18668			1087505	1062807	8780	8770	111820	130981	1,304,840	1,300,991	-3,849
11	Madhya Pradesh	318194	339682	5	95			11059	10951			299002	289096	2765	9500	269926	314866	900,951	964,190	63,239
12	Maharashtra	201921	240718	11154	10683			216790	213806			772380	736465	29653	24673	132163	145434	1,364,061	1,371,779	7,718
13	Mumbai	442634	461513	57145	53726			479353	480526	1504117	1462573		0	112805	107871	478307	533097	3,074,361	3,099,306	24,945
14	North East	0	0		0			0	0			83339	80197	330	330	59906	70448	143,575	150,975	7,400
15	Orissa	0	0	6	4			8381	8353			196630	190624	6570	3670	82238	101190	293,825	303,841	10,016
16	Punjab	171608	179032	1706	1668	198910	211745	12887	13223			263568	257504	2265	2100	128710	145064	779,654	810,336	30,682
17	Rajasthan	117361	128159	4130	4007			12080	12197			307576	296733	13320	15200	168146	195944	622,613	652,240	29,627
18	Tamil Nadu	627786	650686	24094	23321			117917	117937			1054202	1033111	38565	37880	378477	426886	2,241,041	2,289,821	48,780
19	U.P.(E)	103756	110259	21	20			7944	7979			191367	187383	23610	20070	206944	239448	533,642	565,159	31,517
20	U.P.(W)	72913	78709	7	7			4279	4427			206738	200908	7350	3250	217293	254497	508,580	541,798	33,218
21	Kolkata	161358	167235	6915	6516			46187	45924			452866	389729	15330	9930	199605	234916	882,261	854,250	-28,011
22	West Bengal	0	0	12	12			2447	2410			230297	229754	120	120	102788	120837	335,664	353,133	17,469
	Total	5,299,908	5,581,347	190,355	182,410	198,910	211,745	1,595,719	1,597,310	2,804,314	2,754,589	7,830,979	7,593,640	565,876	533,754	4,645,461	5,332,599	23,131,522	23,787,394	655,872

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 30.09.2021	Number of PCOs as on 31.12.2021	Net PCO increase/decrease as on 31.12.2021	Percentage Growth/Decline as on 31.12.2021
1	Andhra Pradesh	Bharat Sanchar Nigam Limited	6,134	5,421	-713	-11.62%
		Bharti Airtel	181	181	0	0.00%
2	Assam	Bharat Sanchar Nigam Limited	536	512	-24	-4.48%
3	Bihar	Bharat Sanchar Nigam Limited	2,872	2,625	-247	-8.60%
4	Delhi	Bharti Airtel	330	330	0	0.00%
		MTNL	7,224	6,906	-318	-4.40%
5	Gujarat	Bharat Sanchar Nigam Limited	3,455	3,239	-216	-6.25%
		Bharti Airtel	14	14	0	0.00%
6	Haryana	Bharat Sanchar Nigam Limited	373	348	-25	-6.70%
		Bharti Airtel	133	133	0	0.00%
7	Himachal Pradesh	Bharat Sanchar Nigam Limited	548	548	0	0.00%
8	Jammu & Kashmir	Bharat Sanchar Nigam Limited	294	267	-27	-9.18%
9	Karnataka	Bharat Sanchar Nigam Limited	5,669	4,195	-1,474	-26.00%
		Bharti Airtel	2,600	2,560	-40	-1.54%
10	Kerala	Bharat Sanchar Nigam Limited	8,465	7,430	-1,035	-12.23%
		Bharti Airtel	374	374	0	0.00%
11	Kolkata	Bharat Sanchar Nigam Limited	1,557	1,522	-35	-2.25%
		Bharti Airtel	26	26	0	0.00%
12	Madhya Pradesh	Bharat Sanchar Nigam Limited	2,899	1,446	-1,453	-50.12%
		Bharti Airtel	0	0	0	
13	Maharashtra	Bharat Sanchar Nigam Limited	4,941	4,373	-568	-11.50%
		Bharti Airtel	0	0	0	
14	Mumbai	Bharti Airtel	50	50	0	0.00%
		MTNL	12,092	10,890	-1,202	-9.94%
15	North East	Bharat Sanchar Nigam Limited	613	598	-15	-2.45%
16	Odisha	Bharat Sanchar Nigam Limited	341	325	-16	-4.69%
17	Punjab	Bharat Sanchar Nigam Limited	1,061	995	-66	-6.22%
		Bharti Airtel	0	0	0	
		Quadrant	461	439	-22	-4.77%
18	Rajasthan	Bharat Sanchar Nigam Limited	757	687	-70	-9.25%
		Bharti Airtel	209	209	0	0.00%
19	TN including Chennai	Bharat Sanchar Nigam Limited	12,544	12,131	-413	-3.29%
		Bharti Airtel	0	0	0	
20	UP - East	Bharat Sanchar Nigam Limited	3,329	3,329	0	0.00%
		Bharti Airtel	0	0	0	
21	UP - West	Bharat Sanchar Nigam Limited	1,440	1,334	-106	-7.36%
		Bharti Airtel	0	0	0	
22	West Bengal	Bharat Sanchar Nigam Limited	201	197	-4	-1.99%
	Total		81,723	73,634	-8,089	-9.90%
	Total (In Lakhs)		0.82	0.74	-0.08	-9.90%

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 30.9.2021	Number of VPTs as on 31.12.2021	Net VPTs increase/ decrease as on 31.12.2021	Percentage Growth/ Decline as on 31.12.2021
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 31.12.2021**

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
1	Reliance Jio Infocomm Ltd	0	420283175	420283175
2	Bharti Airtel Ltd.	20587733	210065491	230653224
3	Vodafone Idea Limited	13628068	122623217	136251285
4	Bharat Sanchar Nigam Ltd.	2789141	25537878	28327019
5	Atria Convergence Technologies Pvt. Ltd.	0	2005924	2005924
6	Hathway Cable & Datacom Pvt. Ltd.	0	1077425	1077425
7	You Broadband India Pvt. Ltd.	14434	825860	840294
8	ONEOTT iNTERTAINMENT LTD (Planet E-Shop Holdings India Ltd.)	0	771650	771650
9	GTPL Broadband Pvt. Ltd.	0	718778	718778
10	Mahanagar Telephone Nigam Ltd.	59663	624451	684114
11	Excitel Broadband Private Limited	0	641351	641351
12	Kerala Vision Broadband Ltd.	0	614880	614880
13	Alliance Broadband Services Pvt. Ltd.	0	498650	498650
14	Netplus Broadband Services Pvt. Ltd	0	456902	456902
15	RailTel Corporation of India Ltd.	0	431168	431168
16	Asianet Satellite Communications Ltd.	0	371600	371600
17	Tikona Infinet Pvt Ltd	0	289572	289572
18	D-Vois Communication Private Limited	0	277817	277817
19	Intech Online Pvt. Ltd.	0	273542	273542
20	QUICKEST BROADBAND PVT. LTD.	0	268543	268543
21	Tata Sky Broadband Private Limited	0	268543	268543
22	Quadrant Televentures Ltd.	53	234761	234814
23	Joister Infoserve Pvt. Ltd.	0	204244	204244
24	Excell Media Pvt. Ltd.	0	143177	143177
25	Indinet Service Pvt. Ltd	0	122812	122812
26	DEN Broadband Limited	0	111640	111640
27	Wish Net Pvt. Ltd.	0	105336	105336
28	Limras Eronet Broadband Service Pvt Ltd	0	94990	94990
29	Five Network Solution (India) Ltd.	0	91377	91377
30	Airnet Cable & Datacom Private Limited	86129	0	86129
31	ANI NETWORK PVT LTD	0	85131	85131
32	GTPL KCBPL Broadband Private Limited	0	76860	76860
33	SITI Broadband Services Pvt. Ltd.	0	75920	75920
34	Fusionnet Web Services Pvt. Ltd.	0	70434	70434
35	Digital Satellite Connect Private Limited	0	58981	58981
36	Ishan Netsol Pvt Ltd	0	57909	57909
37	Dwan Supports Pvt. Ltd.	0	52418	52418

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
38	K NET Solutions Private Limited	0	50487	50487
39	Tata Teleservices Limited	82	42811	42893
40	Instanet Technologies Pvt. Ltd.	0	35067	35067
41	Honesty Net Solutions (I) Pvt Ltd	1	34465	34466
42	DNA Infotel Pvt Ltd	0	33118	33118
43	Wan and Lan Internet Pvt. Ltd.	0	33100	33100
44	Microscan Infommtech Private Limited	0	32374	32374
45	Srisitsanchar Webnet Limited	0	26977	26977
46	Shyam Spectra Private Limited	0	24484	24484
47	Sikka Broadband(P) Ltd.	0	24432	24432
48	Ethernet Xpress(I) Pvt. Ltd.	0	24358	24358
49	Genstar Network Solutions Pvt. Ltd.	0	23816	23816
50	Digital Network associates Pvt. Ltd	0	23583	23583
51	Juweriyah Networks Private Limited	0	23239	23239
52	Kernel Fibernet Online Network Pvt Ltd	0	21987	21987
53	Ortel Communication Ltd.	0	21863	21863
54	Kings Broadband Pvt. Ltd	0	21823	21823
55	Multicraft Digital Technologies Private Limited	0	21156	21156
56	Radinet Info Solutions Pvt Ltd	0	21061	21061
57	Tachyon Communications Private Limited	0	21049	21049
58	Weebo Networks Pvt Ltd.	0	20714	20714
59	Readylink Internet Services Pvt Ltd	0	20039	20039
60	Nuron Networks Private Limited	0	19960	19960
61	Rajesh Digital & Datacom Pvt. Ltd.	0	19762	19762
62	RI Networks Pvt Ltd	0	19600	19600
63	Sai Prasad Internet Services Pvt. Ltd.	0	18818	18818
64	Shree Omkar Infocom Pvt. Ltd.	0	17834	17834
65	DDC BROADBAND PRIVATE LIMITED	0	17701	17701
66	Yashash Cable Network Pvt Ltd	0	17640	17640
67	United Telecoms Ltd.	0	17015	17015
68	Airlink Communications Pvt. Ltd	0	16209	16209
69	Stampede Communications Pvt. Ltd.	0	16014	16014
70	Quest Consultancy Pvt. Ltd.	0	15998	15998
71	Tata Communications Limited	158	15400	15558
72	City Online Services Ltd	0	15304	15304
73	ESTO BROADBAND Pvt. Ltd.	0	14679	14679
74	Spiderlink Networks Pvt. Ltd.	0	14608	14608
75	Meghbela Cable & Broadband Servies (P) Ltd	0	14462	14462
76	Intermedia Cable Communication Pvt Ltd	0	11661	11661
77	Angel Air Network Solutions Private Limited	0	11472	11472

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
78	Ultrahnet Infotech Solution Private Limited	0	10950	10950
79	DL GTPL Broadband Pvt. Ltd.	0	10781	10781
80	HYFY Giga Fiber Pvt. Ltd.	0	10750	10750
81	Signum Digital Networks Pvt. Ltd	0	10735	10735
82	Net 9 Online Hathway Private Limited	0	10634	10634
83	Airfiber Networks Pvt. Ltd.	0	10137	10137
84	LM ENERGY & SOFTWARE PVT. LTD.	5745	4361	10106
85	Broadband Pacenet (I) Pvt. Ltd.	0	9684	9684
86	MAHA MEDIACOM INTERNET PVT. LTD.	0	9469	9469
87	INFONET COMM ENTERPRISES PVT LTD	0	9351	9351
88	Cityzone Infonet Pvt. Ltd	0	9171	9171
89	JETWAY Broadband India Pvt Ltd.	0	8960	8960
90	Five Internet Solutions Pvt. Ltd.	0	8028	8028
91	AT Broadband Pvt. Ltd.	0	7874	7874
92	Airconnect Internet Services Pvt. Ltd.	149	7669	7818
93	Apna Telelink Ltd.	0	7750	7750
94	Candor Infosolution Pvt. Ltd.	0	7478	7478
95	ANI BROADBAND SERVICE PVT LTD	3343	4084	7427
96	Siliguri Internet & Cable TV Pvt. Ltd.	0	7420	7420
97	FOXTEL TELECOMMUNICATIONS PVT LTD	0	7325	7325
98	World Phone Internet Services Pvt Ltd	0	7222	7222
99	Balaji Teleworks Development Pvt Ltd	0	7146	7146
100	Kappa Internet Services Pvt Ltd.	0	7137	7137
101	Prisac Aviation Technologies Pvt. Ltd.	0	7071	7071
102	SSCN PVT LTD	0	6972	6972
103	North East Dataa Network Pvt Ltd.	0	6721	6721
104	Skymax Broadband Services Pvt. Ltd.	6700	0	6700
105	WSNS Pvt. Ltd.	0	6642	6642
106	Orange Waves Networks Pvt. Ltd.	0	6119	6119
107	Om Asha Net Pvt. Ltd.	0	6076	6076
108	S S Netcom Pvt. Ltd.	0	6039	6039
109	DEEPNET BROADBAND PRIVATE LIMITED	0	6007	6007
110	Deepnetwork Pvt. Ltd.	0	6007	6007
111	Symbois Creations Pvt. Ltd.	0	5592	5592
112	Wefe Technology Pvt. Ltd.	344	5203	5547
113	Sonali Internet Services Pvt Ltd	0	5375	5375
114	Pacenet Meghbela Broadband Pvt. Ltd.	0	5302	5302
115	Geocity Network Solutions Pvt. Ltd.	0	5167	5167
116	R.G. Technosolutions Pvt. Ltd.	0	5132	5132
117	GBPS Networks Pvt. Ltd.	0	5105	5105
118	B2H Infonet Pvt. Ltd.	0	5072	5072

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
119	Southern Online Bio Technologies Ltd.	0	4874	4874
120	Multinet (Udaipur) Pvt. Ltd.	0	4844	4844
121	IAXN Telecom Pvt. Ltd.	0	4766	4766
122	Dsouza Infotainment Pvt. Ltd.	0	4677	4677
123	Nextra Teleservices Pvt. Ltd.	0	4644	4644
124	Wnet Telecom Private Limited	0	4511	4511
125	delDSL Internet Pvt Ltd	2105	2105	4210
126	Swiftmail Communications Ltd.	0	4093	4093
127	LALAT INTERNET SERVICE PVT LTD	0	4071	4071
128	Sri Nagar Net Tech Pvt. Ltd.	0	4034	4034
129	Blazenet Ltd.	0	4017	4017
130	Bittel Telecom Pvt.Ltd	0	4016	4016
131	Getway Broadband Pvt. Ltd.	0	3927	3927
132	SUPER SONIC BROADBAND PVT LTD	0	3915	3915
133	Five Net Service Provider Pvt. Ltd.	0	3848	3848
134	SNS Internet Services Pvt. Ltd.	0	3799	3799
135	Arktel Networks Pvt. Ltd. (Formerly Know Sifi Online Pvt. Ltd.)	1853	1856	3709
136	Shine Communications Pvt. Ltd.	0	3659	3659
137	Mukand Infotel Pvt. Ltd.	0	3634	3634
138	Siddhant Broadband Pvt Ltd	0	3623	3623
139	Maharaj Netsol Pvt Ltd	0	3580	3580
140	Antarjal IT Communication Pvt. Ltd.	0	3510	3510
141	Fiberzone communication Pvt Ltd	0	3250	3250
142	SFOUR CABLENET PVT LTD	3054	185	3239
143	VRD Web Services Pvt. Ltd.	0	3200	3200
144	Rainbow Internet teleservices Pvt Ltd	10	3184	3194
145	MINDAGE BROADCASTING Pvt. LTD	0	2908	2908
146	Renu Giga Fiber Pvt. Ltd.	0	2904	2904
147	Airgenie Communications Pvt. Ltd.	0	2822	2822
148	AS Broadband Pvt Ltd	0	2822	2822
149	EI Dot Com Pvt Ltd	0	2804	2804
150	El Dot Com Pvt Ltd	0	2804	2804
151	CSC e-Governance Services India Ltd.	0	2779	2779
152	Sherie Plexus ISP Pvt. Ltd.	0	2779	2779
153	Deenet Services Pvt Ltd	0	2756	2756
154	NETVISION AWADH NETWORKS PVT LTD	0	2709	2709
155	TGN NETWORKS PVT LTD	0	2679	2679
156	CLASSIC INTERNET AND CABLE SERVICES PVT LTD	2646	0	2646
157	Nirav Infoway Pvt. Ltd.	0	2640	2640
158	TRANSMEDIA TECHNOLOGIES (AP) PVT LTD	0	2639	2639

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
159	WOW Solutions and Systems Pvt. Ltd	0	2631	2631
160	NISS INTERNET SERVICES PVT. LTD.	0	2535	2535
161	Chandra Net Pvt. Limited	0	2435	2435
162	STN INFOTECH PRIVATE LIMITED	0	2424	2424
163	Swiftnet Broadband Pvt Ltd	0	2417	2417
164	Kumar Cable Digital Network Pvt. Ltd.	0	2412	2412
165	Pink Broadband Services Pvt. Ltd.	643	1761	2404
166	Lotus Broadband Pvt Ltd	0	2356	2356
167	HIGHTEC NETWORK SOLUTIONS (OPC) PRIVATE LIMITED	0	2321	2321
168	Correl IT Services Pvt. Ltd.	1523	722	2245
169	Bakliwal Telecom Services Pvt. Ltd.	0	2236	2236
170	Macro Signal Pvt. Ltd	0	2184	2184
171	Uzaina Business India Pvt Ltd	0	2170	2170
172	Lbs Infoway India Pvt. Ltd.	0	2141	2141
173	Channel III Internet Pvt. Ltd.	0	2140	2140
174	Foxxcell Communications Pvt. Ltd.	0	2117	2117
175	Net Access Internet India Private Limited	0	2087	2087
176	Airnetz Broadband Services Pvt. Ltd.	527	1545	2072
177	REALWIRE EXPRESS NETWORK PRIVATE LIMITED	0	2070	2070
178	Vision Smartlink Networking Pvt. Ltd.	0	2048	2048
179	Shikhar BroadbandEnterprises Pvt. Ltd.	0	2000	2000
180	Scud Communication Pvt Ltd	0	1981	1981
181	SMART NET INDIA PVT. LTD.	0	1981	1981
182	SMARTLINK SOLUTIONS PVT. LTD.	0	1965	1965
183	Speed Online.net Pvt. Ltd.	0	1961	1961
184	Galaxynet Connections Pvt. Ltd.	0	1947	1947
185	Jetspot Networks Pvt. Ltd.	0	1936	1936
186	Southnet Broadband Pvt. Ltd.	0	1935	1935
187	Country Online Services Pvt. Ltd.	523	1410	1933
188	Blu Ultraband Internet Services Pvt Ltd	0	1930	1930
189	Mayekar Broadband Pvt. Ltd.	0	1911	1911
190	CredenceIS Computing Pvt. Ltd.	10	1900	1910
191	CITY ONLINE AP PVT LTD	0	1906	1906
192	Rida Communication Pvt. Ltd.	857	1014	1871
193	First Mile Digital Private Limited	0	1860	1860
194	SBR Telecom Pvt. Ltd.	530	1330	1860
195	Sphier Infotech Pvt. Ltd.	0	1859	1859
196	Osbnnet Broadband Pvt. Ltd.	0	1855	1855
197	Exnet Broadband Pvt. Ltd.	0	1780	1780
198	Capture Network Systems Pvt. Ltd.	247	1517	1764

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
199	Maruthi Cable & Data Pvt. Ltd.	0	1748	1748
200	DNS SKYLINK PVT. LTD.	0	1728	1728
201	Assistive networks & technologie Pvt Ltd	0	1701	1701
202	Syntego Technologies India Pvt. Ltd.	0	1694	1694
203	Protoact Digital Network Pvt. Ltd.	0	1683	1683
204	Karunay Internet Pvt. Ltd.	0	1667	1667
205	Bakcom Networks India Pvt Ltd	0	1638	1638
206	Surround Networks Pvt Ltd	0	1634	1634
207	Venessa Internet Private Limited	0	1613	1613
208	Netlinx Limited	0	1591	1591
209	Charotar Telelink Pvt. Ltd..	0	1578	1578
210	SIS NETWORKS PRIVATE LIMITED	0	1563	1563
211	Teligus Networks Pvt. Ltd	0	1531	1531
212	Speednet Unique Network Pvt. Ltd.	0	1506	1506
213	SHAILDHAR TELECOM SERVICE Pvt Ltd	0	1497	1497
214	ADRI INFOCOM PVT. LTD.	0	1415	1415
215	Kovai Fibernet Pvt. Ltd.	0	1413	1413
216	Netfirre Communications Pvt. Ltd.	0	1408	1408
217	Elyzium Technologies Pvt. Ltd.	0	1405	1405
218	MORE WIFI PRIVATE LIMITED	0	1370	1370
219	Skynet Datacom Pvt. Ltd.	0	1362	1362
220	Click 4 Net Internet Services Pvt. Ltd.	0	1355	1355
221	Wi-Link Network Pvt. Ltd	614	737	1351
222	SS FIBER NET OPTICAL COMMUNICATION PVT LTD	0	1350	1350
223	Speedmaxx Digital Networks Pvt. Ltd.	0	1343	1343
224	NGC Broadband Pvt. Ltd.	2	1317	1319
225	VN ETHERNET INDIA PRIVATE LIMITED	1316	0	1316
226	Gigacast Network Private Limited	0	1314	1314
227	Skyline Infonet Pvt. Ltd.	0	1308	1308
228	JB Jain Broadband Solutions Private Limited.	0	1290	1290
229	Broad Net India Pvt. Ltd.	1167	97	1264
230	MAKS COMMUNICATIONS PVT.LTD.	0	1248	1248
231	Sefaro Networks Pvt. Ltd.	0	1246	1246
232	City Broadband Network Pvt Ltd	63	1177	1240
233	RTEL INTERNET SERVICES PVT LTD	0	1232	1232
234	UNITED STARS NETWORK PRIVATE LIMITED	0	1221	1221
235	VENKATA SAI INTERNET PVT. LTD	0	1219	1219
236	REVOLUTION BROADBAND PVT LTD	0	1177	1177
237	Amar Broadband Pvt. Ltd.	0	1163	1163
238	Reliance Communications Limited	53	1098	1151

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
239	ALIGARH BROADBAND PVT. LTD.	1150	0	1150
240	Flashcom Network Pvt Ltd	0	1147	1147
241	ACN Fiber Pvt. Ltd.	0	1100	1100
242	Trueinet Networks Pvt.Ltd	0	1095	1095
243	Al-Mairah Braodband Pvt. Ltd.	0	1094	1094
244	FASTNET COMMUNICATION PVT. LTD	201	876	1077
245	BLITS GLOBAL TECHNOLOGIES Pvt. LTD	0	1074	1074
246	Mega Hertz Network Pvt Ltd	0	1052	1052
247	FTTX Broadband P Ltd	0	1050	1050
248	RK Broadband Hifi Services Pvt Ltd	0	1048	1048
249	Mega Hertz Network Solutions Pvt Ltd	0	1045	1045
250	DA Smartzone Pvt. Ltd.	0	1039	1039
251	Net First Communication Pvt Ltd	0	1018	1018
252	SprIOC Web Private Limited	0	1014	1014
253	Hostaxis Network Pvt Ltd	0	1009	1009
254	Oxynet Telecommunications Pvt. Ltd	0	997	997
255	Poem Techno Pvt. Ltd.	0	985	985
256	Hardwork Cable & Internet services Pvt. Ltd.	0	979	979
257	AHM Digital Network Pvt Ltd	0	970	970
258	Shrisai Shavenk Technologies Pvt. Ltd.	0	968	968
259	Anushree Digital Network Pvt Ltd	0	944	944
260	NetMagic Solutions(P) Ltd.	0	936	936
261	Grace Teleinfra Pvt Ltd	0	927	927
262	Veloxr Telecom Pvt. Ltd. (Shree Balaji Infoway Pvt Ltd.)	0	927	927
263	Sampath Venkateswara Communications Pvt. Ltd.	0	913	913
264	Sanchit Infocom Pvt Ltd	0	909	909
265	NETSAT COMMUNICATION PVT. LTD.	0	897	897
266	TOUCHNET BROADBAND SERVICES PVT LTD	0	886	886
267	ALWAR ONLINE PVT LTD	12	868	880
268	Ficus Telecom Pvt. Ltd.	0	873	873
269	Packenet Solutions Pvt. Ltd.	24	844	868
270	SKY ONLINE TECHNOSYSTEM PVT LTD	0	863	863
271	Darer Internet Services Pvt Ltd	0	849	849
272	Bluwaves Internet Services India Pvt. Ltd.	0	848	848
273	DREAMLINK TECHNOLOGIES PVT LTD	0	848	848
274	GREEN TECH NET COM PRIVATE LIMITED	0	830	830
275	Nandini Broadband Pvt. Ltd	0	819	819
276	Daksh Broadband Pvt Ltd	0	816	816
277	Spectram Telecom Pvt.Ltd	156	650	806

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
278	BHR BROADBAND Pvt. LTD	805	0	805
279	AU Networks Pvt. Ltd.	0	803	803
280	Jiffy Cable & Datacom Pvt. Ltd.	0	779	779
281	SB Broadband Services Pvt. Ltd.	0	775	775
282	CATLA IT&ENGG. CO. PVT LTD.	0	770	770
283	Datawave IT solutions Pvt. Ltd.	0	763	763
284	Bapu Internet Services Pvt .Ltd	744	0	744
285	Reticule Infotech Pvt. Ltd.	0	737	737
286	Wyris Network Pvt. Ltd.	0	730	730
287	Rajesh Patel Net Services Pvt. Ltd.	2	727	729
288	Telosy Telecom Pvt. Ltd.	0	729	729
289	LIMERICK TECHNOLOGIES PRIVATE LIMITED	0	727	727
290	Shree Manoranjan Broadband Pvt. Ltd.	0	726	726
291	Aeroway Networks Pvt Ltd.	0	725	725
292	VIVA Communications Pvt Ltd	0	725	725
293	Spirenet Digital Communications Pvt. Ltd.	0	720	720
294	NEONET COMMUNICATIONS PVT LTD	0	708	708
295	CNS Infotel Services Pvt. Ltd.	0	707	707
296	Power Grid Corporation of India Ltd.	0	707	707
297	Cloudnet Communications Pvt. Ltd.	0	706	706
298	Shineplus Networks Pvt Ltd	0	702	702
299	Touch Net India Pvt. Ltd.	0	702	702
300	Vimal Telecom Pvt. Ltd	0	700	700
301	CJ Online Pvt. Ltd.	0	694	694
302	TOUCH NET INDIATELESERVICE PRIVATE LIMITED	0	689	689
303	Smart Wi5 Pvt. Ltd.	0	686	686
304	Software Technology Park of India(STPI)	0	684	684
305	Aerocast Networks Pvt Ltd.	0	683	683
306	Gloiosa Infotel IT Services Pvt Ltd.	500	182	682
307	HPS DIGITAL BROADBAND PVT LTD	0	672	672
308	Unitel Media Pvt. Ltd.	671	0	671
309	SVD DIGITAL NETWORKS PVT LTD	0	670	670
310	Kosmic Broadband Pvt Ltd	669	0	669
311	Craze IT Solutions Pvt Ltd	0	667	667
312	Bandwidth Infinity Private Limited	0	665	665
313	Primenet Global Ltd.	0	665	665
314	BASS NETWORKS PRIVATE LIMITED	0	661	661
315	POWERNET TELECOM PVT LTD	0	649	649
316	Unisas Netserve Pvt Ltd	0	644	644
317	iAIRONET COMMUNICATION PVT LTD	0	631	631

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
318	Sarva Air World Network Pvt Ltd	0	622	622
319	Excel UG Pvt. Ltd.	0	620	620
320	VICTORY DIGITAL NETWORK PRIVATE LIMITED	0	620	620
321	Global India Tele Infra Pvt. Ltd.	0	615	615
322	Gleam Worldwide Services Pvt. Ltd.	0	613	613
323	Fastx Broadband Private Limited	0	612	612
324	Gowio Networks Pvt. Ltd	0	608	608
325	Windsor Internet Pvt. Ltd.	0	608	608
326	Enhancelink CoreportPvt. Ltd	0	604	604
327	RSBS Online Services Pvt. Ltd.	0	595	595
328	Briskcom Infoway Pvt. Ltd.	0	592	592
329	AMK SUNBEAM COMMUNICATION PRIVATE LIMITED	0	588	588
330	Sivaan Infocom Pvt. Ltd	0	586	586
331	Omata Net Pvt. Ltd.	0	583	583
332	KGS NETWORKS PRIVATE LIMITED	0	575	575
333	Alphanet Broadband Pvt Ltd	0	571	571
334	Anish Infoline Pvt. Ltd.	0	570	570
335	Acegen Broadband Pvt Ltd.	0	567	567
336	Verizon Communications India Pvt. Ltd.	284	283	567
337	SG Broadband Internet Pvt. Ltd.	0	562	562
338	Stackbit Internet Services Pvt. Ltd.	0	560	560
339	Gazillio Technologies Pvt. Ltd.	0	557	557
340	Alegra Communication Pvt Ltd	0	552	552
341	HYOSEC SOLUTIONS Pvt. LTD	0	552	552
342	Digital2Virtual ISP Pvt. Ltd.	0	549	549
343	Panav Network and Communications Private Limited	0	548	548
344	ALLIED IT INFRASTRUCTURE & SERVICES PRIVATE LIMITED	536	0	536
345	MREZHI INTERNET PRIVATE LIMITED	0	524	524
346	Amity Hua Electronics Pvt. Ltd.	0	523	523
347	Fastnet Wire & Wireless Solutions Pvt. Ltd.	420	100	520
348	Raycom Fibers Private Limited	0	514	514
349	Varsha Datacom Services Pvt Ltd	0	514	514
350	Hughes Communications India Ltd.	37	474	511
351	Skylink Fibernet Pvt. Ltd.	0	503	503
352	Clickian Network Pvt. Ltd.	0	502	502
353	KSK Broadband Pvt. Ltd.	0	492	492
354	SAMMY NETWORKS PRIVATE LIMITED	489	0	489
355	Imperium Digital Network Pvt. Ltd.	0	487	487
356	Simplex Broadband Pvt Ltd	0	484	484

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
357	Spider Broadband and Cable Pvt. Ltd.	0	481	481
358	Hightel Digital India Pvt. Ltd.	0	480	480
359	Vayutel Technology Services Pvt Ltd	479	0	479
360	Goodwill Smartlink Pvt. Ltd.	0	475	475
361	NC BROADBAND SERVICES PRIVATE LIMITED	0	472	472
362	MSINFINITY ETHERNET SOLUTIONS PRIVATE LIMITED	471	0	471
363	JBN Online Private Limited.	0	470	470
364	Prompt Infracom Pvt. Ltd.	0	458	458
365	Quick Link Broadband and Services Pvt. Ltd.	0	457	457
366	OPTO Communications Private Limited	0	456	456
367	ARJUN BROADBAND PRIVATE LIMITED	0	453	453
368	Tamana Winet Pvt. Ltd.	0	452	452
369	JMD Internet and Services Pvt. Ltd.	0	450	450
370	Zoram Internet Provider Pvt. Ltd.	330	120	450
371	BPS COMMUNICATION AND SERVICES PRIVATE LIMITED	0	448	448
372	Breitband Technologies Private Limited	0	438	438
373	Digital Telco Network India Pvt Ltd	0	433	433
374	Airwaves Internet Pvt. Ltd.	0	423	423
375	Earthlink Broadband Pvt Ltd	0	420	420
376	Sysnet Broadband Services Pvt. Ltd.	0	417	417
377	Moradabad Internet Services Pvt. Ltd.	0	416	416
378	GOMTESH INFOTECH PVT. LTD.	0	414	414
379	Nandita Infocom Pvt. Ltd.	0	414	414
380	TRACKNET SERVICES PVT LTD	0	413	413
381	Rocketwire Internet Solutions Pvt. Ltd.	0	411	411
382	SIDDIQUI GLOBAL SERVICES PVT LTD	0	411	411
383	Mall & Mall Digiworld Pvt Ltd	0	402	402
384	Voxterria Innovtions Pvt Ltd	143	257	400
385	Pulse Telesystems Pvt. Ltd.	0	392	392
386	Visputes Internet Pvt. Ltd.	0	383	383
387	VORRUCKEN NETWORKS PRIVATE LIMITED	0	382	382
388	DMDS SOLUTIONS PRIVATE LIMITED	0	379	379
389	Starlings Wireless Communications Pvt. Ltd.	0	377	377
390	Cybernet Introtech Pvt Ltd	0	375	375
391	Citylink Broadband Services Pvt. Ltd.	0	370	370
392	KKM Broadband Internet Pvt. Ltd.	0	370	370
393	Starnet Global Pvt. Ltd.	0	370	370
394	Speedster Communication Pvt Ltd	0	362	362
395	Elecon Information Technology Limited	0	361	361

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
396	DIGISCOPE NETWORKS PRIVATE LIMITED	0	360	360
397	Sify Technologies Ltd.	187	170	357
398	Peer Networks Private Limited	0	353	353
399	Barani Data Solutions Private Limited	120	232	352
400	NAS Broadband Pvt. Ltd	132	216	348
401	Genisys Communication Private Limited	346	0	346
402	BSL Technologies Private Limited	0	338	338
403	Malang Solutions Pvt. Ltd.	7	330	337
404	EYE FASTNET SERVICE PRIVATE LIMITED	168	168	336
405	Oistel Telecom Pvt. Ltd.	166	166	332
406	Sai Akshay Internet Services Pvt Ltd.	0	332	332
407	WAVETREE NETWORKS PVT LTD	0	331	331
408	Chaitali Communication (OPC) Pvt. Ltd.	0	330	330
409	LINKIO FIBERNET PRIVATE LIMITED	0	330	330
410	Twincity Communication Private Limited	0	325	325
411	Ashoka Netsol Pvt. Ltd.	0	311	311
412	TRIVNET NETWORKS PRIVATE LIMITED	0	304	304
413	STN Communication & Advertising Pvt Ltd.	0	301	301
414	Apex Netcom India Pvt. Ltd..	0	300	300
415	BHORER ALO CABLE AND BROADBAND PRIVATE LIMITED	0	300	300
416	Development Logics Solutions Pvt. Ltd.	0	298	298
417	Aayu Infonet Pvt. Ltd.	0	297	297
418	VERYS INFOTECH PRIVATE LIMITED	0	295	295
419	SHEEN TELECOM CONSULTANTS PVT LTD	0	292	292
420	Neton Icom Pvt. Ltd.	0	290	290
421	Sense Connect IT Pvt. Ltd.	54	234	288
422	Vardaan Netservices Pvt. Ltd.	0	284	284
423	Nanjil Internet Services Pvt. Ltd.	0	280	280
424	PRONET PRIVATE LIMITED	0	278	278
425	LIGHT AIR TRANSMISSION PVT. LTD.	138	138	276
426	Suncity Broadband Pvt Ltd.	0	275	275
427	S.V.C CABLE NET PRIVATE LIMITED	0	273	273
428	HELM CONSULTANTS PVT LTD	82	190	272
429	J-Link Infotainment Pvt. Ltd.	0	270	270
430	RUSH ME BROADBAND PRIVATE LIMITED	0	269	269
431	Kataria Net Solutions Pvt. Ltd.	0	266	266
432	AUSPICE INFRATAL PVT LTD	0	265	265
433	WAY2AIR NET SOLUTION PVT. LTD.	0	265	265
434	SATH Technologies Pvt Ltd	132	132	264
435	INTERJET INDIA PRIVATE LIMITED	0	262	262

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
436	Texas Connect Private Limited	0	261	261
437	Proline Datatech Service Pvt Ltd	0	260	260
438	Singh Internet Services Pvt. Ltd.	0	260	260
439	VIZCON DIGITAL PVT LTD	260	0	260
440	Cityline Networks Pvt Ltd	0	251	251
441	Microsense Pvt. Ltd.	0	246	246
442	SmartLink Broadband Services	0	246	246
443	Faconet Internet Pvt Ltd	0	245	245
444	SNT BROADBAND PRIVATE LIMITED	0	245	245
445	Skyhunt IT Park Pvt. Ltd.	9	235	244
446	I-Infolink Networks Pvt. Ltd.	0	243	243
447	AEROLINK BROADBAND PRIVATE LIMITED	0	238	238
448	HIPOINT CONNECT PRIVATE LIMITED	0	237	237
449	iBus Network & Infrastructure (P) Ltd.	0	235	235
450	Data Ingenious Global Ltd	232	2	234
451	Shreepad Communications Pvt Ltd.	0	229	229
452	Hipath Netcom Services Pvt. Ltd.	0	228	228
453	Khetan Cable Network (P) Ltd	0	228	228
454	Magnuss Broadband Service Pvt. Ltd.	0	228	228
455	VMO BROADBAND PVT LTD	45	180	225
456	VIVEK NETWORK PRIVATE LIMITED	0	224	224
457	CONSAM TELECOM PRIVATE LIMITED	0	222	222
458	Rmax Broadband Pvt. Ltd.	0	222	222
459	GIGANET DIGITAL NET SERVICES PRIVATE LIMITED	0	221	221
460	Zoram Infonet Pvt. Ltd.	0	220	220
461	ACEBROWSE PVT LTD	0	219	219
462	AIRTECHZONE SERVICES INDIA PRIVATE LIMITED	0	219	219
463	CIT SOLUTIONS PVT. LTD.	0	217	217
464	Yuvaa Communications Private Limited	0	209	209
465	Saibaba Broadband Pvt. Ltd.	0	206	206
466	Ishani Broadband Pvt Ltd	0	200	200
467	ANTARIKSH BROADBAND & WIRELESS SOLUTIONS PVT LTD	0	199	199
468	Vrednus Network Pvt. Ltd.	0	196	196
469	7 Sai Net Solutions Pvt. Ltd.	0	194	194
470	Costel Networks Pvt. Ltd.	27	167	194
471	FABNET SERVICES PVT. LTD.	0	194	194
472	AT&T Global Network Services India Private Limited	0	193	193
473	Netrexo Communications Pvt. Ltd.	0	191	191
474	Frontier Infra Communications(P) Ltd.	0	187	187

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
475	Wi5 Internet Services P Ltd	0	183	183
476	Dhadam Hospitality & Services Pvt. Ltd.	182	0	182
477	Achiever Communication and Services Pvt. Ltd.	0	174	174
478	Noob Technologies Pvt.Ltd	0	172	172
479	Rae Internet Service Provider Pvt Ltd	0	171	171
480	White Stallion Networks Pvt. Ltd.	0	169	169
481	Optisky Fibernet Pvt. Ltd.	0	168	168
482	Fibernetisp Pvt. Ltd.	0	164	164
483	Mana Broadband Pvt. Ltd.	0	163	163
484	Pune Teleinfra Pvt. Ltd.	0	161	161
485	Manas Internet Technology Private Limited	0	160	160
486	Veer Point Pvt. Ltd.	0	158	158
487	S A Internet Solution Pvt Ltd	0	152	152
488	NEXTGEN COMPUSOFT PVT LTD	0	151	151
489	Prateek Netconnect Pvt. Ltd	0	150	150
490	PR SHREE NETWORKS PRIVATE LIMITED	0	146	146
491	Shree Siddhivinayak Cable And Internet Service Provider Private Limited	146	0	146
492	AIRMAX INTERNET PVT LTD	137	6	143
493	Sri Ram Broadband Services Private Limited	0	143	143
494	Vishwakarma Broadband Private Limited	0	143	143
495	Aeroway Networks Pvt Ltd	0	140	140
496	Jaybhole Cable Vision Private Limited	0	136	136
497	Airfiber IT Solutions Pvt Ltd	0	132	132
498	Galvin Broadband (OPC) Pvt. Ltd.	0	130	130
499	Triple Link Pvt. Ltd.	5	125	130
500	PMG Networks Pvt Ltd	0	128	128
501	A-Net Communication India Pvt.Ltd.	4	123	127
502	MLC INTERNET PVT LTD	0	126	126
503	Japra Tele Link Pvt. Ltd.	0	125	125
504	Linkup Networks Pvt. Ltd.	0	125	125
505	Mediatech Communication Pvt. Ltd.	0	125	125
506	Micronova Telesystems Pvt Ltd	0	120	120
507	Levotel Bignet Solutions Private Limited	0	118	118
508	ST Network Solutions Pvt. Ltd.	0	118	118
509	V NET NETWORKS PVT. LTD	0	118	118
510	Sharktel Infocom Pvt. Ltd.	0	116	116
511	Pronoc Technologies Pvt. Ltd.	0	107	107
512	Linkuniverse Communication Private Limited	0	105	105
513	AxomNet Broadband Pvt. Ltd.	0	104	104
514	Alien DNS Private Limited	0	103	103

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
515	Telstra Telecommunications Pvt. Ltd.	0	103	103
516	ROYAL WIRELESS SERVICES PVT LTD	0	102	102
517	Invensys Networks Pvt.Ltd.	0	101	101
518	Flix Broadband Services Private Limited	0	99	99
519	NT CYBRONET PRIVATE LIMITED	0	96	96
520	Cheetah Networks Pvt. Ltd.	0	94	94
521	Magica Networking Solutions Pvt. Ltd.	0	94	94
522	Omkar Net Services Pvt. Ltd.	0	94	94
523	M-TEL Networks (P) Ltd	0	93	93
524	Satpar Infotech Pvt Ltd	0	93	93
525	Clicknet Communication Pvt. Ltd.	90	0	90
526	INFINITY WIRELESS SERVICES PVT. LTD.	0	89	89
527	Wireline solution India Pvt Ltd	0	88	88
528	YNET TELECOM SOLUTIONS PVT. LTD.	0	87	87
529	CINFOGEN PRIVATE LIMITED	0	85	85
530	GigHz IT Solutions Pvt Ltd	0	85	85
531	NR IT Service Pvt. Ltd.	0	85	85
532	ARP INFONET PVT. LTD.	0	84	84
533	DURGA BROADBAND PRIVATE LIMITED	0	83	83
534	Aspire Broadband Pvt. Ltd.	21	60	81
535	Wifi Inter-connect Pvt. Ltd.	0	81	81
536	G-Max IT Services Pvt. Ltd.	0	80	80
537	NR Data Service Pvt Ltd.	0	80	80
538	Yotta Network Services Private Limied	0	80	80
539	Shri Vinayagaa Internet Pvt Ltd	0	74	74
540	Jetato Skynet Services Pvt. Ltd.	0	72	72
541	Ezeenet Internet Solutions Pvt. Ltd.	0	71	71
542	SMPL Networks Pvt. Ltd.	45	26	71
543	Blueweb BroadbandServices Pvt. Ltd.	0	70	70
544	JAI MATA DI TELETRONIX PVT LTD	0	70	70
545	Highnet Broadband & Technologies Pvt. Ltd.	0	66	66
546	Divine Broadband Services Pvt Ltd	0	65	65
547	MALACHANDRA BROADBAND SERVICES PRIVATE LIMITED	0	65	65
548	Netwire Internet Solution Pvt Ltd.	0	64	64
549	Datamax Technologies Pvt Ltd	0	63	63
550	Vidarbha Wi-Fi & Network Services Pvt. Ltd.	0	62	62
551	Sanavi Infotech (OPC) Pvt. Ltd.	0	61	61
552	ANODIC TELENETWORK PRIVATE LIMITED	46	14	60
553	Broadstar Net India Pvt. Ltd.	0	60	60
554	Fibernet Solutions (OPC) Pvt. Ltd.	50	10	60

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
555	Kim Broadband Services Pvt Ltd	0	60	60
556	MABA SAFENET BROADBAND SERVICES PVT LTD	0	60	60
557	Winet Infratel Pvt. Ltd.	30	30	60
558	ASVISH TECHNOLOGY PARTNER (OPC) PVT LTD	0	58	58
559	Delix Net Solutions Private Limited	0	58	58
560	Ekdant Communication Pvt Ltd	0	58	58
561	Hansin IT Services Pvt. Ltd.	0	58	58
562	IndrayaniCommunication Pvt. Ltd	0	57	57
563	Infiber Broadnet Pvt. Ltd.	0	56	56
564	Bloglytics Internet Pvt.Ltd	0	54	54
565	Mesh Infranet Pvt. Ltd.	0	52	52
566	Cloudinsta24 Services Private Limited	0	46	46
567	Aamak Network Pvt Ltd.	0	45	45
568	SHIVRAJ BROADBAND INTERNET PVT. LTD.	0	45	45
569	SAMVAD TELECOM PVT LTD	0	43	43
570	Software Technology Parks of India	0	41	41
571	Streamax Broadband Services Pvt. Ltd	0	41	41
572	Edge Telecommunications Pvt. Ltd.	0	40	40
573	Gaxiom Networking Solutions Private Limited	0	40	40
574	Gigalo Communication Pvt. Ltd.	34	6	40
575	ERNET India	22	17	39
576	SPEEDNET INFORMEDIA PVT LTD	0	39	39
577	Tarantula WebNetworks Pvt. Ltd.	0	34	34
578	Jmohit Cable Vision Pvt. Ltd.	0	33	33
579	SKYNETZONE WIFI SERVICES PVT LTD	0	33	33
580	Promptnet Broadband Pvt. Ltd.	0	32	32
581	Bajpai Telecom Pvt. Ltd.	0	30	30
582	RAJNET Care Private Limited	0	28	28
583	Praveen Telecom Pvt. Ltd.	0	27	27
584	WE INTERNET LIMITED	0	27	27
585	Spacetrade Internet Pvt Ltd	0	26	26
586	ULTRAWAVE INTERNET ACCESS PVT LTD	8	18	26
587	Samruddhi Communication Pvt. Ltd.	0	25	25
588	Sudhana Telecommunication Pvt Ltd.	0	25	25
589	Orange Business Services India Network Pvt. Ltd.	0	23	23
590	Pacific Internet India Pvt. Ltd.	0	23	23
591	Smartware Technologies Pvt. Ltd.	0	22	22
592	DRONAGIRI INFOTECH PVT LTD	0	21	21
593	Pintwire Infomatics Pvt. Ltd.	0	21	21

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
594	ME MEXTRA BROADNET PRIVATE LIMITED	0	20	20
595	FASTHOOK NETWORKS PVT LTD	0	18	18
596	Fibmesh IN Limited	0	18	18
597	Sun Broadband and Data Services PVT. LTD.	0	18	18
598	Marutham Networks Pvt. Ltd.	0	16	16
599	Passcom Systems and Services Pvt. Ltd.	0	16	16
600	Angrow Netcomm Pvt. Ltd.	0	15	15
601	IKRA Broadband Private Limited	0	15	15
602	Microtel Internet Network Pvt. Ltd.	0	15	15
603	Nelco Ltd.	14	0	14
604	FASTJET TELECOM PRIVATE LIMITED	0	13	13
605	Hienet Internet Services Pvt. Ltd.	0	10	10
606	Ceralink Communication Pvt Ltd	9	0	9
607	A TO Z INFOLINK PVT. LTD.	0	8	8
608	RIYAZ INTERNET SERVICES PRIVATE LIMITED	0	8	8
609	Tatanet Services Ltd	0	8	8
610	VISHVA INFRATEL PRIVATE LIMITED	0	8	8
611	Airlink Broadband Pvt Ltd	0	7	7
612	CIFY IT Services Pvt. Ltd.	0	7	7
613	Clear Beam Communication Pvt. Ltd.	0	7	7
614	Financial Technologies Communications Ltd.	0	7	7
615	Guru Netcom Pvt. Ltd.	0	7	7
616	Nivid Telecom India Private Limited	0	7	7
617	ADS Royalnet Communication Private Limited	0	6	6
618	Upnet Communications Pvt. Ltd.	0	6	6
619	Uttradoon Networks Pvt. Ltd.	2	4	6
620	FLYFAST CONNECTIONS Pvt. LTD	4	1	5
621	Mastek Infosystems OPC Pvt. Ltd.	0	5	5
622	UBERCORE DATA LABS PVT LTD	0	5	5
623	Cloud8in Technologies Private Limited	0	4	4
624	Cloudcast Digital Ltd	0	4	4
625	ESTO MEDIA PRIVATE LIMITED	0	4	4
626	PHONIX BROADBAND PRIVATE LIMITED	0	4	4
627	Sabse Internet Service Provider Pvt. Ltd.	2	2	4
628	AGILE NETLINK PRIVATE LIMITED	0	3	3
629	Aristo Telenet Pvt Ltd	0	3	3
630	Critel Technologies Pvt Ltd	0	3	3
631	Hybrid Hash Pvt. Ltd.	3	0	3
632	Kartik Network Pvt. Ltd.	3	0	3
633	ZAPTIC PVT. LTD.	0	3	3

S.No.	Name of the Service Provider	Narrowband	Broadband	Total
634	AMBITION NETWORK SOLUTIONS INDIA PRIVATE LIMITED	0	2	2
635	ESP Fibernet Pvt. Ltd.	0	2	2
636	SMS ELAB PRIVATE LIMITED	2	0	2
637	SPARKLIGHT INTERNET PRIVATE LIMITED	0	2	2
638	Bombay Gas Company Proprietary Private Limited	0	1	1
639	Sahiba Silk Mills Pvt. Ltd.	0	1	1
	Total	37210573	792091226	829301799
	Total (in million)	37.21	792.09	829.30

Annexure 1.6: List of Service Providers which reported IP Telephony Minutes for Q.E. Dec-21

S. No.	Name of Service Providers reported IP Telephony Minutes as on 31st December 2021
1	Alliance Broadband Services Pvt. Ltd.
2	Asianet Satellite Communications Ltd.
3	Blazenet Ltd.
4	City Online Services Ltd.
5	Citycom Networks Pvt. Ltd.
6	delDSL Internet Pvt Ltd
7	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	You Broadband & Cable India Pvt. Ltd.
13	Warmconnect Internet Services Pvt. Ltd.

Annexure 1.7: Service Area wise PMRTS subscriber Base

S.No.	DOT Licensed Service	Area Served	Service Provider	Subscriber Base	
				30.09.2021	31.12.2021
1	Andhra Pradesh	Hyderabad	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2,679	2,880
			QuickCall	1,048	1,038
		Visakhapatnam	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	4,220	3,927
Total				7,947	7,845
2	Delhi	Delhi	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	6,894	6,818
			Procall Ltd.	3,024	3,051
		Total			
3	Gujarat	Ahmedabad	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	991	958
		Amrela	Inative Networks Pvt. Ltd.		-
		Bharuch	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,496	1,506
			Inative Networks Pvt. Ltd.		-
		Dahej	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,316	1,393
		Jamnagar	Inative Networks Pvt. Ltd.	360	360
		Kutch	Inative Networks Pvt. Ltd.	205	205
			Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,671	1,732
		Surat	Inative Networks Pvt. Ltd.	895	895
			Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,961	1,991
Vadodara	Inative Networks Pvt. Ltd.	360	360		
	Total				9,255
4	Karnataka	Bangalore	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7,008	7,289
			QuickCall	502	486
		Total			
5	Kerala	Ernakulam	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,026	1,021
		Kerala	Wiwonet Solutions Pvt. Ltd	851	857
		Total			
6	Kolkata	Kolkata	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,790	1,765
7	Madhya Pradesh	Indore	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1,561	1,611
8	Maharashtra	Pune	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2,016	2,065
			Smartalk Pvt Ltd.	706	717
		Total			
9	Mumbai	Mumbai	Airtalk Solutions & Services Pvt. Ltd.	475	495
			Arya Omnitalk Radio Trunking Services Pvt.Ltd.	9,190	8,947
			Bhilwara Telenet Services Pvt.Ltd.	864	872
			Smartalk Pvt Ltd.	848	861
Total				11,377	11,175
10	Rajasthan	Jaipur	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	789	798
			Procall Ltd.	426	424
		Total			
11	Tamil Nadu	Chennai	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7,377	7,593
			QuickCall	494	502
		Total			
Grand Total				63,043	63,417

**Annexure 2.1: Wireless Revenue Service - Service Area wise Statistics for
QE December, 2021**

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	94.21%	137	13	410	405	815
Gujarat	94.20%	124	18	358	331	690
Karnataka	92.17%	129	17	421	412	833
MH	94.54%	127	14	365	354	719
TN (incl. Chennai)	92.43%	138	14	384	379	763

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	95.54%	92	8	377	373	749
Kerala	96.88%	129	7	315	319	635
MP	96.07%	110	14	404	402	805
Punjab	95.15%	123	9	374	365	739
Rajasthan	96.20%	112	16	415	418	832
UP(E)	96.95%	88	11	496	523	1019
UP(W)	96.81%	99	11	424	434	858
WB	98.04%	108	15	467	475	942

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	97.31%	118	27	481	499	980
Bihar	96.98%	100	11	569	614	1183
HP	97.92%	117	10	383	381	763
J&K	48.37%	137	28	569	536	1105
NE	97.81%	141	29	441	446	887
Odisha	97.12%	111	17	498	518	1015

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	93.55%	89	12	402	392	794
Delhi	76.20%	93	21	462	422	884
Mumbai	78.30%	104	12	411	365	776

Annexure 4.1: Performance of QoS Parameters for Cellular Mobile Service

Name of Service Area	Name of Service Provider	Network Related Parameters										Customer Service Quality Parameters									
		Network Availability		Connection Establishment (Accessibility)			Connection Maintenance (Retainability)			POI			Metering and billing				Response time to the customer for assistance		Termination / closure of service		
		BS Accumulated down-time (not available for service) (%age)	Worst affected BSs due to down-time (%age)	Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network)	SDCCH/ Paging Channel Congestion/ RRC Congestion (%age)	TCH, RAB and E-RAB Congestion (%age)	Network QoS DCR Spatial Distribution Measure [Network_QSD(90/90)]	Network QoS DCR Temporal Distribution Measure [Network_QTD(97/90)]	Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)	Down Link (DL) Packet Drop Rate or DL-PDR	Up Link (UL) Packet Drop Rate or UL-PDR	Metering and billing credibility - post paid	Metering and billing credibility - pre paid	Resolution of billing/charging complaints	Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	Accessibility of call centre/ customer care	Percentage of calls answered by the operators (voice to voice) within 90 seconds	%age requests for Termination / Closure of service complied within 7 days	Time taken for refund of deposits after dosures	
		≤ 2%	≤ 2%	≥ 95%	≤ 1%	≤ 2%	≤ 2%	≥ 95%	≤ 0.5%	≤ 2%	≤ 2%	≤ 0.1%	≤ 0.1%	98% within 4 weeks	100% within 6 weeks	within 1 week of resolution of complaint	≥ 95%	≥ 95%	100% within 7 days	100% within 60 days	
The achievement of benchmark against each parameter is to be averaged over a period of one quarter for 2G, 3G and 4G VoLTE Services (combined) as per the measurement methodology explained in Explanatory Memorandum to regulations																					
Andhra Pradesh	Airtel	0.17	0.84	99.45	0.14	0.18	1.21	1.48	96.73	0	0.18	0.17	0.02	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00
	BSNL	1.31	0.62	98.84	0.77	0.67	1.63	1.81	98.65	0	0.10	0.19	0.00	0.00	100.00	100.00	100.00	96.55	70.10	100.00	100.00
	RJIL	0.05	0.09	99.57	0.01	0.00	0.15	0.24	99.97	0	0.00	0.06	0.00	0.00	100.00	100.00	100.00	97.57	97.61	100.00	100.00
	VIL	0.36	0.59	99.11	0.26	0.30	1.85	2.35	98.54	0	0.01	0.16	0.01	0.00	99.95	100.00	100.00	98.45	99.98	86.06	100.00
Assam	Airtel	0.94	1.14	98.69	0.17	0.47	1.90	2.20	96.55	0	0.20	0.21	0.02	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00
	BSNL	1.80	0.46	98.31	0.79	1.70	1.96	2.29	98.43	0	0.00	0.00	0.02	0.00	100.00	100.00	100.00	96.60	97.71	100.00	100.00
	RJIL	0.23	0.98	99.73	0.00	0.00	0.79	0.98	99.95	0	0.00	0.09	0.00	0.00	100.00	100.00	100.00	98.43	98.03	100.00	100.00
	VIL	0.34	1.82	99.43	0.13	0.55	1.98	2.82	98.61	0	0.09	0.09	0.01	0.00	100.00	100.00	100.00	98.56	99.97	100.00	100.00
Bihar	Airtel	0.28	0.47	97.55	0.39	1.24	1.67	1.73	97.69	0	0.10	0.34	0.02	0.00	100.00	100.00	100.00	100.00	99.00	100.00	100.00
	BSNL	1.93	0.63	95.40	0.32	0.34	1.85	2.27	98.30	0	0.00	0.00	0.00	0.00	100.00	100.00	100.00	99.70	96.90	100.00	100.00
	RJIL	0.20	0.80	99.42	0.00	0.00	0.37	0.49	99.96	0	0.00	0.09	0.00	0.00	100.00	100.00	100.00	98.54	96.91	100.00	100.00
	VIL	0.23	1.06	99.76	0.10	0.22	1.45	1.92	99.28	0	0.01	0.02	0.00	0.00	100.00	100.00	100.00	95.86	99.98	100.00	100.00
Delhi	Airtel	0.11	0.00	98.84	0.13	0.34	1.98	2.36	95.35	0	1.04	0.21	0.01	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00
	MTNL	0.06	0.50	97.55	0.08	0.83	1.26	1.44	97.78	0	NA	NA	0.00	0.00	100.00	100.00	100.00	99.81	99.91	100.00	100.00
	RJIL	0.08	0.20	99.50	0.00	0.00	0.12	0.24	99.97	0	0.00	0.06	0.00	0.00	100.00	100.00	100.00	98.17	97.09	100.00	100.00
	VIL	0.04	0.09	99.84	0.12	0.14	1.07	1.47	99.67	0	0.19	0.31	0.01	0.02	100.00	100.00	100.00	99.28	99.99	100.00	100.00
Gujarat	Airtel	0.11	0.35	99.44	0.20	0.41	1.51	2.17	95.24	0	0.10	0.22	0.02	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00
	BSNL	1.29	0.40	97.99	0.19	0.59	1.42	2.32	98.82	0	0.07	0.16	0.00	0.00	100.00	100.00	100.00	99.90	96.55	100.00	100.00
	RJIL	0.10	0.23	99.66	0.01	0.00	0.14	0.25	99.97	0	0.00	0.05	0.00	0.00	100.00	100.00	100.00	98.31	97.30	100.00	100.00
	VIL	0.06	0.15	99.54	0.06	0.31	1.51	2.11	98.42	0	0.15	0.15	0.01	0.00	100.00	100.00	100.00	98.20	99.94	100.00	100.00
Haryana	Airtel	0.13	0.66	99.60	0.13	0.28	1.25	1.71	96.67	0	0.15	0.26	0.01	0.00	100.00	100.00	100.00	100.00	99.00	100.00	100.00
	BSNL	0.62	0.10	98.61	0.26	0.59	1.51	1.73	97.89	0	0.15	0.40	0.08	0.00	100.00	100.00	100.00	96.00	99.88	100.00	100.00
	RJIL	0.07	0.26	99.60	0.00	0.00	0.19	0.36	99.97	0	0.00	0.05	0.00	0.00	100.00	100.00	100.00	98.49	97.77	100.00	100.00
	VIL	0.14	0.49	99.43	0.28	0.55	1.66	2.48	98.54	0	0.12	0.09	0.01	0.01	100.00	100.00	100.00	99.11	99.99	97.72	100.00
Himachal Pradesh	Airtel	0.11	0.47	99.38	0.10	0.07	1.43	1.72	95.10	0	0.17	0.16	0.02	0.00	100.00	100.00	100.00	100.00	99.00	100.00	100.00
	BSNL	1.87	0.28	97.94	0.58	0.68	1.93	2.07	97.52	0	0.00	0.00	0.01	0.00	100.00	100.00	100.00	96.35	96.92	100.00	100.00
	RJIL	0.08	0.42	99.66	0.00	0.00	0.18	0.29	99.98	0	0.00	0.05	0.00	0.00	100.00	100.00	100.00	98.45	97.77	100.00	100.00
	VIL	0.08	0.04	99.54	0.02	0.09	1.94	2.56	97.89	0	0.26	0.15	0.03	0.01	100.00	100.00	100.00	99.90	99.99	100.00	100.00
Jammu & Kashmir	Airtel	0.11	0.18	99.21	0.12	0.12	1.89	2.70	95.01	0	0.25	0.22	0.00	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00
	BSNL	1.81	0.63	97.20	0.74	1.06	1.92	2.72	95.47	0	0.03	0.12	0.01	0.00	100.00	100.00	100.00	96.00	99.83	100.00	100.00
	RJIL	0.21	1.09	99.65	0.00	0.00	0.18	0.29	99.97	0	0.00	0.05	0.00	0.00	100.00	100.00	100.00	98.32	97.17	100.00	100.00
	VIL	0.25	0.52	99.54	0.21	0.19	1.79	2.40	98.73	0	0.59	0.20	0.04	0.00	100.00	100.00	100.00	99.91	100.00	100.00	100.00

Annexure 4.1 (Contd.)

Karnataka	Airtel	0.30	1.62	99.73	0.10	0.13	1.00	1.28	95.34	0	0.18	0.12	0.02	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	
	BSNL	1.56	0.60	97.74	0.42	0.67	1.56	1.70	97.45	0	1.21	0.98	0.00	0.00	99.74	100.00	100.00	100.00	97.97	78.17	100.00	100.00
	RJIL	0.07	0.12	99.59	0.01	0.00	0.13	0.23	99.97	0	0.00	0.06	0.00	0.00	100.00	100.00	100.00	100.00	97.49	97.62	100.00	100.00
	VIL	0.48	1.41	99.80	0.54	0.17	1.59	2.15	99.17	0	0.09	0.24	0.02	0.01	100.00	100.00	100.00	100.00	96.97	99.97	97.46	100.00
Kerala	Airtel	0.07	0.24	99.69	0.16	0.38	1.64	2.44	98.76	0	0.11	0.36	0.01	0.00	100.00	100.00	100.00	100.00	99.00	99.00	100.00	100.00
	BSNL	0.22	0.18	98.91	0.23	0.75	1.69	2.09	98.55	0	0.06	0.18	0.00	0.00	100.00	100.00	100.00	100.00	97.00	90.50	100.00	100.00
	RJIL	0.04	0.06	99.77	0.00	0.00	0.00	0.20	99.97	0	0.00	0.06	0.00	0.00	100.00	100.00	100.00	100.00	97.55	96.98	100.00	100.00
	VIL	0.05	0.21	99.88	0.10	0.10	0.69	1.05	99.54	0	0.10	0.19	0.01	0.01	100.00	100.00	100.00	100.00	98.54	99.88	100.00	100.00
Kolkata	Airtel	0.06	0.00	99.80	0.17	0.20	1.69	2.90	97.79	0	0.23	0.41	0.02	0.00	100.00	100.00	100.00	100.00	97.00	97.00	100.00	100.00
	BSNL	0.36	0.55	98.43	0.27	0.27	1.39	1.67	96.26	0	0.00	0.00	0.01	0.01	98.60	100.00	100.00	100.00	97.36	99.10	100.00	100.00
	RJIL	0.01	0.02	99.66	0.02	0.00	0.07	0.16	99.98	0	0.00	0.04	0.00	0.00	100.00	100.00	100.00	100.00	98.43	97.99	100.00	100.00
	VIL	0.05	0.17	99.90	0.08	0.10	0.72	1.10	98.20	0	0.08	0.13	0.03	0.01	100.00	100.00	100.00	100.00	99.15	99.98	95.23	100.00
Madhya Pradesh	Airtel	0.23	1.20	99.08	0.20	0.35	1.97	2.50	95.09	0	0.10	0.22	0.01	0.00	100.00	100.00	100.00	100.00	100.00	99.00	100.00	100.00
	BSNL	1.29	0.38	98.65	0.46	1.10	1.84	2.02	98.12	0	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	98.14	98.49	100.00	100.00
	RJIL	0.13	0.37	99.64	0.00	0.00	0.29	0.41	99.96	0	0.00	0.09	0.00	0.00	100.00	100.00	100.00	100.00	98.24	97.24	100.00	100.00
	VIL	0.11	0.43	98.95	0.36	0.57	1.79	2.39	97.39	0	0.31	0.22	0.02	0.02	100.00	100.00	100.00	100.00	97.38	99.98	100.00	100.00
Maharashtra	Airtel	0.03	0.03	99.51	0.16	0.31	1.14	1.45	95.31	0	0.11	0.19	0.02	0.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00
	BSNL	1.57	0.63	97.28	0.62	1.03	1.77	2.63	97.18	0	0.06	0.15	0.01	0.00	100.00	100.00	100.00	100.00	100.00	97.16	100.00	100.00
	RJIL	0.34	1.60	99.63	0.00	0.00	0.24	0.36	99.96	0	0.00	0.08	0.00	0.00	100.00	100.00	100.00	100.00	98.42	97.11	100.00	100.00
	VIL	0.24	0.90	97.89	0.84	1.14	1.92	2.98	96.96	0	0.41	0.15	0.01	0.02	100.00	100.00	100.00	100.00	98.51	100.00	95.79	100.00
Mumbai	Airtel	0.16	0.72	99.10	0.24	1.25	1.48	1.97	95.42	0	0.23	0.15	0.01	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00
	MTNL	0.30	1.20	97.80	0.30	0.30	1.89	2.56	98.50	0	NA	NA	0.07	0.01	100.00	100.00	100.00	100.00	100.00	99.88	100.00	100.00
	RJIL	0.19	0.73	99.65	0.00	0.00	0.10	0.18	99.97	0	0.00	0.06	0.00	0.00	100.00	100.00	100.00	100.00	98.17	96.60	100.00	100.00
	VIL	0.04	0.04	99.78	0.06	0.22	1.14	1.62	98.64	0	0.12	0.19	0.02	0.05	100.00	100.00	100.00	100.00	97.72	99.99	100.00	100.00
North East	Airtel	0.94	1.07	98.51	0.44	1.26	1.88	2.01	96.81	0	0.26	0.22	0.01	0.00	100.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00
	BSNL	1.55	0.46	98.36	0.59	0.84	1.95	2.00	96.60	0	0.00	0.00	0.05	0.05	100.00	100.00	100.00	100.00	96.00	95.42	100.00	100.00
	RJIL	0.97	1.60	99.62	0.00	0.00	1.05	1.36	99.95	0	0.00	0.10	0.00	0.00	100.00	100.00	100.00	100.00	98.47	96.88	100.00	100.00
	VIL	0.59	1.97	99.55	0.17	0.35	1.99	2.00	98.80	0	0.13	0.10	0.01	0.00	100.00	100.00	100.00	100.00	97.01	99.99	100.00	100.00
Odisha	Airtel	0.09	0.17	98.75	0.18	0.51	1.67	1.79	96.48	0	0.06	0.17	0.01	0.00	100.00	100.00	100.00	100.00	99.00	100.00	100.00	100.00
	BSNL	0.65	0.65	96.11	0.78	1.59	1.94	1.95	95.97	0	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	97.01	99.21	100.00	100.00
	RJIL	0.08	0.19	99.63	0.00	0.00	0.25	0.33	99.96	0	0.00	0.08	0.00	0.00	100.00	100.00	100.00	100.00	98.50	98.09	100.00	100.00
	VIL	0.22	0.14	99.90	0.05	0.08	1.96	2.44	98.78	0	0.04	0.22	0.02	0.01	100.00	100.00	100.00	100.00	98.46	99.96	100.00	100.00
Punjab	Airtel	0.11	0.54	99.79	0.10	0.11	0.75	1.32	98.24	0	0.09	0.34	0.02	0.00	100.00	100.00	100.00	100.00	100.00	99.00	100.00	100.00
	BSNL	0.30	0.50	97.75	0.39	0.32	1.77	2.24	97.79	0	0.01	0.02	0.01	0.00	100.00	100.00	100.00	100.00	96.69	96.15	100.00	100.00
	RJIL	0.07	0.18	99.60	0.01	0.00	0.00	0.17	99.98	0	0.00	0.04	0.00	0.00	100.00	100.00	100.00	100.00	98.46	97.15	100.00	100.00
	VIL	0.04	0.04	99.68	0.07	0.31	0.55	1.08	99.31	0	0.09	0.23	0.02	0.00	100.00	100.00	100.00	100.00	96.90	99.99	96.99	100.00
Rajasthan	Airtel	0.18	0.76	97.64	0.24	0.75	1.85	2.22	97.37	0	0.33	0.21	0.01	0.00	100.00	100.00	100.00	100.00	99.00	99.00	100.00	100.00
	BSNL	1.17	0.50	98.30	0.74	1.70	1.52	2.05	98.37	0	0.00	0.00	0.02	0.00	99.09	100.00	100.00	100.00	95.18	99.85	100.00	100.00
	RJIL	0.05	0.09	99.67	0.00	0.00	0.29	0.39	99.97	0	0.00	0.07	0.00	0.00	100.00	100.00	100.00	100.00	98.28	96.86	100.00	100.00
	VIL	0.13	1.26	99.27	0.20	0.53	1.89	2.63	98.77	0	0.19	0.29	0.01	0.01	100.00	100.00	100.00	100.00	97.96	99.99	100.00	100.00
Tamil Nadu	Airtel	0.06	0.14	99.70	0.18	0.25	1.92	2.56	97.15	0	0.15	0.12	0.02	0.00	100.00	100.00	100.00	100.00	97.00	97.00	100.00	100.00
	BSNL	0.93	0.56	99.02	0.38	0.47	1.92	2.96	98.43	0	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	97.77	95.72	100.00	100.00
	RJIL	0.04	0.06	99.70	0.00	0.00	0.12	0.21	99.97	0	0.00	0.06	0.00	0.00	100.00	100.00	100.00	100.00	97.74	97.53	100.00	100.00
	VIL	0.23	1.38	99.30	0.62	0.68	1.65	2.13	98.63	0	0.08	0.11	0.03	0.01	100.00	100.00	100.00	100.00	97.13	99.97	100.00	100.00
Uttar Pradesh (East)	Airtel	0.34	1.06	98.60	0.31	0.66	1.17	1.55	97.02	0	0.13	0.23	0.02	0.00	100.00	100.00	100.00	100.00	99.00	99.00	100.00	100.00
	BSNL	1.27	0.63	99.26	0.88	0.36	1.69	2.27	98.24	0	0.01	0.05	0.09	0.02	100.00	100.00	100.00	100.00	96.89	96.23	100.00	100.00
	RJIL	0.29	1.35	99.44	0.01	0.00	0.25	0.38	99.97	0	0.00	0.07	0.00	0.00	100.00	100.00	100.00	100.00	98.40	96.94	100.00	100.00
	VIL	0.30	1.02	98.96	0.92	0.95	1.91	2.84	98.09	0	0.08	0.13	0.01	0.01	100.00	100.00	100.00	100.00	99.47	99.98	94.99	100.00
Uttar Pradesh (West)	Airtel	0.53	1.06	99.68	0.16	0.26	1.94	2.29	95.75	0	0.12	0.19	0.02	0.00	100.00	100.00	100.00	100.00	99.00	99.00	100.00	100.00
	BSNL	1.84	0.62	96.82	0.84	1.28	1.76	1.96	96.89	0	0.00	0.00	0.01	0.00	100.00	100.00	100.00	100.00	96.37	96.66	100.00	100.00
	RJIL	0.14	0.81	99.50	0.01	0.00	0.36	0.48	99.97	0	0.00	0.06	0.00	0.00	100.00	100.00	100.00	100.00	98.52	97.39	100.00	100.00
	VIL	0.09																				

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

S. No.	Name of Service Area	Name of Service Provider	Faults Incidences (No. of faults/ 100 Subs./ month)	Fault Repair				Mean Time to Repair (MTTR)	POI Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark)	Metering and Billing					Response time to the customer for		Termination / Closure of service	
				% of faults repaired by next working day	% of faults repaired within 5 days	% of faults repaired by next working day	% of faults repaired within 7 days			Metering and Billing Credibility - post paid	Metering and billing credibility - pre paid	Resolution of billing/ charging/ validity complaints	Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	Accessibility of call centre/ customer care	Percentage of calls answered by the operators (voice to voice) within 90 seconds	%age requests for Termination / Closure of service complied within 7 days	Time taken for refund of deposits after closures	
				Benchmarks														
≤7	For urban areas by next working day: ≥85%	For urban areas: ≥ 100%	For rural and hilly areas: ≥ 75%	For rural and hilly areas: ≥ 100%	≤ 10 Hrs	≤0.5%	≤0.1%	≤0.1%	98% within 4 weeks	100% within 6 weeks	1 week of resolution of complaint	≥95%	≥95%	100% within 7 days	100% within 60 days			
1	Andhra Pradesh	Bharti Airtel	0.59	94.64%	100.00%	NA	NA	7.88	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	93.97%	100.00%	100.00%
2		BSNL	5	98.00%	100.00%	97.00%	100.00%	6	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.61%	99.55%	100.00%	100.00%
3		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	95.45%	98.88%	100.00%	100.00%
4		Tata	5.57	71.62%	100.00%	100.00%	100.00%	15.71	0	0.00%	NA	100.00%	100.00%	100.00%	99.00%	98.00%	100.00%	100.00%
5		VIL	0.09	100.00%	100.00%	NA	NA	4.2	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
6	Assam	BSNL	3	91.00%	100.00%	92.00%	100.00%	4	0	0.00%	0.00%	100.00%	100.00%	100.00%	96.07%	95.84%	100.00%	100.00%
7		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	100.00%	100.00%
8		VIL	2.36	100.00%	100.00%	NA	NA	3.17	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
9	Bihar	BSNL	3	95.00%	100.00%	96.00%	100.00%	4	0	0.01%	0.00%	98.00%	100.00%	100.00%	98.85%	98.52%	100.00%	100.00%
10		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	96.00%	99.31%	100.00%	100.00%
11		Tata	1.02	98.53%	100.00%	100.00%	100.00%	1.57	0	0.00%	NA	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%	100.00%
12		VIL	1.21	100.00%	100.00%	NA	NA	3.8	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA
13	Delhi	Bharti Airtel	0.68	88.32%	100.00%	NA	NA	5.37	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	95.28%	100.00%	100.00%
14		MTNL	2.30	60.35%	83.79%	NA	NA	25.19	0	0.00%	0.00%	100.00%	100.00%	100.00%	99.89%	99.69%	100.00%	100.00%
15		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	95.24%	99.27%	100.00%	100.00%
16		Tata	1.74	93.85%	100.00%	100.00%	100.00%	4.82	0	0.00%	NA	100.00%	100.00%	100.00%	95.00%	89.00%	100.00%	100.00%
17		VIL	0.21	100.00%	100.00%	NA	NA	3.53	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA

Annexure 4.2 (Contd.)

18	Gujarat	Bharti Airtel	0.31	91.45%	100.00%	NA	NA	4.49	0	0.02%	NA	100.00%	100.00%	100.00%	100.00%	95.92%	100.00%	100.00%
19		BSNL	4	95.00%	100.00%	94.00%	100.00%	4	0	0.01%	0.00%	100.00%	100.00%	100.00%	99.84%	99.84%	100.00%	100.00%
20		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	96.00%	100.00%	100.00%	100.00%
21		Tata	1.75	84.66%	100.00%	100.00%	100.00%	9.12	0	0.00%	NA	100.00%	100.00%	100.00%	98.00%	99.00%	100.00%	100.00%
22		VIL	0.18	100.00%	100.00%	NA	NA	5.26	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
23	Himachal Pradesh	BSNL	6	89.00%	100.00%	92.00%	100.00%	7	0	0.02%	0.00%	98.00%	100.00%	100.00%	99.13%	99.10%	100.00%	92.60%
24		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	100.00%	100.00%
25		Tata	0.00	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
26		VIL	0.00	100.00%	100.00%	NA	NA	0.00	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA
27	Haryana	Bharti Airtel	0.40	89.46%	100.00%	NA	NA	4.22	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	94.79%	100.00%	100.00%
28		BSNL	5	91.00%	100.00%	92.00%	100.00%	5	0	0.07%	0.00%	100.00%	100.00%	100.00%	99.64%	99.64%	100.00%	100.00%
29		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	100.00%	100.00%
30		Tata	1.19	100.00%	100.00%	100.00%	100.00%	5.17	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
31		VIL	2.96	100.00%	100.00%	NA	NA	0.34	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
32	Jammu & Kashmir	Bharti Airtel	0.10	86.00%	100.00%	NA	NA	5.66	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	94.45%	100.00%	100.00%
33		BSNL	4	98.00%	100.00%	95.00%	100.00%	7	0	0.01%	0.00%	98.00%	100.00%	100.00%	99.80%	99.82%	100.00%	100.00%
34		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	95.45%	100.00%	100.00%	100.00%
35	Kerala	Bharti Airtel	0.84	89.32%	100.00%	NA	NA	8.63	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	91.10%	100.00%	100.00%
36		BSNL	4	92.00%	100.00%	92.00%	100.00%	7	0	0.01%	0.00%	100.00%	100.00%	100.00%	99.05%	98.98%	100.00%	100.00%
37		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	95.95%	98.80%	100.00%	100.00%
38		Tata	0.13	100.00%	100.00%	100.00%	100.00%	3.13	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
39		VIL	0.40	100.00%	100.00%	NA	NA	6.14	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
40	Kolkata	Bharti Airtel	0.36	88.78%	100.00%	NA	NA	9.65	0	0.01%	NA	100.00%	100.00%	100.00%	100.00%	94.13%	100.00%	100.00%
41		BSNL	6	90.00%	100.00%	NA	NA	9	0	0.00%	0.00%	98.00%	100.00%	100.00%	98.22%	98.22%	100.00%	0.00%
42		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	95.60%	97.96%	100.00%	100.00%
43		Tata	1.60	99.58%	100.00%	100.00%	100.00%	1.33	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
44		VIL	0.35	100.00%	100.00%	NA	NA	4.16	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
45	Karnataka	Bharti Airtel	0.53	88.59%	100.00%	NA	NA	8.92	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	95.53%	100.00%	100.00%
46		BSNL	7	90.00%	100.00%	89.00%	100.00%	7	0	0.09%	0.00%	98.00%	100.00%	100.00%	99.25%	99.23%	100.00%	100.00%
47		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	97.37%	98.62%	100.00%	100.00%
48		Tata	0.27	90.23%	100.00%	100.00%	100.00%	7.09	0	0.00%	NA	100.00%	100.00%	100.00%	97.00%	97.00%	100.00%	100.00%
49		VIL	0.12	100.00%	100.00%	NA	NA	3.7	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
50	Maharashtra	Bharti Airtel	0.10	89.85%	100.00%	NA	NA	7.08	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	94.58%	100.00%	100.00%
51		BSNL	6	86.00%	100.00%	82.00%	100.00%	8	0	0.01%	0.00%	100.00%	100.00%	100.00%	99.75%	99.75%	100.00%	100.00%
52		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	95.93%	99.46%	100.00%	100.00%
53		Tata	1.70	93.64%	100.00%	100.00%	100.00%	6.28	0	0.00%	NA	100.00%	100.00%	100.00%	99.00%	98.00%	100.00%	100.00%
54		VIL	0.41	100.00%	100.00%	NA	NA	5.25	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
55	Madhya Pradesh	Bharti Airtel	0.72	85.09%	100.00%	NA	NA	5.96	0	0.01%	NA	100.00%	100.00%	100.00%	100.00%	95.56%	100.00%	100.00%
56		BSNL	7	88.00%	100.00%	91.00%	100.00%	4	0	0.01%	0.00%	100.00%	100.00%	100.00%	99.64%	99.58%	100.00%	100.00%
57		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	96.15%	100.00%	100.00%	100.00%
58		Tata	4.14	100.00%	100.00%	100.00%	100.00%	1.09	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
59		VIL	0.25	100.00%	100.00%	NA	NA	3.35	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA

Annexure 4.2 (Contd.)

60	Mumbai	Bharti Airtel	0.22	91.45%	100.00%	NA	NA	4.94	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	95.63%	100.00%	100.00%	
61		MTNL	2.90	74.30%	90.00%	NA	NA	20.31	0	0.01%	NA	99.20%	100.00%	100.00%	99.95%	99.89%	98.39%	30.52%	
62		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	95.13%	98.99%	100.00%	100.00%	
63		Tata	3.92	89.76%	100.00%	100.00%	100.00%	8.39	0	0.00%	NA	100.00%	100.00%	100.00%	99.00%	98.00%	100.00%	100.00%	
64	North East	VIL	0.19	100.00%	100.00%	NA	NA	3.26	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA	
65		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00	0.00%	NA	NA	NA	95.00%	100.00%	100.00%	100.00%	
66		VIL	0.00	100.00%	100.00%	NA	NA	0.00	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA	
67	Odisha	BSNL	4	94.00%	100.00%	90.00%	100.00%	6	0	0.01%	0.00%	100.00%	100.00%	100.00%	94.82%	94.51%	100.00%	100.00%	
68		BSNL	5	85.00%	100.00%	87.00%	100.00%	8	0	0.09%	0.00%	99.00%	100.00%	100.00%	97.62%	97.31%	100.00%	100.00%	
69		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	100.00%	98.41%	100.00%	100.00%	
70		Tata	3.55	100.00%	100.00%	100.00%	100.00%	1.41	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
71	Punjab	VIL	0.39	100.00%	100.00%	NA	NA	0.40	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA	
72		Bharti Airtel	0.55	87.41%	100.00%	NA	NA	5.12	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	94.37%	100.00%	100.00%	
73		BSNL	7	91.00%	100.00%	90.00%	100.00%	5	0	0.03%	0.00%	98.00%	100.00%	100.00%	99.77%	99.77%	100.00%	99.50%	
74		Quadrant	5.8	92.30%	100.00%	100.00%	100.00%	6.39	0	0.00%	0.00%	100.00%	100.00%	100.00%	97.61%	95.20%	100.00%	100.00%	
75		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	95.00%	97.92%	100.00%	100.00%	
76	Rajasthan	Tata	0.14	100.00%	100.00%	100.00%	100.00%	0.91	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
77		VIL	0.43	100.00%	100.00%	NA	NA	1.16	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA	
78		Bharti Airtel	0.49	85.35%	100.00%	NA	NA	5.21	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	95.22%	100.00%	100.00%	
79		BSNL	5	95.00%	100.00%	95.00%	100.00%	6	0	0.08%	0.00%	99.00%	100.00%	100.00%	99.84%	99.84%	100.00%	11.00%	
80	Tamil Nadu	RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	96.00%	96.69%	100.00%	100.00%	
81		Tata	4.15	99.28%	100.00%	100.00%	100.00%	2.47	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
82		VIL	0.18	100.00%	100.00%	NA	NA	2.18	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA	
83		Bharti Airtel	1.12	90.21%	100.00%	NA	NA	9.30	0	0.01%	NA	100.00%	100.00%	100.00%	100.00%	94.50%	100.00%	100.00%	
84	UPE	BSNL	5	93.00%	100.00%	88.00%	100.00%	7	0	0.04%	0.00%	100.00%	100.00%	100.00%	99.56%	99.56%	100.00%	100.00%	
85		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	96.35%	99.56%	100.00%	100.00%	
86		Tata	0.32	94.94%	100.00%	100.00%	100.00%	3.17	0	0.00%	NA	100.00%	100.00%	100.00%	99.00%	99.00%	100.00%	100.00%	
87		VIL	0.36	100.00%	100.00%	NA	NA	3.57	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA	
88	UPW	Bharti Airtel	0.26	88.69%	100.00%	NA	NA	4.61	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	94.62%	100.00%	100.00%	
89		BSNL	6	85.00%	100.00%	90.00%	100.00%	7	0	0.08%	0.00%	100.00%	100.00%	100.00%	99.84%	99.88%	100.00%	100.00%	
90		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	95.55%	99.59%	100.00%	100.00%	
91		Tata	1.55	97.87%	100.00%	100.00%	100.00%	2.36	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
92	West Bengal	VIL	0.26	100.00%	100.00%	NA	NA	3.41	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA	
93		Bharti Airtel	0.22	85.87%	100.00%	NA	NA	5.35	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	96.84%	100.00%	100.00%	
94		BSNL	7	93.00%	100.00%	93.00%	100.00%	7	0	0.08%	0.00%	99.00%	100.00%	100.00%	99.69%	99.70%	100.00%	100.00%	
95		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	95.89%	99.57%	100.00%	100.00%	
96	West Bengal	Tata	2.62	85.71%	100.00%	100.00%	100.00%	0.14	0	0.00%	NA	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
97		VIL	1.62	100.00%	100.00%	NA	NA	3.15	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA	
98		BSNL	4	85.00%	100.00%	80.00%	100.00%	6	0	0.01%	0.00%	100.00%	100.00%	100.00%	98.45%	98.39%	100.00%	100.00%	
99		RJIL	0	100.00%	100.00%	100.00%	100.00%	0.00	0	0.00%	0.00%	NA	NA	NA	96.00%	98.02%	100.00%	100.00%	
100	West Bengal	Tata	0.00	99.58%	100.00%	100.00%	100.00%	0.00	0	0.00%	NA	100.00%	100.00%	100.00%	97.00%	99.00%	100.00%	100.00%	
101		VIL	1.67	100.00%	100.00%	NA	NA	1.42	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA	
		Note: NA means Not applicable																	

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

Sl. No.	Service Provider	Service area/ LSA	Service Provisioning	Faults Repair			Billing Performance			Response Time to the Customer for assistance		Bandwidth utilisation/throughput				Service availability /uptime (for all users) in %age	Packet Loss	Network latency (for wired broadband access)			
				%age of connections provided within 15 days of registration of demand	% of faults repaired by next working day (>90%)	% of faults repaired within 3 working day	%age of bills disputed	%age of billing complaints resolved within 4 weeks	%age of cases to whom refund 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 utilization during peak hours (TCBH) (Enclose MRTG) <50%	Broadband Connection Speed available (download) from ISP node to user			Packet loss (for wired broadband access) in %age	User reference point at POP/ISP Gateway node to International gateway (IGSP/NIXI)	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)
1	Bharat Sanchar Nigam Ltd.(BSNL)	All India	100.00%	94.39%	99.74%	0.07%	100.00%	91.00%	94.03%	96.13%	NA	0	61.40%	93.72%	99.56%	0.50%	62	170	NA		
2	Mahanagar Telephone Nigam Ltd.	Delhi & Mumbai	75.52%	62.69%	81.98%	0.00%	100.00%	64.43%	93.73%	95.91%	0	46.28%	89.76%	99.37%	0.50%	35	317	NA			
3	Airlink Communications Pvt. Ltd.	All India	100.00%	90.92%	99.33%	NA	100.00%	NA	99.84%	100.00%	0	77.84%	98.80%	99.89%	0.47%	80	275	NA			
4	Alliance Broadband Services Pvt. Ltd.	All India	100.00%	93.95%	100.00%	0.00%	100.00%	Nil	82.33%	100.00%	0	58.84%	98.00%	99.73%	0.00%	2	4	102			
5	ANI Network Pvt. Ltd.	Delhi	100.00%	92.00%	100.00%	0.00%	100.00%	100.00%	99.00%	100.00%	0	89.00%	100.00%	99.90%	0.40%	20	288	NA			
6	Asianet Satellite Communications Ltd.	All India	100.00%	90.36%	99.73%	0.91%	100.00%	100.00%	60.63%	80.86%	0	66.71%	91.00%	99.50%	0.80%	56	229	0			
7	Atria Convergence Technologies Pvt.	All India	100.00%	95.50%	99.50%	0.81%	100.00%	0%	78.00%	81.00%	0	58.00%	96.00%	99.99%	0.02%	19	92	0			
8	Bharti Airtel Ltd.	Andhra Pradesh	100.00%	95.22%	99.95%	0.01%	100.00%	100.00%	93.00%	96.00%	0	0	48.00%	100.00%	99.86%	0.00%	35	12	NA		
		Assam	100.00%	98.12%	100.00%	0.00%	100.00%	100.00%	93.00%	96.00%	0	NA	NA	100.00%	99.76%	0.00%	73	NA	NA		
		Bihar	100.00%	90.65%	99.13%	0.01%	100.00%	100.00%	91.00%	94.00%	0	0	25.00%	100.00%	99.80%	0.00%	71	72	NA		
		Delhi	100.00%	91.25%	99.02%	0.01%	100.00%	100.00%	94.00%	97.00%	0	0	52.00%	100.00%	99.98%	0.00%	43	71	NA		
		Gujarat	100.00%	93.53%	99.41%	0.01%	100.00%	100.00%	94.00%	97.00%	0	0	0.36%	100.00%	99.88%	0.00%	20	64	NA		
		Haryana	100.00%	90.42%	99.25%	0.01%	100.00%	100.00%	94.00%	96.00%	0	NA	NA	100.00%	99.71%	0.00%	70	NA	NA		
		Himachal Pradesh	100.00%	91.35%	99.37%	0.01%	100.00%	100.00%	93.00%	96.00%	0	NA	NA	100.00%	99.85%	0.00%	20	NA	NA		
		Jammu & Kashmir	100.00%	90.70%	99.24%	0.01%	100.00%	100.00%	92.00%	96.00%	0	0	29.00%	100.00%	99.66%	0.00%	74	76	NA		
		Karnataka	100.00%	90.69%	100.00%	0.01%	100.00%	100.00%	95.00%	97.00%	0	0	42.00%	100.00%	99.93%	0.00%	11	40	NA		
		Kerala	100.00%	92.51%	99.88%	0.01%	100.00%	100.00%	92.00%	95.00%	0	NA	NA	100.00%	99.91%	0.00%	22	NA	NA		
		Kolkata	100.00%	90.64%	100.00%	0.01%	100.00%	100.00%	92.00%	95.00%	0	0	48.00%	100.00%	99.94%	0.00%	47	69	NA		
		Madhya Pradesh	100.00%	92.03%	99.10%	0.02%	100.00%	100.00%	94.00%	97.00%	0	0	48.00%	100.00%	99.78%	0.00%	83	59	NA		
		Maharashtra	100.00%	93.14%	99.30%	0.01%	100.00%	100.00%	92.00%	96.00%	0	0	0.34%	100.00%	99.82%	0.00%	35	57	NA		
		Mumbai	100.00%	92.72%	99.35%	0.01%	100.00%	100.00%	93.00%	96.00%	0	0	28.00%	100.00%	99.82%	0.00%	39	59	NA		
		North East	100.00%	96.00%	100.00%	0.00%	100.00%	100.00%	93.00%	96.00%	0	NA	NA	100.00%	99.74%	0.00%	86	NA	NA		
		Orissa	100.00%	94.74%	100.00%	0.06%	100.00%	100.00%	93.00%	96.00%	0	NA	NA	100.00%	99.55%	0.00%	85	NA	NA		
		Punjab	100.00%	90.69%	99.16%	0.01%	100.00%	100.00%	94.00%	97.00%	0	0	61.00%	100.00%	99.95%	0.00%	71	76	NA		
		Rajasthan	100.00%	90.20%	99.93%	0.02%	100.00%	100.00%	94.00%	97.00%	0	0	0.49%	100.00%	99.88%	0.00%	43	75	NA		
		Tamilnadu	100.00%	91.84%	99.92%	0.01%	100.00%	100.00%	93.00%	96.00%	0	0	43.00%	100.00%	99.92%	0.00%	6	25	NA		
		UP - East	100.00%	90.58%	99.26%	0.02%	100.00%	100.00%	91.00%	95.00%	0	0	28.00%	100.00%	99.70%	0.00%	21	70	NA		
UP - West	100.00%	90.27%	99.10%	0.02%	100.00%	100.00%	93.00%	96.00%	0	NA	NA	100.00%	99.79%	0.00%	20	NA	NA				
West Bengal	100.00%	91.99%	100.00%	0.03%	100.00%	100.00%	93.00%	96.00%	0	NA	NA	100.00%	99.40%	0.00%	47	NA	NA				
9	City Online Services Ltd.	AP	100.00%	99.00%	99.00%	0.00%	100.00%	100.00%	95.00%	98.00%	0	71.30%	99.00%	99.00%	0.50%	15	232	NA			
		Karnataka	100.00%	98.00%	99.00%	0.00%	100.00%	100.00%	96.00%	98.17%	0	78.00%	98.00%	99.00%	0.57%	18	280	NA			
10	DDC Broad Band Pvt. Ltd.	Delhi	100.00%	97.00%	100.00%	0.09%	100.00%	100.00%	91.00%	94.00%	0	78.13%	97.00%	100.00%	0.06%	10	249	NA			
11	DEN Broadband Ltd.	All India	100.00%	97.23%	99.80%	0.00%	0.00%	0.00%	87.00%	91.00%	0	63.16%	92.00%	99.14%	0.62%	80	329	0			
12	Digital Network Associates Pvt. Ltd	Maharashtra & Goa	100.00%	90.94%	99.34%	0.00%	100.00%	0.00%	62.40%	82.04%	0	0	80.00%	83.00%	99.82%	0.85%	4	255	600		
		Mumbai	100.00%	98.51%	100.00%	0.00%	100.00%	0.00%	89.24%	98.73%	0	0	80.00%	86.00%	99.82%	0.20%	4	255	600		
13	Digital Satellite Connect Pvt. Ltd.	Maharashtra	100.00%	90.93%	99.33%	0.00%	100.00%	0.00%	63.45%	84.23%	0	0	80.00%	82.00%	99.82%	0.90%	4	255	600		
		Mumbai	100.00%	91.00%	99.31%	0.00%	100.00%	0.00%	62.98%	82.86%	0	0	80.00%	82.00%	99.82%	0.95%	4	255	600		
14	DL GPL Broadband Pvt.Ltd.	Maharashtra	100.00%	96.00%	99.00%	0.00%	100.00%	100.00%	99.00%	99.00%	0	0	79.00%	85.00%	99.00%	0.00%	15	300	0		
		Gujarat	100.00%	94.00%	99.00%	0.00%	100.00%	100.00%	99.00%	99.00%	0	0	79.00%	85.00%	99.00%	0.00%	15	300	0		
15	DNA Infotel Pvt Ltd	Maharashtra	100.00%	90.93%	99.36%	0.00%	100.00%	0.00%	62.98%	82.71%	0	80.00%	83.00%	99.82%	0.90%	4	255	600			
16	D-Vois Communications Pvt.Ltd.	All India	100.00%	96.00%	99.84%	0.00%	0.00%	0.00%	91.00%	99.00%	0	0	0.00%	90.00%	100.00%	0.10%	24	28	59		

Annexure 4.3 (Contd.)

17	Esto Broadband Pvt.Ltd.	All India	100.00%	94.70%	100.00%	0.00%	0.00%	0.00%	88.00%	88.00%	0	0	45.03%	90.00%	99.07%	0.00%	40	100	720
18	Ethernet Xpress India Pvt Ltd	Maharashtra (Panjim)	100.00%	93.00%	99.40%	0.64%	100.00%	100.00%	95.00%	84.90%	0	0	20.00%	99.00%	98.96%	0.10%	30	300	650
19	Excitel Broadband Pvt. Ltd.	All India	100.00%	92.00%	99.50%	NA	NA	NA	62.10%	82.10%	0	0	78.60%	98.40%	99.30%	0.00%	4	199	0
20	Five Networks Solution (India) Ltd.	All India	100.00%	99.50%	100.00%	0.00%	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	90.00%	99.00%	0.80%	0	0	0
21	Fusionnet Web Services Pvt. Ltd.	All India	100.00%	95.40%	99.80%	0.00%	100.00%	100.00%	87.00%	92.50%	0	0	52.00%	100.00%	100.00%	0.00%	5	230	0
22	GTPL Broadband Pvt.Ltd.	All India	100.00%	97.66%	99.15%	0.00%	100.00%	100.00%	94.26%	97.16%	NA	0	44.00%	94.00%	99.18%	0.00%	11	300	NA
23	GTPL KCBPL Broadband Pvt.Ltd.	Kolkata	100.00%	93.72%	100.00%	NA	100.00%	100.00%	93.29%	94.18%	0	0	76.00%	96.00%	99.20%	0.00%	<10	<250	310
		West Bengal	100.00%	95.23%	100.00%	NA	100.00%	100.00%	93.29%	94.18%	0	0	76.00%	96.00%	99.20%	0.00%	<10	<250	310
24	Hathway Cable & Datacom Ltd.	All India	100.00%	93.43%	99.55%	0.27%	100.00%	100.00%	84.54%	91.78%	0	0	77.94%	90.00%	99.78%	0.22%	77	263	NA
25	Honesty Net Solutions (I) Pvt. Ltd.	Mumbai	100.00%	93.00%	100.00%	Nil	100.00%	0.00%	68.00%	100.00%	0	0	NA	95.00%	100.00%	0.00%	NA	66	NA
26	Indinet Service Pvt Ltd	All India	100.00%	91.67%	100.00%	0.00%	100.00%	100.00%	75.47%	83.21%	0	0	88.00%	90.00%	99.09%	0.20%	54	261	0
27	Instanet Technologies Pvt.Ltd.	Maharashtra	100.00%	98.17%	100.00%	0.22%	100.00%	NA	80.13%	89.62%	0	0	63.00%	90.00%	100.00%	0.00%	4	255	NA
28	Intech Online Pvt.Ltd.	Maharashtra	100.00%	91.30%	99.36%	1.09%	100.00%	100.00%	94.10%	94.10%	0	0	43.38%	85.33%	99.82%	0.07%	15	89	452
		Mumbai	100.00%	92.17%	99.45%	0.92%	100.00%	100.00%	93.68%	93.68%	0	0	43.23%	85.33%	99.82%	0.04%	1	76	453
29	Intermedia Cable Communication Pvt.	Maharashtra	100.00%	96.00%	99.50%	0.00%	100.00%	100.00%	97.00%	99.00%	0	0	83.66%	90.00%	98.80%	0.00%	67	300	0
30	Ishan Netsol Pvt Ltd	Gujarat	100.00%	91.31%	100.00%	0.00%	100.00%	100.00%	64.38%	84.94%	0	0	62.67%	91.00%	99.48%	0.00%	100	225	NA
31	Joister Infoserve Pvt. Ltd.	Mumbai	100.00%	95.00%	100.00%	0.00%	100.00%	0.00%	85.00%	89.00%	0	0	88.00%	99.00%	100.00%	0.98%	1	47	265
		Maharashtra	100.00%	93.00%	100.00%	0.00%	100.00%	NA	86.00%	88.00%	0	0	86.00%	99.00%	100.00%	0.97%	1	225	265
32	Juweriyah Networks Pvt. Ltd.	Mumbai	100.00%	98.00%	100.00%	0.00%	100.00%	0.00%	83.67%	87.00%	0	0	73.00%	99.00%	100.00%	0.00%	1	47	80
33	K NET Solutions Pvt. Ltd.	TN (incl.Chennai)	100.00%	92.72%	99.29%	0.00%	100.00%	100.00%	78.91%	81.12%	0	0	NA	100.00%	99.89%	0.00%	9	226	NA
34	Kings Broadband Pvt.Ltd.	Kerala	100.00%	97.30%	100.00%	0.00%	0.00%	0.00%	80.00%	96.66%	0	0	80.00%	95.60%	100.00%	0.10%	30	310	650
35	Limras Eronet Broadband Service Pvt. Ltd.	All India	100.00%	99.00%	100.00%	1.00%	100.00%	0.00%	90.00%	100.00%	0	0	0.00%	98.00%	99.40%	0.01%	13	251	0
36	Meghbela Cable & Broadband Services (P) Ltd	All India	100.00%	95.00%	100.00%	0.00%	100.00%	100.00%	95.00%	100.00%	0	0	74.00%	95.00%	99.90%	0.00%	60	150	0
37	Microscan Infocommtech Pvt. Ltd. (Formerly - Microscan Computers Pvt Ltd)	Mumbai	100.00%	96.51%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0	0	16.53%	100.00%	100.00%	0.47%	5	225	NA
		Maharashtra	100.00%	96.32%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0	0	9.60%	100.00%	100.00%	0.49%	5	225	NA
38	Multicraft Digital Technologies Pvt. Ltd.	PAN India	100.00%	98.67%	100.00%	0.00%	0.00%	0.00%	90.00%	99.00%	0	0	80.00%	91.00%	99.00%	0.00%	41	0	0
39	Net 9 Fibernet Pvt.Ltd. (formerly Net 9 Online Hathway Pvt.Ltd.)	Mumbai	100.00%	97.97%	100.00%	0.00%	100.00%	100.00%	100.00%	100.00%	0	0	77.89%	89.97%	99.67%	0.32%	93	273	NA
40	Netplus Broadband Services Pvt. Ltd.	All India	100.00%	100.00%	100.00%	1.38%	100.00%	100.00%	87.25%	92.27%	0	0	73.70%	96.10%	100.00%	0.10%	96	196	NA
41	Nuron Networks India Pvt.Ltd.	Karnataka	100.00%	92.00%	99.00%	0.00%	0.00%	0.00%	72.00%	93.00%	0	0	0.00%	90.00%	99.00%	0.10%	27	29	59
42	ONEOTT Intertainment Limited (formerly Planet E-shop Holdings India Ltd.)	All India	100.00%	97.00%	99.00%	1.15%	100.00%	100.00%	95.00%	95.00%	0	0	84.58%	100.00%	99.97%	0.50%	57	198	NA
43	Quadrant Televentures Ltd.	Punjab	100.00%	95.97%	99.27%	0.33%	100.00%	100.00%	92.78%	95.24%	0	0	70.70%	100.00%	99.98%	0.00%	80	280	0
44	Quest Consultancy Pvt Ltd.	Gujarat	100.00%	95.00%	100.00%	Nil	100.00%	Nil	89.00%	99.00%	0	Nil	82.00%	99.00%	99.00%	0.30%	13	267	NA
45	Radinet Info Solutions Pvt Ltd.	Rajasthan	100.00%	90.78%	99.65%	0.00%	0.00%	0.00%	90.02%	92.22%	0	0	74.75%	90.00%	99.14%	0.00%	40	300	0
46	RaiiTel Corporation of India Ltd.	Pan India	100.00%	98.00%	100.00%	0.00%	Nil	Nil	89.00%	100.00%	0	0	49.51%	100.00%	99.95%	<0.83	90	326	NA
47	Rajesh Digital & Datacom Pvt.Ltd.	Mumbai	100.00%	98.00%	100.00%	0.00%	100.00%	100.00%	97.00%	97.00%	0	0	87.00%	83.00%	99.00%	0.00%	46	250	500
48	Readylink Internet Services Pvt Ltd	TN	100.00%	99.00%	100.00%	0.03%	100.00%	100.00%	82.00%	91.00%	0	0	71.00%	83.00%	100.00%	0.00%	23	85	0
49	Reliance Jio Infocomm Ltd.	Andhra Pradesh	100.00%	96.18%	99.24%	0.00%	100.00%	100.00%	97.70%	98.69%	NA	NA	NA	100.00%	100.00%	0.01%	12	NA	NA
		Assam	100.00%	96.35%	99.29%	0.00%	100.00%	100.00%	97.80%	98.84%	NA	NA	NA	100.00%	99.99%	NA	NA	NA	NA
		Bihar	100.00%	95.33%	99.25%	0.00%	100.00%	100.00%	98.47%	99.13%	NA	NA	NA	100.00%	99.97%	NA	NA	NA	NA
		Delhi	100.00%	95.55%	99.36%	0.00%	100.00%	100.00%	97.75%	98.82%	NA	NA	19.00%	100.00%	99.99%	0	18	NA	NA
		Gujarat	100.00%	97.66%	99.18%	0.00%	100.00%	100.00%	98.39%	99.07%	NA	NA	NA	100.00%	99.99%	0	24	NA	NA
		Haryana	100.00%	97.39%	99.31%	0.00%	100.00%	100.00%	98.02%	99.05%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA
		Himachal Pradesh	100.00%	96.04%	99.13%	0.00%	100.00%	100.00%	97.85%	99.08%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA
		Jammu & Kashmir	100.00%	94.72%	99.25%	0.00%	100.00%	100.00%	99.03%	99.34%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA
		Karnataka	100.00%	97.50%	99.35%	0.00%	100.00%	100.00%	98.02%	98.83%	NA	NA	3.00%	100.00%	99.99%	0	14	NA	NA
		Kerala	100.00%	96.44%	99.37%	0.00%	100.00%	100.00%	97.15%	98.41%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA
		Kolkata	100.00%	97.30%	99.10%	0.00%	100.00%	100.00%	97.46%	98.72%	NA	NA	NA	100.00%	99.99%	0	33	NA	NA
		Madhya Pradesh	100.00%	96.89%	99.18%	0.00%	100.00%	100.00%	99.29%	99.38%	NA	NA	NA	100.00%	99.99%	NA	NA	NA	NA
		Maharashtra	100.00%	91.67%	99.27%	0.00%	100.00%	100.00%	99.18%	99.23%	NA	NA	NA	100.00%	99.97%	0	18	NA	NA
		Mumbai	100.00%	97.36%	99.15%	0.00%	100.00%	100.00%	97.86%	98.76%	NA	NA	49.00%	100.00%	99.95%	0	8	105	NA
		North East	100.00%	95.61%	99.16%	0.00%	100.00%	100.00%	97.62%	98.98%	NA	NA	NA	100.00%	99.94%	NA	NA	NA	NA
		Orissa	100.00%	97.16%	99.35%	0.00%	100.00%	100.00%	99.24%	99.26%	NA	NA	NA	100.00%	99.99%	NA	NA	NA	NA
		Punjab	100.00%	97.75%	99.36%	0.00%	100.00%	100.00%	98.05%	99.09%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA
		Rajasthan	100.00%	95.07%	99.21%	0.00%	100.00%	100.00%	98.05%	99.05%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA
		Tamilnadu	100.00%	90.68%	99.27%	0.00%	100.00%	100.00%	97.97%	98.80%	NA	NA	NA	100.00%	99.97%	0	9	33	NA
		Uttar Pradesh - East	100.00%	97.20%	99.13%	0.00%	100.00%	100.00%	99.10%	99.29%	NA	NA	NA	100.00%	99.99%	0	33	NA	NA
Uttar Pradesh - West	100.00%	93.80%	99.09%	0.00%	100.00%	100.00%	97.93%	99.00%	NA	NA	NA	100.00%	99.99%	NA	NA	NA	NA		
West Bengal	100.00%	98.02%	99.28%	0.00%	100.00%	100.00%	99.34%	99.44%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA		

Annexure 4.3 (Contd.)

50	RI Networks Pvt Ltd	All India	100.00%	95.40%	99.20%	0.00%	100.00%	100.00%	94.35%	96.77%	0	0	86.00%	100.00%	100.00%	1	50	200	NA
51	Sai Prasad Internet Services Pvt.Ltd.	Kalyan(Mah)	100.00%	90.82%	99.46%	0.00%	100.00%	0.00%	62.22%	82.62%	0	0	80.00%	81.00%	99.86%	1	4	255	600
52	Shree Omkar Infocom Pvt. Ltd.	Mumbai	100.00%	98.00%	100.00%	0.00%	100.00%	100.00%	91.00%	96.00%	0	0	70.00%	97.00%	99.90%	1	2	125	640
53	Shyam Spectra Pvt. Ltd. (formerly Citycom Networks Pvt. Ltd.)	All India	100.00%	97.93%	99.29%	0.78%	100.00%	100.00%	87.70%	89.20%	0	0	15.48%	94.00%	99.65%	0	11	147	NA
54	Signum Digital Networks Pvt.Ltd. (Changed to Fiberx Networks Pvt.Ltd.)	AP	100.00%	92.00%	99.00%	0.00%	100.00%	100.00%	69.66%	83.00%	0	0	65.20%	99.00%	99.00%	1	8	NA	NA
55	Sikka Broadband(P) Ltd.	UP (East)	100.00%	91.00%	99.26%	0.00%	0.00%	0.00%	88.00%	98.70%	0	0	80.00%	86.60%	99.50%	0	10	290	400
56	Siti Broadband Services Pvt.Ltd.	Pan India	100.00%	94.70%	99.28%	0.00%	0.00%	100.00%	97.00%	98.00%	0	0	63.63%	95.00%	99.57%	0	3	133	316
57	Spiderlink Networks Pvt. Ltd.	Rajasthan	100.00%	94.10%	99.53%	0.00%	100.00%	100.00%	78.00%	86.00%	0	0.00%	77.00%	97.83%	98.97%	0	50	240	NA
58	Tachyon Communications Pvt. Ltd.	UP-East	100.00%	98.00%	100.00%	0.00%	100.00%	100.00%	88.00%	94.00%	0	0	73.00%	99.00%	100.00%	0	35	70	NA
59	Tata Communications Ltd. (Ceased broadband services, hence NIL report)	All India	NA	Nil	Nil	0.00%	0.00%	0.00%	0.00%	0.00%	Nil	Nil	0.00%	Nil	Nil	0	15	253	Nil
60	Tata Sky Broadband Pvt. Ltd.	All India	100.00%	96.35%	99.55%	0.00%	0.00%	0.00%	91.36%	93.03%	0	0	50.91%	100.00%	99.97%	0	1	NA	NA
61	Tata Teleservices Limited (TTSL)	All India	100.00%	92.00%	96.00%	0.03%	100.00%	100.00%	97.00%	98.00%	0	0	55.00%	100.00%	99.80%	0	36	38	0
62	Tata Teleservices(Mah) Ltd.(TTML)	Mum. & Mah.	100.00%	90.00%	97.00%	0.03%	100.00%	100.00%	97.00%	98.00%	0	0	69.00%	97.00%	99.79%	0	33	49	0
63	Tikona Infinet Pvt.Ltd.*	PAN India	100.00%	95.35%	99.64%	0.46%	100.00%	100.00%	63.90%	81.90%	0	0	81.28%	95.87%	99.82%	0	3	NA	NA
64	United Telecoms Ltd.	Goa/Maharashtra	99.00%	92.00%	99.50%	0.01%	100.00%	100.00%	85.00%	90.00%	0	0	73.95%	100.00%	99.99%	0	20	132	NA
65	Wish Net Pvt. Ltd.	Kolkata	100.00%	98.05%	100.00%	0.00%	100.00%	NA	87.73%	94.90%	0	0	47.00%	100.00%	99.66%	0	12	NA	NA
		West Bengal	100.00%	99.05%	100.00%	0.00%	100.00%	NA	91.97%	95.85%	0	0	47.50%	100.00%	99.94%	0	19	NA	NA
66	Yashash Cable Network Pvt Ltd	Karnataka	100.00%	92.12%	99.63%	0.00%	0.00%	0.00%	88.26%	94.61%	0	0	68.64%	84.00%	99.70%	0	48	301	0
67	You Broadband India Ltd.	All India	100.00%	95.45%	99.30%	0.00%	100.00%	100.00%	97.39%	98.81%	0	0	75.39%	86.90%	99.06%	0	9	270	0
			DNF= Data not as per Format				NR= Data not reported by the Service Provider						NA = Not Applicable			C/DNF= Complied the parameter but Data is not in the required format			

Note: *New entrant.

(2)- M/s Tata Communications Ltd. has ceased broadband services, hence, NIL report submitted.

Annexure 5.1: List of pay channels, offered by broadcasters to subscribers as reported to TRAI (New Regulatory Framework) - as on 31st December, 2021

S.No	Name of the broadcaster	S. No	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	Asianet Star Communications Private Limited	3	Vijay TV	SD
		4	Vijay Super	SD
		5	Vijay HD	HD
		6	Vijay Music	SD
		7	Asianet	SD
		8	Asianet Plus	SD
		9	Asianet Movies	SD
		10	Suvarna Plus	SD
		11	Star Suvarna HD	HD
		12	Asianet HD	HD
		13	Star Suvarna	SD
3	Bangla Entertainment Private Limited	14	AATH	SD
		15	SONY Marathi	SD
4	BBC Global News India Private Limited	16	BBC World News	SD
		17	Cbeebies	SD
5	Bennett, Coleman & Company Limited	18	Zoom	SD
		19	Romedy Now	SD
		20	MN +	HD
		21	Mirror Now	SD
		22	ET NOW	SD
		23	Times Now	SD
		24	Times Now Navbharat HD	HD
		25	Movies Now HD	HD
		26	MNX HD	HD
		27	ET Now Swedesh	SD
		28	MNX	SD
29	Times Now World	HD		

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
6	Celebrities Management Pvt Limited	30	Travel XP HD	HD
		31	Travel XP Tamil	SD
7	CSL Info Media Private Limited	32	JAN TV PLUS	SD
8	Direct New Private Limited	33	News X	SD
9	Discovery Communications India	34	Animal Planet	SD
		35	Discovery Channel	SD
		36	DTAMIL	SD
		37	Discovery Kids Channel	SD
		38	Discovery Science	SD
		39	Discovery Turbo	SD
		40	Investigation Discovery	SD
		41	Discovery HD	HD
		42	Animal Planet HD World	HD
		43	TLC HD	HD
		44	Investigation Discovery HD	HD
		45	TLC	SD
		46	EUROSPORT HD (Earlier name "Dsport HD")	HD
		47	EUROSPORT (Earlier name "Dsport")	SD
10	Disney Broadcasting (India) Limited	48	Disney Junior	SD
		49	UTV Movies	SD
		50	Marvel HQ	SD
		51	Disney International HD	HD
		52	Hungama TV	SD
		53	The Disney Channel	SD
		54	UTV HD	HD
		55	UTV Bindass	SD
		56	UTV Action	SD
11	Eenadu Televisoin Private Limited	57	ETV	SD
		58	ETV Andhra Pradesh	SD
		59	ETV - Telangana	SD
		60	ETV Cinema	SD

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
		61	ETV Life	SD
		62	ETV Plus	SD
		63	ETV Abhiruchi	SD
		64	ETV HD	HD
		65	ETV Plus HD	HD
		66	ETV Cinema HD	HD
		67	ETV Balbharat Telugu	SD
		68	ETV Balbharat Hindi	SD
		69	ETV Balbharat Punjabi	SD
		70	ETV Balbharat Marathi	SD
		71	ETV Balbharat Gujarathi	SD
		72	ETV Balbharat kannada	SD
		73	ETV Balbharat Malayalam	SD
		74	ETV Balbharat Tamil	SD
		75	ETV Balbharat Bangla	SD
		76	ETV Balbharat Odia	SD
		77	ETV Balbharat Assamese	SD
		78	ETV Balbharat English	SD
		79	ETV Balbharat HD	HD
		80	ETV Balbharat SD	SD
12	IN 10 Media Private Limited	81	EPIC TV	SD
		82	Filamchi	SD
		83	Gubbare	SD
		84	Showbox	SD
		85	Ishara TV	SD
13	Information TV Private Limited	86	India News	SD
14	Fame Media Private Limited	87	4tv News	SD
15	Greycells18 Media Limited	88	Topper TV	SD
16	IBN Lokmat News Private Ltd	89	News 18 Lokmat	SD
17	Living Entertainment Enterprises Private Ltd	90	ZEE ZEST HD	HD
		91	LF HD	HD

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
18	Lifestyle and Media Broadcasting Limited	92	Good Times	SD
19	Lex Sportel Vision Private Limited	93	1SPORTS	SD
20	Mavis Satcom Limited	94	J Movies	SD
		95	Jaya Max	SD
		96	Jaya Plus	SD
		97	Jaya TV HD	HD
21	MSM World Wide Factual Media Private Limited	98	SONY BBC EARTH	SD
		99	SONY BBC EARTH HD	HD
22	Media World Wide Limited	100	Travel XP	SD
23	New Delhi Television Limited	101	NDTV 24*7	SD
		102	NDTV India	SD
		103	NDTV Profit	SD
24	NGC Network (India) Pvt Limited	104	Fox Life	SD
		105	National Geographic Channel (NGC)	SD
		106	Fox Life HD	HD
		107	Nat Geo Wild	SD
		108	National Geographic HD	HD
		109	Nat Geo Wild HD	HD
		110	Baby TV HD	HD
25	Odisha Television Limited	111	Prarthana	SD
		112	Tarang	SD
		113	Tarang Music	SD
		114	Alankar	SD
26	Parshavnath Media Private Limited	115	Dangal Kannada	SD
27	Raj Television Network Limited	116	Raj Digital Plus	SD
		117	Raj Musix	SD
		118	Raj News	SD
		119	Raj TV	SD
28	Silverstar Communications Limited	120	Mega 24	SD
		121	Mega Musiq	SD
		122	Mega TV	SD

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
29	Sony Pictures Networks India Private Limited	123	Sony YAY!	SD
		124	SET MAX	SD
		125	SAB	SD
		126	SONY ENTERTAINMENT CHANNEL (SET)	SD
		127	PIX	SD
		128	SIX	SD
		129	MAX 2	SD
		130	PAL	SD
		131	SET HD	HD
		132	SIX HD	HD
		133	PIX HD	HD
		134	MAX HD	HD
		135	Ten 2 HD	HD
		136	Ten 3 HD	HD
		137	Ten 2	SD
		138	Ten 1	SD
		139	Ten 3	SD
		140	Ten 1 HD	HD
		141	SONY Wah	SD
		142	SAB HD	HD
143	Ten 4	SD		
144	Ten 4 HD	HD		
30	Star India Private Limited	145	Star Sports 3	SD
		146	Star Sports 1 Tamil	SD
		147	Star Sports Select 2	SD
		148	Star Bharat	SD
		149	Star Gold 2 (Movies OK)	SD
		150	Star Sports 1 Hindi	SD
		151	Star Gold	SD
		152	Star Jalsha	SD
		153	Star Movies	SD
		154	Star Gold Select	SD

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
		155	Star Plus	SD
		156	Star Pravah	SD
		157	Star Sports 1	SD
		158	Star Sports 2	SD
		159	Star World	SD
		160	Jalsha Movies	SD
		161	Star Sports HD 2	HD
		162	Star Sports HD 1	HD
		163	Star Bharat HD	HD
		164	Star Gold HD	HD
		165	Star Movies HD	HD
		166	Star Plus HD	HD
		167	Star Sports 1 HD Hindi	HD
		168	Star Sports Select 1	SD
		169	Star Movies Select HD	HD
		170	Star World HD	HD
		171	Star Sports First	SD
		172	MAA Gold	SD
		173	MAA Movies	SD
		174	MAA Music	SD
		175	MAA TV	SD
		176	Star Pravah HD	HD
		177	Star Jalsha HD	HD
		178	Jalsha Movies HD	HD
		179	Star Sports Select HD 1	HD
		180	Star Sports Select HD 2	HD
		181	MAA HD	HD
		182	Star Gold Select HD	HD
		183	MAA Movies HD	HD
		184	Star World Premiere HD	HD
		185	Star Sport 1 Telugu	SD
		186	Star Sport 1 Kannada	SD

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
		187	Star Sports 1 Bangla	SD
		188	Star Utsav	SD
		189	Star Sports 1 Marathi	SD
		190	Star Utsav Movies	SD
31	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
		215	KTV HD	HD
		216	Sun Music HD	HD
		217	Gemini TV HD	HD
		218	Gemini Music HD	HD

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
		219	Gemini Movies HD	HD
		220	Surya TV HD	HD
		221	Udaya TV HD	HD
32	Suryansh Broadcasting Private Limited	222	Flowers	SD
33	Turner International India Pvt Ltd	223	Cartoon Network	SD
		224	CNN International	SD
		225	POGO	SD
		226	Cartoon Network HD+	HD
34	TV 18 Broadcast Limited	227	CNN News 18	SD
		228	CNBC Bazaar	SD
		229	CNBC TV 18 Prime HD	HD
		230	CNBC Awaaz	SD
		231	News 18 Tamil Nadu	SD
		232	News 18 Kerala	SD
		233	News 18 Assam / North East	SD
		234	News 18 India	SD
		235	CNBC TV 18	SD
		236	News 18 Bihar Jharkhand	SD
		237	News 18 Madhya Pradesh / Chattisgarh	SD
		238	News 18 Rajasthan	SD
		239	News 18 Uttar Pradesh/ Uttaranchal	SD
		240	News 18 Urdu	SD
		241	News 18 Kannada	SD
		242	News 18 Bangla	SD
		243	News 18 Punjab / Haryana / Himanchal Pradesh	SD
		244	News 18 Gujarati	SD
245	News 18 Odia	SD		
35	TV Today Network Limited	246	Aaj Tak	SD
		247	India Today	SD
		248	AAJ Tak HD	HD
		249	Aaj Tak Tez	SD

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
36	Viacom 18 Media Private Limited	250	Colors	SD
		251	Comedy Central (HD)	HD
		252	MTV	SD
		253	NICK	SD
		254	NICK JR	SD
		255	SONIC	SD
		256	VH 1 (HD Distribution)	HD
		257	Colors Infinity HD	HD
		258	Colors Infinity	SD
		259	Colors HD	HD
		260	NICKS HD+	HD
		261	Colors Cineplex	SD
		262	MTV Beats	SD
		263	Colors Kannada HD	HD
		264	Colors Marathi HD	HD
		265	Colors Bangla HD	HD
		266	Colors Super	SD
		267	Colors Bangla	SD
		268	Colors Gujarati	SD
		269	Colors Kannada	SD
		270	Colors Marathi	SD
		271	Colors Oriya	SD
		272	MTV Beats HD	HD
		273	Colors Tamil	SD
		274	Colors Cineplex HD	HD
		275	VH 1	SD
		276	Colors Tamil HD	HD
		277	MTV HD+	HD
278	Colors Rishtey	SD		
279	Colors Kannada Cinema	SD		
280	Colors Gujarati Cinema	SD		
281	Comedy Central	SD		

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
		282	Rishtey Cineplex	SD
		283	Colors Bangla Cinema	SD
37	Zee Akaash News Private Limited	284	Zee 24 Ghanta	SD
38	Zee Entertainment Enterprises Limited	285	Zee Bollywood	SD
		286	Zee Action	SD
		287	Zee Bangla Cinema	SD
		288	Zee Café HD	HD
		289	Zee Café	SD
		290	Zee Cinema	SD
		291	Zee Talkies	SD
		292	Zee TV	SD
		293	Zing	SD
		294	& Picture	SD
		295	Zee Bangla	SD
		296	Zee Marathi	SD
		297	Zee Zest	SD
		298	Zee TV HD	HD
		299	Zee Cinema HD	HD
		300	& TV	SD
		301	& TV HD	HD
		302	Zee Kannada	SD
		303	Zee Telugu	SD
		304	& Pictures HD	HD
305	Zee Cinemalu	SD		
306	Zee Yuva	SD		
307	Zee Marathi HD	HD		
308	& Prive HD	HD		
309	Zee Bangla HD	HD		
310	Zee Tamil HD	HD		
311	Zee Cinemalu HD	HD		
312	Zee Telugu HD	HD		
313	Zee Tamil	SD		

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
		314	Zee Kannada HD	HD
		315	Zee Anmol Cinema	SD
		316	& Flix HD	HD
		317	& Flix	SD
		318	Zee Keralam HD	HD
		319	Zee Keralam	SD
		320	Zee Vajwa	SD
		321	Zee Anmol	SD
		322	Big Magic	SD
		323	Big Ganga	SD
		324	Zee Classic	SD
		325	&Xplore HD	HD
		326	ZEE Sarthak	SD
		327	Zee Talkies HD	HD
		328	Zee Punjabi	SD
		329	Zee Thirai	SD
		330	Zee Picchar	SD
		331	Zee Thirai HD	HD
		332	Zee Picchar HD	HD
		333	Zee Biskope	SD
39	Zee Media Corporation Limited	334	Zee 24 Taas	SD
		335	Zee Odisha	SD
		336	Zee Business	SD
		337	Zee Punjab Haryana Himachal	SD
		338	Zee Madhya Pradesh Chattisgarh	SD
		339	Zee Salaam	SD
		340	Zee 24 Kalak	SD
		341	WION	SD
		342	Zee Uttar Pradesh Uttrakhand	SD
		343	Zee Hindustan	SD
		344	Zee Bihar Jharkhand	SD

S.No	Name of the broadcaster	S. No	Name of the channel	Declared as SD or HD
		345	Zee News	SD
		346	Zee Rajasthan News	SD
40	Zoom Entertainment Network Limited	347	Movies Now	SD
41	Sidharth Broadcasting Private Limited	348	Sidharth TV	SD
42	Sathak Music Private Limited	349	Sidharth Bhakti	SD
		350	Sidharth Gold	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.sitinetworkslimited
Toll Free No. 1800 1234 001
- 2. M/s Den Networks Limited.**
236, Ground Floor, Okhla Industrial Estate,
Phase-III, New Delhi-110020
Website: www.den-networks.com
Toll Free No. 1800 419 2020
- 3. M/s Hathway Digital Private Limited.**
805/606, 8th Floor, Windsor
Off CST Road, Kalina, Santacruz (East),
Mumbai-400098 (Maharashtra)
PH: 022-26001306,
Fax No: 022-26001307
Website : www.hathway.com
Toll Free No. 1800 4197 900
- 4. M/s GTPL Hathway.**
202, 2nd Floor,
Sahajanad Shopping Center
Opp. Swaminarayan Mandir
Shahibaug, Ahemdabad-38004
Ph: 079-30280340 / 41, 079-25626476 / 77
Website : www.gtpl.net
Toll Free No. 1800-419-0419
- 5. M/s NXT Digital Limited.**
IN Centre, 49/50 MIDC
12th Road, Andheri
MUMBAI-400093 (Maharashtra)
Ph: 022-28208585
Website : www.nxtdigital.co.in
Toll Free No. 18602120400 18002100400

- 6. M/s NXT Digital Limited (HITS)**
IN Centre, 49/50 MIDC
12th Road, Andheri
MUMBAI-400093 (Maharashtra)
Ph: 022-28208585
Website : www.nxtdigital.co.in
Toll Free No. 18602120400 18002100400
- 7. M/s Fastway Transmission Pvt. Ltd.**
SCO-16-17, Top Floor
Sector-34-A, Chandigarh
Ph: 0161-4044444
Website : www.fastway.in
Toll Free No. 18001026602
- 8. M/s Tamil Nadu ARASU Cable TV Corporation Ltd.**
11/22, Mangadusamy Street, Nungambakkam,
Chennai-600034
Ph: 044-2843 2911
Fax : 044-2843 2913
Website : www.tactv.in
Toll Free No. 1800 425 2911
- 9. M/s Kerala Communicators Cable Ltd.**
CC -22/491, Girnar, Kadavanthara,
Cochin-682020 (Kerala)
Ph: 0484-2316441
Website : www.kccl.tv
Toll Free No. 18004195755
- 10. M/s Thamizhaga Cable TV Communication Pvt. Ltd.**
Old No. 150, New No. 48, Sami Naicken Street,
Chinthadripet, Chennai-600002 (T.N.)
Ph: 044-49272222
Website : www.tccl.co.in
Toll Free No. 1800-102-9845
- 11. M/s Asianet Digital Network Pvt. Network**
2A, 2nd Floor, Leela Infopark
Technopark, Kazahakuttom,
Thiruvananthapuram-695581 (Kerala)
Ph: 0471-2700995
Fax : 0471-2527878
Website : www.asianetdigital.co.in
Toll Free No. 1800 425 4725

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

List of Pay DTH Operators

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

Annexure 5.4: List of 113 existing cities with operational FM Radio Channels in India, as on 31st December, 2021

S. No.	City	Category	Stations
1	Agartala	D	2
2	Agra	B	4
3	Ahmedabad	A	6
4	Ahmednagar	C	4
5	Aizwal	D	3
6	Ajmer	C	4
7	Akola	C	4
8	Alappuzha	C	2
9	Aligarh	C	4
10	Allahabad	B	4
11	Amravati	C	1
12	Amritsar	B	4
13	Asansol	B	3
14	Aurangabad	C	4
15	Bareilly	C	4
16	Bengaluru	A	8
17	Bhadarwah	Others	1
18	Bharuch	D	2
19	Bhavangar	C	2
20	Bhopal	B	4
21	Bhubaneshwar	C	4
22	Bikaner	C	4
23	Bilaspur	C	3
24	Chandigarh	C	4
25	Chennai	A+	7
26	Coimbatore	B	4
27	Dehradun	C	1
28	Delhi	A+	9
29	Dhule	C	3
30	Dhubri	Others	1

31	Durg-Bhillaina	D	1
32	Erode	C	2
33	Gangtok	D	2
34	Godhara	D	1
35	Gorakhpur	C	4
36	Gulbarga	C	1
37	Guwahati	C	4
38	Gwalior	C	4
39	Haflong	Others	1
40	Hissar	D	4
41	Hubli - Dharwad	C	2
42	Hyderabad	A	8
43	Indore	B	4
44	Itanagar	D	2
45	Jabalpur	B	4
46	Jaipur	A	6
47	Jalandhar	C	4
48	Jalgaon	C	4
49	Jammu	C	4
50	Jamnagar	C	2
51	Jamshedpur	B	4
52	Jhansi	C	4
53	Jodhpur	C	4
54	Junagarh	D	2
55	Kannur	C	3
56	Kanpur	A	6
57	Karnal	D	3
58	Kargil	Others	2
59	Kathua	Others	2
60	Kochi	B	4
61	Kolhapur	C	4
62	Kolkata	A+	7
63	Kota	C	4
64	Kozhikode	C	4

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

99	Thiruvananthapuram	C	4
100	Thoothukudi	C	2
101	Thrissur	C	3
102	Tiruchirappalli	C	3
103	Tirunelveli	C	3
104	Tirupati	C	3
105	Udaipur	C	4
106	Ujjain	C	1
107	Vadodra	B	4
108	Varanasi	B	4
109	Vellore	C	2
110	Veraval	D	1
111	Vijayawada	B	3
112	Vishakapatnam	B	3
113	Warrangal	B	3
Total			386

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