



## **Telecom Regulatory Authority of India**

### **The Indian Telecom Services Performance Indicators** January – March, 2019

New Delhi, India  
10<sup>th</sup> July, 2019

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## Snapshot

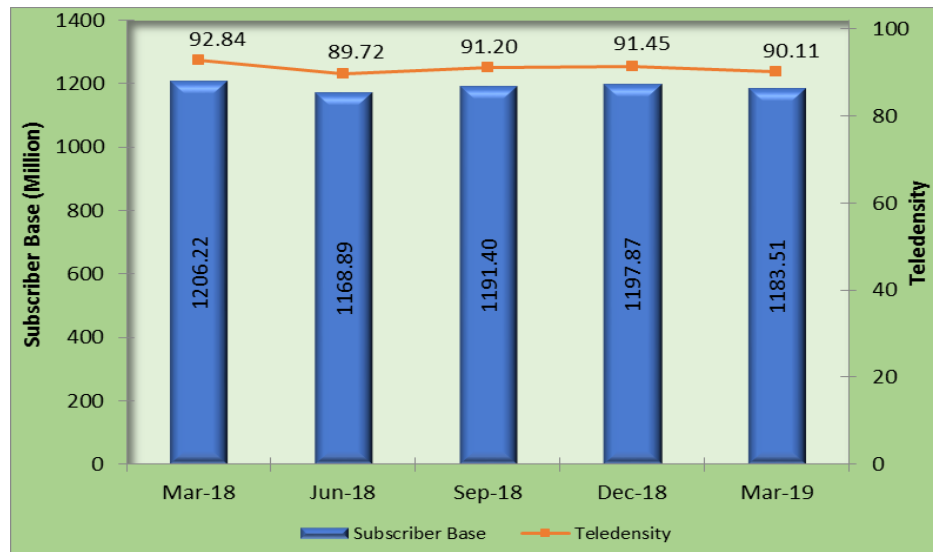
<b>(Data as on Q.E. 31<sup>st</sup> March, 2019)</b>	
<b>Telecom Subscribers (Wireless+Wireline)</b>	
Total Subscribers	1,183.51 Million
% change over the previous quarter	-0.79%
Urban Subscribers	669.16 Million
Rural Subscribers	514.35 Million
Market share of Private Operators	88.71%
Market share of PSU Operators	11.29%
Teledensity	90.11
Urban Teledensity	159.96
Rural Teledensity	57.47
<b>Wireless Subscribers</b>	
Total Wireless Subscribers	1,161.81 Million
% change over the previous quarter	-1.21%
Urban Subscribers	650.49 Million
Rural Subscribers	511.32 Million
Market share of Private Operators	89.74%
Market share of PSU Operators	10.26%
Teledensity	88.46
Urban Teledensity	155.49
Rural Teledensity	57.13
Total Wireless Data Usage during the quarter	15,850,560 TB
No. of total Public Mobile Radio Trunk Services (PMRTS)	60,078
No. of Very Small Aperture Terminals (VSAT)	2,97,465
<b>Wireline Subscribers</b>	
Total Wireline Subscribers	21.70 Million
% change over the previous quarter	-0.79%
Urban Subscribers	18.67 Million
Rural Subscribers	3.02 Million
Market share of Private Operators	33.58%
Market share of PSU Operators	66.42%
Teledensity	1.65
Urban Teledensity	4.46
Rural Teledensity	0.34
No. of Village Public Telephones (VPT)	1,30,376
No. of Public Call Office (PCO)	2,55,268

<b>Telecom Financial Data</b>	
Gross Revenue (GR) during the quarter	₹ 58,414 Crore
% change in GR over the previous quarter	-0.98%
Adjusted Gross Revenue (AGR) during the quarter	₹ 35,932 Crore
% change in AGR over the previous quarter	-0.34%
Share of Public sector undertakings in Access AGR	9.57%
Monthly Average Revenue Per User (ARPU) for Access Services	₹ 72.49
<b>Internet/Broadband Subscribers</b>	
Total Internet Subscribers	636.73 Million
% change over previous quarter	5.38%
Narrowband subscribers	73.42 Million
Broadband subscribers	563.31 Million
Wired Internet Subscribers	21.68 Million
Wireless Internet Subscribers	615.05 Million
Urban Internet Subscribers	409.72 Million
Rural Internet Subscribers	227.01 Million
Total Internet Subscribers per 100 population	48.48
Urban Internet Subscribers per 100 population	97.94
Rural Internet Subscribers per 100 population	25.36
<b>Broadcasting &amp; Cable Services</b>	
Number of private satellite TV channels permitted by the Ministry of I&B for uplinking only/downlinking /uplinking	902
Number of Pay TV Channels as reported by broadcasters	328
Number of private FM Radio Stations (excluding All India Radio)	356
Number of net Active subscribers with Pay DTH Operators	72.44 Million
Number of Operational Community Radio Stations	251
Number of pay DTH Operators	5
<b>Revenue &amp; Usage Parameters</b>	
Monthly ARPU of Wireless Service (GSM+CDMA+LTE)	₹ 71.39
Minutes of Usage (MOU) per subscriber per month - Wireless Service (GSM+CDMA+LTE)	692 Minutes
Total Outgoing Minutes of Usage for Internet Telephony	197 Million
<b>Wireless Data Usage</b>	
Average Wireless Data Usage per wireless data subscriber per month	9.06 GB
Average cost to subscriber per GB wireless data during the quarter	₹ 7.95

## Executive Summary

1. The number of telephone subscribers in India declined from 1,197.87 million at the end of Dec-18 to 1,183.51 million at the end of Mar-19, registering a decline rate of 1.20% over the previous quarter. This reflects year-on-year (Y-O-Y) decline rate of 1.88% over the same quarter of last year. The overall Teledensity<sup>1</sup> in India declined from 91.45 as on QE Dec-18 to 90.11 as on QE Mar-19.

### **Trends in Telephone subscribers and Teledensity in India**



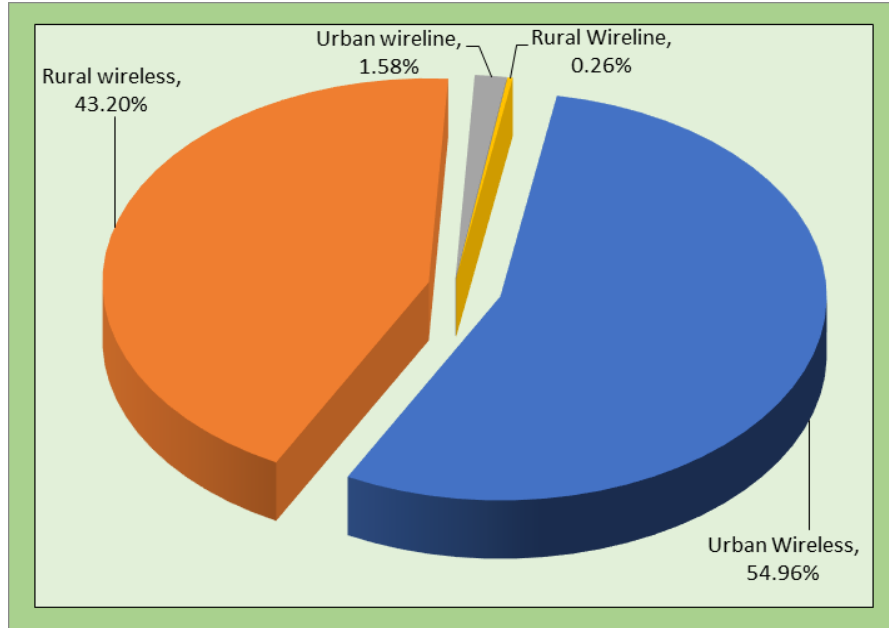
2. Telephone subscription in Urban areas increased from 666.28 million at the end of Dec-18 to 669.16 million at the end of Mar-19 however, Urban Teledensity slightly declined from 159.98 to 159.96 during the same period.
3. Rural telephone subscription declined from 531.59 million at the end of Dec-18 to 514.35 million at the end of Mar-19 and Rural Teledensity also declined from 59.50 at the end of Dec-18 to 57.47 at the end of Mar-19.

<sup>1</sup> Teledensity – Number of telephone connections (fixed lines and mobile phone subscribers) per 100 inhabitants within a geographical area.

(Source-ITU)

4. Out of the total subscription, the share of Rural subscription declined from 44.38% at the end of Dec-18 to 43.46% at the end of Mar-19.

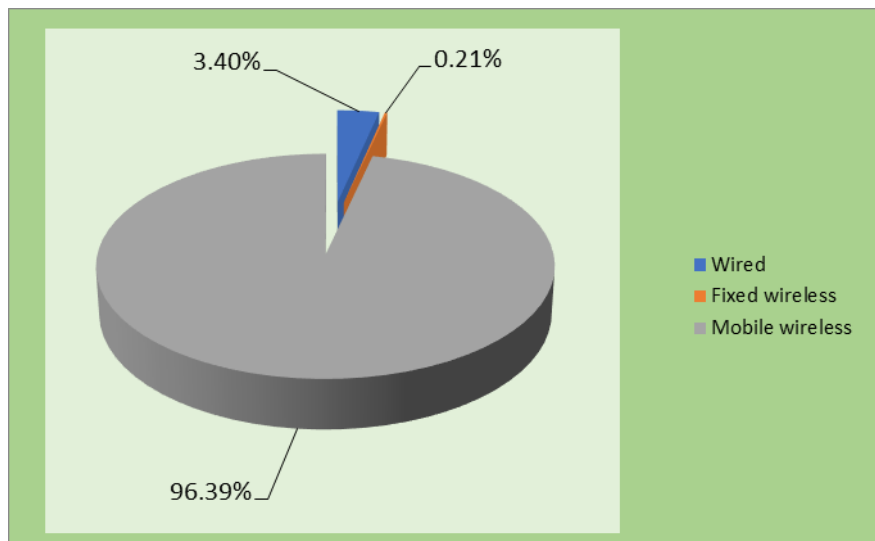
**Composition of Telephone Subscribers**



5. With a net decline of 14.19 million subscribers during the quarter, total wireless (GSM incl. LTE + CDMA) subscriber base declined from 1,176.00 million at the end of Dec-18 to 1,161.81 million at the end of Mar-19, registering a decline rate of 1.21% over the previous quarter. Wireless subscriptions declined year-on-year (Y-O-Y) at the rate of 1.82% during the quarter.
6. Wireless Tele-density declined from 89.78 at the end of Dec-18 to 88.46 at the end of Mar-19.
7. Wireline subscriber declined from 21.87 million at the end of Dec-18 to 21.70 million at the end of Mar-19 with quarterly decline rate of 0.79%. The year-on-year (Y-O-Y) decline rate in wireline subscribers for Mar-19 is 4.89%.
8. Wireline Teledensity also declined from 1.67 at the end of Dec-18 to 1.65 at the end of Mar-19.

9. Total number of Internet<sup>2</sup> subscribers increased from 604.21 million at the end of Dec-18 to 636.73 million at the end of Mar-19, registering a quarterly growth rate of 5.38%. Out of 636.73 million internet subscribers, number of Wired Internet subscribers are 21.68 million and number of Wireless Internet subscribers are 615.05 million.

**Composition of internet subscription**



10. The Internet subscriber base is comprised of Broadband<sup>3</sup> Internet subscriber base of 563.31 million and Narrowband<sup>4</sup> Internet subscriber base of 73.42 million.
11. The broadband Internet subscriber base increased by 7.22% from 525.36 million at the end of Dec-18 to 563.31 million at the end of Mar-19. However, the narrowband Internet subscriber base declined by 6.89% from 78.86 million at the end of Dec-18 to 73.42 million at the end of Mar-19.

<sup>2</sup> Internet: Interconnected global networks that use the internet protocol.

<sup>3</sup> Broadband: Internet access with a minimum capacity of greater or equal 512 Kbit/s in one or both directions.

<sup>4</sup> Narrowband: Internet access with a capacity of less than 512 Kbit/s in one or both directions.

(Source-ITU)



12. Monthly Average Revenue per User (ARPU)<sup>5</sup> for wireless service increased by 1.80%, from ₹70.13 in QE Dec-18 to ₹71.39 in QE Mar-19. However, monthly ARPU for wireless service declined by 6.12% on yearly basis (Y-O-Y) in this quarter.
13. Prepaid ARPU per month increased from ₹60 in QE Dec-18 to ₹63 in QE Mar-19, however Postpaid ARPU per month declined from ₹296 in QE Dec-18 to ₹261 in QE Mar-19.
14. On an all India average, the overall Minutes of Usage (MOU)<sup>6</sup> per subscriber per month for wireless service increased by 3.74% from 667 for QE Dec-18 to 692 in QE Mar-19.
15. Prepaid MOU per subscriber per month increased from 666 in QE Dec-18 to 694 in QE Mar-19. However, postpaid MOU per subscriber per month declined from 711 in QE Dec-18 to 641 in QE Mar-19.
16. Gross Revenue<sup>7</sup> (GR) and Adjusted Gross Revenue<sup>8</sup> (AGR) of Telecom Service Sector for the QE Mar-19 has been ₹58,414 Crore and ₹35,932 Crore respectively. GR declined by 0.98% and AGR declined by 0.34% in QE Mar-19 as compared to previous quarter.

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<sup>5</sup> ARPU per month is calculated by dividing net subscribers' revenue by average number of subscribers.

<sup>6</sup> MOU per subscriber per month is calculated by dividing total minutes of usage (incoming & outgoing) by average number of subscribers.

<sup>7</sup> 1. 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.

<sup>8</sup> 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

17. The year-on-year (Y-O-Y) growth in GR and AGR in QE Mar-19 over the same quarter in last year has been -6.08% and 0.66% respectively.
18. Pass-through<sup>9</sup> charges declined from ₹22,936 Crore in QE Dec-18 to ₹22,482 Crore in QE Mar-19. The quarterly and the year-on-year (Y-O-Y) growth rates of pass-through charges for QE Mar-19 are -1.98% and -15.17% respectively.
19. The License Fee<sup>10</sup> declined from ₹2,890 Crore for the QE Sep-18 to ₹2,888 Crore for the QE Mar-18. The quarterly and the year-on-year (Y-O-Y) growth rates of license fee are -0.08% and -1.52% respectively in this quarter.
20. Access services contributed 72.62% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Adjusted Gross Revenue (AGR), License Fee and Pass Through Charges increased by 0.29%, 0.10%, 0.46%, 0.60% respectively in QE Mar-19. However, Spectrum Usage Charges (SUC)<sup>11</sup> declined quarterly by 0.70% during the same period.

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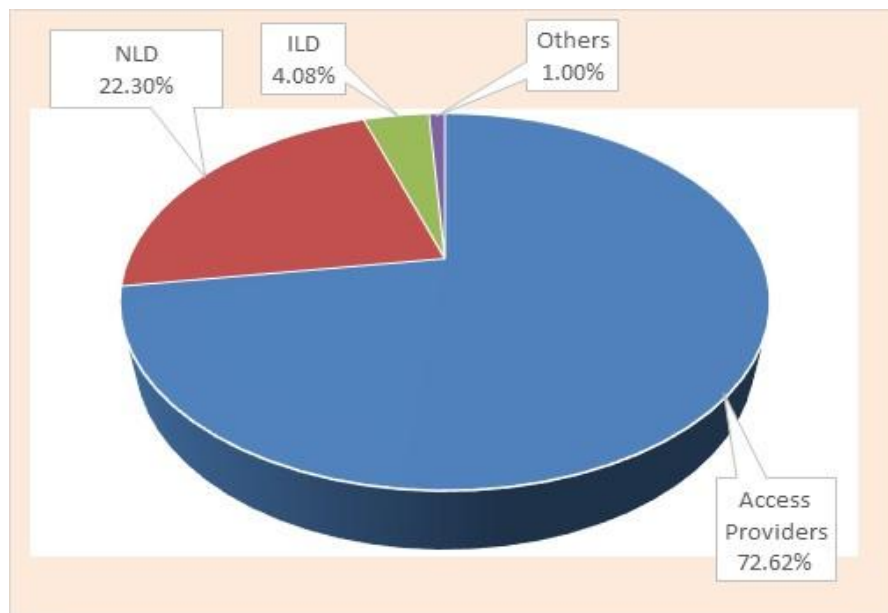
<sup>9</sup> Pass through charges means the charges excluded from gross revenue to arrive at adjusted gross revenue for the purpose of levying licence fee.

<sup>10</sup> License Fee means a fee payable by Licensee at prescribed intervals and rates for the period of the Licence.

<sup>11</sup> 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)

**Composition of Adjusted Gross Revenue in access services**



21. Monthly Average Revenue per User (ARPU) for Access Services based on AGR, declined from ₹72.82 in QE Dec-18 to ₹72.49 in QE Mar-19.
  
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:

<b>Parameters showing improvement in QoS</b>	<b>Parameters showing deterioration in QoS</b>
<ul style="list-style-type: none"> <li>• Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints</li> </ul>	<ul style="list-style-type: none"> <li>• Accessibility of call centre/customer care</li> <li>• %age of calls answered by the operators (voice to voice) within 90 sec</li> <li>• %age requests for Termination/ Closure of service complied within 7 days</li> <li>• Time taken for refund of deposits after closures</li> </ul>

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

<b>Parameters showing improvement in QoS</b>	<b>Parameters showing deterioration in QoS</b>
<ul style="list-style-type: none"> <li>• %age of fault repaired by next working day (for urban areas)</li> <li>• Response time to the customer for Assistance -Accessibility of call centre/ customer care</li> <li>• Response time to the customer for Assistance – %age of calls answered by the operators (Voice to voice) within 90 seconds</li> </ul>	<ul style="list-style-type: none"> <li>• Fault incidences - No. of faults per 100 subs/month)</li> <li>• Mean time to Repair (MTTR)</li> </ul>

24. A total number of 902 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/uplinking and downlinking both, as on 31<sup>st</sup> March, 2019.
25. As per the reporting to TRAI, done by broadcaster in pursuance of the Tariff Order (Broadcasting & Cable), dated 3<sup>rd</sup> March 2017, there are 328 pay channels as on 31<sup>st</sup> March, 2019, which include 229 SD (standard definition) pay TV channels and 99 HD (high definition) Pay TV channels.
26. Since its introduction in the year 2003, DTH (direct-to-home) service has displayed a phenomenal growth. During the QE 31<sup>st</sup> December, 2018, there were 5 pay DTH service providers in the country.

27. DTH has attained net active subscriber base of around 72.44 million in QE 31<sup>st</sup> March, 2019. This is in addition the subscribers of free DTH services of Doordarshan.
28. Apart from the radio stations operated by All India Radio, the public broadcaster, as on 31<sup>st</sup> March, 2019, there are 356 operational private FM Radio stations in 98 cities with operational 33 Private FM Radio broadcaster as compared to 355 private FM Radio Stations in 97 cities with operational 33 FM Radio broadcasters in the previous quarter.
29. As per data received from MIB, as on 31<sup>st</sup> March, 2019, 251 Community Radio Stations are operational.

## Trends at a Glance

### A. Access Service (Wireline + Wireless)

	QE Mar 2018	QE Jun 2018	QE Sep 2018	QE Dec 2018	QE Mar 2019	%age change over Mar- 2018	%age change over Jun- 2018	%age change over Sep- 2018	%age change over Dec- 2018
						(12 months)	(9 months)	(6 months)	(3 months)
<b>1) Subscriber Base (in million)</b>									
Wireline	22.81	22.40	22.11	21.87	21.70	-4.89%	-3.12%	-1.88%	-0.79%
Wireless	1183.41	1146.49	1169.29	1176.00	1161.81	-1.82%	1.34%	-0.64%	-1.21%
<b>Total</b>	<b>1206.22</b>	<b>1168.89</b>	<b>1191.40</b>	<b>1197.87</b>	<b>1183.51</b>	<b>-1.88%</b>	<b>1.25%</b>	<b>-0.66%</b>	<b>-1.20%</b>
Rural	524.61	516.13	524.76	531.59	514.35	-1.96%	-0.34%	-1.98%	-3.24%
Urban	681.61	652.76	666.64	666.28	669.16	-1.83%	2.51%	0.38%	0.43%
<b>2) Teledensity</b>									
Wireline	1.76	1.72	1.69	1.67	1.65	-5.91%	-3.90%	-2.41%	-1.05%
Wireless	91.09	88.00	89.51	89.78	88.46	-2.88%	0.52%	-1.17%	-1.47%
<b>Total</b>	<b>92.84</b>	<b>89.72</b>	<b>91.20</b>	<b>91.45</b>	<b>90.11</b>	<b>-2.94%</b>	<b>0.43%</b>	<b>-1.20%</b>	<b>-1.46%</b>
Rural	59.05	57.99	58.85	59.50	57.47	-2.69%	-0.90%	-2.35%	-3.42%
Urban	165.90	158.16	160.79	159.98	159.96	-3.58%	1.14%	-0.52%	-0.02%
<b>3) Service Provider wise Subscribers Base (in Million) (wireless+wireline)</b>									
Bharti	308.12	348.52	347.52	344.30	329.36	-4.84%	-5.50%	-5.23%	-4.34%
Telenor	37.98								
Vodafone	222.92	222.97	435.22	419.03	395.17	-8.97%	-10.91%	-9.20%	-5.69%
Idea	211.21								
Reliance Jio	186.56	215.26	252.25	280.12	306.72	64.41%	42.49%	21.59%	9.50%
BSNL	123.95	125.00	124.69	125.81	126.91	2.39%	1.53%	1.78%	0.87%
Aircel	74.15	-	-	-	-	-	-	-	-
Reliance Com.	1.11	0.96	0.86	0.78	0.75	-32.45%	-21.63%	-12.64%	-3.72%
Tata	33.07	28.50	23.85	20.86	17.68	-46.53%	-37.97%	-25.87%	-15.25%
MTNL	6.90	6.84	6.78	6.74	6.70	-3.00%	-2.10%	-1.26%	-0.63%
Quadrant	0.24	0.24	0.23	0.23	0.22	-9.01%	-7.26%	-5.07%	-2.34%
<b>Total</b>	<b>1206.22</b>	<b>1168.89</b>	<b>1191.40</b>	<b>1197.87</b>	<b>1183.51</b>	<b>-1.88%</b>	<b>1.25%</b>	<b>-0.66%</b>	<b>-1.20%</b>

## B. Internet Services

	QE Mar 2018	QE Jun 2018	QE Sep 2018	QE Dec 2018	QE Mar 2019	%age change over Mar-2018 (12 months)	%age change over Jun-2018 (9 months)	%age change over Sep-2018 (6 months)	%age change over Dec-2018 (3 months)
	<b>1) Subscriber's Base (in million)</b>								
<b>A. Wired Internet Subscribers</b>	21.24	21.16	21.25	21.42	21.68	2.07%	2.45%	2.02%	1.19%
<b>B. Wireless Internet Subscribers</b>	472.72	491.10	538.76	582.79	615.05	30.11%	25.24%	14.16%	5.54%
i. Mobile Wireless (Mobile & Dongle)	472.25	490.66	537.92	582.35	613.75	29.96%	25.08%	14.10%	5.39%
ii. Fixed Wireless (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	0.47	0.44	0.83	0.44	1.31	177.42%	198.81%	56.50%	199.11%
<b>Total Internet Subscribers</b>	<b>493.96</b>	<b>512.26</b>	<b>560.01</b>	<b>604.21</b>	<b>636.73</b>	<b>28.90%</b>	<b>24.30%</b>	<b>13.70%</b>	<b>5.38%</b>
<b>2) No. of Internet Subs per 100 Population</b>	38.02	39.32	42.87	46.13	48.48	27.51%	23.29%	13.09%	5.10%

## C. Usage and Revenue for Wireless Services

Traffic(MOU) (minutes of uses/ subscriber/month)	583	608	627	667	692	18.67%	13.71%	10.35%	3.66%
ARPU (Rs./sub/month)	76	69	67	70	71	-6.06%	3.24%	5.94%	1.80%

## D. Telecom Financial Data

	QE Mar 2018	QE Jun 2018	QE Sep 2018	QE Dec 2018	QE Mar 2019	%age change over Mar-2018 (12 months)	%age change over Jun-2018 (9 months)	%age change over Sep-2018 (6 months)	%age change over Dec-2018 (3 months)
	<b>1. Telecom Sector</b>								
i) Gross Revenue (₹ in Crores)	62198.26	58401.12	57827.24	58990.60	58414.36	-6.08%	0.02%	1.02%	-0.98%
ii) Adjusted Gross Revenue (₹ in Crores)	35697.24	36552.48	36142.44	36054.13	35932.44	0.66%	-1.70%	-0.58%	-0.34%
<b>2. Access Services</b>									
Adjusted Gross Revenue (₹ in Crores)	25448.09	25585.07	25727.79	26070.72	26095.71	2.54%	2.00%	1.43%	0.10%
ARPU per month (AGR/ Average subscribers/3)	71.62	73.34	72.50	72.82	72.49	1.22%	-1.15%	-0.02%	-0.45%

## **Introduction**

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending 31<sup>st</sup> March, 2019. 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](http://www.trai.gov.in) under the link <http://www.trai.gov.in/release-publication/reports/performance-indicators-reports>). Any suggestion or any clarification pertaining to this report, Pr. Advisor (F&EA), TRAI may be contacted on Tel. +91-11-23221856, Fax. +91-11-23235249 and e-mail: [skmishra.trai@nic.in](mailto:skmishra.trai@nic.in).



# **Chapter 1 :**

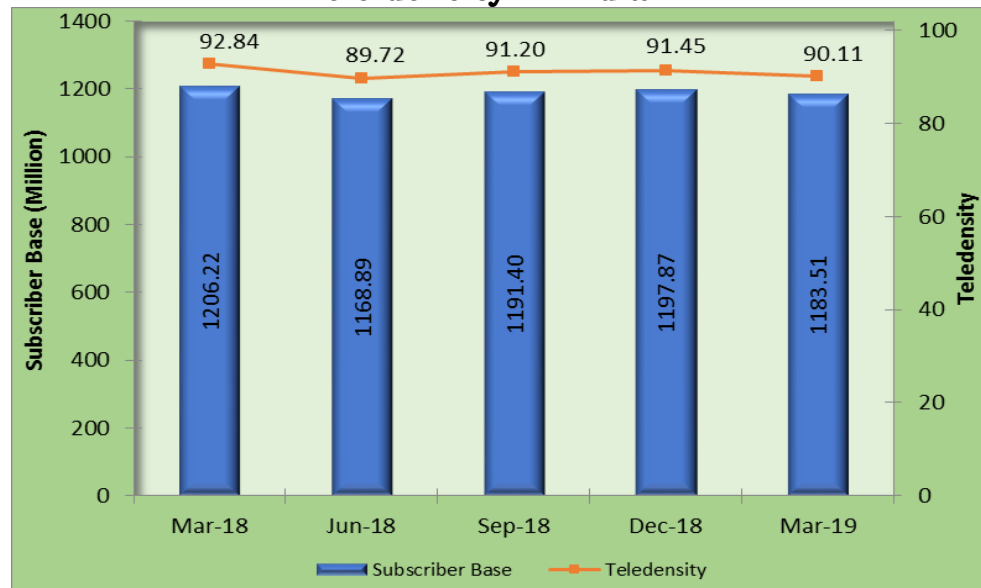
# **Subscription Data**

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- In this report, Tele-density is based on the population projections from census data published by the Office of Registrar General & Census Commissioner of India.

## Section A : Access Service - An Overview

1.1 The number of telephone subscribers in India declined from 1,197.87 million at the end of Dec-18 to 1,183.51 million at the end of Mar-19, registering a decline rate of 1.20% over the previous quarter. This reflects year-on-year (Y-O-Y) growth rate of -1.88% over the same quarter of last year. The overall Teledensity in India declined from 91.45 at the end of Dec-18 to 90.11 at the end of Mar-19.

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

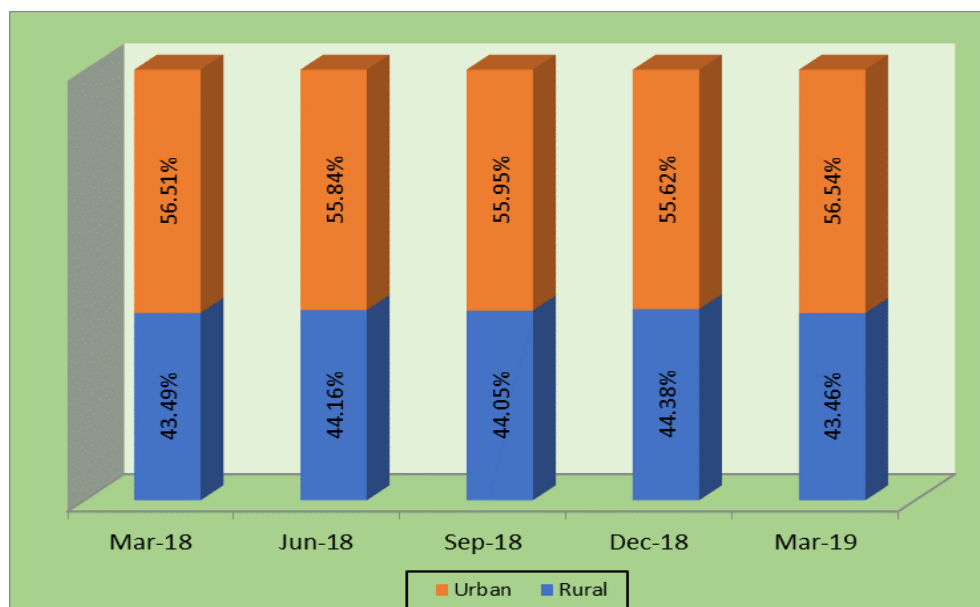


**Table 1.1: Subscriber Base & Teledensity - Rural & Urban**

Quarter ending	Subscriber Base (million)		Teledensity	
	Rural	Urban	Rural	Urban
Mar-18	524.61	681.61	59.05	165.90
Jun-18	516.13	652.76	57.99	158.16
Sep-18	524.76	666.64	58.85	160.79
Dec-18	531.59	666.28	59.50	159.98
Mar-19	514.35	669.16	57.47	159.96

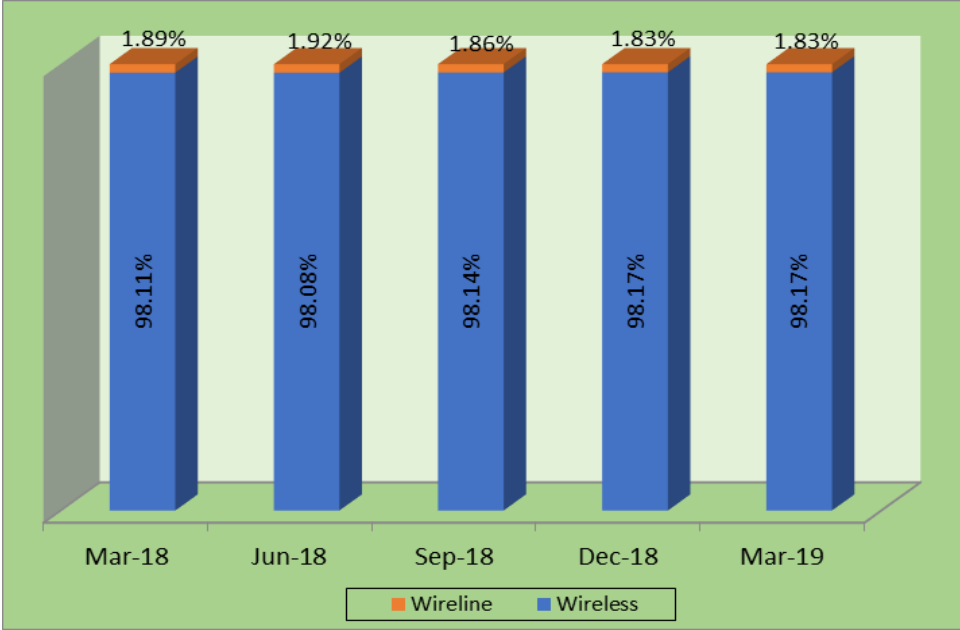
- 1.2 Telephone subscription in Urban areas increased from 666.28 million at the end of Dec-18 to 669.16 million at the end of Mar-19, however Urban Tele-density slightly declined from 159.98 to 159.96 at the end of the quarter.
- 1.3 Rural telephone subscription declined from 531.59 million at the end of Dec-18 to 514.35 million at the end of Mar-19 and Rural Tele-density also declined from 59.50 at the end of Dec-18 to 57.47 at the end of Mar-19.
- 1.4 The year-on-year(Y-O-Y) growth rate of Urban and Rural telephone subscription from Mar-18 to Mar-19 is -1.83% and -1.96% respectively. Year-on-year (Y-o-Y) growth rate of Urban and Rural Tele-density from Mar-18 to Mar-19 is -3.58% and -2.69% respectively.

**Chart 1.2: Market Share - Rural & Urban Subscribers**

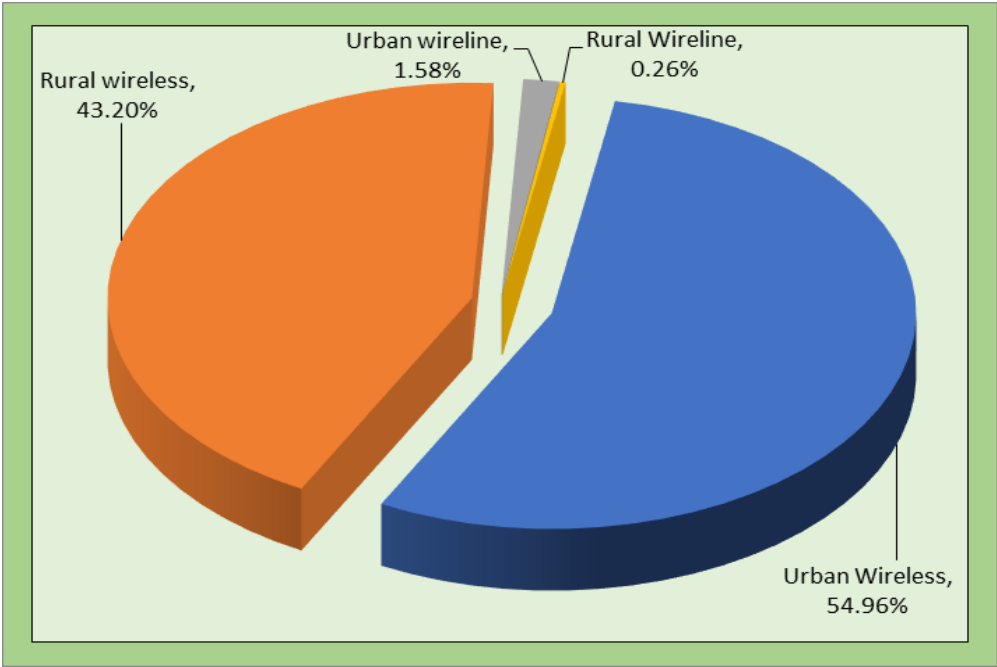


- 1.5 Share of subscription of rural areas in total telephone subscription declined from 44.38% at the end of Dec-18 to 43.46% at the end of Mar-19.

**Chart 1.3: Composition of Access subscription - Wireline & Wireless**



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



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

Service Area	Subscribers (million)			
	Dec-18	Mar-19	Quarterly Net Additions	Rate of Growth (%)
Andhra Pradesh	88.64	88.17	-0.47	-0.53
Assam	21.86	23.08	1.22	5.57
Bihar	88.32	85.31	-3.01	-3.41
Delhi	54.33	55.39	1.06	1.95
Gujarat	71.87	70.53	-1.34	-1.86
Haryana	27.96	27.99	0.03	0.10
Himachal Pradesh	10.62	10.63	0.01	0.11
Jammu & Kashmir	11.61	11.44	-0.17	-1.50
Karnataka	70.79	70.40	-0.39	-0.55
Kerala	45.56	45.84	0.28	0.62
Madhya Pradesh	77.83	75.72	-2.11	-2.71
Maharashtra	96.58	94.55	-2.03	-2.10
Mumbai	40.48	40.93	0.45	1.11
North East	11.78	12.09	0.32	2.69
Orissa	33.37	32.93	-0.44	-1.33
Punjab	40.11	40.01	-0.10	-0.24
Rajasthan	66.93	64.77	-2.16	-3.23
T.N. (incl. Chennai)	84.97	84.56	-0.41	-0.49
U.P.(E)	102.24	99.45	-2.79	-2.73
U.P.(W)	65.06	64.89	-0.17	-0.27
Kolkata	27.79	27.05	-0.74	-2.67
West Bengal	59.14	57.77	-1.37	-2.32
<b>All India</b>	<b>1,197.87</b>	<b>1,183.51</b>	<b>-14.36</b>	<b>-1.20</b>

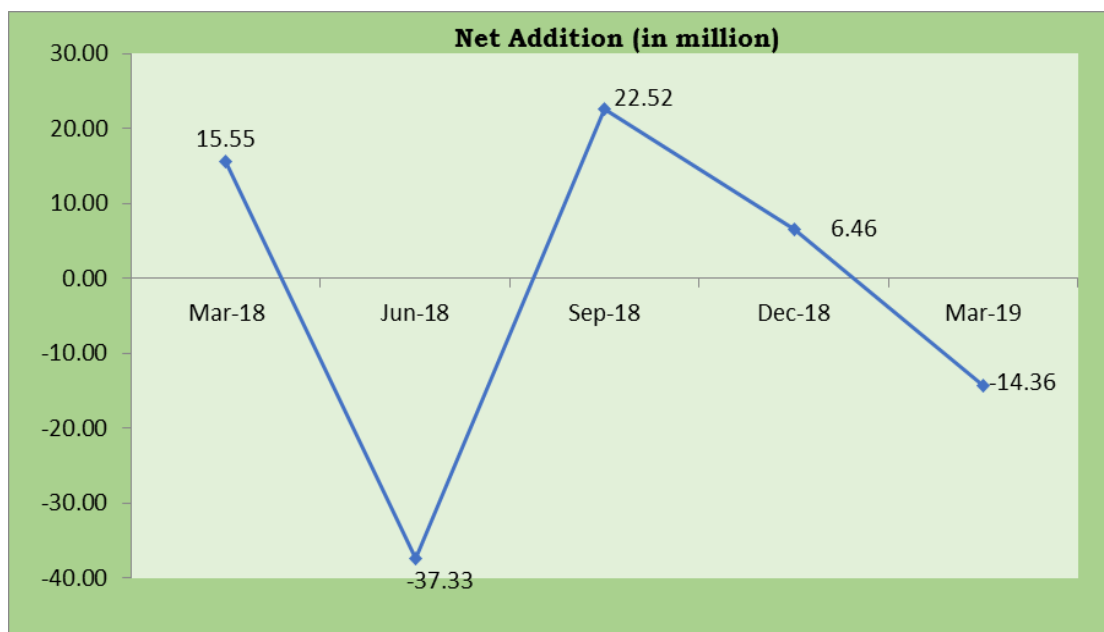
1.6 Assam service area showed maximum quarterly growth of 5.57%, however Bihar service area showed maximum quarterly decline of 3.41% in their subscriber base during the quarter ending Mar-19.

**Table 1.3: Service Area wise Rural-Urban Subscribers at QE Mar-19**

Service Area	Numbr of Subscribers (in million)			
	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	88.17	42.24	45.93	47.90
Assam	23.08	11.82	11.26	51.22
Bihar	85.31	55.81	29.50	65.42
Delhi	55.39	1.65	53.74	2.98
Gujarat	70.53	26.73	43.80	37.90
Haryana	27.99	13.84	14.15	49.44
Himachal Pradesh	10.63	5.94	4.70	55.84
Jammu & Kashmir	11.44	5.14	6.30	44.91
Karnataka	70.40	26.62	43.78	37.81
Kerala	45.84	18.22	27.63	39.74
Madhya Pradesh	75.72	34.33	41.39	45.34
Maharashtra	94.55	43.56	50.99	46.07
Mumbai	40.93	1.64	39.29	4.01
North East	12.09	4.92	7.17	40.69
Orissa	32.93	21.40	11.53	64.99
Punjab	40.01	13.62	26.39	34.04
Rajasthan	64.77	33.08	31.68	51.08
T.N. (incl. Chennai)	84.56	23.09	61.47	27.31
U.P.(E)	99.45	58.66	40.79	58.99
U.P.(W)	64.89	31.76	33.13	48.94
Kolkata	27.05	2.83	24.22	10.45
West Bengal	57.77	37.45	20.31	64.84
<b>All India</b>	<b>1,183.51</b>	<b>514.35</b>	<b>669.16</b>	<b>43.46</b>

1.7 Only seven service areas have more than 50% share of rural subscribers in their total number of subscribers. Bihar service area has maximum share of rural subscribers (65.42%) in its total telephone subscribers.

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



1.8 The net decline in telephone subscribers is 14.36 million in Q.E. Mar-19 as compared to the net addition of 6.46 million subscribers in Q.E. Dec-18.

**Table 1.4 : Service Area wise Teledensity**

Service Area/ States	As on 31 <sup>st</sup> December, 2018			As on 31 <sup>st</sup> March, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	65.38	182.58	98.25	64.96	181.15	97.55
Assam	45.14	165.80	65.35	42.36	199.70	68.81
Bihar	45.52	165.79	62.23	45.55	149.10	59.95
Delhi	-	-	235.65	-	-	238.58
Gujarat	75.07	155.63	109.53	71.11	155.34	107.21
Haryana	67.23	148.79	97.88	70.82	142.00	97.66
Himachal Pradesh	121.57	327.43	146.50	111.75	396.88	146.39
J&K	61.63	164.75	90.99	56.19	172.74	89.43

Service Area/ States	As on 31 <sup>st</sup> December, 2018			As on 31 <sup>st</sup> March, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Karnataka	67.01	177.25	110.87	69.19	171.66	110.04
Kerala	77.92	266.76	125.52	67.01	301.74	126.15
Madhya Pradesh	46.30	139.42	72.29	44.12	137.10	70.11
Maharashtra (incl. Mumbai)*	74.91	142.94	108.61	70.92	143.71	107.05
North East	49.34	176.07	82.01	46.10	192.84	84.01
Orissa	61.72	144.80	76.90	60.27	144.73	75.74
Punjab	79.99	181.26	125.98	78.37	181.50	125.35
Rajasthan	63.77	165.26	88.45	57.60	171.56	85.33
Tamil Nadu (incl. Chennai)	89.02	134.97	117.77	85.94	135.47	117.05
Uttar Pradesh (incl. UPE & UPW)	49.22	139.13	70.12	49.22	132.63	68.63
West Bengal (incl. Kolkata)*	61.72	158.30	89.62	58.29	158.54	87.26
<b>All India</b>	<b>59.50</b>	<b>159.98</b>	<b>91.45</b>	<b>57.47</b>	<b>159.96</b>	<b>90.11</b>

\* 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, published by the Office of the Registrar General & Census Commissioner, India.
2. Delhi Service area, apart from the State of Delhi, includes wireless subscribers of the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).
3. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

1.9 Himachal Pradesh service area has the highest Rural Tele-density of 111.75 followed by Tamil Nadu service area (85.94). Assam service area has the lowest Rural Tele-density of 42.36 followed by Madhya Pradesh service area (44.12).



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

Sl.No.	States/UT	Total Telephone Subscription (million)		
		Total	Rural	Urban
1	Andhra Pradesh	46.29	25.44	20.85
2	Arunachal Pradesh	1.27	0.56	0.72
3	Assam	23.08	11.82	11.26
4	Bihar	62.56	43.76	18.80
5	Chhattisgarh	20.54	9.89	10.65
6	Goa	2.90	1.19	1.71
7	Gujarat	69.60	26.47	43.13
8	Haryana	34.31	12.83	21.48
9	Himachal Pradesh	10.63	7.13	3.50
10	Jammu & Kashmir	11.44	5.14	6.30
11	Jharkhand	22.75	12.05	10.70
12	Karnataka	70.40	23.94	46.46
13	Kerala	45.76	20.82	24.95
14	Madhya Pradesh	55.18	24.43	30.74
15	Maharashtra Incl. Mumbai	132.58	44.02	88.57
16	Manipur	2.41	0.81	1.60
17	Meghalaya	2.29	1.11	1.18
18	Mizoram	1.36	0.38	0.98
19	Nagaland	1.73	0.69	1.04
20	Odisha	32.93	21.40	11.53
21	Punjab	37.86	13.54	24.32
22	Rajasthan	64.77	33.08	31.68
23	Sikkim	0.80	0.43	0.37
24	Tamil Nadu (incl. Chennai)	83.22	22.73	60.50
25	Telangana	41.88	16.80	25.08
26	Tripura	3.03	1.37	1.66
27	Uttar Pradesh (UPE + UPW)	160.12	84.16	75.95
28	Uttarakhand	12.75	6.42	6.33
29	West Bengal Incl. Kolkata	83.55	39.63	43.92
<b>Union Territories</b>				
1	Andaman & Nicobar Islands	0.46	0.22	0.24
2	Chandigarh	2.13	0.08	2.05
3	Dadar & Nagar Haweli	0.59	0.20	0.38
4	Daman & Diu	0.35	0.06	0.28
5	Delhi	40.58	1.30	39.27
6	Lakshdweep	0.08	0.07	0.003
7	Puduchery	1.34	0.36	0.97
	<b>Total</b>	<b>1183.51</b>	<b>514.35</b>	<b>669.16</b>

**Table 1.6 : State/UT wise total Teledensity**

Sl.No.	State/UT	Total Teledensity		
		Total	Rural	Urban
1	Andhra Pradesh	51.21	64.96	181.15
2	Arunachal Pradesh	93.91	71.89	123.23
3	Assam	68.81	42.36	199.70
4	Bihar	58.26	45.56	165.68
5	Chhattisgarh	76.64	49.69	154.45
6	Goa	136.68	161.43	123.54
7	Gujarat	107.17	71.23	155.22
8	Haryana	119.69	71.86	198.72
9	Himachal Pradesh	146.39	111.75	396.88
10	Jammu & Kashmir	89.43	56.19	172.74
11	Jharkhand	65.15	45.51	126.78
12	Karnataka	110.04	62.23	182.15
13	Kerala	126.23	76.76	273.10
14	Madhya Pradesh	67.96	42.21	131.96
15	Maharashtra Incl. Mumbai	106.54	69.86	144.17
16	Manipur	90.17	40.51	239.58
17	Meghalaya	79.92	49.47	191.02
18	Mizoram	124.28	78.79	160.08
19	Nagaland	70.32	33.78	244.72
20	Odisha	75.74	60.27	144.73
21	Punjab	126.68	78.85	191.30
22	Rajasthan	85.33	57.60	171.56
23	Sikkim	120.52	76.76	356.93
24	Tamil Nadu (incl. Chennai)	118.27	86.34	137.36
25	Tripura	76.73	43.83	203.18
26	Uttar Pradesh (UPE +UPW)	70.10	47.80	145.07
27	Uttarakhand	115.71	84.04	187.35
28	West Bengal Incl. Kolkata	87.09	58.10	158.42
<b>Union Territories</b>				
1	Andaman & Nicobar Islands	78.38	66.90	92.54
2	Chandigarh	104.53	37.59	112.10
3	Dadar & Nagar Haweli	124.96	147.09	115.79
4	Daman & Diu	92.31	21.38	376.00
5	Delhi	174.76	171.18	174.88
6	Lakshdweep	91.53	117.88	12.38
7	Puduchery	71.23	66.88	73.00
	<b>Total</b>	<b>90.11</b>	<b>57.47</b>	<b>159.96</b>

\*Data of Telengana is included in A.P. State as separate projected population data of Telengana is not available.

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

Service Provider	Subscriber base (millions)			Rate of Growth (%)	Market Share in QE Dec-18 (%)	Market Share in QE Mar-19 (%)
	Dec-18	Mar-19	Net Additions			
Vodafone Idea Ltd	419.03	395.17	-23.86	-5.69	34.98	33.39
Bharti	344.30	329.36	-14.95	-4.34	28.74	27.83
Reliance Jio	280.12	306.72	26.61	9.50	23.38	25.92
BSNL	125.81	126.91	1.10	0.87	10.50	10.72
Tata	20.86	17.68	-3.18	-15.25	1.74	1.49
MTNL	6.74	6.70	-0.04	-0.63	0.56	0.57
Reliance Com.	0.78	0.75	-0.03	-3.72	0.06	0.06
Quadrant	0.23	0.22	-0.01	-2.34	0.02	0.02
<b>Total</b>	<b>1,197.87</b>	<b>1,183.51</b>	<b>-14.36</b>	<b>-1.20</b>	<b>100</b>	<b>100</b>

1.10 M/s Vodafone Idea Ltd continued to be the market leader with 33.39% in access segment in terms of number of subscribers with 395.17 million subscribers at the end of Mar-19. M/s Bharti Airtel held the second position with 329.36 million subscribers at the end of Mar-19. M/s Reliance Jio Infocomm Ltd is also in the race of top ranker with telephone subscriber base of 306.72 million at the end of Mar-19.

1.11 In term of net addition, only Reliance Jio Infocom Ltd and BSNL became the gainer with net addition of 26.61 million and 1.10 million telephone subscribers respectively during the QE Mar-19. All other access service providers showed negative growth in their telephone subscriber base during the quarter.

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

<b>Service Provider</b>	<b>No. of Total Subscribers (in millions)</b>	<b>No. of Rural Subscribers (in millions)</b>	<b>Percentage of Rural subscribers</b>	<b>Market share of Rural subscribers (%)</b>
Vodafone Idea Ltd	395.17	207.15	52.42	40.27
Bharti Airtel	329.36	149.14	45.28	29.00
Reliance Jio	306.72	116.32	37.92	22.62
BSNL	126.91	39.52	31.14	7.68
Tata Tele.	17.68	2.13	12.03	0.41
MTNL	6.70	0.05	0.69	0.01
Quadrant	0.22	0.05	20.54	0.01
Reliance Com.	0.75	0.001	0.19	0.0003
<b>Total</b>	<b>1,183.51</b>	<b>514.35</b>	<b>43.46</b>	<b>100</b>

1.12 M/s Vodafone Idea Ltd is the telecom service provider with highest proportion of rural telephone subscribers (52.42%) followed by Bharti Airtel (45.28%) to their total telephone subscribers at the end of Mar-19.

## Section B : Wireless Service

**Table 1.9: List of Cellular Mobile (GSM, LTE & CDMA) Service Providers currently providing service [As on 31<sup>st</sup> March, 2019]**

Sl.No.	Service Provider	Licenced Service Areas
1	Bharti Airtel Ltd	All India
2	Reliance Communications Ltd	All India (except Assam & NE)
3	Reliance Telecom Ltd	Kolkata, MP, WB, HP, Bihar, Odisha, Assam & NE
4	Vodafone Idea Ltd	All India
5	Tata Teleservices	All India except Assam, NE & J&K
6	BSNL	All India (except Delhi & Mumbai)
7	MTNL	Delhi & Mumbai
8	Reliance Jio Infocom Ltd	All India

*Source : DoT website*

### **UL Access Services Licensees Virtual Network Operators (VNOs) who are providing services as on 31<sup>st</sup> March, 2019**

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

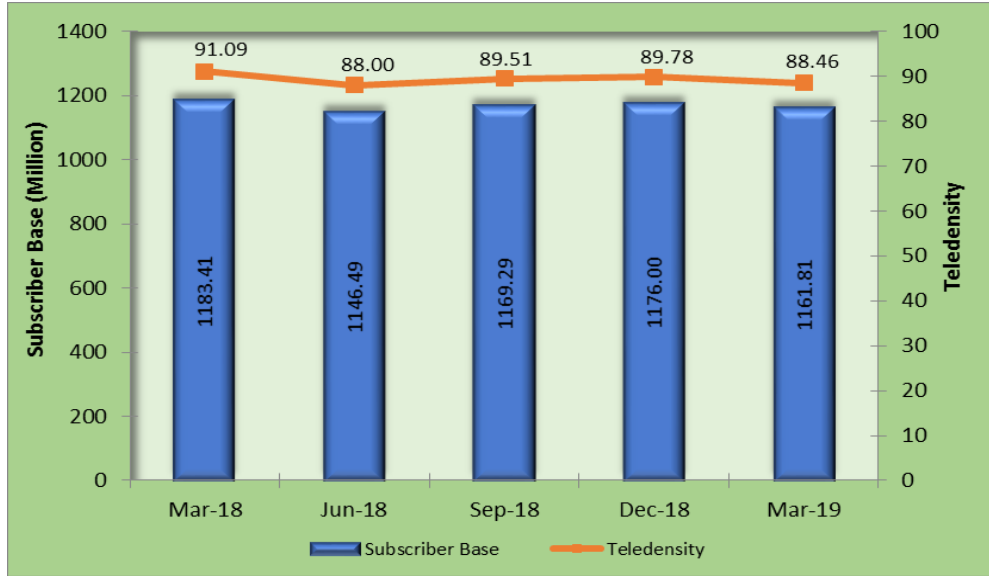
*Source : As reported by telecom service providers*

1.13 Total Wireless (GSM including LTE+CDMA) subscriber base declined from 1,176.00 million at the end of Dec-18 to 1,161.81 million at the end of Mar-19, thereby showing a quarterly decline rate of 1.21%. During the quarter, net decline of 14.19 million wireless subscribers has been recorded.

1.14 Total wireless subscriber base showed year-on-year (Y-O-Y) growth rate of -1.82% in QE Mar-19 over same quarter in previous year.

1.15 Wireless Teledensity declined from 89.78 at the end of Dec-18 to 88.46 at the end of Mar-19.

**Chart 1.6: Wireless Subscriber Base and Teledensity**



**Table 1.10: Wireless Subscriber Base & Teledensity - Rural & Urban**

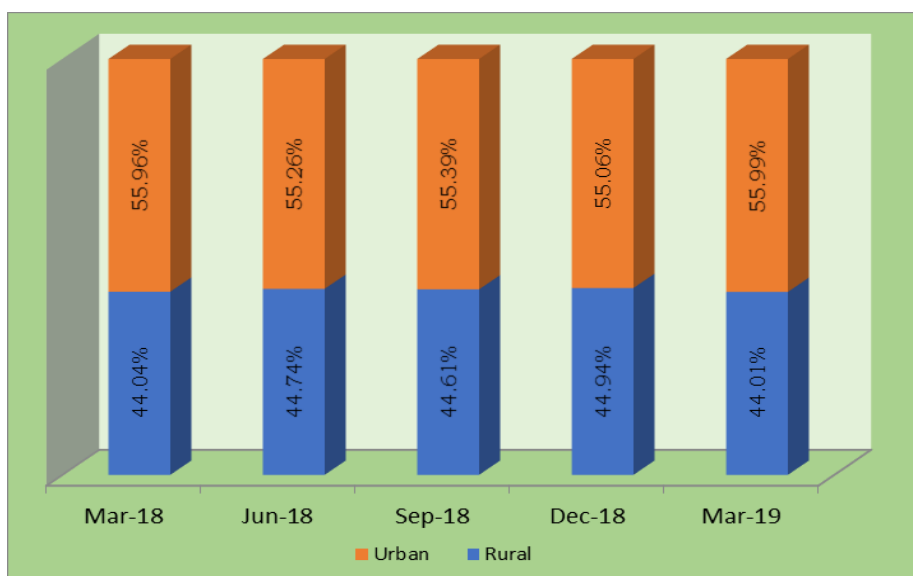
Quarter ending	Subscriber Base (million)		Tele-density	
	Rural	Urban	Rural	Urban
Mar-18	521.23	662.18	58.67	161.17
Jun-18	512.89	633.60	57.63	153.52
Sep-18	521.59	647.70	58.49	156.23
Dec-18	528.48	647.52	59.15	155.48
Mar-19	511.32	650.49	57.13	155.49

1.16 The Rural Wireless subscribers declined from 528.48 million at the end of Dec-18 to 511.32 million at the end of Mar-19, however the urban wireless subscribers increased from 647.52 million to 650.49 million during the quarter.

1.17 Quarterly Growth rates of Rural and Urban wireless subscriptions are -3.25% and 0.46% respectively in QE Mar-19.

1.18 The share of rural wireless subscription declined from 44.94% to 44.01% in total wireless subscription in this quarter.

**Chart 1.7: Wireless Market Share - Rural & Urban**



**Table 1.11: Growth in Wireless Subscriber base**

Service Provider	Subscriber Base (millions)			Rate of Growth (%)	Market Share Dec-18 (%)	Market Share Mar-19 (%)
	Dec-18	Mar-19	Net Additions			
Vodafone Idea Ltd	418.75	394.84	-23.91	-5.71	35.61	33.98
Bharti Airtel	340.26	325.18	-15.08	-4.43	28.93	27.99
Reliance Jio	280.12	306.72	26.61	9.50	23.82	26.40
BSNL	114.37	115.74	1.37	1.20	9.73	9.96
Tata Tele.	19.01	15.85	-3.15	-16.58	1.62	1.36
MTNL	3.47	3.45	-0.02	-0.62	0.30	0.30
Reliance Com.	0.022	0.019	-0.003	-14.22	0.002	0.002
<b>Total</b>	<b>1,176.00</b>	<b>1,161.81</b>	<b>-14.19</b>	<b>-1.21</b>	<b>100</b>	<b>100</b>

1.19 M/s Vodafone Idea Ltd is still a leading operator with market share of 33.98% in total wireless subscription at the end of Mar-19, despite losing of 23.91 million wireless subscribers during the quarter. M/s Bharti Airtel held second position with 325.18 million wireless subscribers at the end of Mar-19.

1.20 In terms of net additions during the quarter ending Mar-19, only Reliance Jio and BSNL showed positive growth in their wireless subscriber base with net addition of 26.61 million and 1.37 million subscribers respectively. All other service providers showed decline in their subscriber base during the quarter.

**Table 1.12: Service Area wise Wireless Subscriber base**

Service Area	Subscriber base (in million)			
	Dec-18	Mar-19	Net Additions	Rate of change (%)
Andhra Pradesh	87.21	86.73	-0.48	-0.55
Assam	21.74	22.97	1.22	5.62
Bihar	88.08	85.08	-3.00	-3.41
Delhi	51.13	52.14	1.01	1.97
Gujarat	70.65	69.30	-1.35	-1.91
Haryana	27.68	27.72	0.04	0.15
Himachal Pradesh	10.50	10.52	0.01	0.14
Jammu & Kashmir	11.51	11.33	-0.17	-1.49
Karnataka	68.62	68.24	-0.38	-0.55
Kerala	43.65	43.96	0.31	0.71
Madhya Pradesh	76.90	74.80	-2.11	-2.74
Maharashtra	95.01	93.03	-1.98	-2.09
Mumbai	37.54	38.01	0.47	1.25
North East	11.67	11.99	0.32	2.74
Orissa	33.14	32.69	-0.44	-1.33
Punjab	39.32	39.24	-0.08	-0.20
Rajasthan	66.39	64.23	-2.15	-3.24
T.N. (incl. Chennai)	82.75	82.37	-0.38	-0.46
U.P.(E)	101.79	99.00	-2.79	-2.74
U.P.(W)	64.75	64.59	-0.17	-0.26
Kolkata	27.06	26.34	-0.73	-2.68
West Bengal	58.89	57.54	-1.35	-2.29
<b>All India</b>	<b>1,176.00</b>	<b>1,161.81</b>	<b>-14.19</b>	<b>-1.21</b>



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

Service Area	Subscriber base (in million)			
	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	86.73	42.02	44.71	48.45
Assam	22.97	11.80	11.16	51.40
Bihar	85.08	55.78	29.30	65.56
Delhi	52.14	1.65	50.48	3.17
Gujarat	69.30	26.55	42.75	38.31
Haryana	27.72	12.59	15.13	45.43
Himachal Pradesh	10.52	7.07	3.45	67.20
Jammu & Kashmir	11.33	5.13	6.21	45.22
Karnataka	68.24	26.47	41.77	38.79
Kerala	43.96	17.08	26.87	38.87
Madhya Pradesh	74.80	34.22	40.57	45.76
Maharashtra	93.03	43.31	49.71	46.56
Mumbai	38.01	1.64	36.37	4.31
North East	11.99	4.90	7.09	40.86
Orissa	32.69	21.35	11.34	65.31
Punjab	39.24	13.46	25.78	34.30
Rajasthan	64.23	33.01	31.22	51.39
T.N. (incl. Chennai)	82.37	22.78	59.59	27.65
U.P.(E)	99.00	58.59	40.41	59.18
U.P.(W)	64.59	31.73	32.85	49.14
Kolkata	26.34	2.83	23.51	10.73
West Bengal	57.54	37.36	20.19	64.92
<b>All India</b>	<b>1,161.81</b>	<b>511.32</b>	<b>650.49</b>	<b>44.01</b>

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

**Table 1.14 : Service Area wise Wireless Tele-density**

Service Area	As on 31 <sup>st</sup> December, 2018			As on 31 <sup>st</sup> March, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
A.P.	65.02	177.85	96.66	64.62	176.34	95.96
Assam	45.07	164.03	64.99	42.30	198.00	68.47
Bihar	45.49	164.75	62.06	45.53	148.09	59.79
Delhi	-	-	221.76	-	-	224.55
Gujarat	74.59	151.92	107.67	70.63	151.61	105.33
Haryana	66.93	146.66	96.89	70.53	139.98	96.72
H.P.	120.56	321.30	144.88	110.78	390.95	144.81
J&K	61.51	162.16	90.17	56.07	170.23	88.63
Karnataka	66.62	169.30	107.47	68.81	163.78	106.67
Kerala	73.68	258.48	120.26	62.85	293.51	120.96
M.P.	46.17	136.70	71.43	43.99	134.39	69.26
Maharashtra (incl. Mumbai)*	74.49	136.14	105.03	70.52	137.04	103.54
North East	49.13	173.78	81.27	45.89	190.64	83.29
Orissa	61.58	142.43	76.35	60.13	142.39	75.20
Punjab	79.00	176.96	123.48	77.42	177.32	122.92
Rajasthan	63.64	162.72	87.73	57.47	169.06	84.62
Tamil Nadu (incl. Chennai)	87.85	130.75	114.69	84.78	131.33	114.02
Uttar Pradesh (incl. UPE&UPW)*	49.17	137.94	69.80	49.17	131.45	68.32
West Bengal (incl. Kolkata)*	61.57	155.20	88.61	58.15	155.55	86.30
<b>All India</b>	<b>59.15</b>	<b>155.48</b>	<b>89.78</b>	<b>57.13</b>	<b>155.49</b>	<b>88.46</b>

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

Notes:

1. Teledensity figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country, published by the Office of the Registrar General & Census Commissioner, India.
2. Delhi service area, apart from the State of Delhi, includes 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 Chhathishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

**Table 1.15 : State/UT wise Wireless Subscriber Base**

Sl.No.	States/UT	Wireless Subscribers (in million)		
		Total	Rural	Urban
1	Andhra Pradesh	45.69	25.26	20.43
2	Arunachal Pradesh	1.25	0.55	0.70
3	Assam	22.97	11.80	11.16
4	Bihar	62.44	43.74	18.71
5	Chhattisgarh	20.36	9.87	10.49
6	Goa	2.80	1.16	1.64
7	Gujarat	68.38	26.29	42.09
8	Haryana	33.98	12.78	21.20
9	Himachal Pradesh	10.52	7.07	3.45
10	Jammu & Kashmir	11.33	5.13	6.21
11	Jharkhand	22.64	12.04	10.59
12	Karnataka	68.24	23.80	44.45
13	Kerala	43.88	19.69	24.20
14	Madhya Pradesh	54.43	24.35	30.08
15	Maharashtra	128.24	43.80	84.45
16	Manipur	2.39	0.81	1.58
17	Meghalaya	2.27	1.11	1.16
18	Mizoram	1.35	0.38	0.97
19	Nagaland	1.72	0.69	1.03
20	Odisha	32.69	21.35	11.34
21	Punjab	37.26	13.38	23.88
22	Rajasthan	64.23	33.01	31.22
23	Sikkim	0.80	0.43	0.37
24	Tamil Nadu	81.09	22.42	58.66
25	Telangana	41.04	16.75	24.28
26	Tripura	3.01	1.37	1.64
27	Uttar Pradesh	159.43	84.08	75.35
28	Uttarakhand	12.66	6.41	6.24
29	West Bengal	82.64	39.54	43.10
	<b>Union Territories</b>			
1	Andaman & Nicobar Islands	0.44	0.21	0.23
2	Chandigarh	1.95	0.08	1.88
3	Dadar & Nagar Haweli	0.58	0.20	0.38
4	Daman & Diu	0.34	0.06	0.28
5	Delhi	37.40	1.30	36.10
6	Lakshdweep	0.07	0.07	0.00
7	Puduchery	1.28	0.36	0.92
	<b>Total</b>	<b>1161.81</b>	<b>511.32</b>	<b>650.49</b>

**Table 1.16 : State/UT wise Wireless Tele-density**

Sl.No.	State/UT	Wireless Teledensity		
		Total	Rural	Urban
1	Andhra Pradesh*	95.96	64.62	176.34
2	Arunachal Pradesh	92.14	71.02	120.27
3	Assam	68.47	42.30	198.00
4	Bihar	58.15	45.54	164.83
5	Chhattisgarh	75.97	49.59	152.12
6	Goa	131.86	157.15	118.43
7	Gujarat	105.28	70.75	151.45
8	Haryana	118.56	71.57	196.21
9	Himachal Pradesh	144.81	110.78	390.95
10	Jammu & Kashmir	88.63	56.07	170.23
11	Jharkhand	64.82	45.47	125.56
12	Karnataka	106.67	61.85	174.28
13	Kerala	121.04	72.59	264.89
14	Madhya Pradesh	67.05	42.06	129.14
15	Maharashtra	103.05	69.51	137.46
16	Manipur	89.41	40.26	237.29
17	Meghalaya	79.30	49.37	188.49
18	Mizoram	123.03	78.60	158.00
19	Nagaland	70.00	33.76	243.01
20	Odisha	75.20	60.13	142.39
21	Punjab	124.68	77.90	187.89
22	Rajasthan	84.62	57.47	169.06
23	Sikkim	119.56	76.65	351.36
24	Tamil Nadu	115.23	85.18	133.19
25	Tripura	76.21	43.62	201.48
26	Uttar Pradesh	69.80	47.75	143.92
27	Uttarakhand	114.85	83.91	184.82
28	West Bengal	86.14	57.96	155.45
	<b>Union Territories</b>			
1	Andaman & Nicobar Islands	75.48	64.87	88.57
2	Chandigarh	95.86	36.75	102.54
3	Dadar & Nagar Haweli	124.09	145.95	115.04
4	Daman & Diu	90.75	20.58	371.44
5	Delhi	161.08	171.18	160.74
6	Lakshdweep	86.29	115.02	-
7	Puduchery	68.35	65.42	69.55
	<b>All India Teledensity</b>	<b>88.46</b>	<b>57.13</b>	<b>155.49</b>

\*Data of Telengana is included in A.P. State as separate projected population data of Telengana is not available.

**Table 1.17 : Rural Wireless Subscriber base and Market Share as on 31.03.2019**

<b>Service Provider</b>	<b>Total number of wireless Subscribers (in millions)</b>	<b>Rural Subscribers (in millions)</b>	<b>% of Rural subscribers in total</b>	<b>Market Share of Rural Subscribers (%)</b>
Vodafone Idea Ltd	394.84	207.15	52.46	40.51
Bharti Airtel	325.18	149.14	45.86	29.17
Reliance Jio	306.72	116.32	37.92	22.75
BSNL	115.74	36.59	31.61	7.16
Tata Tele.	15.85	2.08	13.10	0.41
MTNL	3.45	0.05	1.34	0.01
Reliance Com.	0.019	0.00	0.00	0.00
<b>Total</b>	<b>1,161.81</b>	<b>511.32</b>	<b>44.01</b>	<b>100</b>

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

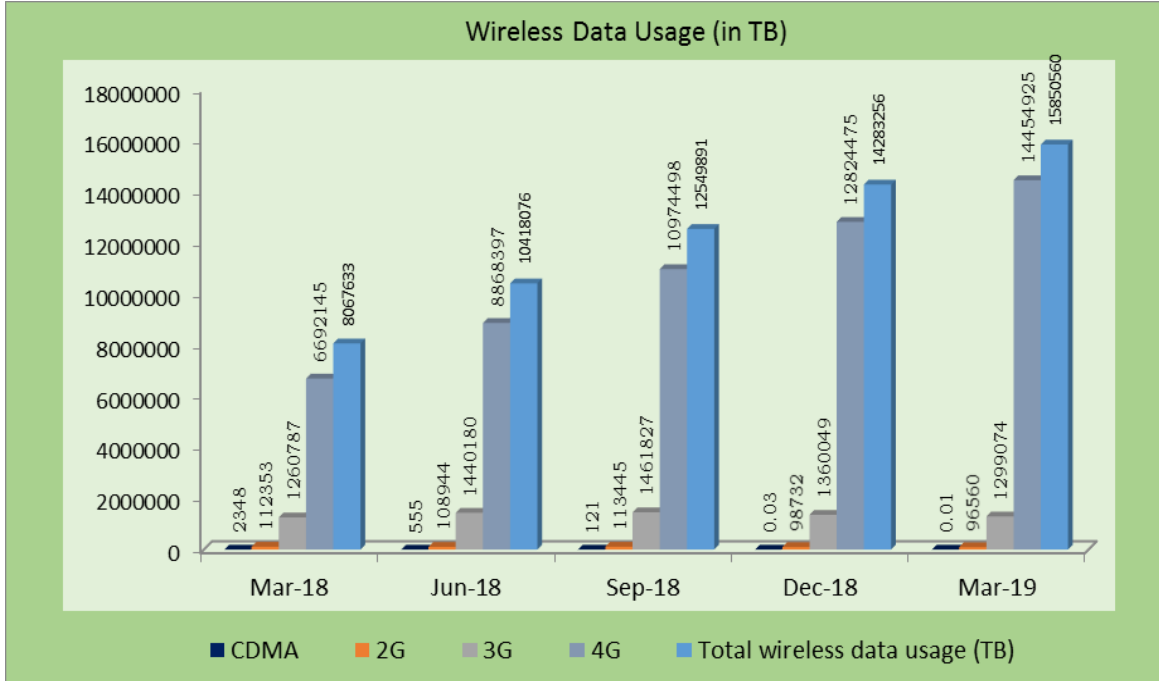
### **Wireless Data Usage**

1.22 Volume of total wireless data usage increased from 14,283,256 terabytes during Q.E. Dec-18 to 15,850,560 terabytes during Q.E. Mar-19. Out of total data wireless usage, 2G data usage was 96,560 terabytes, 3G data usage was 1,299,074 terabyte and 4G data usage was 14,454,925 terabytes during the quarter. CDMA data usage was remained 0.01 terabytes only during the QE Mar-19.

1.23 Total number of wireless data subscribers increased from 578.20 million at the end of Dec-18 to 613.75 million at the end of Mar-19.

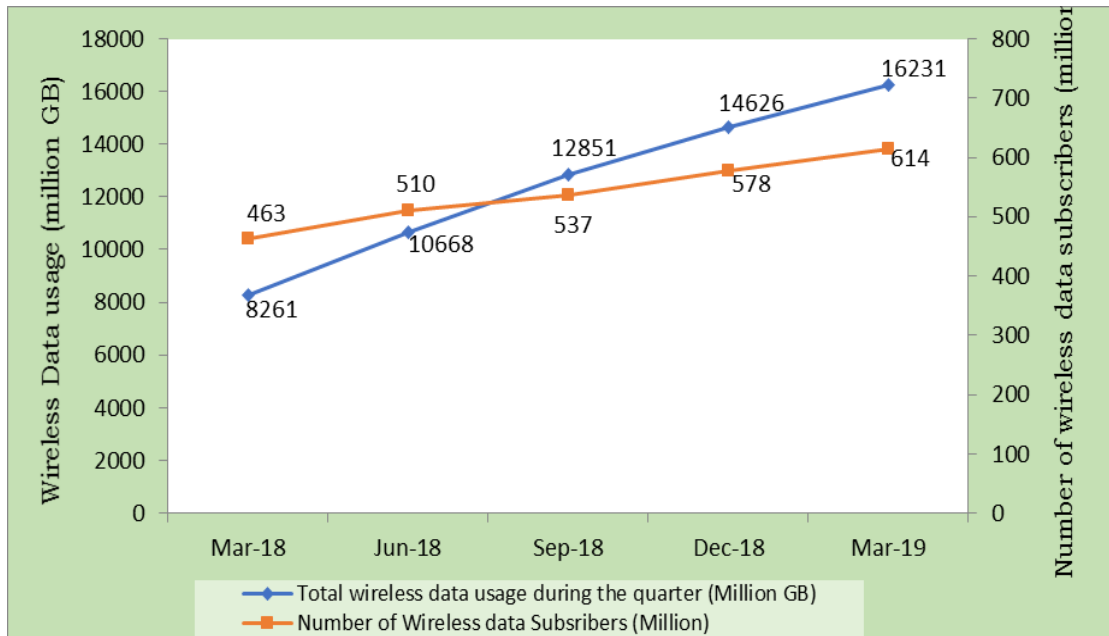
1.24 Technology-wise trend of growth in volume of wireless data usage is depicted in the following chart.

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



1.25 The contribution of 3G and 4G data usage in total volume of wireless data usage are about 8.20% and 91.20% respectively during the QE Mar-19. Share of 2G data usage remained 0.61% during the quarter.

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



## Section C : Wireline Service

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

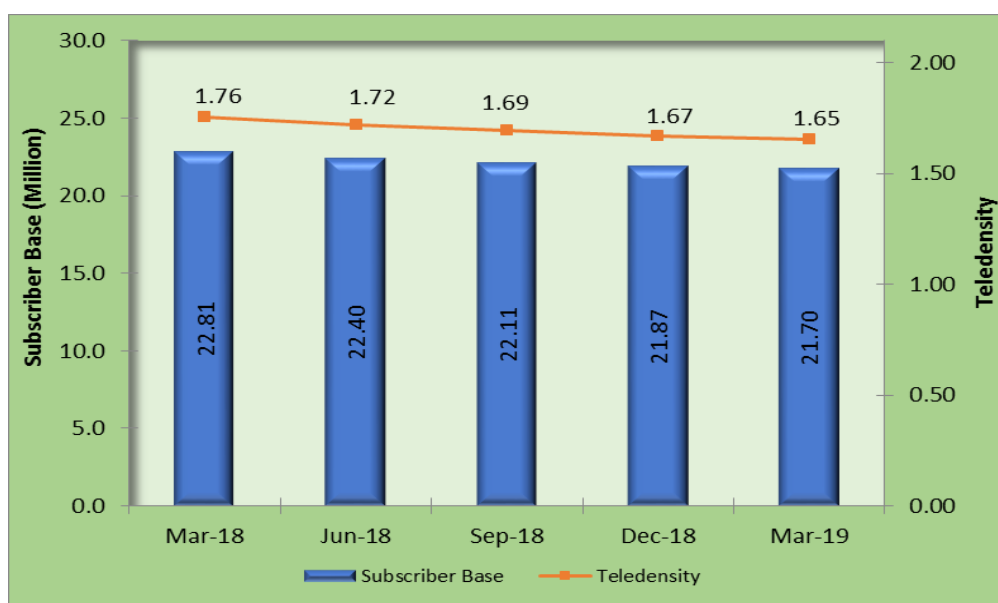
**[As on 31<sup>st</sup> March, 2019]**

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

1.26 Total Wireline subscriber base declined from 21.87 million at the end of Dec-18 to 21.70 at the end of Mar-19 with quarterly decline rate of 0.79%. Overall Wireline Teledensity also declined from 1.67 at the end of Dec-18 to 1.65 at the end of Mar-19.

1.27 Rural subscriber base has shown decline of 2.77%, from 3.11 Million at the end of Dec-18 to 3.02 Million at the end of Mar-19. Urban wireline subscription also recorded decline rate of 0.46%, from 18.76 million to 18.67 million during the same period.

**Chart 1.10: Wireline Subscriber Base and Teledensity**



**Table 1.19 : Wireline Subscriber Base & Teledensity - Rural & Urban**

Quarter ending	Subscriber Base (million)		Teledensity (%)	
	Rural	Urban	Rural	Urban
Mar-18	3.38	19.43	0.38	4.73
Jun-18	3.24	19.16	0.36	4.64
Sep-18	3.17	18.95	0.36	4.57
Dec-18	3.11	18.76	0.35	4.50
Mar-19	3.02	18.67	0.34	4.46

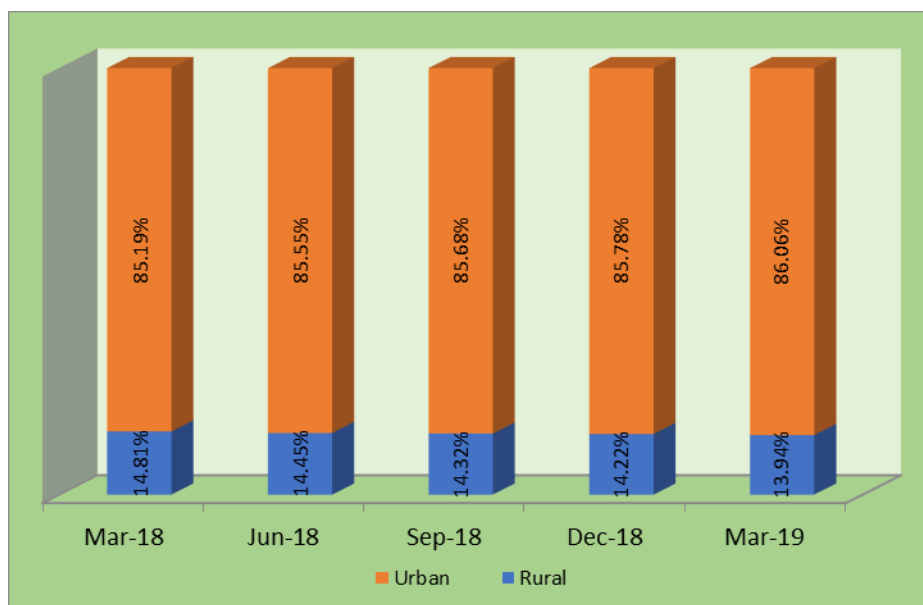


**Table 1.20 : Service Provider wise Subscriber base (Rural - Urban)  
- As on 31.03.2019**

Service Provider	Subscriber Base (million)			Share of Rural subscription (%)
	Rural	Urban	Total	
BSNL	2.93	8.24	11.17	26.22
Bharti Airtel	--	4.17	4.17	--
MTNL	--	3.24	3.24	--
Tata Tele.	0.05	1.78	1.83	2.70
Reliance Com.	0.001	0.73	0.73	0.20
Quadrant	0.05	0.18	0.22	20.54
Vodafone Idea	--	0.33	0.33	--
<b>Total</b>	<b>3.02</b>	<b>18.67</b>	<b>21.70</b>	<b>13.94</b>

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

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



**Table 1.21 : Service Provider wise growth in Wireline Subscriber base**

Service Provider	Subscriber Base (million)			Rate of change (%)	Market share-Dec-18(%)	Market share-Mar-19(%)
	Dec-18	Mar-19	Net Addition			
BSNL	11.44	11.17	-0.27	-2.37	52.31	51.47
Bharti Airtel	4.04	4.17	0.13	3.26	18.49	19.24
MTNL	3.26	3.24	-0.02	-0.65	14.93	14.95
Tata Tele.	1.86	1.83	-0.03	-1.63	8.49	8.42
Reliance Com.	0.76	0.73	-0.03	-3.41	3.46	3.37
Vodafone Idea	0.28	0.33	0.05	17.64	1.29	1.53
Quadrant	0.23	0.22	-0.01	-2.34	1.04	1.02
<b>Total</b>	<b>21.87</b>	<b>21.70</b>	<b>-0.17</b>	<b>-0.79</b>	<b>100</b>	<b>100</b>

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

Service Area	Dec-18	Mar-19	Net Additions	Rate of Change (%)
Andhra Pradesh	1.43	1.44	0.010	0.73
Assam	0.12	0.11	-0.005	-4.00
Bihar	0.24	0.23	-0.007	-3.12
Delhi	3.20	3.26	0.053	1.66
Gujarat	1.22	1.24	0.014	1.13
Haryana	0.28	0.27	-0.012	-4.23
Himachal Pradesh	0.12	0.11	-0.003	-2.75
Jammu & Kashmir	0.11	0.10	-0.003	-2.74
Karnataka	2.17	2.15	-0.013	-0.60
Kerala	1.91	1.88	-0.024	-1.27
Madhya Pradesh	0.93	0.92	-0.006	-0.60
Maharashtra	1.57	1.52	-0.046	-2.90
Mumbai	2.94	2.92	-0.020	-0.69
North East	0.11	0.10	-0.003	-2.36
Orissa	0.24	0.24	-0.002	-0.67
Punjab	0.79	0.77	-0.020	-2.51
Rajasthan	0.55	0.54	-0.009	-1.61
T.N. (incl. Chennai)	2.22	2.19	-0.031	-1.38
U.P.(E)	0.45	0.45	-0.001	-0.16

<b>Service Area</b>	<b>Dec-18</b>	<b>Mar-19</b>	<b>Net Additions</b>	<b>Rate of Change (%)</b>
U.P.(W)	0.31	0.30	-0.008	-2.48
Kolkata	0.73	0.71	-0.018	-2.46
West Bengal	0.25	0.23	-0.021	-8.34
<b>All India</b>	<b>21.87</b>	<b>21.70</b>	<b>-0.172</b>	<b>-0.79</b>

1.29 All service areas except A.P., Delhi and Gujarat showed decline in their wireline subscriber base during the QE Mar-19.

**Table 1.23: Service Area wise Wireline Rural-Urban Subscriber Base (in million) – as on 31.03.2019**

<b>Service Area</b>	<b>Total Subscribers</b>	<b>Rural Subscribers</b>	<b>Urban Subscribers</b>	<b>% of Rural Subscribers</b>
Andhra Pradesh	1.44	0.22	1.22	15.25
Assam	0.11	0.02	0.10	16.32
Bihar	0.23	0.03	0.20	12.86
Delhi	3.26	-	3.26	-
Gujarat	1.24	0.18	1.05	14.75
Haryana	0.27	0.05	0.22	19.31
Himachal Pradesh	0.11	0.06	0.05	54.42
Jammu & Kashmir	0.10	0.01	0.09	10.57
Karnataka	2.15	0.15	2.01	6.78
Kerala	1.88	1.13	0.75	60.03
Madhya Pradesh	0.92	0.10	0.82	11.24
Maharashtra	1.52	0.25	1.27	16.46
Mumbai	2.92	-	2.92	-
North East	0.10	0.02	0.08	21.23
Orissa	0.24	0.05	0.19	21.06
Punjab	0.77	0.16	0.61	21.29
Rajasthan	0.54	0.07	0.46	13.84
T.N. (incl. Chennai)	2.19	0.31	1.88	14.24
U.P.(E)	0.45	0.08	0.37	16.92
U.P.(W)	0.30	0.02	0.28	6.78
Kolkata	0.71	-	0.71	-
West Bengal	0.23	0.10	0.13	43.49
<b>All India</b>	<b>21.70</b>	<b>3.02</b>	<b>18.67</b>	<b>13.94</b>

**Table 1.24: Service Area wise Wireline Teledensity**

Service Area	As on 31 <sup>st</sup> December, 2018			As on 31 <sup>st</sup> March, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	0.36	4.73	1.58	0.34	4.81	1.59
Assam	0.07	1.77	0.36	0.07	1.70	0.34
Bihar	0.03	1.04	0.17	0.02	1.01	0.16
Delhi	-	-	13.89	-	-	14.03
Gujarat	0.48	3.71	1.86	0.48	3.74	1.88
Haryana	0.30	2.14	0.99	0.29	2.02	0.94
Himachal Pradesh	1.01	6.13	1.63	0.98	5.93	1.58
Jammu & Kashmir	0.12	2.59	0.83	0.12	2.51	0.80
Karnataka	0.39	7.94	3.39	0.38	7.87	3.37
Kerala	4.24	8.28	5.26	4.16	8.22	5.18
Madhya Pradesh	0.14	2.73	0.86	0.13	2.70	0.85
Maharashtra (incl. Mumbai)*	0.42	6.79	3.57	0.39	6.68	3.51
North East	0.21	2.28	0.74	0.21	2.21	0.72
Orissa	0.14	2.37	0.55	0.14	2.34	0.54
Punjab	0.99	4.30	2.49	0.95	4.19	2.42
Rajasthan	0.13	2.54	0.72	0.13	2.50	0.71
Tamil Nadu (incl. Chennai)	1.17	4.22	3.08	1.16	4.14	3.03
Uttar Pradesh (incl. UPE & UPW)	0.06	1.19	0.32	0.05	1.18	0.31
West Bengal (incl. Kolkata)*	0.16	3.10	1.01	0.14	2.98	0.96
<b>All India</b>	<b>0.35</b>	<b>4.50</b>	<b>1.67</b>	<b>0.34</b>	<b>4.46</b>	<b>1.65</b>

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

- Note: 1. Teledensity figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country, published by the Office of the Registrar General & Census Commissioner, India.
2. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

**Table 1.25: State/UT wise Wireline Subscriber base**

Sl.No.	States/UT	Wireline Subscribers (in million)		
		Total	Rural	Urban
1	Andhra Pradesh	0.59	0.17	0.42
2	Arunachal Pradesh	0.02	0.01	0.02
3	Assam	0.11	0.02	0.10
4	Bihar	0.12	0.02	0.10
5	Chhattisgarh	0.18	0.02	0.16
6	Goa	0.10	0.03	0.07
7	Gujarat	1.23	0.18	1.05
8	Haryana	0.32	0.05	0.27
9	Himachal Pradesh	0.11	0.06	0.05
10	Jammu & Kashmir	0.10	0.01	0.09
11	Jharkhand	0.11	0.01	0.10
12	Karnataka	2.15	0.15	2.01
13	Kerala	1.88	1.13	0.75
14	Madhya Pradesh	0.74	0.08	0.66
15	Maharashtra Incl. Mumbai	4.34	0.22	4.12
16	Manipur	0.02	0.01	0.02
17	Meghalaya	0.02	0.002	0.02
18	Mizoram	0.01	0.001	0.01
19	Nagaland	0.01	0.00	0.01
20	Odisha	0.24	0.05	0.19
21	Punjab	0.60	0.16	0.43
22	Rajasthan	0.54	0.07	0.46
23	Sikkim	0.01	0.00	0.01
24	Tamil Nadu (incl. Chennai)	2.14	0.30	1.83
25	Telangana	0.85	0.05	0.80
26	Tripura	0.02	0.01	0.01
27	Uttar Pradesh (UPE +UPW)	0.68	0.09	0.60
28	Uttarakhand	0.10	0.01	0.09
29	West Bengal Incl. Kolkata	0.91	0.09	0.82
	<b>Union Territories</b>			
1	Andaman & Nicobar Islands	0.02	0.01	0.01
2	Chandigarh	0.18	0.002	0.17
3	Dadar & Nagar Haweli	0.004	0.002	0.003
4	Daman & Diu	0.01	0.002	0.003
5	Delhi	3.18	-	3.18
6	Lakshdweep	0.004	0.002	0.003
7	Puduchery	0.05	0.01	0.05
	<b>Total</b>	<b>21.70</b>	<b>3.02</b>	<b>18.67</b>

**Table 1.26: State/UT wise Wireline Teledensity**

Sl.No.	State/UT	Wireline Teledensity		
		Total	Rural	Urban
1	Andhra Pradesh	1.59	0.34	4.81
2	Arunachal Pradesh	1.76	0.86	2.96
3	Assam	0.34	0.07	1.70
4	Bihar	0.11	0.02	0.85
5	Chhattisgarh	0.67	0.10	2.32
6	Goa	4.82	4.28	5.11
7	Gujarat	1.89	0.48	3.77
8	Haryana	1.13	0.29	2.51
9	Himachal Pradesh	1.58	0.98	5.93
10	Jammu & Kashmir	0.80	0.12	2.51
11	Jharkhand	0.32	0.04	1.22
12	Karnataka	3.37	0.38	7.87
13	Kerala	5.18	4.16	8.21
14	Madhya Pradesh	0.91	0.15	2.82
15	Maharashtra Incl. Mumbai	3.49	0.35	6.71
16	Manipur	0.76	0.25	2.30
17	Meghalaya	0.63	0.10	2.53
18	Mizoram	1.25	0.19	2.08
19	Nagaland	0.32	0.02	1.72
20	Odisha	0.54	0.14	2.34
21	Punjab	2.00	0.95	3.42
22	Rajasthan	0.71	0.13	2.50
23	Sikkim	0.96	0.11	5.57
24	Tamil Nadu (incl. Chennai)	3.04	1.16	4.16
25	Tripura	0.52	0.21	1.70
26	Uttar Pradesh (UPE + UPW)	0.30	0.05	1.14
27	Uttarakhand	0.86	0.13	2.53
28	West Bengal incl. Kolkata	0.95	0.13	2.97
	<b>Union Territories</b>			
1	Andaman & Nicobar Islands	2.90	2.03	3.98
2	Chandigarh	8.67	0.84	9.55
3	Dadar & Nagar Haweli	0.87	1.14	0.75
4	Daman & Diu	1.56	0.80	4.56
5	Delhi	13.68	0.00	14.14
6	Lakshdweep	5.23	2.85	12.38
7	Puduchery	2.88	1.47	3.46
	<b>Total</b>	<b>1.65</b>	<b>0.34</b>	<b>4.46</b>

\*Data of Telengana is included in A.P. State as separate projected population data of Telengana is not available.

## Public Call Offices (PCO)

1.30 Total number of PCOs in the country declined from 2,80,646\* at the end of Dec-18 to 2,55,268 at the end of Mar-19. Detailed table of service provider wise PCOs is available at Annexure -1.3.

**Chart 1.12: Trend of Number of PCOs**



**Table 1.27 : Rate of change & Market share of PCOs**

Service Provider	Dec-18	Mar-19	Rate of change (%)	Market share (%) (Mar-19)
BSNL	1,94,035	1,73,234	-10.72%	67.86%
MTNL	68,579	70,727	3.13%	27.71%
Bharti	11,010	10,415	-5.40%	4.08%
Quadrant	1,420	892	-37.18%	0.35%
Tata Tele.	5,602*	0	-	-
<b>Total</b>	<b>2,80,646</b>	<b>2,55,268</b>	<b>-9.04%</b>	<b>100%</b>

1.31 Number of PCOs continued shows declining trend. It has recorded a overall quarterly decline rate of 9.04% and the year-on-year (Y-O-Y) decline rate of 29.10% at the QE Mar-19.

**Note:** \*In the Performance Indicator Report for QE December, 2018 published on 4<sup>th</sup> April, 2019, number of PCOs may be read as 2,80,646 in place of 272032 and the number of PCOs of M/s Tata may be read as 5,602 in place of 00 as on QE Dec-18.

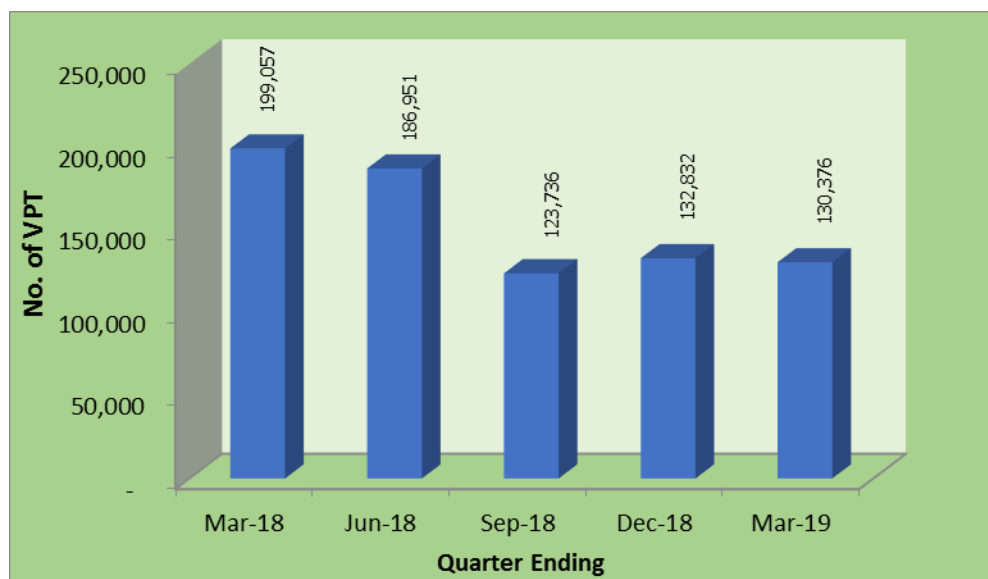
## Village Public Telephones (VPTs)

1.32 There are 5,93,731 inhabited villages in India as per census 2001. At the end of the quarter, only 21.96% of the total inhabited villages in India have been connected by VPTs.

1.33 Number of VPTs declined from 1,32,832\* at the end of Dec-18 to 1,30,376 at the end of Mar-19 with quarterly decline rate of 1.53%. However, it shows yearly decline of 34.50% in QE Mar-19 over same quarter in previous year.

1.34 As per the information received in TRAI, at the end of Mar-19, only M/s BSNL was providing VPT in the country. Service area wise detailed table of VPT is available at Annexure -1.4.

**Chart 1.8: Trend of number of VPTs**



Note: \* In the Performance Indicator Report for QE December, 2018 published on 4<sup>th</sup> April, 2019, number of VPTs may be read as 1,32,832 in place of 1,32,403 as on 31<sup>st</sup> December, 2018



## Section D: Internet Service

1.35 This section summarizes information submitted by 332 internet service providers for the quarter ending Mar-19. **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)**

1.36 As per reports received from 332 operators as compared to 326 operators in last quarter, total number of internet subscribers increased from 604.21 million at the end of Dec-18 to 636.73 million at the end of Mar-19 with quarterly growth rate of 5.38%. Out of total 636.73 million internet subscribers, 563.31 million were broadband subscribers and 73.42 million were narrowband subscribers.

1.37 Wired Internet subscribers increased from 21.42 million at the end of Dec-18 to 21.68 million at the end of Mar-19 with quarterly growth rate of 1.19%. Wireless Internet subscribers increased from 582.79 million at the end of Dec-18 to 615.05 million at the end of Mar-19 with quarterly growth rate of 5.54%.

1.38 The number of Broadband subscribers increased from 525.36 million at the end of Dec-18 to 563.31 million at the end of Mar-19 with quarterly growth rate of 7.22%. However, the number of Narrowband subscribers declined from 78.86 million at the end of Dec-18 to 73.42 million at the end of Mar-19 with quarterly growth rate of -6.89%.

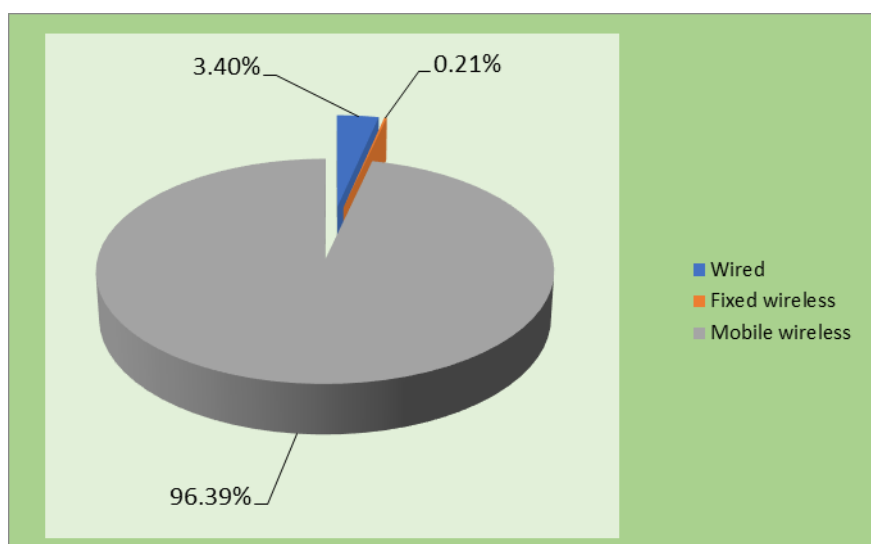
**Table 1.28: Trend of Internet subscriber base**

Segment	Mode of Access								Total Subscribers (in million)	
	Wired Subscribers (in million)		Wireless Subscribers (in million)							
			Fixed Wireless (Wi-Fi, Wi-Max, Radio & VSAT)		Mobile Wireless (Phone + Dongle)		Total Wireless			
	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19
Broadband	18.17	18.42	0.43	1.30	506.76	543.59	507.19	544.89	525.36	563.31
Narrowband	3.26	3.26	0.01	0.01	75.59	70.16	75.60	70.16	78.86	73.42
<b>Total</b>	<b>21.42</b>	<b>21.68</b>	<b>0.44</b>	<b>1.31*</b>	<b>582.35</b>	<b>613.75</b>	<b>582.79</b>	<b>615.05</b>	<b>604.21</b>	<b>636.73</b>

\*major variation seen in the number of fixed wireless subscribers due to increase in number of *wi-fi* subscribers of M/s BSNL, as reported.

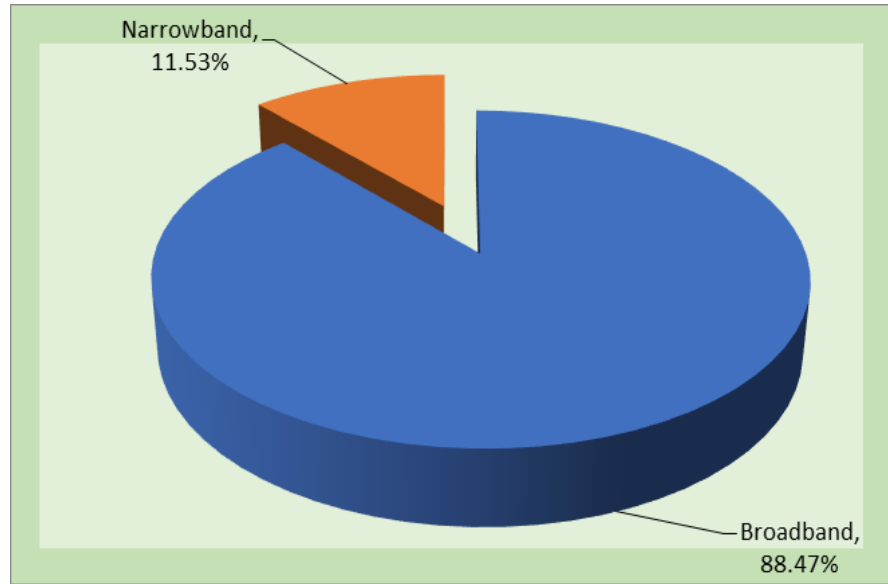
1.39 The following charts present the composition of Internet Subscribers by mode of access and composition of Broadband & Narrowband subscription as on 31<sup>st</sup> March, 2019.

**Chart 1.9: Composition of Internet subscription**



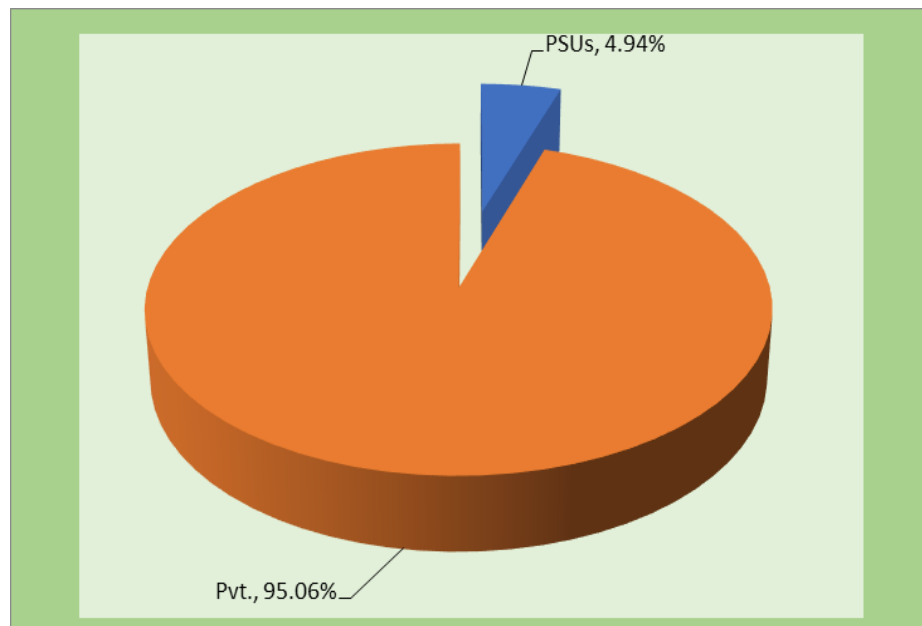
1.40 Out of total internet subscribers, 96.39% subscribers are using Mobile devices for access of internet service.

**Chart 1.10 : Composition of Broadband & Narrowband subscription**



1.41 Share of private internet service providers in respect of subscriber base, increased from 95.01% at QE Dec-18 to 95.06% at QE Mar-19. The following charts present the composition of market share of PSUs and Private Internet service providers.

**Chart 1.11 : Market share of PSUs and Private Internet Service Providers**



1.42 The urban/rural break up of internet subscribers are as per the following table.

**Table 1.29: Break up of Rural-Urban internet subscriber base (million)**

Telecom Service Area	Narrowband		Broadband		Total Internet	
	Rural	Urban	Rural	Urban	Rural	Urban
Andhra Pradesh	2.63	2.40	17.32	26.94	19.94	29.34
Assam	0.75	0.74	4.94	5.11	5.68	5.85
Bihar	4.06	2.15	18.56	14.57	22.62	16.72
Delhi	0.21	2.56	0.49	32.60	0.70	35.16
Gujarat	1.54	1.80	9.89	26.95	11.44	28.75
Haryana	0.67	0.77	4.88	8.58	5.54	9.35
Himachal Pradesh	0.30	0.23	2.90	1.73	3.21	1.96
Jammu & Kashmir	0.40	0.29	2.17	3.74	2.57	4.03
Karnataka	1.82	2.09	10.11	26.38	11.93	28.47
Kerala	1.06	1.23	8.98	13.44	10.04	14.67
Kolkata	0.16	1.50	1.37	12.63	1.53	14.13
Madhya Pradesh	3.42	2.60	12.27	23.11	15.69	25.71
Maharashtra	3.18	3.07	17.03	30.19	20.21	33.26
Mumbai	0.11	2.61	1.11	23.02	1.21	25.63
North East	0.36	0.41	2.42	3.51	2.78	3.92
Orissa	1.64	0.57	8.00	5.60	9.64	6.17
Punjab	0.82	1.10	6.31	15.35	7.13	16.45
Rajasthan	2.39	1.80	13.18	18.61	15.57	20.40
Tamil Nadu	1.62	2.91	9.75	31.20	11.37	34.11
Uttar Pradesh(East)	4.91	2.41	17.90	19.75	22.81	22.16
Uttar Pradesh(West)	2.40	1.94	9.51	18.21	11.90	20.15
West Bengal	2.54	1.27	10.95	12.07	13.49	13.33
<b>Total</b>	<b>36.98</b>	<b>36.44</b>	<b>190.03</b>	<b>373.28</b>	<b>227.01</b>	<b>409.72</b>

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

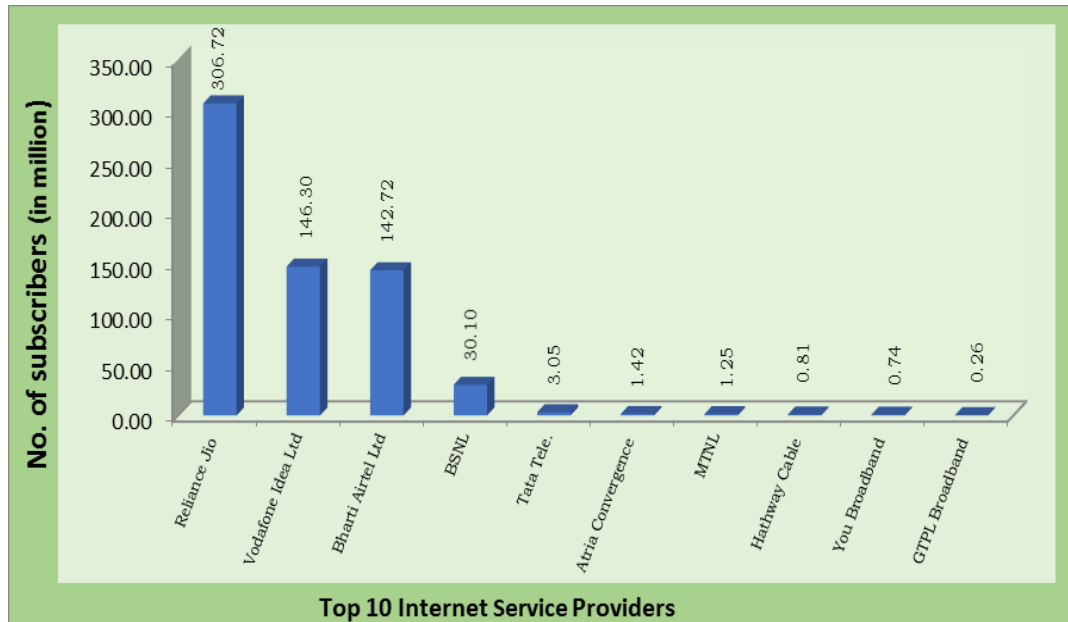
<b>S.No</b>	<b>ISP</b>	<b>No. of Subscribers</b>	<b>Share (%)</b>
1	Reliance Jio Infocomm Ltd	306,724,836	48.17
2	Vodafone Idea Limited	146,304,646	22.98
3	Bharti Airtel Ltd.	142,716,061	22.41
4	Bharat Sanchar Nigam Ltd.	30,097,857	4.73
5	Tata Teleservices Limited	3,048,178	0.48
6	Atria Convergence Technologies Pvt. Ltd.	1,420,749	0.22
7	Mahanagar Telephone Nigam Ltd.	1,250,113	0.20
8	Hathway Cable & Datacom Pvt. Ltd.	812,292	0.13
9	You Broadband India Pvt. Ltd.	740,933	0.12
10	GTPL Broadband Pvt. Ltd.	263,694	0.04
	<b>Total of Top 10 ISPs</b>	<b>633,379,359</b>	99.47
	<b>Others</b>	3,350,068	0.53
	<b>Grand Total</b>	<b>636,729,427</b>	<b>100</b>

1.43 Reliance Jio holds the top position with 48.17% of market share of internet subscribers followed by Vodafone Idea Ltd with 22.98% at the QE Mar-19. M/s Bharti Airtel held the third position in respect of internet subscribers with market share of 22.41%.

1.44 Out of total 332 internet service providers, top 10 Service Providers together hold 99.47% of total internet subscriber base at the QE Mar-19. Detailed table of number of internet subscriber base (broadband and narrowband) of all the service providers is available at **Annexure-1.5**.

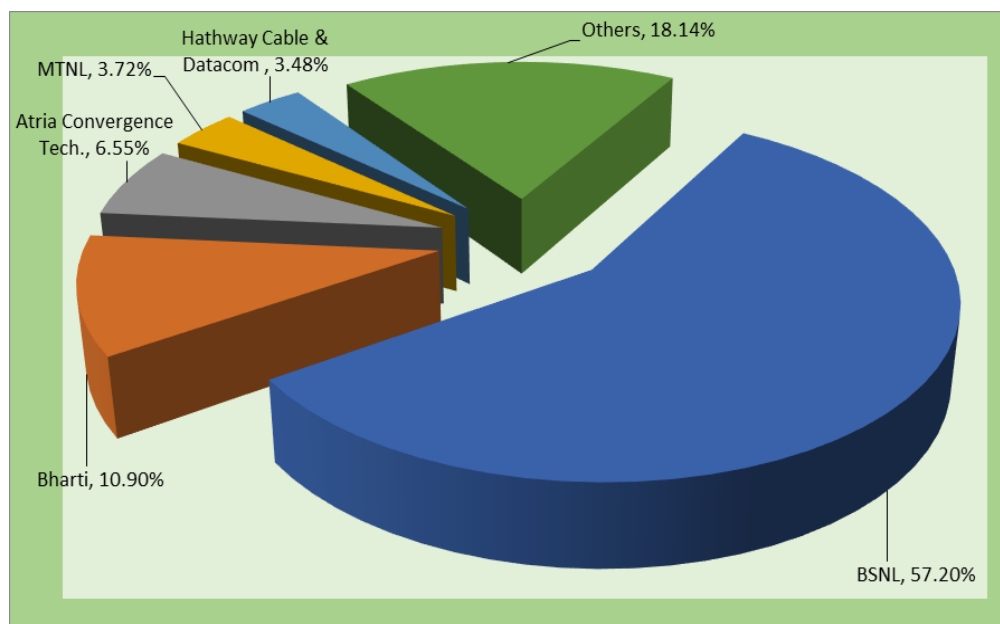
1.45 The following chart depicts the internet subscriber base of top ten Internet Service Providers (ISPs) in the QE Mar-19.

**Chart 1.17 : Subscriber base of top ten ISPs**



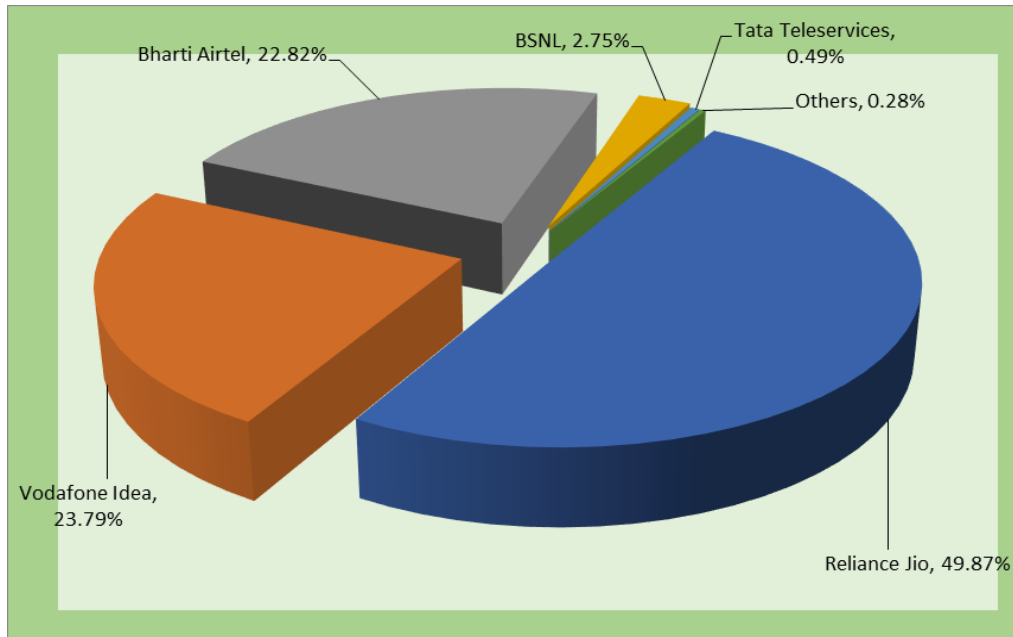
1.46 Out of total 21.68 million wired internet subscribers, BSNL holds 57.20% market share with 12.40 million subscribers, followed by Bharti with 2.36 million subscribers.

**Chart 1.18 : Composition of Wired Internet subscribers**

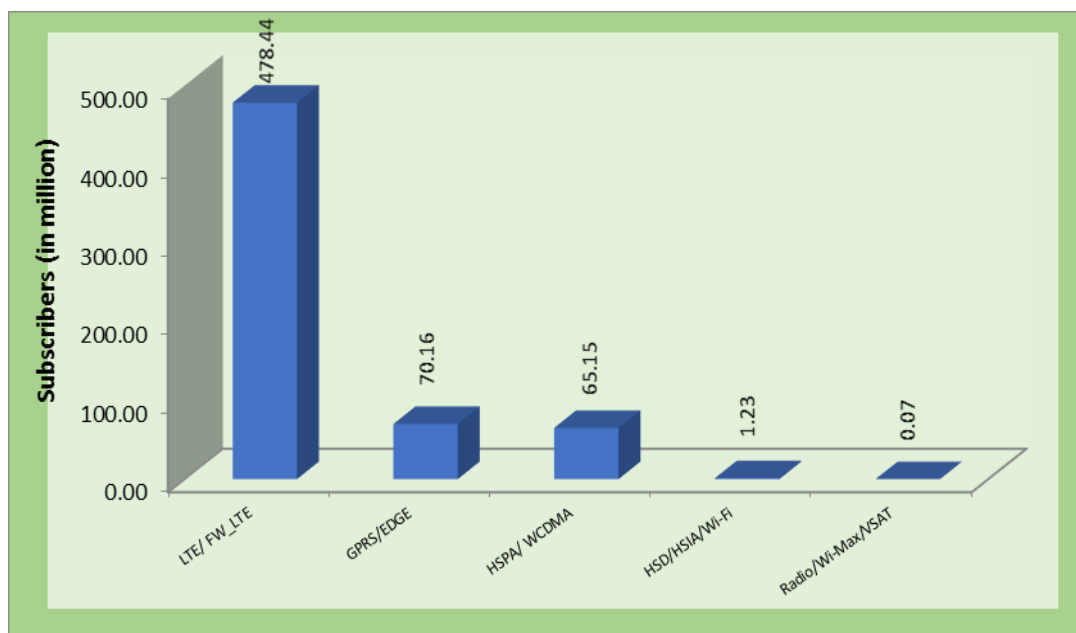


1.47 In wireless internet segment, Reliance Jio holds 49.87% market share with 306.72 million subscribers followed by Vodafone Idea Ltd with 23.79% of wireless internet subscribers at the QE Mar-19.

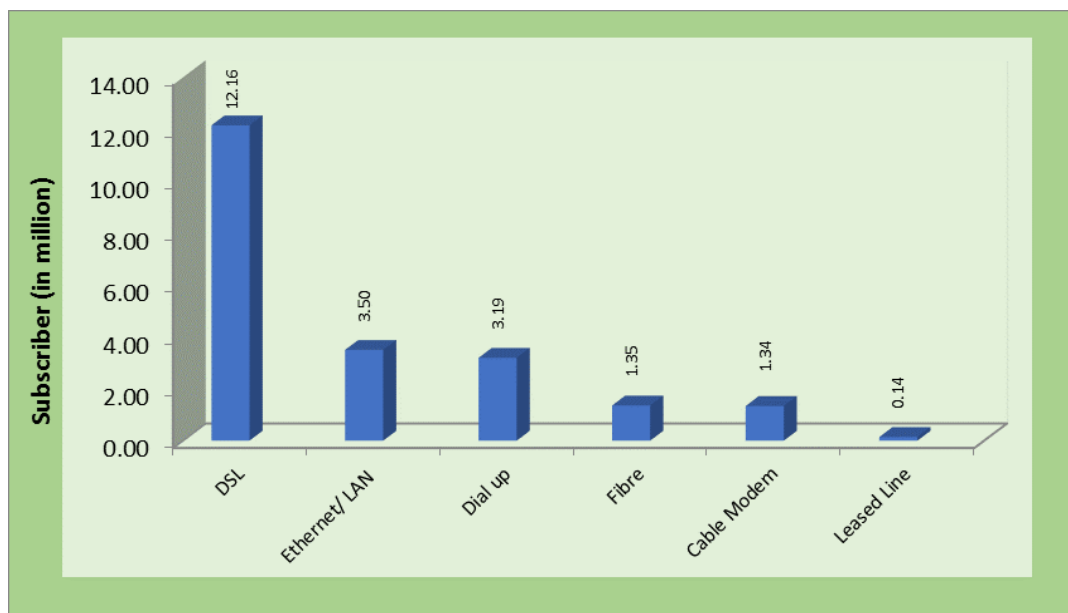
**Chart 1.19 : Composition of Wireless Internet subscription**



**Chart 1.20 : Technology trend for Wireless Internet Access**



**Chart 1.21 : Technology trend for Wired Internet Access**



1.48 Top five service areas in terms of internet subscriptions (wired+ wireless) are Maharashtra (53.47 million), Andhra Pradesh (49.29 million), Tamil Nadu including Chennai (45.48 million), U.P.(East) (44.97 million) and Madhya Pradesh (41.40 million).

**Table 1.31 : Service Area wise number of Internet Subscribers per 100 population at the end of Mar-19**

Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	19.94	29.34	49.29	30.67	115.72	54.53
Assam	5.68	5.85	11.53	20.36	103.76	34.38
Bihar	22.62	16.72	39.34	18.46	84.49	27.64
Delhi	0.70	35.16	35.86	91.91	156.56	154.44
Gujarat	11.44	28.75	40.18	30.42	101.96	61.08
Haryana	5.54	9.35	14.90	31.05	86.55	51.98
Himachal Pradesh	3.21	1.96	5.17	50.26	222.08	71.14
Jammu & Kashmir	2.57	4.03	6.60	28.12	110.45	51.60
Karnataka	11.93	28.47	40.39	31.00	111.62	63.14



Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Kerala	10.04	14.67	24.71	36.93	160.26	68.00
Madhya Pradesh	15.69	25.71	41.40	20.17	85.15	38.33
Maharashtra	20.21	33.26	53.47	33.61	93.74	63.46
Mumbai	1.21	25.63	26.85			
North East	2.78	3.92	6.70	26.02	105.35	46.51
Orissa	9.64	6.17	15.81	27.14	77.44	36.36
Punjab	7.13	16.45	23.58	41.02	113.15	73.88
Rajasthan	15.57	20.40	35.97	27.11	110.47	47.39
Tamil Nadu	11.37	34.11	45.48	42.31	75.17	62.95
UP (East)	22.81	22.16	44.97	18.89	75.92	32.17
UP (West)	11.90	20.15	32.06			
Kolkata	1.53	14.13	15.66	21.74	97.76	43.71
West Bengal	13.49	13.33	26.83			
<b>Total</b>	<b>227.01</b>	<b>409.72</b>	<b>636.73</b>	<b>25.36</b>	<b>97.94</b>	<b>48.48</b>

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

Notes:

1. No. of total internet subscribers per 100 population is derived from the subscriber data provided by the operators and the population projections of the country, published by the Office of the Registrar General & Census Commissioner, India.
2. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura states.

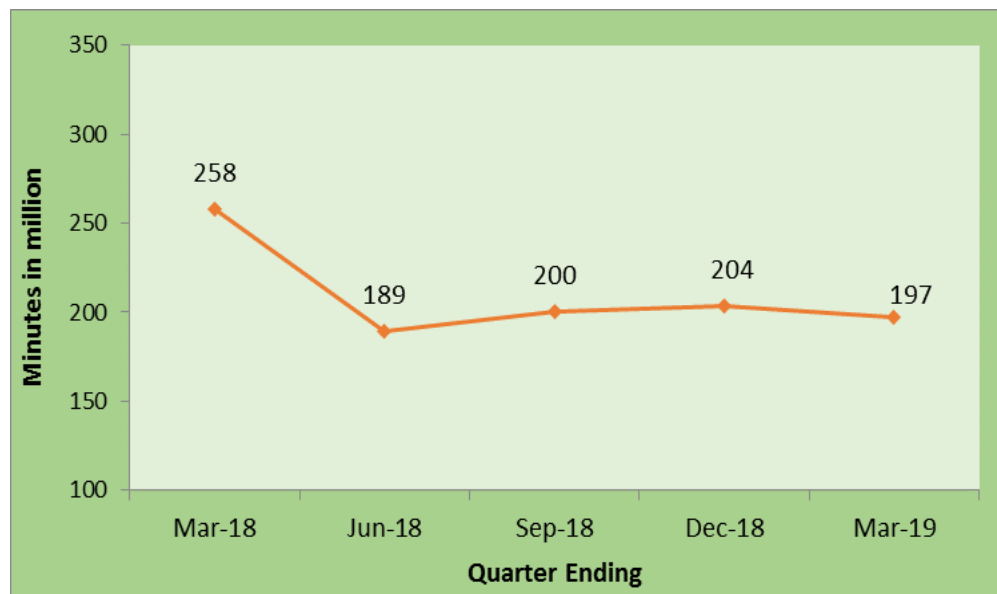
## ISP Connectivity

1.49 The International Internet bandwidth owned by various service providers is reported to be 12,394 Gbps during the quarter ending Mar-19 as compared to 7,840 Gbps during the previous quarter. M/s Reliance Jio infocomm Ltd. has reported sharp increase in bandwidth ownership from 1,460 Gbps in QE Dec-18 to 5,797 Gbps in QE Mar-19.

## Internet Telephony

1.50 As per the reports received from 15 service providers, providing Internet Telephony services, the total outgoing minutes of usage for internet telephony is 197.32 million during the Q.E. Mar-19 as compare to 203.81 million in previous quarter. 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)

1.51 The total number of broadband subscribers increased from 525.36 million at the end of Dec-18 to 563.31 million at the end of Mar-19. Out of which number of wired broadband subscribers are 18.42 million and wireless broadband subscribers are 544.89 million.

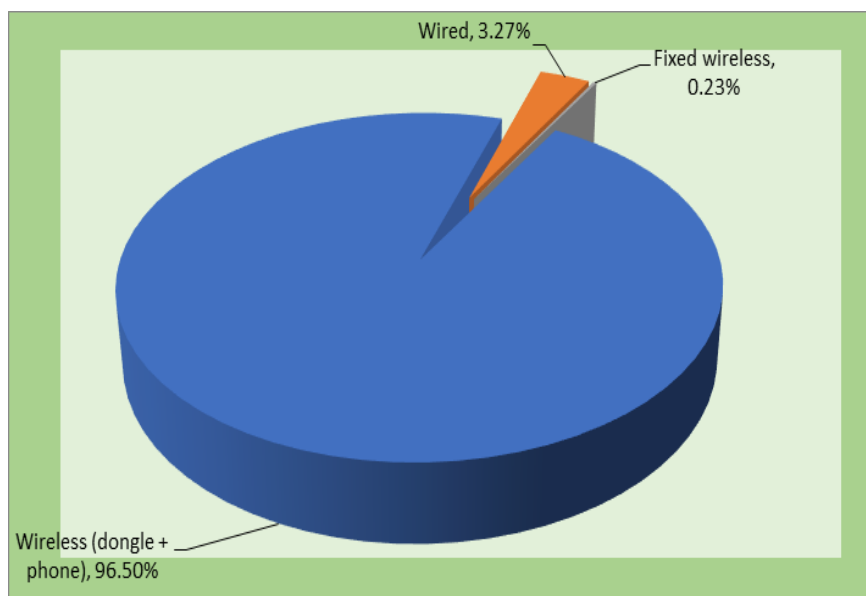
1.52 Top five broadband (wired+wireless) service providers in term of subscribers are Reliance Jio (306.72 million), Bharti Airtel (114.62 million), Vodafone Idea Ltd (110.22 million), BSNL (22.14 million) and Tata Teleservices (2.10 million).

1.53 In wired broadband segment, BSNL holds 50% market share with 9.21 million subscribers followed by Bharti with 2.36 million subscribers.

1.54 In wireless broadband segment, Reliance Jio holds 56.29% market share with 306.72 million subscribers followed by Bharti Airtel Ltd (20.60%) with 112.26 million subscribers.

1.55 Top five service areas in respect of broadband subscriptions at Q.E. Mar-19 are Maharashtra (47.22 million), Andhra Pradesh including Telengana (44.26 million), Tamil Nadu including Chennai (40.95 million), U.P.-East (37.65 million) and Gujarat (36.85 million).

**Chart 1.23 : Composition of Broadband subscription – Technology wise**



1.56 Mobile Device Users (dongle+phone) constitute 96.50% of total broadband subscribers at the end of Mar-19.

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

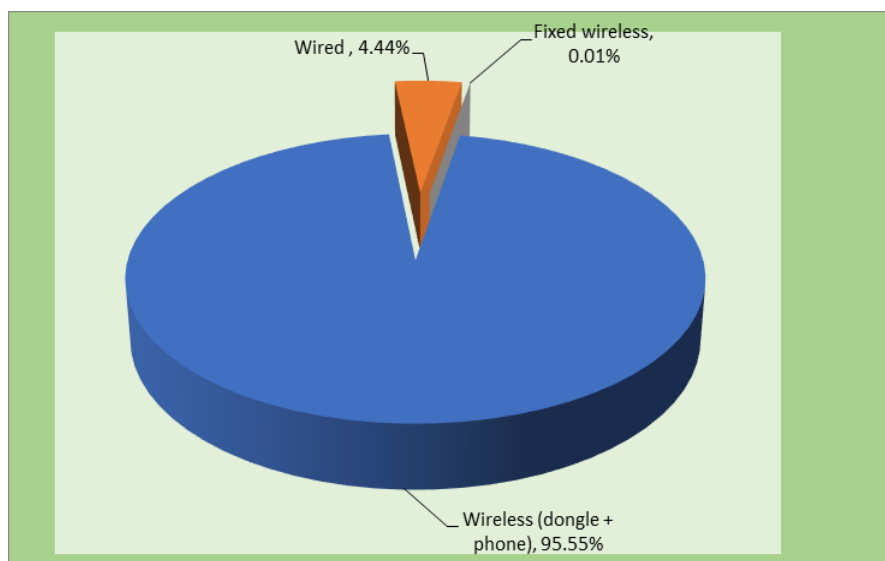
1.57 Total number of narrowband subscribers declined from 78.86 million at the end of Dec-18 to 73.42 million at the end of Mar-19 with the quarterly growth rate of -6.89%. Out of 73.42 million narrowband subscribers, Wired Narrowband subscribers are 3.26 million and Wireless Narrowband subscribers are 70.16 million.

1.58 The top five narrowband (wired+wireless) service providers in term of subscriber base are Vodafone Idea Ltd (36.09 million), Bharti Airtel (28.10 million), BSNL (7.96 million), Tata Teleservices (0.94 million) and MTNL (0.26 million).

1.59 In wired narrowband segment, BSNL holds 98.09% market share with 3.195 million subscribers followed by Microscan Computers Pvt Ltd and You Broadband India Pvt Ltd with 0.015 million each.

1.60 In wireless narrowband segment, Vodafone Idea Ltd holds 51.44% market share with 36.09 million subscribers followed by Bharti Airtel with 28.10 million subscribers.

**Chart 1.24 : Composition of Narrowband subscription – Technology wise**



## Section E : Other Value Added Services - PMRTS & VSAT

### Public Mobile Radio Trunk Services (PMRTS)

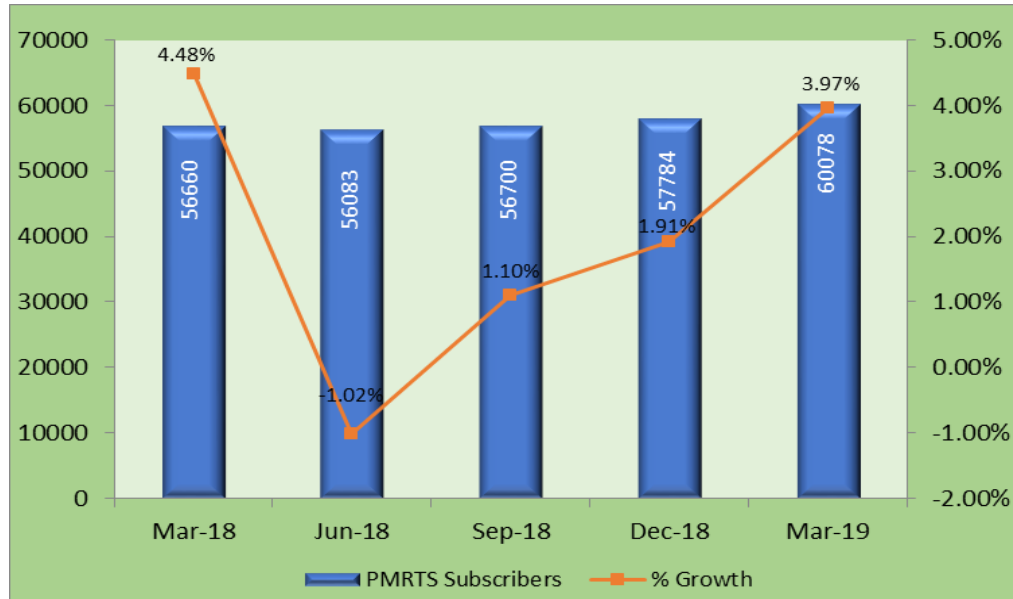
1.61 The subscriber base of PMRTS increased from 57,784 at the end of Dec-18 to 60,078 at the end of Mar-19 with quarterly growth rate of 3.97%.

**Table 1.32 : PMRTS Subscriber base - Service Provider wise**

Sl. No	Name of the Service Provider	Subscriber Base as on 31.12.2018	Subscriber Base as on 31.03.2019	Growth in Subscribers	% Growth in subscribers in QE Mar-19
1	Arya Omnitalk Radio Trunking Services Pvt. Ltd.	48,121	50,178	2,057	4.27
4	Procall Ltd.	3,218	3,261	43	1.34
2	Quick Call	2,065	2,151	86	4.16
3	Inative Networks Pvt Ltd	1,820	1,820	0	0.00
5	Smartlink Pvt Ltd	968	1,063	95	9.81
6	Bhilwara Telenet Services Pvt Ltd	870	881	11	1.26
7	Wiwonet Solutions Pvt Ltd	361	363	2	0.55
8	Airtalk Solutions & Services Pvt Ltd	361	361	0	0.00
	<b>Total</b>	<b>57,784</b>	<b>60,078</b>	<b>2,294</b>	<b>3.97</b>

1.62 Detailed table on Service Area wise subscriber base of PMRTS as on 31<sup>st</sup> March, 2019 is available at **Annexure-1.7**.

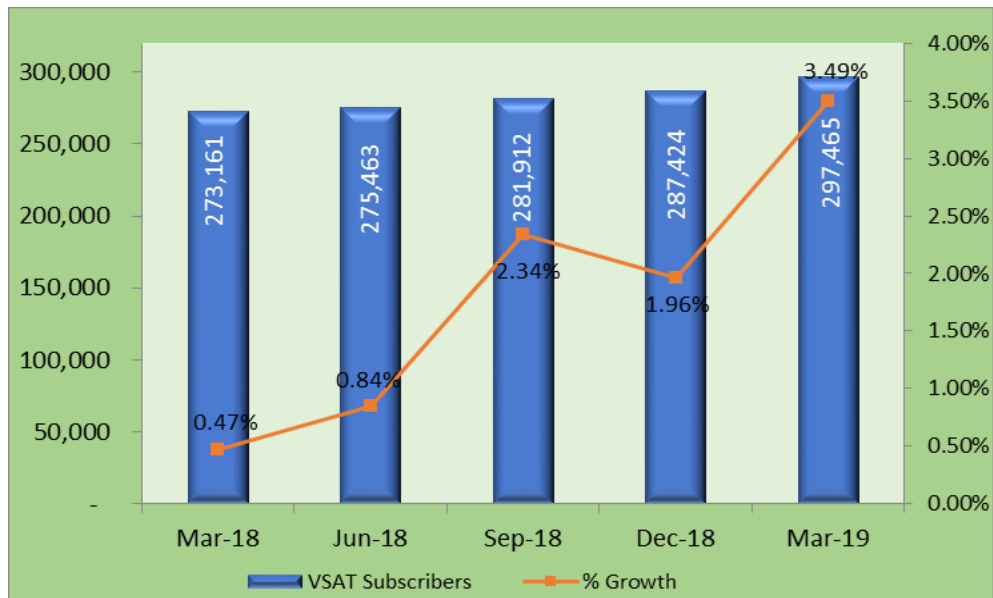
**Chart 1.25 : Number of PMRTS subscribers & Rate of Growth (%)**



**Very Small Aperture Terminal (VSAT)**

1.63 The total number of VSAT subscribers increased from 2,87,424 at the end of Dec-18 to 2,97,465 at the end of Mar-19. Net addition during the quarter has been 10,041 at the growth rate of 3.49%.

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



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

Sr. No	Name of Service Providers	Subscriber base at the Quarter ending		Net Addition	%age Growth	Market Share (%) Mar-19
		Dec-18	Mar-19			
1	Hughes Communications Ltd.	103,168	106,407	3,239	3.14	35.77
2	Bharti Airtel Limited	79,604	81,309	1,705	2.14	27.33
3	Tatanet Services	67,584	73,627	6,043	8.94	24.75
4	HCL Comnet	18,154	17,720	-434	-2.39	5.96
5	BSNL	16,307	15,809	-498	-3.05	5.31
6	Infotel Satcom	2,533	2,519	-14	-0.55	0.85
7	Cloudcast Digital Ltd (eartwhile Planetcast Media Services Ltd)	74	74	0	0.00	0.02
	<b>Total</b>	<b>287,424</b>	<b>297,465</b>	<b>10,041</b>	<b>3.49</b>	<b>100</b>

1.64 Hughes Communication Limited continues to be the market leader in VSAT with subscriber base of 1,06,407 followed by Bharti Airtel Ltd (81,309) at the end of Mar-19.

1.65 M/s Tatanet Services added maximum number of VSAT i.e. 6,043 subscribers in QE Mar-19, with maximum growth rate of 8.94% in its VSAT subscribers. M/s HCL Comnet, M/s BSNL and M/s Infotel Satcom showed decline of 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 the section A & B covers the licensees, who have been providing service during the entire period from 1<sup>st</sup> January, 2019 to 31<sup>st</sup> March, 2019 in the various service areas.



**Table 2.1: Key Indicators – Wireless Services (GSM, LTE & CDMA)**

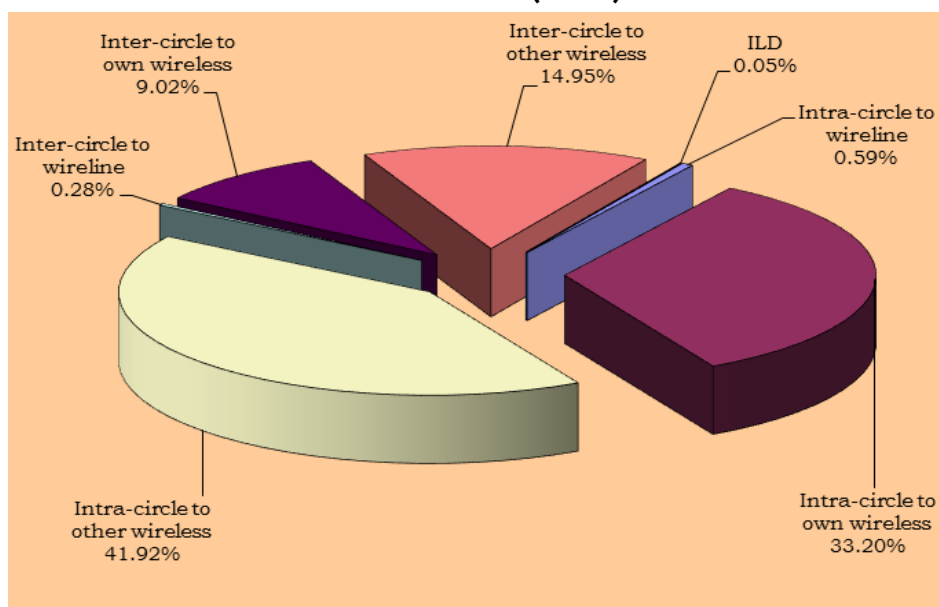
Parameter	Mar-19	Dec-18	Mar-18	QoQ %age change	YoY %age change
Subscriber Base* (million)	1179.02#	1177.49	1070.04	0.13%	10.18%
Share of Prepaid (%)	94.42%	95.81%	95.47%	-1.45%	-1.10%
Incoming MOU* per subscriber per month	343.25	329.58	288.12	4.15%	19.13%
Outgoing MOU* per subscriber per month	348.59	337.85	294.50	3.18%	18.37%
No. of Outgoing SMS per subscriber per month	16.27	16.15	20.01	0.74%	-18.67%
Average Revenue Per User (ARPU) per month (₹)	71.39	70.13	76.05	1.80%	-6.12%

\* Subscriber figures are closing figures as on last day of the quarter.

# Subscriber figures for 4G LTE is also included.

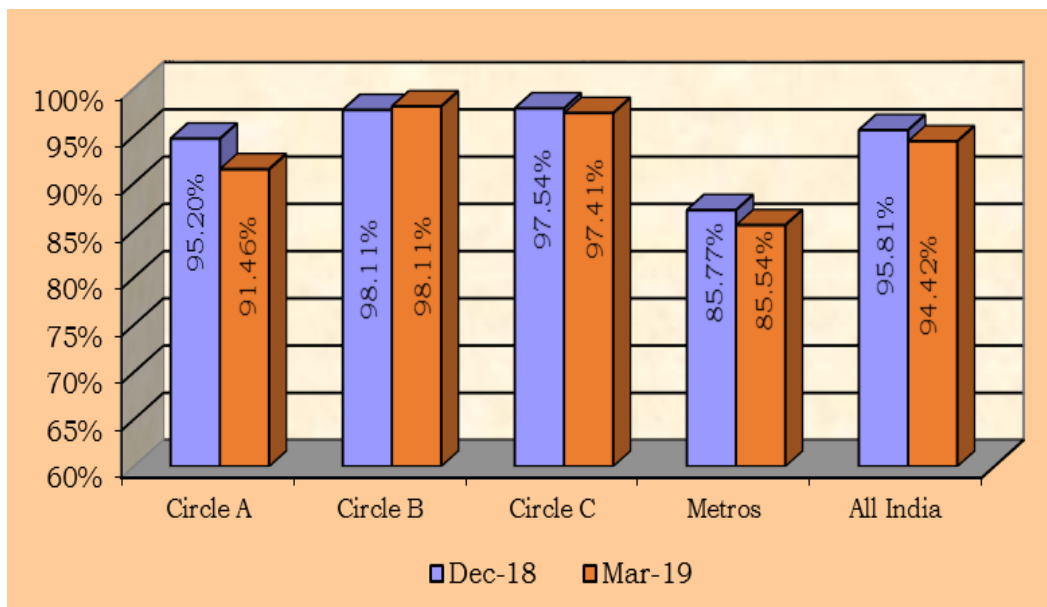
2.1 The following chart presents % break-up of outgoing minutes from Home Service Area (HSA) in the QE Mar-19.

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



2.2 The following chart depicts prepaid subscribers as a % of total wireless 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 Market share of prepaid wireless subscribers declined from 95.81% at the end of Dec-18 to 94.42% at the end of Mar-19.

2.4 The Average Revenue Per User (ARPU) per month (all India, blended) increased from ₹70.13 in Q.E. Dec-18 to ₹71.39 in Q.E. Mar-19 with quarterly growth rate of 1.80%. However, ARPU per month declined year-on-year by 6.12% in this quarter.

2.5 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 Mar-19**

Circle Category	ARPU per month (in ₹)		
	Post-paid	Pre-paid	Blended
Circle A	258	73	83
Circle B	278	60	64
Circle C	231	61	65
Metros	265	38	70
<b>All India</b>	<b>261</b>	<b>63</b>	<b>71</b>
All private SPs	262	66	75
BSNL/MTNL	245	36	41

2.6 The ARPU per month for pre-paid segment is ₹63 and ARPU per month for postpaid segment is ₹261 in QE Mar-19. The following table presents the composition of ARPU per month for QE Mar-19.

**Table 2.3: Composition of ARPU per month - Wireless Services**

S. No.	Item	Revenue (excl. service tax) per subscriber per month (in ₹)	Share of total revenue from subscribers
1	<b>Usage from Home Service Area</b>		
1.1.	Rental Revenue	31.13	36.8%
1.2.	Revenue from calls	10.27	12.1%
1.3.	Revenue from SMS	0.87	1.0%
1.4.	Revenue from data usage	36.38	42.9%
1.5.	Revenue from other VAS	2.53	3.0%
1.6.	Other revenue	2.14	2.5%
2	<b>Usage outside Home Service Area</b>		
2.1.	Revenue from outroamers	1.38	1.6%
3	<b>Total revenue from subscribers (1+2)</b>	<b>84.70</b>	<b>100%</b>
4	Net inter-operator settlement charges receivable *	-13.31	
5	<b>Net Revenue (ARPU) per month (3+4)</b>	<b>71.39</b>	

\* includes Interconnect Usages Charges and roaming settlement charges

- 2.7 From the above table, it may be seen that the net inter-operator settlement charges payable (₹13.31) accounts for 15.71% of the total revenue from subscribers.
- 2.8 On an all India average, the overall minutes of usage (MOU) per subscriber per month increased from 667 in QE Dec-18 to 692 in QE Mar-19 with quarterly growth rate of 3.74%.
- 2.9 The following table presents the total MOU (usage from, and outside, the home service area) per subscriber per month for various categories of circles.

**Table 2.4: MOU per subscriber per month - QE Mar-19**

Circle category	MOU per subscriber per month								
	Postpaid			Prepaid			Blended		
	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU
Circle A	313	289	602	312	287	599	312	287	599
Circle B	369	353	722	340	355	696	341	355	696
Circle C	498	364	862	406	457	863	408	455	863
<b>Metro</b>	318	271	589	435	326	761	418	319	736
<b>All India</b>	<b>340</b>	<b>301</b>	<b>641</b>	<b>349</b>	<b>345</b>	<b>694</b>	<b>349</b>	<b>343</b>	<b>692</b>

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

- 2.10 The overall ratio of incoming MOU and outgoing MOUs for the QE Mar-19 is 50.4 : 49.6.

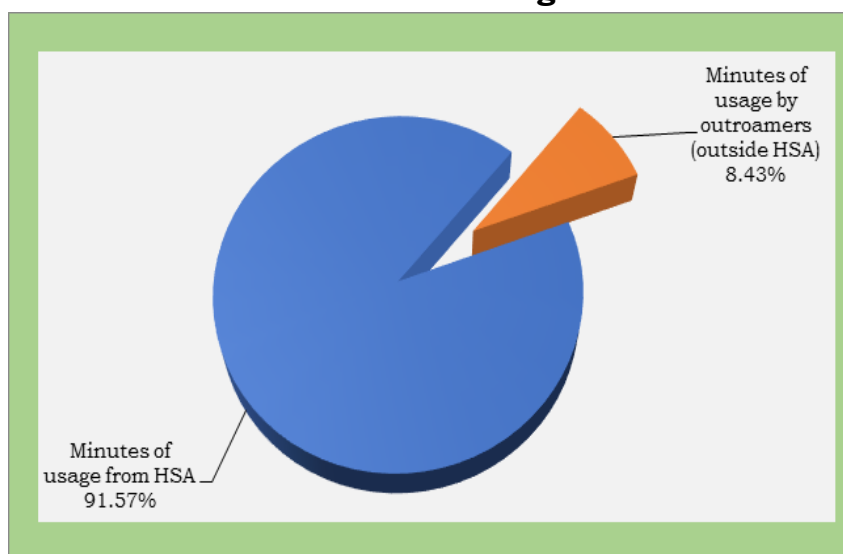
2.11 Number of outgoing SMS per subscriber per month remained same at 16 in Q.E. Mar-19. The following table presents the outgoing SMS usage (usage from, and outside, the home service area) per subscriber per month for various categories of circles and various platforms for payment viz. post-paid and pre-paid.

**Table 2.5: No. of Outgoing SMS per subscriber per month during QE Mar-19**

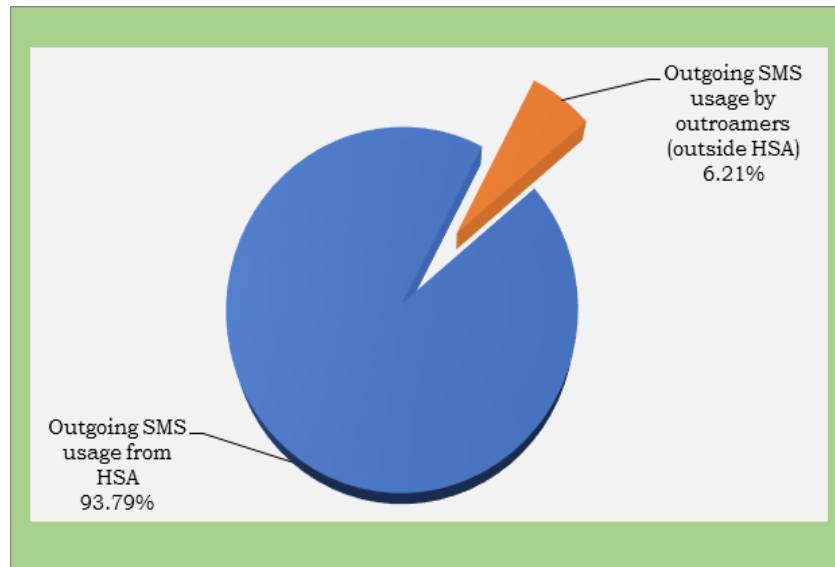
Circle category	Outgoing SMS per subscriber month		
	Postpaid	Prepaid	Blended
Circle A	32	18	19
Circle B	29	13	13
Circle C	9	20	20
Metro	25	14	15
<b>All India</b>	<b>27</b>	<b>16</b>	<b>16</b>

*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**



**Chart 2.4: Outgoing SMS Usage by Out-roamers as a % of Total No. of Outgoing SMS Usage**



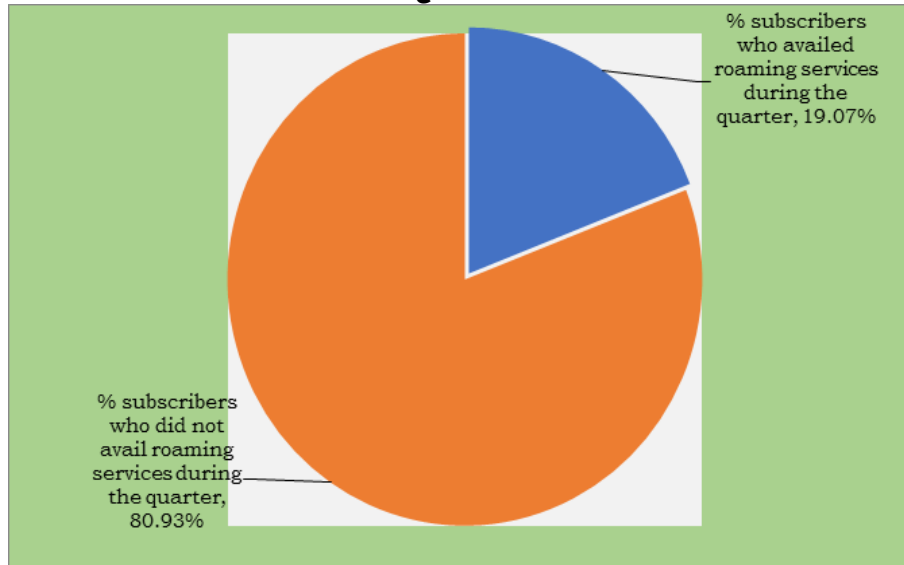
2.12 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks.

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

<b>Circle Category</b>	<b>% Intra-circle to wireline</b>	<b>% Intra-circle to own wireless</b>	<b>% Intra-circle to other wireless</b>	<b>% Inter-circle to wireline</b>	<b>% Inter-circle to own wireless</b>	<b>% Inter-circle to other wireless</b>	<b>% ILD</b>
<b>Circle A</b>	0.71	34.69	45.21	0.32	7.20	11.82	0.04
<b>Circle B</b>	0.47	34.24	43.15	0.22	8.03	13.83	0.05
<b>Circle C</b>	0.25	35.62	39.54	0.23	9.56	14.78	0.01
<b>Metros</b>	1.17	21.72	32.01	0.45	16.72	27.84	0.10
<b>All India</b>	<b>0.59</b>	<b>33.20</b>	<b>41.92</b>	<b>0.28</b>	<b>9.02</b>	<b>14.95</b>	<b>0.05</b>

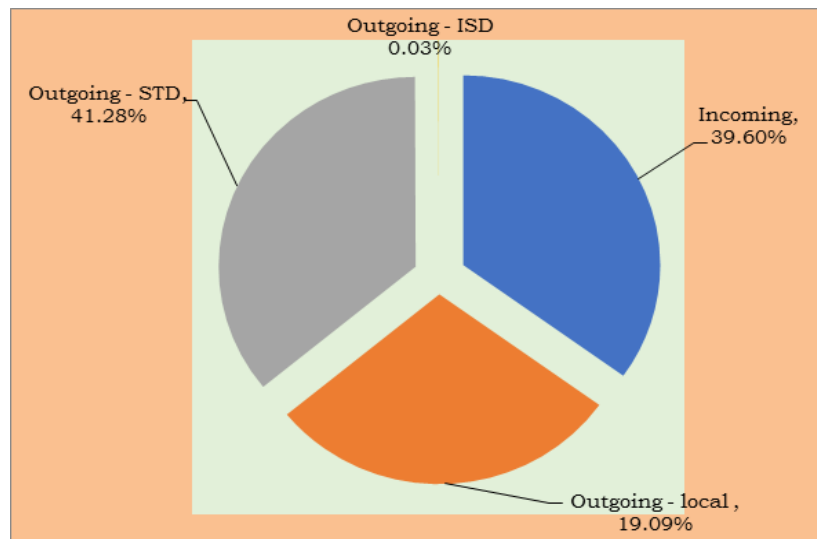
2.13 The chart given below presents the percentage of subscribers who availed roaming services (out-roamers) during the quarter ending Mar-19.

**Chart 2.5: % subscribers availed roaming services during the QE Mar-19**



2.14 The usage pattern of out-roamers i.e. usage from outside the home service area shows that incoming minutes accounts for 39.60% of the total minutes of usage by out-roamers in QE Mar-19 as compare to 34.91 in the previous quarter. The chart given below presents the break-up of minutes of usage of out-roamers during the QE Mar-19.

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



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

\*Average Outgo per Outgoing Minute for usage from HSA =  

$$\frac{\text{Rental revenue} + \text{revenue from outgoing calls from HSA}}{\text{No. of outgoing minutes from HSA}}$$

**Table 2.7: Average outgo per outgoing minute from HSA**

Circle Category	(₹ per minute)		
	Postpaid	Prepaid	Blended
Circle A	0.60	0.13	0.16
Circle B	0.48	0.11	0.12
Circle C	0.24	0.10	0.10
Metros	0.63	0.10	0.16
<b>All India</b>	<b>0.54</b>	<b>0.11</b>	<b>0.13</b>

2.16 All India average outgo per outgoing minute increased from ₹0.11 in the Q.E. Dec-18 to ₹0.13 in the Q.E. Mar-19.



**Table 2.8: Trends of Key Parameters - GSM and LTE Services**

<b>Parameter</b>	<b>Mar-18</b>	<b>Jun-18</b>	<b>Sep-18</b>	<b>Dec-18</b>	<b>Mar-19</b>
<b>1. ARPU (₹ Per month)</b>	76	69	67	70	71
<b>3. Average outgo (tariff) per GB wireless data ( in ₹)</b>	14.99	12.07	10.91	10.51	7.95
<b>3. MOU per subscriber per month</b>	583	608	627	667	692
<b>4. Outgoing MOU per subscriber per month</b>					
4.1 Local (Intra-circle)	212	223	224	248	248
4.2 NLD (inter-circle)	83	83	85	90	100
4.3 ILD	0.2	0.3	0.1	0.1	0.2
<b>5. No. of Outgoing SMS per subscriber per month</b>	20	19	17	16	16
<b>6. Average Outgo (voice) per outgoing minute from HSA (in ₹)</b>	0.16	0.14	0.12	0.11	0.13

2.17 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**

<b>Particulars</b>	<b>QE Mar-18 (₹ in Crore)</b>	<b>QE Dec-18 (₹ in Crore)</b>	<b>QE Mar-19 (₹ in Crore)</b>	<b>Q-O-Q % Change</b>	<b>Y-O-Y % Change</b>
Gross Revenue (GR)	62,198	58,991	58,414	-0.98	-6.08
Adjusted Gross Revenue (AGR)	35,697	36,054	35,932	-0.34	0.66
Pass Through Charges (GR-AGR)	26,501	22,936	22,482	-1.98	-15.17
License Fee	2,932	2,890	2,888	-0.08	-1.52
Spectrum Usage Charges	1,051	1,064	1,055	-0.92	0.36

3.1 Gross Revenue (GR) quarterly declined by 0.98% in QE Mar-19, and on annual basis, it declined by 6.08%. Adjusted Gross Revenue (AGR) quarterly declined by 0.34%, however on yearly basis it increased by 0.66% in QE Mar-19.

3.2 Pass through charges quarterly and on annual basis declined by 1.98% and 15.17% respectively in the QE Mar-19.

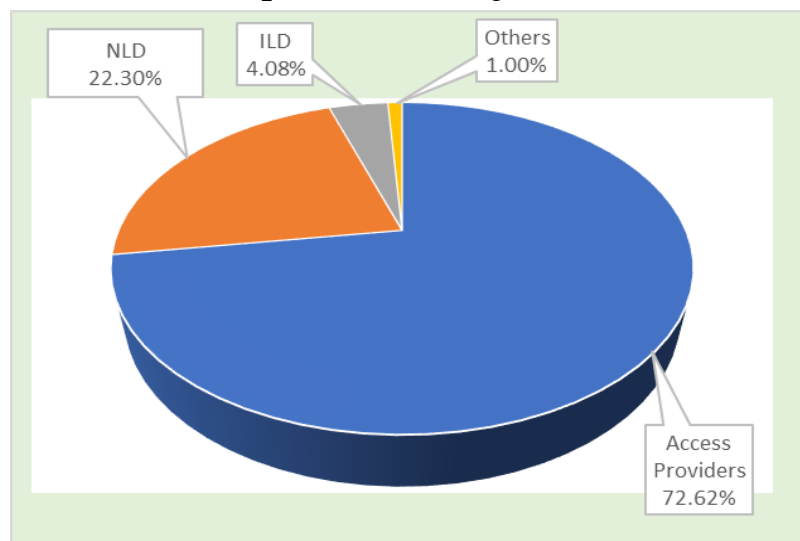
3.3 Pass-through charges as a percentage of Gross Revenue are 38.49% in QE Mar-19 as against 38.88% in the previous quarter.

**Table 3.2: Service-wise Gross Revenue, Adjusted Gross Revenue, License Fee and Spectrum Charges**

(in ₹ Crore)

<b>Service</b>	<b>GR</b>	<b>AGR</b>	<b>LF</b>	<b>Spectrum Usage Charges</b>
<b>Access Providers</b>	41,879	26,096	2,102	1,053
<b>NLD</b>	10,084	8,014	641	-
<b>ILD</b>	2,970	1,465	117	-
<b>Others</b>	3,481	358	28	2
<b>Total</b>	<b>58,414</b>	<b>35,932</b>	<b>2,888</b>	<b>1,055</b>

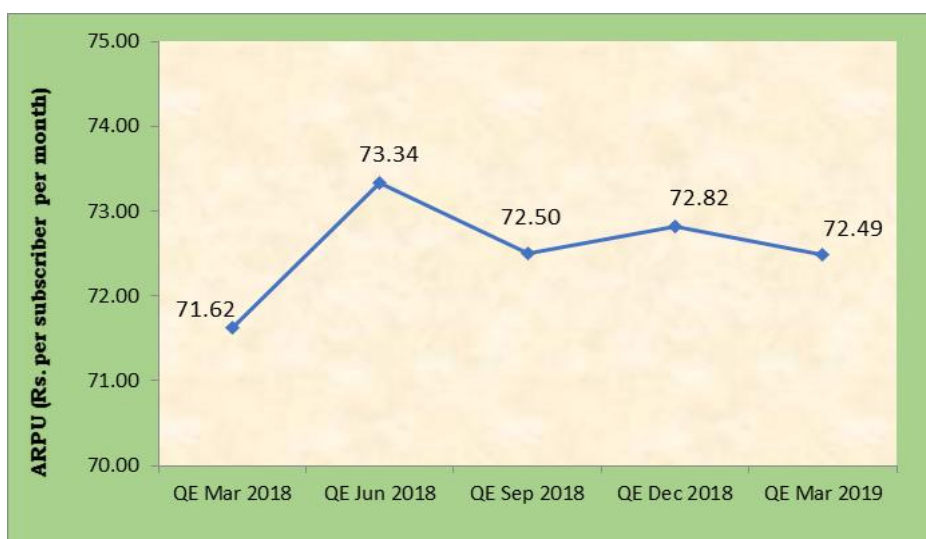
**Chart 3.1: Composition of Adjusted Gross Revenue**



3.4 Access services contributed 72.62% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Adjusted Gross Revenue (AGR), License Fee and Pass Through Charges increased by 0.29%, 0.10%, 0.46%, 0.60% respectively in QE Mar-19. However, Spectrum Usage Charges (SUC) declined quarterly by 0.70% during the same period.

3.5 Monthly Average Revenue per User (ARPU) for Access Services based on AGR declined from ₹72.82 in QE Dec-18 to ₹72.49 in QE Mar-19.

**Chart 3.2: Trend in ARPU per month for Access Services**



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

(in ₹ Crore)

Service Provider	QE Mar-19	QE Dec-18	% Change
Reliance Jio	9838.91	9482.31	3.76
Vodafone Idea	7133.40	7223.72	-1.25
Bharti Airtel	5920.22	6439.65	-8.07
BSNL	2031.07	1744.37	16.44
Tata Tele.	531.00	544.04	-2.40
MTNL	466.74	427.24	9.25
Reliance Com.	170.90	196.31	-12.94
Quadrant	3.47	13.08	-73.49
<b>Grand Total (Access)</b>	<b>26095.71</b>	<b>26070.72</b>	<b>0.10</b>

3.6 Public Sector Undertakings' share in the Access AGR of telecom services is 9.57% in the QE Mar-19.

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

Category	AGR of Access Services for QE Mar-19 (in ₹ crore)	%age share of AGR
Metro	2972.84	11.39
A	10348.05	39.65
B	9459.14	36.25
C	3315.68	12.71
<b>Total</b>	<b>26095.71</b>	<b>100</b>

**Notes :**

1. Source: Figures are un-audited and as submitted by the Operators.
2. The figures have been regrouped wherever considered necessary for analysis purpose.
3. The Spectrum usage charges (mostly) are now reported on "Payment for the current Quarter" basis. However, some operators are reporting on payment basis or on estimate basis on projected AGR for next quarter.
4. Metro area includes Delhi, Mumbai and Kolkata only. Chennai is clubbed with Tamilnadu.

# **Chapter 4 : Quality of Service (QoS)**

## Section A: Quality of Service Performance of Wireless Service Providers

**Table 4.1: QoS Summary - Wireless Service**

Sl. No.	Parameters	Bench mark	Performance in respect of UASL/CMTS Licensees for the Parameters and Benchmarks			
			For Q. E. December, 2018		For Q. E. March, 2019	
			Out Of 129 (Nos.)	Out Of 129 (%)	Out Of 129 (Nos.)	Out Of 129 (%)
<b>I.</b>	<b>Network Related Parameters</b>					
<b>1</b>	<b>Network Availability</b>					
(i)	BS Accumulated down-time (not available for service)(%age)	≤ 2%	0	0%	0	0%
(ii)	Worst affected BSs due to down-time (%age)	≤ 2%	0	0%	0	0%
<b>2</b>	<b>Connection Establishment (Accessibility)</b>					
(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%	4	3.10%	4	3.10%
<b>3</b>	<b>Connection Maintenance (Retain ability)</b>					
(i)	Network QoS DCR Spatial Distribution Measure [Network_ QSD(90,90)]	≤ 2%	1	0.78%	1	0.78%
(ii)	Network QoS DCR Temporal Distribution Measure [Network_ QTD(97,90)]	≤ 3%	1	0.78%	1	0.78%
<b>4</b>	Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality	≥ 95%	0	0%	0	0%
<b>5</b>	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)	≤ 0.5%	1	0.78%	1	0.78%

Sl. No.	Parameters	Bench mark	Performance in respect of UASL/CMTS Licensees for the Parameters and Benchmarks			
			For Q. E. December, 2018		For Q. E. March, 2019	
			Out Of 129 (Nos.)	Out Of 129 (%)	Out Of 129 (Nos.)	Out Of 129 (%)
6*	Down Link (DL) Packet Drop Rate or DL-PDR	≤ 2%	0	0%	0	0%
7*	Up Link (UL) Packet Drop Rate or UL-PDR	≤ 2%	0	0%	0	0%
<b>II.</b>	<b>Customer Service Quality Parameters</b>					
<b>6</b>	<b>Metering and Billing</b>					
(i)	Metering and billing credibility - post paid	≤ 0.1%	0	0%	0	0%
(ii)	Metering and billing credibility - pre paid	≤ 0.1%	1	0.78%	1	0.78%
(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	0	0%	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	2	1.55%	1	0.78%
<b>7</b>	<b>Response time to the customer for assistance</b>					
(i)	Accessibility of call centre/customer care	≥ 95%	1	0.78%	6	4.65%
(ii)	%age of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	36	27.91%	38	29.46%
<b>8</b>	<b>Termination / closure of service</b>					
(i)	%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	1	0.78%	5	3.88%
(ii)	Time taken for refund of deposits after closures	100% within 60 days	3	2.33%	11	8.53%

\*M/s BSNL has not submitted data for the parameters "Down Link (DL) Packet Drop Rate or DL-PDR" and "Up Link (UL) Packet Drop Rate or UL-PDR" for QE December 2018 and QE March 2019".



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

- a. Period of applying credit/waiver/adjustment to customer's account from the date of resolution of complaints

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

- a. Accessibility of call centre/ customer care
- b. %age of calls answered by the operators (voice to voice) within 90 sec
- c. %age requests for Termination/Closure of service complied within 7 days
- d. Time taken for refund of deposits after closures

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

Parameter	Bench mark	Service Provider	Service Area	Performance
TCH, RAB and E-RAB Congestion (%age)	≤ 2%	VIL(Idea)	Madhya Pradesh	3.27
			Uttar Pradesh (West)	3.46
		VIL(Vodafone)	Madhya Pradesh	3.27
			Uttar Pradesh (West)	2.36
Network QoS DCR Spatial Distribution Measure [Network_ QSD(90,90)]	≤ 2%	BSNL	West Bengal	8.50
Network QoS DCR Temporal Distribution Measure [Network_ QTD(97,90)]	≤ 3%	BSNL	West Bengal	10.53
Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter )	≤ 0.5%	RJio	Maharashtra	1

<b>Parameter</b>	<b>Bench mark</b>	<b>Service Provider</b>	<b>Service Area</b>	<b>Performance</b>
Metering and billing credibility - pre paid	≤ 0.1%	VIL(Vodafone)	Rajasthan	0.16
Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	within 1 week of resolution of complaint	VIL(Vodafone)	Mumbai	99.49
Accessibility of call centre/ customer care	≥ 95%	Airtel	Delhi	90.38
			Kolkata	94.11
		TATA	Haryana	94.73
			Punjab	94.84
			UP-East	94.74
Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	Airtel	UP-West	94.61
			Kolkata	94.00
		RJio	Bihar	83.00
			UP-East	84.19
			UP-West	82.47
		TATA	Andhra Pradesh	75.66
			Bihar	66.46
			Gujarat	79.27
			Haryana	78.16
			Karnataka	75.53
			Kerala	93.56
			Kolkata	66.81
			Madhya Pradesh	75.78
			Maharashtra	76.39
			Mumbai	76.62
			Orissa	67.12
			Punjab	78.29
			Rajasthan	74.84
			Tamil Nadu	79.39
		UP-East	75.93	
		UP-West	76.42	
		West Bengal	62.32	
		VIL(Idea)	Haryana	94.43
		VIL(Vodafone)	Andhra Pradesh	69.73
			Bihar	94.86
			Delhi	92.62
			Gujarat	87.79
Haryana	78.61			
Himachal Pradesh	93.00			
Jammu & Kashmir	87.13			
Karnataka	87.95			

<b>Parameter</b>	<b>Bench mark</b>	<b>Service Provider</b>	<b>Service Area</b>	<b>Performance</b>
Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%		Kerala	92.02
			Kolkata	74.40
			Madhya Pradesh	93.56
			Mumbai	85.78
			Punjab	79.98
			Rajasthan	92.61
			UP-West	89.58
			West Bengal	77.06
%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	VIL(Idea)	Maharashtra	99.69
			Rajasthan	98.19
		VIL(Vodafone)	Andhra Pradesh	99.76
			Gujarat	99.20
			Madhya Pradesh	98.93
Time taken for refund of deposits after closures	100% within 60 days	VIL(Idea)	Assam	49.81
			Haryana	49.58
			North East	77.31
			Uttar Pradesh (West)	97.64
		VIL(Vodafone)	Bihar	99.89
			Delhi	99.97
			Haryana	99.98
			Himachal Pradesh	98.78
			Jammu & Kashmir	95.50
			Maharashtra	99.99
			Uttar Pradesh (East)	99.99

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**

S. No.	Parameters	Bench mark	No of license areas where operators not meeting the benchmarks			
			Q.E. December, 2018		Q.E. March, 2019	
			Out of 82 (in Nos.)	Out of 82 (in %age)	Out of 82 (in Nos.)	Out of 82 (in %age)
(i)	Fault incidences No. of faults per 100 subs/month)	$\leq 7$	0	0%	2	2%
(ii)	% Fault repaired by next working day (for urban areas)	$\geq 85\%$	3	4%	2	2%
	% Fault repaired within 5 days (for urban areas)	$\geq 100\%$	1	1%	1	1%
(iii)	% Fault repaired by next working day (for rural and hilly areas)	$\geq 75\%$	0	0%	0	0%
	% Fault repaired within 7 days (for rural and hilly areas)	$\geq 100\%$	0	0%	0	0%
(iv)	Mean time to Repair (MTTR)	$\leq 10\text{Hs}$	1	1%	2	2%
(v)	Point of Interconnection (POI) Congestion (No. of POIs not meeting benchmark)	$\leq 0.5\%$	0	0%	0	0%
(vi)	Metering and Billing credibility - post-paid	$\leq 0.1\%$	0	0%	0	0%
	Metering and Billing credibility - pre-paid	$\leq 0.1\%$	0	0%	0	0%
(vii)	Resolution of billing/charging /Credit & validity complaints	98% within 4 weeks	0	0%	0	0%
	Resolution of billing/charging / Credit & validity complaints	100% within 6 weeks	0	0%	0	0%
(viii)	Period of applying credit /waiver/ adjustment to customer's	1 week of resolution of complaint	0	0%	0	0%
(ix)	Accessibility of call centre/ customer care	$\geq 95\%$	10	12%	1	1%
	%age of calls answered by the operators (voice to voice) within 90 seconds	$\geq 95\%$	13	16%	10	12%

S. No.	Parameters	Bench mark	No of license areas where operators not meeting the benchmarks			
			Q.E. December, 2018		Q.E. March, 2019	
			Out of 82 (in Nos.)	Out of 82 (in %age)	Out of 82 (in Nos.)	Out of 82 (in %age)
(x)	%age of request for Termination / closure of service complied within 7 days	100% within 7 days	3	4%	3	4%
(xi)	Time taken for refund of deposits after closures	100% within 60 days	0	0%	0	0%

NOTE: Most of the SPs have not reported for the parameter “Metering and billing credibility - prepaid” 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 :-

- a. %age of fault repaired by next working day (for urban areas)
- b. Response time to the customer for Assistance -Accessibility of call centre/ customer care
- c. Response time to the customer for Assistance- %age of calls answered by the operators (Voice to voice) within 90 seconds

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

- a. Fault incidences No. of faults per 100 subs/month)
- b. Mean time to Repair (MTTR)

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

<b>Parameters</b>	<b>Bench- marks</b>	<b>Service Provider</b>	<b>Service areas</b>	<b>Parameters not met</b>
<b>Fault incidences</b> No. of faults per 100 subs/month)	≤ 7	TATA	MP	9.32%
			UP(W)	16.67%
<b>“Fault Repair”</b> %age of fault repaired by next working day (for urban areas)	≥ 85%	TATA	GJ	83.50%
			KTK	83.40%
<b>“Fault Repair”</b> % Fault repaired within 5 days (for urban areas)	≥100%	MTNL	DEL	99.53%
<b>Mean time to Repair (MTTR)</b>	≤10 Hrs	TATA	GJ	10.54
			KTK	10.71
<b>Response time to the customer for assistance -</b> Accessibility of call centre/ customer care	≥ 95%	BSNL	UP (E)	94.26%
<b>Response time to the customer for assistance -</b> Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	Bharti Airtel	HR	93%
			KOL	92%
			KR	92%
			MP	94%
			MH	89%
			MUM	88%
			PB	94%
			RJ	94%
		UP(W)	93%	
BSNL	KTK	94.67%		
<b>“Termination / closure of service”</b> %age of request for Termination / closure of service complied within 7 days	100% within 7 days	TATA	DL	99.62%
			KTK	99.30%
			MH	99.86%

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 270 Internet Service Providers (ISPs) providing broadband (wireline) service at the end of March, 2019. Out of these 270 ISPs, 48 Service Providers are having broadband subscriber base >10,000 and market share of these 48 SPs is 98.02% of total broadband subscriber base. This report covers performance of 47 broadband Service Providers vis-à-vis the QoS benchmarks prescribed by TRAI, for the QE March, 2019.

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

S. No.	Parameter	Benchmark	No. of Licensees not meeting the Benchmarks			
			Quarter Ending December, 2018		Quarter Ending March, 2019	
			Out of 66 (No.)	Out of 66 (%)	Out of 67 (No.)	Out of 67 (%)
<b>1</b>	<b>Service Provisioning</b>	100% in =<15 working days				
1.2	%age of connections provided within 15 days of registration of demand	100%	1	1.52%	1	1.49%
<b>2</b>	<b>Faults Repair</b>					
2.2	% of faults repaired by next working day (>90%)	>90%	2	3.03%	2	2.99%
2.3	% of faults repaired within 3 working day	=>99%	4	6.06%	4	5.97%
<b>3</b>	<b>Billing Performance</b>					
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	0	0.00%	0	0.00%
<b>4</b>	<b>Response Time to the Customer for assistance</b>					
4.2	%age of calls answered by operator (Voice to voice) within 60 sec	>60%	1	1.52%	1	1.49%
4.3	%age of calls answered by operator (Voice to voice) within 90 sec	>80%	3	4.55%	1	1.49%

S. No.	Parameter	Benchmark	No. of Licensees not meeting the Benchmarks			
			Quarter Ending December, 2018		Quarter Ending March, 2019	
			Out of 66 (No.)	Out of 66 (%)	Out of 67 (No.)	Out of 67 (%)
<b>5</b>	<b>Bandwidth utilisation/ throughput</b>					
5.2	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	0	1	1.52%	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%
<b>6</b>	<b>Service availability /uptime (for all users) in %age</b>					
6.3	Service availability /uptime (for all users) in %age	>98%	0	0.00%	0	0.00%
<b>7</b>	<b>Packet loss (for wired broadband access) in %age</b>					
		<1%	0	0.00%	0	0.00%
<b>8</b>	<b>Network latency (for wired broadband access)</b>					
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**

<b>Parameters</b>	<b>Bench- mark</b>	<b>Name of the Service Provider not meeting the Benchmark</b>
<b>Service Provisioning</b>		
%age of connections provided within 15 days of registration of demand	100%	<b>You Broadband</b> - All India (97.95%)
<b>Faults Repair</b>		
% of faults repaired by next working day (>90%)	>90%	<b>TATA (TTSL)</b> - All India (89.02%),
		<b>TATA (TTML)</b> - Mah. & Goa (82.00%)
% of faults repaired within 3 working day	=>99%	<b>Tata Sky Broadband Private Limited</b> - (94.99%)
		<b>TATA(TTSL)</b> - All India (96.69%),
		<b>TATA (TTML)</b> - Mah. & Goa (94.00%)
		<b>You Broadband</b> - All India (98.76%)
<b>Response Time to the Customer for assistance</b>		
%age of calls answered by operator (Voice to voice) within 60 sec	>60%	<b>Atria Convergence</b> - All India (47.00%)
%age of calls answered by operator (Voice to voice) within 90 sec	>80%	<b>Atria Convergence</b> - All India (52.00%)

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

# **Chapter 5 : Performance of Cable TV, DTH and Radio Broadcasting Services**

**Table 5.1: Key Parameters - Broadcasting & Cable TV Services**

S.No	Parameter	QE Dec-18	QE Mar-19
1	Number of Private satellite TV channels permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/ downlinking / uplinking	880	902
2	Number of Pay TV Channels as reported by broadcasters	330	328
3	Number of FM Radio Stations (excluding All India Radio)	355	356
4	Number of pay DTH Operators	5	5
5	Number of net active subscribers with pay DTH operators	70.49 Million	72.44 Million
6	Number of Operational Community Radio Stations	248	251

**A. Satellite TV Channels**

5.1 A total of 902 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking only/uplinking and downloading both, as on 31<sup>st</sup> March, 2019. The quarter-wise figures in the total number of TV channels depicted in below chart.

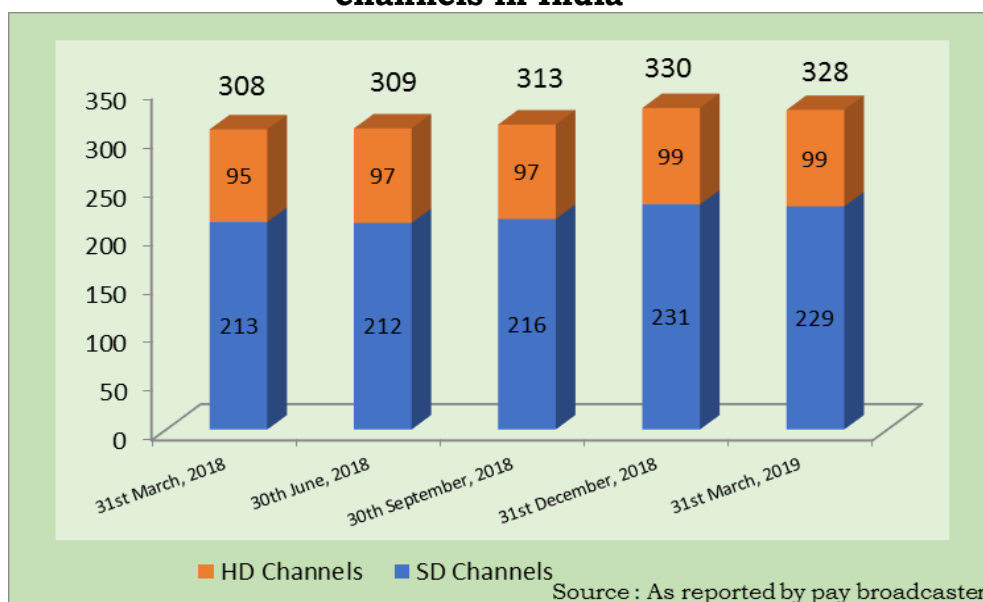
**Chart 5.1: Quarterly growth in number of Satellite TV channels (FTA & Pay) registered with Ministry of I&B**



## **B. Pay TV Channels**

- 5.2 Telecom Regulatory Authority of India (TRAI), in March, 2017, notified the new regulatory framework for Broadcasting and Cable services. The framework comprises of Tariff Order 2017, Interconnection Regulations 2017 and Quality of Service & Consumer Protection Regulations 2017. The framework was duly notified vide press release no.71/2018 dated 3<sup>rd</sup> July 2018 with revised timelines for implementation. All the timelines prescribed in the above-mentioned framework commenced from 3<sup>rd</sup> July 2018. The new regulatory framework has come into effect on 29<sup>th</sup> December 2018.
- 5.3 As per the Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff Order, 2017 dated 3<sup>rd</sup> March 2017, every broadcaster has to offer all its channels on a-la-carte basis to all distributors of television channels and declare maximum retail price, per month, payable by a subscriber for each of its pay channel offered on a-la-carte basis. Further, it is also permissible for a broadcaster to offer its pay channels in the form of bouquet and declare the maximum retail price, per month, of such bouquet payable by a subscriber.
- 5.4 As per the reporting done by broadcasters in pursuance of the Tariff Order dated 3<sup>rd</sup> March 2017, there are 328 pay channels, as on 31<sup>st</sup> March, 2019, which include 229 SD pay TV channels and 99 HD Pay TV channels. A list of Maximum Retail Prices (MRP) of pay channels offered by broadcasters for subscribers as reported to TRAI is attached as **Annexure-5.1**

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



### C. Cable TV Sector

5.5 Digitization, with addressability, of cable TV sector has been completed. The country achieved 100% digitization of Cable TV network. This is a stupendous achievement making India as the only large country where 100% digital cable has been achieved through mandatory regulations. As on 31<sup>st</sup> March 2019, there are 1,469 Multi System Operators (MSOs) registered with Ministry of Information and Broadcasting (MIB).

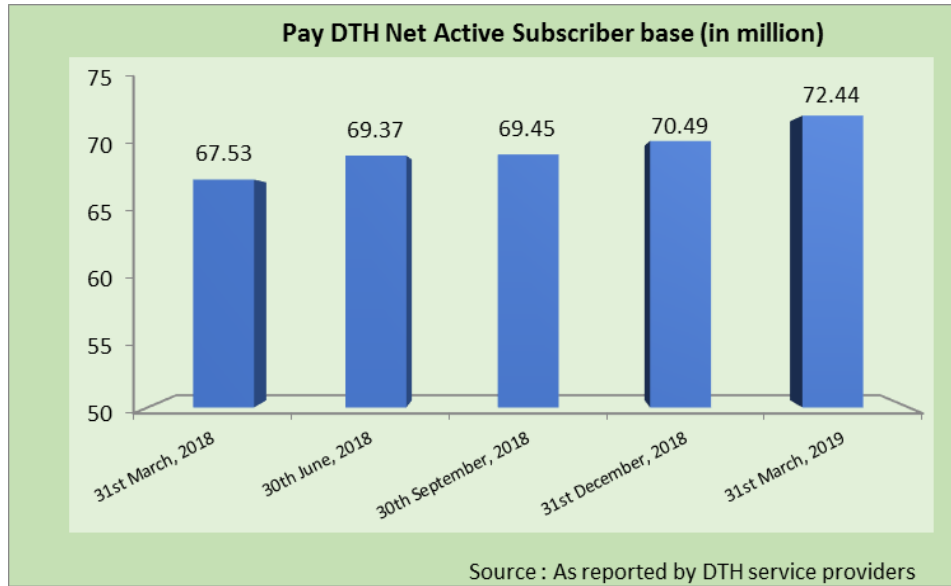
### D. Direct-to-Home (DTH) Sector

5.6 Since its introduction in the year 2003, Indian DTH service has displayed a phenomenal growth. During the quarter ending 31<sup>st</sup> March, 2019, there were 5 pay DTH service providers in India.

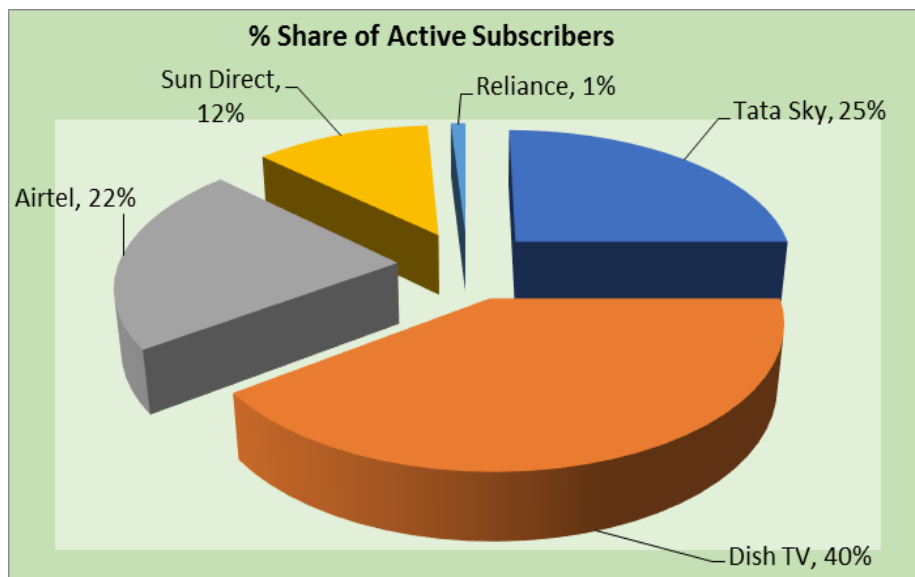
5.7 DTH has attained net active subscriber base of around 72.44 million with 5 pay DTH service providers as on 31<sup>st</sup> March, 2019 as compared to 70.49 million at the end of last quarter. This is in

addition to the subscribers of the free DTH services of Doordarshan. Quarterly growth in the DTH sector in terms of the net active subscriber base and Market Share of DTH operators in terms of the percentage of net active subscribers during the quarter is depicted in the following charts.

**Chart 5.3 : Quarterly growth in Net Active subscribers (in million) of pay DTH**



**Chart 5.4 : Market share of DTH Operators**



## E. FM Radio Services

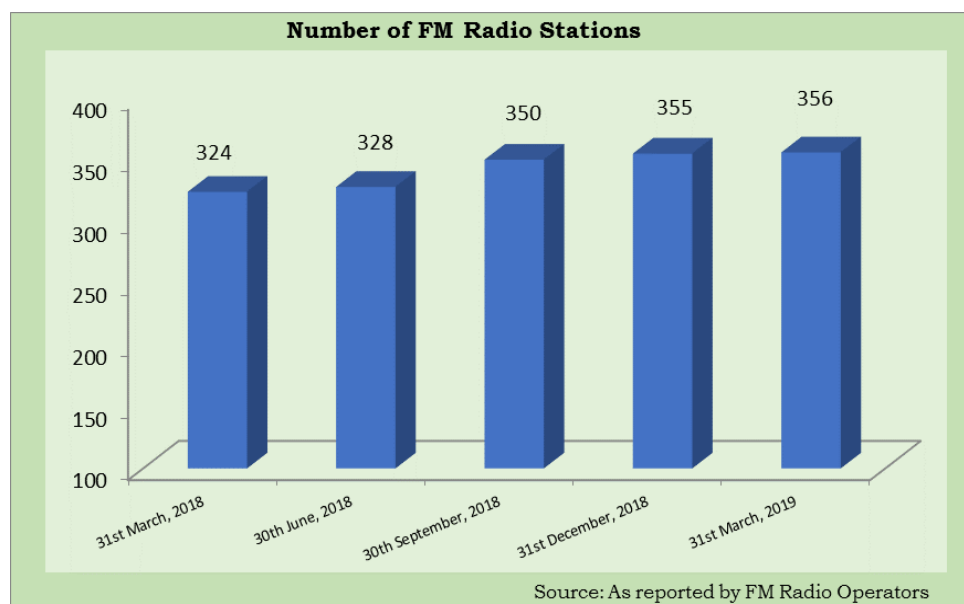
5.8 Apart from the radio stations operated by All India Radio- the public broadcaster, as on 31<sup>st</sup> March 2019, there are 356 operational private FM Radio stations in 98 cities with operational 33 Private FM Radio broadcaster as compared to 355 private FM Radio Stations in 97 cities with operational 33 FM Radio broadcasters in the previous quarter. A list of 98 existing cities with operational private FM radio channels in India as on 31<sup>st</sup> March, 2019 is placed at **Annexure 5.3**.

5.9 During the quarter ending 31<sup>st</sup> March, 2019, one new private FM Radio Station has become operational. The detail of new private FM Radio station is as under:-

### New Private FM Radio Stations

Sl. No.	Name of FM Radio Operator	No of station	Name of Cities	
			(Existing)	(New)
1	The Mathrubhumi Printing & Publishing Co. Ltd	01	-----	Alappuzha
	<b>Total</b>	<b>01</b>		

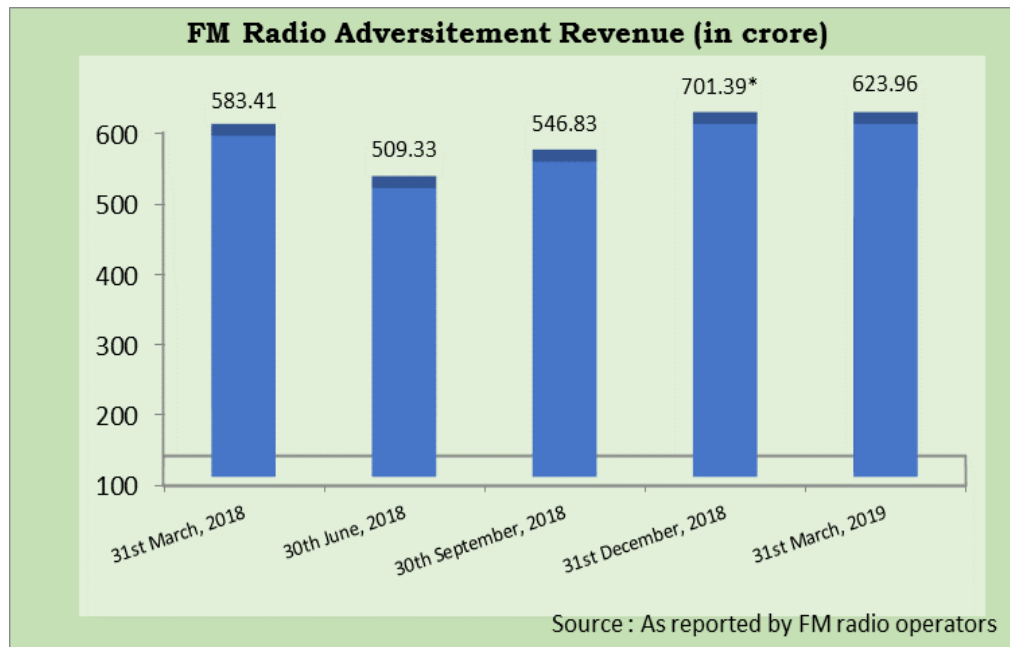
**Chart 5.5 : Quarterly growth in private FM Radio stations**



5.10 The reported advertisement revenue during the quarter ending 31<sup>st</sup> March, 2019 in respect of 355 private FM Radio stations is Rs.623.96 crore as against Rs.701.39 crore in respect of 354 private FM Radio stations in the previous quarter i.e December, 2018. One FM Radio Broadcaster, M/s Gwalior Firm Private Limited, operating in the city of Guwahati, has not submitted the advertisement revenue.

5.11 The following chart of trend of advertisement revenue is based on the details of quarterly Advertisement Revenue submitted by the FM Radio broadcasters to TRAI during last one year.

**Chart 5.6 : Quarterly growth in FM Radio Advertisement Revenue**



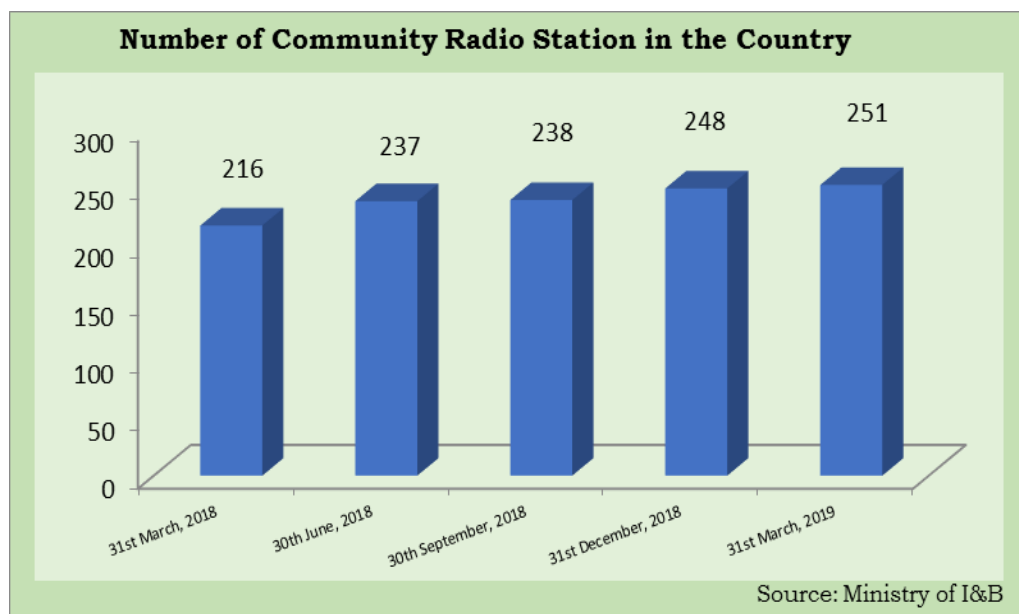
\*One operator (Ms Purvy Broadcast) submitted revised report of advertisement revenue for the quarter ending December, 2018



## F. Community Radio

5.12 As on 31<sup>st</sup> March, 2019, there are 251 Community Radio stations in operation as compared to 248 Community Radio station at the end of previous quarter. The quarterly growth in the number of operational community radio stations during last one year is depicted in the chart below.

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



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# **Annexures**

### Annexure 1.1: Wireless Subscriber Base

Service Area	Vodafone Idea		Bharti		Reliance Com.		Tata		BSNL	
	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19
Andhra Pradesh	23,144,533	22,283,084	29,798,728	28,220,681	2,298	1,923	1,700,765	1,484,357	10,145,072	10,171,597
Assam	5,303,241	5,993,877	8,382,180	8,188,605	-	-	-	-	2,418,559	2,560,859
Bihar	23,417,362	20,887,026	39,346,424	36,979,492	129	192	310,450	246,948	4,890,882	4,566,337
Delhi	19,570,240	18,983,299	15,164,364	15,644,514	3,920	2,623	62,435	20	-	-
Gujarat	33,947,738	31,642,967	12,322,135	11,527,108	314	490	884,064	687,200	5,775,864	5,958,786
Haryana	11,247,676	10,605,018	3,812,942	3,937,921	90	167	832,938	707,059	4,904,904	4,928,753
Himachal Pradesh	1,371,833	1,409,059	3,615,762	3,395,637	72	72	4,291	2,774	2,767,116	2,822,517
Jammu & Kashmir	1,339,981	1,242,344	5,642,025	5,462,946	-	-	-	-	1,214,265	1,242,060
Karnataka	15,923,911	14,931,069	27,186,628	26,776,908	3,155	1,761	3,150,454	2,751,604	7,101,238	7,197,784
Kerala	20,404,012	20,249,640	5,131,817	5,249,759	317	379	318,184	252,872	10,850,884	10,890,618
Madhya Pradesh	32,185,390	29,061,279	15,617,229	14,820,329	589	727	1,936,607	1,621,001	6,119,647	6,181,330
Maharashtra	48,916,041	45,872,515	16,404,201	15,217,675	923	728	1,647,573	1,311,424	6,907,764	7,204,097
Mumbai	15,776,272	15,224,742	8,447,178	8,966,426	5,427	5,070	850,151	658,572	-	-
North East	2,067,625	2,375,119	5,335,815	5,192,375	-	-	-	-	1,642,752	1,601,944
Orissa	5,885,690	5,161,435	13,114,987	12,178,352	75	138	527,842	427,153	5,527,595	5,747,860
Punjab	11,494,406	10,916,410	10,362,648	10,087,180	137	219	891,419	756,145	5,335,427	5,452,464
Rajasthan	18,751,708	16,662,225	23,357,048	21,816,582	243	347	123,990	90,625	5,694,204	5,907,492
Tamil Nadu (incl. Chennai)	25,332,666	24,207,464	25,771,495	25,206,041	3,390	2,829	1,511,988	1,189,091	11,909,640	12,129,547
UP(E)	36,564,291	33,836,712	32,724,449	30,403,507	624	732	1,765,487	1,529,282	11,820,748	11,844,571
UP(W)	29,513,753	28,936,225	13,772,831	12,722,363	60	62	1,365,337	1,189,200	5,923,283	5,942,389
Kolkata	9,674,397	9,085,628	6,439,985	6,150,183	42	34	1,083,018	921,787	1,792,484	1,571,580
West Bengal	26,912,269	25,269,876	18,508,444	17,036,682	333	497	38,546	26,562	1,630,129	1,819,980
<b>Total</b>	<b>418,745,035</b>	<b>394,837,013</b>	<b>340,259,315</b>	<b>325,181,266</b>	<b>22,138</b>	<b>18,990</b>	<b>19,005,539</b>	<b>15,853,676</b>	<b>114,372,457</b>	<b>115,742,565</b>

**Annexure 1.1 (contd.)**

Service Area	MTNL		Reliance Jio		Total		Net Additions
	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	
Andhra Pradesh			22,422,936	24,568,739	87,214,332	86,730,381	(483,951)
Assam			5,639,950	6,223,002	21,743,930	22,966,343	1,222,413
Bihar			20,119,506	22,399,889	88,084,753	85,079,884	(3,004,869)
Delhi	2,220,516	2,213,046	14,108,953	15,294,371	51,130,428	52,137,873	1,007,445
Gujarat			17,720,545	19,482,308	70,650,660	69,298,859	(1,351,801)
Haryana			6,880,952	7,541,842	27,679,502	27,720,760	41,258
Himachal Pradesh			2,744,696	2,888,273	10,503,770	10,518,332	14,562
Jammu & Kashmir			3,309,640	3,387,436	11,505,911	11,334,786	(171,125)
Karnataka			15,258,054	16,584,577	68,623,440	68,243,703	(379,737)
Kerala			6,942,760	7,313,052	43,647,974	43,956,320	308,346
Madhya Pradesh			21,044,892	23,113,410	76,904,354	74,798,076	(2,106,278)
Maharashtra			21,132,249	23,418,625	95,008,751	93,025,064	(1,983,687)
Mumbai	1,254,382	1,240,177	11,209,409	11,918,598	37,542,819	38,013,585	470,766
North East			2,622,832	2,818,913	11,669,024	11,988,351	319,327
Orissa			8,078,892	9,179,431	33,135,081	32,694,369	(440,712)
Punjab			11234532	12028763	39,318,569	39,241,181	(77,388)
Rajasthan			18,458,434	19,754,424	66,385,627	64,231,695	(2,153,932)
Tamil Nadu (incl. Chennai)			18,221,611	19,631,847	82,750,790	82,366,819	(383,971)
UP(E)			18,914,302	21,384,985	101,789,901	98,999,789	(2,790,112)
UP(W)			14,177,099	15,795,454	64,752,363	64,585,693	(166,670)
Kolkata			8,072,806	8,608,156	27,062,732	26,337,368	(725,364)
West Bengal			11,802,717	13,388,741	58,892,438	57,542,338	(1,350,100)
<b>Total</b>	<b>3,474,898</b>	<b>3,453,223</b>	<b>280,117,767</b>	<b>306,724,836</b>	<b>1,175,997,149</b>	<b>1,161,811,569</b>	<b>(14,185,580)</b>

## Annexure 1.2: Wireline Subscriber Base

Service Area	Bharti		Reliance Com.		Quadrant		Tata		MTNL		BSNL		Vodafone		Total		Net Additions
	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	Dec-18	Mar-19	
Andhra Pradesh	174,826	199,419	46,869	47,011			174,471	173,298			998,736	960,344	34,580	59,790	1,429,482	1,439,862	10,380
Assam											116,309	111,518	2,820	2,850	119,129	114,368	-4,761
Bihar			3,540	3,234			8,410	8,369			222,513	215,515	1,770	1,740	236,233	228,858	-7,375
Delhi	1,382,801	1,443,935	124,216	119,290			154,349	155,756	1,490,886	1,481,900			51,070	55,670	3,203,322	3,256,551	53,229
Gujarat	82,520	91,049	20,620	19,608			89,660	87,465			1,008,211	1,009,423	20,539	27,803	1,221,550	1,235,348	13,798
Haryana	22,800	23,203	2,894	2,701			36,258	35,083			220,020	209,003	150	210	282,122	270,200	-11,922
Pradesh			3,035	2,795			1,831	1,789			113,046	110,078	60	60	117,972	114,722	-3,250
Kashmir											105,329	102,447			105,329	102,447	-2,882
Karnataka	671,236	683,367	140,110	132,910			274,109	272,238			1,039,637	1,021,570	42,475	44,497	2,167,567	2,154,582	-12,985
Kerala	59,997	61,265	17,170	16,836			19,413	18,915			1,809,217	1,783,570	2,550	3,450	1,908,347	1,884,036	-24,311
Madhya Pradesh	242,111	243,345	10,724	10,478			15,770	14,571			656,076	650,594	870	1,050	925,551	920,038	-5,513
Maharashtra	88,787	94,489	49,324	46,613			289,655	278,280			1,123,163	1,084,062	18,343	20,274	1,569,272	1,523,718	-45,554
Mumbai	363,306	370,665	179,535	173,263			571,166	559,627	1,773,866	1,761,740			53,050	55,302	2,940,923	2,920,597	-20,326
North East											106,397	103,881	270	270	106,667	104,151	-2,516
Orissa			2,520	2,490			7,463	8,219			225,488	223,052	2,160	2,280	237,631	236,041	-1,590
Punjab	128,549	132,046	10,571	11,361	227,164	221,854	14,096	12,326			411,522	394,359	1,620	1,680	793,522	773,626	-19,896
Rajasthan	53,518	55,275	20,999	20,589			12,273	11,455			451,088	439,056	7,320	10,030	545,198	536,405	-8,793
Tamil Nadu (incl. Chennai)	555,593	556,766	72,696	70,448			118,701	120,153			1,456,658	1,423,913	18,675	20,360	2,222,323	2,191,640	-30,683
U.P.(E)	66,088	66,160	6,174	6,327			8,215	8,233			358,611	357,470	11,840	12,020	450,928	450,210	-718
U.P.(W)	23,323	23,671	3,749	3,381			5,342	4,820			273,129	265,817	3,990	4,170	309,533	301,859	-7,674
Kolkata	126,895	129,470	39,764	39,406			52,749	53,116			500,573	479,590	8,390	8,900	728,371	710,482	-17,889
West Bengal			1,694	1,688			2,410	2,370			242,995	222,417	120	120	247,219	226,595	-20,624
<b>Total</b>	<b>4,042,350</b>	<b>4,174,125</b>	<b>756,204</b>	<b>730,429</b>	<b>227,164</b>	<b>221,854</b>	<b>1,856,341</b>	<b>1,826,083</b>	<b>3,264,752</b>	<b>3,243,640</b>	<b>11,438,718</b>	<b>11,167,679</b>	<b>282,662</b>	<b>332,526</b>	<b>21,868,191</b>	<b>21,696,336</b>	<b>-171,855</b>

### Annexure 1.3: Service Area and Operator wise details of PCOs

Name of the Circle/Service Area	Service Provider	Number of PCOs as on 31.12.2018	Number of PCOs as on 31.03.2019	Net PCO increase/decrease
Andhra Pradesh (Excluding Telangana)	Bharat Sanchar Nigam Ltd.	6,965	6,752	-213
	Bharti Group	181	181	0
	Tata Group	2,166	0	-2,166
Telangana	Bharat Sanchar Nigam Ltd.	5,188	4,827	-361
Andhra Pradesh (Including Telangana)	Bharat Sanchar Nigam Ltd.	12,153	11,579	-574
	Bharti Group	181	181	0
	Tata Group	2,166	0	-2,166
Assam	Bharat Sanchar Nigam Ltd.	4,877	4,763	-114
Bihar (excluding Jharkhand)	Bharat Sanchar Nigam Ltd.	1,117	1,117	0
	Tata Group	4	0	-4
Jharkhand	Bharat Sanchar Nigam Ltd.	2,441	2,441	0
Bihar (including Jharkhand)	Bharat Sanchar Nigam Ltd.	3,558	3,558	0
	Tata Group	4	0	-4
Delhi	Bharti Group	330	330	0
	Mahanagar Telephone Nigam Ltd./MTNL	46,349	46,210	-139
	Tata Group	108	0	-108
Gujarat	Bharat Sanchar Nigam Ltd.	18,200	5,297	-12,903
	Bharti Group	14	14	0
	Tata Group	108	0	-108
Haryana	Bharat Sanchar Nigam Ltd.	1,357	952	-405
	Bharti Group	141	141	0
	Tata Group	29	0	-29
Himachal Pradesh	Bharat Sanchar Nigam Ltd.	877	832	-45
Jammu & Kashmir	Bharat Sanchar Nigam Ltd.	1,056	983	-73
Karnataka	Bharat Sanchar Nigam Ltd.	17,527	16,834	-693
	Bharti Group	3,356	3,221	-135
	Tata Group	7	0	-7
Kerala	Bharat Sanchar Nigam Ltd.	15,316	15,040	-276
	Bharti Group	436	422	-14
	Tata Group	9	0	-9
Kolkata	Bharat Sanchar Nigam Ltd.	3,527	3,412	-115
	Bharti Group	28	31	3
	Tata Group	7	0	-7

**Annexure 1.3 (contd.)**

<b>Name of the Circle/Service Area</b>	<b>Service Provider</b>	<b>Number of PCOs as on 31.12.2018</b>	<b>Number of PCOs as on 31.03.2019</b>	<b>Net PCO increase/decrease</b>
Madhya Pradesh (excluding Chhattisgarh)	Bharat Sanchar Nigam Ltd.	15,786	15,694	-92
	Bharti Group	1,573	1,452	-121
	Tata Group	165	0	-165
Chhattisgarh	Bharat Sanchar Nigam Ltd.	1,004	1,001	-3
Madhya Pradesh (including Chhattisgarh)	Bharat Sanchar Nigam Ltd.	16,790	16,695	-95
	Bharti Group	1,573	1,452	-121
	Tata Group	165	0	-165
Maharashtra & Goa	Bharat Sanchar Nigam Ltd.	34,172	32,830	-1,342
	Tata Group	2,397	0	-2,397
Mumbai	Bharti Group	50	50	0
	Mahanagar Telephone Nigam Ltd./MTNL	22,230	24,517	2,287
	Tata Group	256	0	0
Maharashtra (including Mumbai & Goa)	Bharat Sanchar Nigam Ltd.	34,172	32,830	-1,342
	Bharti Group	50	50	0
	Mahanagar Telephone Nigam Ltd./MTNL	22,230	24,517	2,287
	Tata Group	2,653	0	-2,653
Arunachal Pradesh	Bharat Sanchar Nigam Ltd.	1,352	1,352	0
Manipur	Bharat Sanchar Nigam Ltd.	846	845	-1
Meghalaya	Bharat Sanchar Nigam Ltd.	431	431	0
Mizoram	Bharat Sanchar Nigam Ltd.	130	126	-4
Nagaland	Bharat Sanchar Nigam Ltd.	118	61	-57
Tripura	Bharat Sanchar Nigam Ltd.	524	518	-6
Orissa	Bharat Sanchar Nigam Ltd.	1,707	1,583	-124
	Tata Group	2	0	-2
Punjab	Bharat Sanchar Nigam Ltd.	1,900	1,745	-155
	Bharti Group	18	12	-6
	Quadrant Televentures Ltd.	1,420	892	-528
	Tata Group	145	0	-145
Rajasthan	Bharat Sanchar Nigam Ltd.	3,134	2,640	-494
	Bharti Group	209	209	0
	Tata Group	80	0	-80
Sikkim	Bharat Sanchar Nigam Ltd.	12	12	0
Tamilnadu (excluding chennai)	Bharat Sanchar Nigam Ltd.	31,314	29,082	-2,232
	Bharti Group	4,584	4,276	-308
	Tata Group	51	0	-51

**Annexure 1.3 (contd.)**

<b>Name of the Circle/Service Area</b>	<b>Service Provider</b>	<b>Number of PCOs as on 31.12.2018</b>	<b>Number of PCOs as on 31.03.2019</b>	<b>Net PCO increase/decrease</b>
Chennai	Bharat Sanchar Nigam Ltd.	8,307	8,129	-178
Tamil Nadu (including Chennai)	Bharat Sanchar Nigam Ltd.	39,621	37,211	-2,410
	Bharti Group	4,584	4,276	-308
	Tata Group	51	0	-51
Uttar Pradesh- East	Bharat Sanchar Nigam Ltd.	8,565	8,294	-271
	Bharti Group	77	76	-1
	Tata Group	2	0	-2
Uttarakhand	Bharat Sanchar Nigam Ltd.	921	676	-245
Uttar Pradesh - West (excluding Uttarakhand)	Bharat Sanchar Nigam Ltd.	1,880	1,627	-253
	Bharti Group	13	0	-13
	Tata Group	57	0	-57
Uttar Pradesh - West (including Uttarakhand)	Bharat Sanchar Nigam Ltd.	2,801	2,303	-498
	Bharti Group	13	0	-13
	Tata Group	57	0	-57
West Bengal (excluding Andaman & Nicobar)	Bharat Sanchar Nigam Ltd.	3,342	3,196	-146
	Tata Group	9	0	-9
Andaman and Nicobar	Bharat Sanchar Nigam Ltd.	142	142	0
West Bengal (including Andaman & Nicobar)	Bharat Sanchar Nigam Ltd.	3,484	3,338	-146
	Tata Group	9	0	-9
<b>Total</b>		<b>280,646</b>	<b>255,268</b>	<b>-25,378</b>



**Annexure 1.4: Service Area & Operator wise details of Village Public Telephones**

<b>Name of Circle/ Service Area</b>	<b>Service Provider</b>	<b>Number of VPTs as on 31.12.2018</b>	<b>Number of VPTs as on 31.03.2019</b>	<b>Net VPTs increase/ decreased</b>
Andhra Pradesh (Excluding Telangana)	Bharat Sanchar Nigam Ltd.	2,787	2,487	-300
Telangana	Bharat Sanchar Nigam Ltd.	1,333	1,073	-260
Andhra Pradesh (Including Telangana)	Bharat Sanchar Nigam Ltd.	4,120	3,560	-560
Assam	Bharat Sanchar Nigam Ltd.	105	105	0
Bihar (excluding Jharkhand)	Bharat Sanchar Nigam Ltd.	6,368	6,368	0
Jharkhand	Bharat Sanchar Nigam Ltd.	489	489	0
Bihar (including Jharkhand)	Bharat Sanchar Nigam Ltd.	6,857	6,857	0
Gujarat	Bharat Sanchar Nigam Ltd.	5,297	5,297	0
Haryana	Bharat Sanchar Nigam Ltd.	687	672	-15
Himachal Pradesh	Bharat Sanchar Nigam Ltd.	2,209	1,931	-278
Jammu & Kashmir	Bharat Sanchar Nigam Ltd.	1,060	1,051	-9
Karnataka	Bharat Sanchar Nigam Ltd.	4,075	4,055	-20
Kerala	Bharat Sanchar Nigam Ltd.	349	342	-7
Kolkata	Bharat Sanchar Nigam Ltd.	130	130	0
Madhya Pradesh (excluding Chhattisgarh)	Bharat Sanchar Nigam Ltd.	39,692	39,692	0
Chhattisgarh	Bharat Sanchar Nigam Ltd.	453	446	-7
Madhya Pradesh (including Chhattisgarh)	Bharat Sanchar Nigam Ltd.	40,145	40,138	-7
Maharashtra & Goa	Bharat Sanchar Nigam Ltd.	8,166	8,101	-65
Maharashtra (including Mumbai & Goa)	Bharat Sanchar Nigam Ltd.	8,166	8,101	-65
Arunachal Pradesh	Bharat Sanchar Nigam Ltd.	1,054	1,054	0
Manipur	Bharat Sanchar Nigam Ltd.	418	418	0
Meghalaya	Bharat Sanchar Nigam Ltd.	270	270	0
Mizoram	Bharat Sanchar Nigam Ltd.	83	83	0
Nagaland	Bharat Sanchar Nigam Ltd.	41	41	0
Tripura	Bharat Sanchar Nigam Ltd.	222	222	0
Orissa	Bharat Sanchar Nigam Ltd.	1,819	1,817	-2
Punjab	Bharat Sanchar Nigam Ltd.	5,104	5,046	-58
Rajasthan	Bharat Sanchar Nigam Ltd.	1,212	1,198	-14

**Annexure 1.4 (contd.)**

<b>Name of Circle/ Service Area</b>	<b>Service Provider</b>	<b>Number of VPTs as on 31.12.2018</b>	<b>Number of VPTs as on 31.03.2019</b>	<b>Net VPTs increase/ decreased</b>
Sikkim	Bharat Sanchar Nigam Ltd.	429	429	0
Tamilnadu (excluding chennai)	Bharat Sanchar Nigam Ltd.	6,086	6,021	-65
Tamil Nadu (including Chennai)	Bharat Sanchar Nigam Ltd.	6,086	6,021	-65
Uttar Pradesh- East	Bharat Sanchar Nigam Ltd.	981	568	-413
Uttarakhand	Bharat Sanchar Nigam Ltd.	3,473	2,676	-797
Uttar Pradesh - West (excluding Uttarakhand)	Bharat Sanchar Nigam Ltd.	1,994	1,848	-146
Uttar Pradesh - West (incl. Uttarakhand)	Bharat Sanchar Nigam Ltd.	5,467	4,524	-943
West Bengal (excl. Andaman & Nicobar)	Bharat Sanchar Nigam Ltd.	36,352	36,352	0
Andaman & Nicobar	Bharat Sanchar Nigam Ltd.	94	94	0
West Bengal (including Andaman & Nicobar)	Bharat Sanchar Nigam Ltd.	36,446	36,446	0
<b>Total</b>		<b>1,32,832</b>	<b>1,30,376</b>	<b>-2,456</b>

**Annexure 1.5 : Internet Service Provider(ISP) wise Internet Subscriber base  
as on 31.03.2019**

<b>S.No.</b>	<b>Name of the Service Provider</b>	<b>Narrowband Subscribers</b>	<b>Broadband Subscribers</b>	<b>Total Internet Subscribers</b>
1	Reliance Jio Infocomm Ltd	0	306724836	306724836
2	Vodafone Idea Limited	36085461	110219185	146304646
3	Bharti Airtel Ltd.	28097566	114618495	142716061
4	Bharat Sanchar Nigam Ltd.	7959307	22138550	30097857
5	Tata Teleservices Limited	944651	2103527	3048178
6	Atria Convergence Technologies Pvt. Ltd.	0	1420749	1420749
7	Mahanagar Telephone Nigam Ltd.	264667	985446	1250113
8	Hathway Cable & Datacom Pvt. Ltd.	13	812279	812292
9	You Broadband India Pvt. Ltd.	14862	726071	740933
10	GTPL Broadband Pvt. Ltd.	0	263694	263694
11	Tikona Infinet Ltd. Infinet Ltd.	0	237601	237601
12	D-Vois Broadband Private Limited	0	225789	225789
13	Excitel Broadband Private Limited	0	211450	211450
14	Asianet Satellite Communications Ltd.	0	205510	205510
15	Alliance Broadband Services Pvt. Ltd.	0	200046	200046
16	Quadrant Televentures Ltd. (HFCL Infotel Ltd.)	132	196883	197015
17	Joister Infoserve Pvt. Ltd.	0	181065	181065
18	INTECH ONLINE PVT LTD	0	138746	138746
19	Planet E-Shop Holdings India Ltd.	0	138516	138516
20	Indinet Service Pvt Ltd	0	132849	132849
21	DEN Networks Ltd	0	115964	115964
22	RailTel Corporation of India Ltd.	0	106087	106087
23	Airlink Communications Pvt. Ltd	0	65925	65925
24	Five Network Solution (India) Ltd.	0	61469	61469
25	Nextra Teleservices Pvt. Ltd.	0	50668	50668
26	Honesty Net Solutions (I) Pvt Ltd	155	50347	50502
27	Wish Net Pvt. Ltd.	0	41740	41740
28	Limras Eronet Broadband Service Pvt Ltd	6072	29662	35734
29	ANI network Pvt Ltd	0	34525	34525
30	Citycom Networks Pvt. Ltd.	0	33716	33716
31	AIRNET CABLE AND DATACOM Pvt Ltd	0	31715	31715
32	Wan and Lan Internet Pvt. Ltd.	0	31299	31299
33	Fusionnet Web Services Pvt. Ltd.	0	26519	26519
34	K NET SOLUTIONS PVT LTD	0	25347	25347

**Annexure 1.5 (contd.)**

<b>S.No.</b>	<b>Name of the Service Provider</b>	<b>Narrowband Subscribers</b>	<b>Broadband Subscribers</b>	<b>Total Internet Subscribers</b>
35	Ishan Netsol Pvt Ltd	0	25105	25105
36	MICROSCAN COMPUTERS PVT LTD	15230	7268	22498
37	SITI Broadband Services Pvt. Ltd.	0	22085	22085
38	DNA Infotel Pvt Ltd	0	21400	21400
39	Vasai Cable Pvt. Ltd.	0	20960	20960
40	City Online Services Ltd	0	19864	19864
41	Reliance Communications Ltd.	0	16908	16908
42	Digital Satellite Connect Pvt. Ltd.	0	16901	16901
43	Tata Communications Limited	716	15802	16518
44	RAJESH DIGITAL DATACOM PVT LTD	26	16024	16050
45	Tata Sky Broadband Private Limited	0	15953	15953
46	Quest Consultancy Pvt. Ltd.	0	14721	14721
47	Geocity Network Solutions Pvt. Ltd.	0	14265	14265
48	IKF Technologies Ltd	0	14026	14026
49	Digital Network associates Pvt. Ltd	0	13710	13710
50	Ortel Communication Ltd.	0	12800	12800
51	Sikka Broadband(P) Ltd.(Gomti Cable Network Pvt. Ltd.)	0	12717	12717
52	CSC e-Governance Services India Ltd.	0	12192	12192
53	Meghbela Cable & Broadband Servies (P) Ltd	0	11382	11382
54	Sai Prasad Internet Pvt Ltd	0	10899	10899
55	Yashash Cable Network Pvt Ltd	0	10217	10217
56	Pioneerelabs Pvt Ltd	351	9643	9994
57	RI Networks Pvt Ltd	0	9670	9670
58	North East Dataa Network Pvt Ltd.	0	9657	9657
59	Reliance Communications Limited	0	9345	9345
60	World Phone Internet Services Pvt Ltd	0	9056	9056
61	CANDOR INFOSOLUTION PVT LTD	8496	0	8496
62	United Telecoms Ltd.	190	8260	8450
63	Broadband Pacenet (I) Pvt. Ltd.	0	8202	8202
64	SmartLink Broadband Services	0	8128	8128
65	Apna Telelink Ltd.	0	7799	7799
66	Sifi Online Pvt. Ltd.	0	7608	7608
67	FOXTEL Telecommunications Pvt Ltd	7325	0	7325
68	Jetway Broadband India Pvt.Ltd.	0	7309	7309

**Annexure 1.5 (contd.)**

<b>S.No.</b>	<b>Name of the Service Provider</b>	<b>Narrowband Subscribers</b>	<b>Broadband Subscribers</b>	<b>Total Internet Subscribers</b>
69	Swiftmail Communications Ltd.	1541	5723	7264
70	Net 9 Online Hathway Private Limited	0	7237	7237
71	Ethernet Xpress India Pvt. Ltd	0	7056	7056
72	GBPS Networks Pvt. Ltd.	0	6995	6995
73	Kappa Internet Services Pvt Ltd.	0	6930	6930
74	Readylink Internet Services Pvt Ltd	114	6582	6696
75	Netplus Broadband Services Pvt. Ltd	0	6672	6672
76	WOW SOLUTIONS & SYSTEM PVT LTD	0	6636	6636
77	Cityzone Infonet Pvt. Ltd	0	6561	6561
78	Shree Omkar Infocom Pvt. Ltd.	0	6518	6518
79	DL GTPL BROADBAND PVT LTD	0	6145	6145
80	L S Fibernet Pvt. Ltd.	0	6127	6127
81	SSCN PVT LTD	0	6074	6074
82	Multicraft Digital Technologies Pvt Ltd	0	6034	6034
83	Sampark Infotainment Pvt Ltd	0	5921	5921
84	Bittel Telecom Pvt.Ltd	0	5732	5732
85	Swiftnet Broadband Pvt Ltd	0	5520	5520
86	Intermedia Cable Communication Pvt Ltd	0	5394	5394
87	Narmada Cyberzone Pvt Ltd	1858	3097	4955
88	IAXN Telecom Pvt. Ltd.	0	4766	4766
89	FIVE NET SERVICE PROVIDER PVT LTD	0	4705	4705
90	Multinet (Udaipur) Pvt. Ltd.	0	4609	4609
91	Siliguri Internet & Cable TV Pvt. Ltd.	0	4345	4345
92	Powernet Communication Pvt Ltd	2086	2086	4172
93	Mukand Infotel Pvt. Ltd.	4114	0	4114
94	Blazenet Ltd.	0	4017	4017
95	Aerocast Networks Pvt Ltd.	0	3928	3928
96	GIGATEL NETWORKS PVT LTD	0	3708	3708
97	LM ENERGY & SOFTWARE PVT LTD	0	3666	3666
98	Zoram Business Enterprise Pvt Ltd	0	3624	3624
99	GETWAY BROADBAND PVT LTD	0	3573	3573
100	SONALI Internet Services PVT LTD	0	3553	3553
101	Spacenet Internet Services Pvt Ltd	0	3460	3460
102	Spiderlink Networks Pvt. Ltd.	0	3400	3400
103	Vision Smartlink Networking Pvt. Ltd.	0	3297	3297
104	Rainbow Internet teleservices Pvt Ltd	16	3184	3200

**Annexure 1.5 (contd.)**

<b>S.No.</b>	<b>Name of the Service Provider</b>	<b>Narrowband Subscribers</b>	<b>Broadband Subscribers</b>	<b>Total Internet Subscribers</b>
105	Wnet Telecom Private Limited	0	3161	3161
106	Southern Online Bio Technologies Ltd.	7	3072	3079
107	Star Broadband Services (I) Pvt Ltd	0	3076	3076
108	TGN Netwoks PVT LTD	0	2679	2679
109	Airgenie Communications Pvt. Ltd.	0	2571	2571
110	F/X Wireless Technology Services Pvt Ltd	0	2534	2534
111	Kaizen Infonet Pvt Ltd	0	2526	2526
112	TRANSMEDIA Technologies (AP) Pvt Ltd	0	2516	2516
113	NISS Internet Services PVT. LTD.	0	2485	2485
114	Chandra Net Pvt. Limited	0	2435	2435
115	S.S. Netcom Pvt Ltd	0	2309	2309
116	Speed Online.net Pvt. Ltd.	0	2221	2221
117	WSNS PVT LTD	0	2152	2152
118	Jetspot Networks Pvt. Ltd.	0	2007	2007
119	SMARTLINK SOLUTIONS PVT. LTD.	0	1965	1965
120	SCUD COMMUNICATION PVT LTD	0	1958	1958
121	Shree Balaji Infoway Pvt Ltd	0	1913	1913
122	Capture Network Systems Pvt. Ltd.	288	1517	1805
123	GALAXYNET CONNECTIONS PVT LTD	0	1790	1790
124	Assistive networks & technologie Pvt Ltd	0	1701	1701
125	Ultranet Infotech Solution Pvt Ltd	0	1600	1600
126	Touch Net India Pvt. Ltd.	0	1596	1596
127	Nettlinx Ltd.	0	1591	1591
128	Symbois Creations Pvt. Ltd.	0	1553	1553
129	Rajesh Patel Net Services Pvt. Ltd.	21	1526	1547
130	INET FIBER INDIA PVT LTD	0	1520	1520
131	Sphier Infotech Pvt. Ltd.	0	1515	1515
132	Netfirre Communications Pvt Ltd	0	1408	1408
133	Craze IT Solutions Pvt Ltd	0	1394	1394
134	Sanchit Infocomm Pvt Ltd	0	1376	1376
135	Hughes Communications India Ltd.	427	909	1336
136	Imperium Digital Network Pvt. Ltd.	0	1322	1322
137	Skylink Fibernet Pvt. Ltd.	0	1307	1307
138	GURU NETCOMM PVT LTD	0	1301	1301
139	delDSL Internet Pvt Ltd	0	1248	1248

**Annexure 1.5 (contd.)**

<b>S.No.</b>	<b>Name of the Service Provider</b>	<b>Narrowband Subscribers</b>	<b>Broadband Subscribers</b>	<b>Total Internet Subscribers</b>
140	MAKS Communications Pvt. Ltd.	0	1248	1248
141	CJ Online Pvt. Ltd.	0	1246	1246
142	Fiberzone Communications Pvt. Ltd.	0	1210	1210
143	Hardwork Cable&Internet Services Pvt Ltd	0	1195	1195
144	Elyzium Technologies Pvt. Ltd.	0	1178	1178
145	Aeroway Networks Pvt Ltd.	0	1132	1132
146	Click4Net Internet Services Pvt Limited	0	1005	1005
147	GIGACAST NETWORK PVT LTD	0	924	924
148	SS Fiber Net Optical Communication Pvt. Ltd	0	918	918
149	Touchnet Broadband Services Pvt. Ltd.	0	907	907
150	Gorakhpur Net Services Pvt. Ltd.	0	904	904
151	Varesha Air World Networks Pvt Ltd	433	433	866
152	Sky Online Technosystem Pvt Ltd	0	863	863
153	Dreamlink Technologies Pvt Ltd	0	848	848
154	Japra Tele Link Pvt. Ltd.	0	836	836
155	NetMagic Solutions(P) Ltd.	0	835	835
156	ESTO Boradnad Pvt Ltd./ESTO internet Pvt Ltd	0	824	824
157	NGC Broadband Pvt. Ltd.	812	0	812
158	Smart Net India Pvt Ltd	0	811	811
159	ANTARIKSH BROADBAND & WIRELESS SOLUTIONS PVT LTD	800	0	800
160	Correl IT Services Pvt. Ltd.	0	785	785
161	Ani Broadband Service Pvt. Ltd.	0	763	763
162	Datawave IT solutions Pvt. Ltd.	0	761	761
163	Suncity Broadband Pvt Ltd.	0	754	754
164	Light Air Transmission Pvt. Ltd.	375	375	750
165	Daksh Broadband Services Pvt Ltd	0	728	728
166	Unitel Media Pvt Ltd	0	722	722
167	Barani Data Solutions Private Limited	410	306	716
168	Cloudnet Communications Pvt Ltd	0	714	714
169	Grace Teleinfra Pvt Ltd	0	699	699
170	Sify Technologies Ltd.	375	321	696
171	STN Communication & Advertising Pvt Ltd.	2	686	688
172	HPS Digital Broadband Pvt Ltd	0	672	672

**Annexure 1.5 (contd.)**

<b>S.No.</b>	<b>Name of the Service Provider</b>	<b>Narrowband Subscribers</b>	<b>Broadband Subscribers</b>	<b>Total Internet Subscribers</b>
173	SVD Digital Networks Pvt Ltd	0	665	665
174	HOSTAXIS Networks Pvt Ltd	0	655	655
175	Super Sonic Broadband Pvt Ltd	0	639	639
176	Primenet Global Ltd.	0	627	627
177	Harisree CableNet Pvt. Ltd.	0	623	623
178	Wi-Link Network Pvt. Ltd	0	614	614
179	Sefaro Networks Private Ltd	0	608	608
180	Fastnet Communication Pvt Ltd	200	401	601
181	Webridors Internet Pvt Ltd	0	594	594
182	Alphanet Broadband Pvt Ltd	0	571	571
183	VIVA Communications Pvt Ltd	0	556	556
184	Alegra Communication Pvt Ltd	0	552	552
185	Shree Manoranjan Broadband Pvt Ltd	0	551	551
186	Digital2Virtual ISP Pvt. Ltd.	0	549	549
187	Laironet Communication Pvt Ltd	0	532	532
188	Infinity Wireless Services Pvt. Ltd.	0	529	529
189	Rida Communication Pvt. Ltd.	0	523	523
190	Datamax Technology Pvt Ltd	39	482	521
191	Reticule Infotech Pvt. Ltd.	0	490	490
192	Power Grid Corporation of India Ltd.	0	486	486
193	Data Infosys Ltd.	0	484	484
194	Spirenet Digital Communication Pvt Ltd	0	478	478
195	Helm Consultants Pvt Ltd	193	274	467
196	Packenet Solutions Pvt. Ltd.	0	467	467
197	Adri Infocom Pvt. Ltd.	0	465	465
198	Oasis Cable Pvt Ltd.	0	445	445
199	Elecon Infotmation Technology Ltd	0	431	431
200	Gleam Worldwide Services Pvt. Ltd.	0	422	422
201	Speedmaxx Digital Networks Pvt Ltd	0	421	421
202	Tamana Winet Pvt. Ltd.	0	404	404
203	Oistel Telecom Pvt. Ltd.	204	195	399
204	Packnet Solutions Pvt Ltd	0	397	397
205	Cns Infotel Services Pvt Ltd	0	392	392
206	Spider Broadband and Cable Pvt Ltd	0	376	376
207	Windsor Internet Pvt Ltd	0	374	374



**Annexure 1.5 (contd.)**

<b>S.No.</b>	<b>Name of the Service Provider</b>	<b>Narrowband Subscribers</b>	<b>Broadband Subscribers</b>	<b>Total Internet Subscribers</b>
208	Bass Jokernet Private Limited	0	371	371
209	Panav Network and Communications Private Limited	0	368	368
210	Bass Networks Pvt Ltd	0	350	350
211	Pulse Telesystems Pvt. Ltd.	0	346	346
212	Revolution Broadband Pvt Ltd	0	343	343
213	Sai Akshay Internet Services Pvt Ltd.	0	332	332
214	CATLA IT & ENGG. CO. PVT LTD.	0	327	327
215	Twincity Communication Private Limited	0	325	325
216	Panchsheel Broadband Services's Pvt Ltd	0	320	320
217	Digital Cloud Technologies Pvt. Ltd.	0	310	310
218	Bhiwani Communications Pvt. Ltd.	73	233	306
219	Moradabad Internet Dervices Pvt Ltd	0	301	301
220	Nextgen Compusoft Pvt Ltd	0	298	298
221	Development Logics Solutions Pvt Ltd	0	296	296
222	Classic Internet and Cable Services Pvt Ltd	287	0	287
223	Anushree Digital Network Pvt Ltd	0	270	270
224	Auspice Infratal Pvt Ltd	150	116	266
225	Sheen Telecom Consultants Pvt Ltd	263	0	263
226	Citylink Broadband Services Pvt. Ltd.	0	261	261
227	Singh Internet Services Pvt. Ltd.	0	260	260
228	Goodwill Smartlink Pvt. Ltd.	0	252	252
229	Cityline Networks Pvt Ltd	0	251	251
230	ALWAR ONLINE PVT LTD	250	0	250
231	Faiconet Internet Pvt Ltd	0	245	245
232	Wi5 Internet Services P Limited	0	241	241
233	Khetan Cable Network (P) Ltd	0	228	228
234	VMO Broadband Pvt Ltd	225	0	225
235	Acebrowse Pvt Ltd	0	219	219
236	CIT Solutions Pvt. Ltd.	0	217	217
237	Kartik Network Pvt. Ltd.	0	216	216
238	Srinagar Technology Consultants Ltd	213	0	213
239	Wavetree Networks Pvt Ltd	0	210	210
240	Saibaba Broadband Pvt. Ltd.	0	206	206
241	CERALINK COMMUNICATION PVT LTD	0	196	196
242	Gazillio Technologies Pvt. Ltd.	0	182	182

**Annexure 1.5 (contd.)**

<b>S.No.</b>	<b>Name of the Service Provider</b>	<b>Narrowband Subscribers</b>	<b>Broadband Subscribers</b>	<b>Total Internet Subscribers</b>
243	NETTECH INFOVISION PVT LTD	0	180	180
244	Rajdhani Telecom Pvt. Ltd.	4	172	176
245	Amar Broadband Private Limited	0	176	176
246	STN Infotech Pvt. Ltd	0	175	175
247	Microsense Pvt. Ltd.	0	173	173
248	SOUTHNET BROADBAND PVT LTD	0	166	166
249	Kataria Net Solutions Pvt. Ltd.	0	163	163
250	ERNET India	62	100	162
251	Juweriyah Networks Pvt Ltd	0	159	159
252	Netwire Internet Solutions Pvt. Ltd.	0	157	157
253	Airmax Internet Pvt Ltd	0	156	156
254	Netvision Awadh Networks Pvt Ltd	0	153	153
255	Shineplus Networks Pvt Ltd	0	143	143
256	Proline Datatech Sercivces Pvt Ltd	0	137	137
257	Global India Tele Infra Pvt. Ltd.	36	100	136
258	AirFiber IT Solutions Pvt. Ltd	0	135	135
259	ROYAL WIRELESS SERVICES PVT LTD	0	128	128
260	Invensys Networks pvt ltd	9	118	127
261	MLC INTERNET PVT LTD	0	126	126
262	Airtechzone Services India Pvt Ltd	78	47	125
263	Airmesh Communications Limited	0	123	123
264	Skynetzone Wifi Services Pvt Ltd	0	123	123
265	Shri Vinayagaa Internet Pvt Ltd	0	121	121
266	Achiever Communication and Services Pvt. Ltd.	0	119	119
267	V NET NETWORKS PVT. LTD	0	118	118
268	Verizon Communications India Pvt. Ltd.	0	117	117
269	Optisky Fiber Pvt Ltd	0	112	112
270	Shri Ram Braoadband Services Pvt Ltd	0	112	112
271	Pronoc Technologies Pvt. Ltd.	0	107	107
272	Shreepad Communication Pvt. Ltd.	0	107	107
273	AT&T Global Network Services India Private Limited	0	100	100
274	Angel Air Network Solutions Pvt Ltd	0	96	96
275	Cheetah Networks Pvt Ltd	0	94	94
276	SATH TECHNOLOGIES PVT LTD	0	93	93

**Annexure 1.5 (contd.)**

<b>S.No.</b>	<b>Name of the Service Provider</b>	<b>Narrowband Subscribers</b>	<b>Broadband Subscribers</b>	<b>Total Internet Subscribers</b>
277	QBC Infotech Pvt. Ltd.	0	89	89
278	NR DATA SERVICE PVT LTD	0	89	89
279	Micronova Network Solutions Ltd	87	0	87
280	Satpar Infotech Pvt Ltd	0	87	87
281	TRIPLE LINK PVT LTD	0	84	84
282	Vidarbha Wi-Fi & Network Services Pvt. Ltd.	84	0	84
283	Dream Plus Multi Services Pvt. Ltd.	0	82	82
284	DigiStar Info Solutions Pvt Ltd	40	40	80
285	ARP INFONET PVT. LTD.	0	78	78
286	Telestra Telecommunications Pvt. Ltd.	0	77	77
287	BSL Technologies Pvt. Ltd.	0	75	75
288	Malang Solutions Pvt. Ltd.	0	69	69
289	Airlink Broadband Pvt Ltd	0	64	64
290	Wireline Solution(India) Pvt. Ltd.	0	62	62
291	Mtel Networks Pvt. Ltd.	0	58	58
292	Edge Telecommunications Pvt. Ltd.	0	56	56
293	Dronagiri Infotech Pvt Ltd	0	56	56
294	Infiber Broadnet Pvt. Ltd.	0	56	56
295	City Broadband Pvt. Ltd.	0	52	52
296	S A Internet Solution Pvt Ltd	0	48	48
297	Trans Virtual Pvt. Ltd.	0	47	47
298	Pimoonny Broadband Serives Pvt Ltd	0	41	41
299	IWAVE Telecommunications Pvt Ltd	0	38	38
300	PMG Networkd Pvt Ltd	0	34	34
301	Navariya Satellite Services Pvt.Ltd.	33	0	33
302	Pacific Internet India Pvt. Ltd.	0	32	32
303	Divine Broadband Services Pvt Ltd	0	32	32
304	Dreamnet Pvt.Ltd.	0	30	30
305	West Bengal Electronics Industry Development Corp. Ltd.	0	30	30
306	Jai Mata Di Telectronix Pvt Ltd	0	30	30
307	Sanyog Networks Pvt Ltd	0	29	29
308	WE Internet Limited (Nivyah Infrastructure & Telecom Services Ltd.)	0	27	27
309	Orange Business Services India Network Pvt. Ltd.	0	22	22
310	Adya Tech One Services Pvt Ltd	0	21	21

**Annexure 1.5 (contd.)**

<b>S.No.</b>	<b>Name of the Service Provider</b>	<b>Narrowband Subscribers</b>	<b>Broadband Subscribers</b>	<b>Total Internet Subscribers</b>
311	Mastek Infosystems OPC Pvt. Ltd.	0	21	21
312	Fasthook Networks Pvt Ltd	0	18	18
313	A TO Z Infolink Pvt. Ltd.	0	16	16
314	Ubercore Data Labs Pvt Ltd	0	16	16
315	Jetfirenet Telelink Pvt Ltd	0	16	16
316	Microtel Internet Network Pvt ltd	0	15	15
317	Novanet India Ltd.	0	14	14
318	Texas Connect Private Limited	0	14	14
319	Marutham Networks Pvt. Ltd.	0	12	12
320	Clear Beam Communication Pvt Ltd	5	6	11
321	Financial Technologies Communications Ltd.	10	0	10
322	Angrow Netcomm Pvt. Ltd.	10	0	10
323	Reliance Telecom Limited	0	8	8
324	Essel Shyam Communications Limited	0	7	7
325	Sun Boardband and Data Services Pvt Ltd	0	6	6
326	ABT Ltd.	3	2	5
327	Nelco Ltd.	0	4	4
328	Tatanet Services Ltd	0	4	4
329	Lotus Broadband Pvt Ltd	0	3	3
330	Aristo Telenet Pvt Ltd	0	3	3
331	KIIRUS INFONET PVT. LTD.	0	2	2
332	Sabse Internet Services Provider Pvt Ltd	0	2	2
	<b>Total</b>	<b>73421457</b>	<b>563307970</b>	<b>636729427</b>
	<b>Total (in million)</b>	<b>73.42</b>	<b>563.31</b>	<b>636.73</b>

Note: Some wireless service providers exclude incidental data users from their subscriber base, based on minimum usage decided by them.

**Annexure 1.6: List of Service Providers which reported IP  
Telephony Minutes for Q.E. Mar-19**

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

**Annexure 1.7: Service Area wise PMRTS subscriber Base**

Sl. No.	Operative Area	Service Provider	Subscriber Base	
			31.12.2018	31.03.2019
1	Delhi (Faridabad/ Gurgaon)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	6015	6270
		Procall (Delhi)	2938	2971
		Procall (Faridabad)		
		Procall (Gurgaon)		
		<b>Total</b>	<b>8953</b>	<b>9241</b>
2	Mumbai (Navi Mumbai)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	8375	8831
		Smartalk (Mumbai)	526	611
		Bhilwara Telenet(Mumbai)	870	881
		Airtalk Solutions & Services Pvt. Ltd	361	361
		<b>Total</b>	<b>10132</b>	<b>10684</b>
3	Kolkata	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2467	2440
		<b>Total</b>	<b>2467</b>	<b>2440</b>
4	TN(Chennai)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7177	7447
		Quick Calls	592	583
		<b>Total</b>	<b>7769</b>	<b>8030</b>
5	Karnataka (Bangalore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7231	7190
		Quick Calls	602	710
		<b>Total</b>	<b>7833</b>	<b>7900</b>
6	Andhra Pradesh (Vishakhapatnam & Hyderabad)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	5408	6007
		Quick Calls (Hyderabad Urban)	871	585
		<b>Total</b>	<b>6279</b>	<b>6865</b>
7	Madhya Pradesh ( Indore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1363	1500
		<b>Total</b>	<b>1363</b>	<b>1500</b>
8	Rajasthan (Jaipur)	Procall	280	290
		Arya Omnitalk Radio Trunking Services Pvt.Ltd.	531	540
		<b>Total</b>	<b>811</b>	<b>830</b>

**Annexure- 1.7 (Contd.)**

Sl. No.	Operative Area	Service Provider	Subscriber Base	
			31.12.2018	31.03.2019
9	Gujarat (Ahmedaba/Surat /Vadodara/ Bharuch/Dahej/ Kutch/Amrela /Jamnagar)	Arya Omnitalk Radio Trunking Services Pvt.Ltd. (Ahmedaba/Surat/ Vadodara/ Bharuch/Dahej)	6811	7114
		Inative Network Pvt. Ltd. (Ahmedaba/Surat/ Vadodara/ Bharuch/ Kutch/Amrela / Jamnagar)	1820	1820
		<b>Total</b>	<b>8631</b>	<b>8934</b>
10	Maharashtra (Pune)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1904	1919
		Smartalk	442	452
		<b>Total</b>	<b>2346</b>	<b>2371</b>
11	Kerala (Cochin City & Quilon)	Wiwonet Solutions Pvt. Ltd.	361	363
		Arya Omnitalk Radio Trunking Services Pvt.Ltd.	839	920
		<b>Total</b>	<b>1200</b>	<b>1283</b>
		<b>Grand Total</b>	<b>57,784</b>	<b>60,078</b>

**Annexure 2.1: Wireless Revenue Service - Service Area wise Statistics for  
QE Mar-19**

**Key parameters for service areas of category-A**

Service Area	% of pre-paid in total subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
AP	95.64	92	21	319	307	626
Gujarat	95.39	71	14	314	262	576
Karnataka	75.97	82	21	322	291	613
MH	95.67	78	19	300	276	575
TN (incl. Chennai)	94.90	90	18	308	298	606

**Key parameters for service areas of category-B**

Service Area	% of pre-paid in total Subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Haryana	97.94	53	12	333	312	645
Kerala	97.33	91	12	253	267	520
MP	98.06	67	18	332	330	663
Punjab	95.95	78	12	339	291	630
Rajasthan	97.77	68	12	365	354	719
UP(E)	98.65	52	11	375	444	819
UP(W)	98.45	57	13	350	359	709
WB	99.41	61	14	328	360	688

**Key parameters for service areas of category-C**

Service Area	% of pre-paid in total subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Assam	97.82	81	29	379	417	796
Bihar	99.31	55	11	429	513	942
HP	98.48	66	11	317	292	609
J&K	76.58	90	70	516	445	961
NE	98.42	74	35	329	328	656
Orissa	98.90	69	16	390	428	818

**Key parameters for service areas of category-Metro**

Service Area	% of pre-paid in total subscribers	ARPU (₹ per month)	Total usage ( from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Kolkata	93.84	56	14	315	285	600
Delhi	85.37	64	17	469	352	821
Mumbai	80.03	89	14	421	297	718



## Annexure 4.1: Performance of QoS Parameters for Cellular Mobile Service

Performance Monitoring Report on Quality of Service for Cellular Mobile Service Provider for Q.E. March, 2019																						
Name of Service Area	Name of Service Area	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 SDCCH/ Paging Channel Congestion/ RRC Congestion (%age)	TCH, RAB and E-RAB Congestion (%age)	Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)]	Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)]	Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)	Down Link (DL) Packet Drop Rate or DL-PDR	Up Link (UL) Packet Drop Rate or UL-PDR	Metering and billing credibility - post paid	Metering and billing credibility - pre paid	Resolution of billing/charging complaints	Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints	Accessibility of call centre/ customer care	Percentage of calls answered by the operators (voice to voice) within 90 seconds	%age requests for Termination / Closure of service complied within 7 days	Time taken for refund of deposits after closures			
		≤ 2%	≤ 2%	≥ 95%	≤ 1%	≤ 2%	≤ 2%	≤ 3%	≥ 95%	≤ 0.5%	≤ 2%	≤ 2%	≤ 0.1%	≤ 0.1%	98% within 4 weeks	100% within 6 weeks	within 1 week of resolution of complaint	≥ 95%	≥ 95%	100% within 7 days	100% within 60 days	
The achievement of benchmark against each parameter is to be averaged over a period of one quarter for 2G, 3G and 4G VoLTE Services (combined) as per the measurement methodology explained in Explanatory Memorandum to regulations																						
Andhra Pradesh	Airtel	0.10	0.17	98.57	0.32	0.53	1.49	2.17	96.41	0	0.23	0.30	0.01	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00	
	BSNL	0.96	1.59	97.75	0.60	1.33	1.91	2.33	98.69	0	NR	NR	0.00	0.00	100.00	100.00	100.00	97.00	97.00	100.00	100.00	
	RJio	0.03	0.03	99.60	0.01	0.00	0.29	0.40	99.92	0	0.01	0.16	0.00	0.00	100.00	100.00	100.00	96.62	99.03	100.00	100.00	
	TATA	0.64	0.00	99.56	0.05	0.01	0.00	1.80	98.75	0	NA	NA	0.00	0.00	100.00	100.00	100.00	98.84	<b>75.66</b>	100.00	100.00	
	VIL	Idea	0.08	0.35	98.53	0.71	0.26	1.64	2.47	99.58	0	0.13	0.38	0.01	0.00	99.62	100.00	100.00	100.00	98.78	100.00	100.00
	VIL	Vodafone	0.08	0.35	98.53	0.71	0.26	1.64	2.47	99.58	0	0.13	0.38	0.01	0.01	99.73	100.00	100.00	100.00	<b>69.73</b>	<b>99.76</b>	100.00
Assam	Airtel	0.43	1.29	97.73	0.35	0.52	1.96	2.34	97.75	0	0.13	0.32	0.01	0.00	100.00	100.00	100.00	99.67	99.00	100.00	100.00	
	BSNL	1.98	1.98	98.27	0.78	1.73	1.98	2.35	96.80	0	NR	NR	0.01	0.00	100.00	100.00	100.00	97.00	97.60	100.00	100.00	
	RJio	0.31	1.14	99.54	0.01	0.00	0.52	0.66	99.88	0	0.02	0.24	0.00	0.00	100.00	100.00	100.00	96.88	99.93	100.00	100.00	
	VIL	Idea	0.27	0.81	98.40	0.27	1.48	1.70	2.36	98.16	0	1.03	0.56	0.02	0.00	100.00	100.00	100.00	97.71	100.00	100.00	<b>49.81</b>
	VIL	Vodafone	0.27	0.81	98.40	0.27	1.48	1.70	2.36	98.16	0	1.03	0.56	0.01	0.01	100.00	100.00	100.00	99.95	100.00	100.00	100.00
Bihar	Airtel	0.31	0.75	97.86	0.44	1.29	1.77	1.88	99.14	0	0.10	0.38	0.01	0.00	100.00	100.00	100.00	99.78	97.00	100.00	100.00	
	BSNL	1.89	1.82	95.66	0.36	0.50	1.89	2.40	98.30	0	NR	NR	0.00	0.00	99.39	100.00	100.00	98.00	96.44	100.00	100.00	
	RJio	0.13	0.35	99.40	0.00	0.01	0.57	0.74	99.88	0	0.01	0.25	0.00	0.00	100.00	100.00	100.00	96.89	<b>83.00</b>	100.00	100.00	
	TATA	0.23	1.33	97.30	0.39	0.00	0.00	0.00	98.69	0	NA	NA	0.00	0.00	100.00	100.00	100.00	97.81	<b>66.46</b>	100.00	100.00	
	VIL	Idea	0.58	0.04	98.28	0.33	1.95	1.55	2.17	98.57	0	0.01	0.02	0.00	0.00	100.00	100.00	100.00	96.46	99.98	100.00	100.00
	VIL	Vodafone	0.58	0.04	98.28	0.33	1.95	1.55	2.17	98.57	0	0.01	0.02	0.01	0.01	100.00	100.00	100.00	100.00	<b>94.86</b>	100.00	<b>99.89</b>
Delhi	Airtel	0.09	0.00	99.21	0.19	0.29	1.68	2.61	95.96	0	0.79	0.34	0.02	0.00	100.00	100.00	100.00	<b>90.38</b>	96.00	100.00	100.00	
	MTNL	0.05	0.00	97.36	0.15	1.02	1.50	1.65	96.35	0	NA	NA	0.02	0.00	100.00	100.00	100.00	98.91	99.41	100.00	100.00	
	RJio	0.08	0.23	99.60	0.00	0.00	0.20	0.32	99.90	0	0.01	0.20	0.00	0.00	100.00	100.00	100.00	96.96	98.04	100.00	100.00	
	TATA	0.12	0.62	95.93	0.00	0.50	0.00	0.00	99.05	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
	VIL	Idea	0.24	0.97	99.26	0.10	0.19	1.50	1.84	98.69	0	NA	NA	0.02	0.00	100.00	100.00	100.00	99.18	97.52	100.00	100.00
	VIL	Vodafone	0.09	0.26	99.53	0.18	0.34	1.81	2.30	99.27	0	0.55	0.39	0.05	0.03	99.95	100.00	100.00	100.00	<b>92.62</b>	100.00	<b>99.97</b>

### Annexure 4.1 (Contd.)

Gujarat	Airtel	0.06	0.06	99.60	0.16	0.20	1.61	1.94	95.69	0	0.09	0.16	0.01	0.00	100.00	100.00	100.00	99.73	96.00	100.00	100.00
	BSNL	1.27	0.98	98.19	0.05	0.29	1.68	2.54	100.00	0	NR	NR	0.02	0.00	100.00	100.00	100.00	96.00	96.25	100.00	100.00
	RJio	0.09	0.31	99.55	0.00	0.00	0.37	0.50	99.91	0	0.01	0.17	0.00	0.00	100.00	100.00	100.00	97.32	99.22	100.00	100.00
	TATA	0.33	0.00	99.88	0.00	0.00	0.00	0.00	95.60	0	NA	NA	0.00	0.00	100.00	100.00	100.00	98.35	<b>79.27</b>	100.00	100.00
	VIL	Idea	0.08	0.25	99.28	0.18	0.34	1.28	1.71	98.46	0	0.77	0.67	0.01	0.00	99.94	100.00	100.00	97.06	99.91	100.00
	Vodafone	0.07	0.10	99.54	0.09	0.37	1.27	1.64	99.04	0	0.11	0.21	0.08	0.02	99.77	100.00	100.00	95.99	<b>87.79</b>	<b>99.20</b>	100.00
Haryana	Airtel	0.07	0.17	99.78	0.13	0.16	1.27	1.92	97.65	0	0.33	0.42	0.01	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00
	BSNL	0.48	0.22	98.82	0.13	0.30	1.55	1.79	97.62	0	NR	NR	0.00	0.00	100.00	100.00	100.00	100.00	99.95	100.00	100.00
	RJio	0.05	0.13	99.52	0.00	0.00	0.53	0.70	99.94	0	0.01	0.13	0.00	0.00	100.00	100.00	100.00	96.69	99.90	100.00	100.00
	TATA	0.48	0.00	99.77	0.08	0.00	0.00	0.35	98.63	0	NA	NA	0.00	0.00	100.00	100.00	100.00	<b>94.73</b>	<b>78.16</b>	100.00	100.00
	VIL	Idea	0.24	0.42	97.87	0.95	1.99	1.46	2.38	98.61	0	0.10	0.18	0.01	0.00	100.00	100.00	100.00	98.08	<b>94.43</b>	100.00
	Vodafone	0.24	0.42	97.87	0.95	1.99	1.46	2.38	98.61	0	0.10	0.18	0.04	0.03	100.00	100.00	100.00	100.00	<b>78.61</b>	100.00	<b>99.98</b>
Himachal Pradesh	Airtel	0.28	0.88	99.23	0.13	0.10	1.14	1.49	95.19	0	0.24	0.39	0.02	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00
	BSNL	1.70	1.97	98.85	0.63	0.95	1.95	2.39	95.76	0	NR	NR	0.00	0.00	100.00	100.00	100.00	100.00	99.91	100.00	100.00
	RJio	0.14	0.42	99.59	0.00	0.00	0.34	0.51	99.94	0	0.00	0.12	0.00	0.00	100.00	100.00	100.00	96.99	99.99	100.00	100.00
	TATA	0.00	0.00	100.00	0.00	0.00	0.00	0.00	97.37	0	NA	NA	0.00	0.00	100.00	100.00	100.00	95.95	100.00	100.00	100.00
	VIL	Idea	0.21	0.52	98.82	0.11	0.61	1.96	2.48	97.36	0	0.02	0.38	0.01	0.00	100.00	100.00	100.00	98.16	98.89	100.00
	Vodafone	0.21	0.52	98.82	0.11	0.61	1.96	2.48	97.36	0	0.02	0.38	0.06	0.04	100.00	100.00	100.00	100.00	<b>93.00</b>	100.00	<b>98.78</b>
Jammu & Kashmir	Airtel	0.16	0.20	97.70	0.12	0.14	1.43	2.56	98.65	0	0.00	0.00	0.01	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00
	BSNL	1.19	1.50	98.33	0.62	1.15	1.93	2.20	96.54	0	NR	NR	0.01	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	RJio	0.20	0.99	99.62	0.00	0.01	0.52	0.68	99.93	0	0.01	0.13	0.00	0.00	100.00	100.00	100.00	96.82	99.72	100.00	100.00
	VIL	Idea	0.33	1.09	98.42	0.32	0.90	1.94	2.31	97.45	0	0.53	0.45	0.01	0.00	100.00	100.00	100.00	96.18	97.79	100.00
	Vodafone	0.33	1.09	98.42	0.32	0.90	1.94	2.31	97.45	0	0.53	0.45	0.03	0.03	100.00	100.00	100.00	100.00	<b>87.13</b>	100.00	<b>95.50</b>
Karnataka	Airtel	0.32	0.55	98.85	0.62	0.40	1.83	2.71	95.26	0	0.18	0.20	0.02	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00
	BSNL	1.38	1.76	97.50	0.42	0.62	1.98	2.95	97.21	0	NR	NR	0.00	0.00	99.77	100.00	100.00	97.00	98.09	100.00	100.00
	RJio	0.14	0.35	99.62	0.01	0.00	0.34	0.51	99.93	0	0.01	0.15	0.00	0.00	100.00	100.00	100.00	96.45	98.87	100.00	100.00
	TATA	0.68	0.00	95.08	0.20	0.07	0.66	2.93	99.26	0	NA	NA	0.00	0.00	100.00	100.00	100.00	98.84	<b>75.53</b>	100.00	100.00
	VIL	Idea	0.09	0.29	99.82	0.41	0.18	0.80	1.02	99.80	0	0.17	0.48	0.05	0.02	100.00	100.00	100.00	99.07	97.60	100.00
	Vodafone	0.28	1.42	99.40	0.15	0.12	1.20	1.85	99.76	0	0.15	0.63	0.05	0.04	99.88	100.00	100.00	100.00	<b>87.95</b>	100.00	100.00
Kerala	Airtel	0.05	0.06	98.96	0.10	0.20	1.86	2.84	97.12	0	0.12	0.19	0.02	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00
	BSNL	0.24	1.27	99.08	0.32	0.89	1.77	2.06	98.90	0	NR	NR	0.01	0.00	98.00	100.00	100.00	97.00	96.78	100.00	100.00
	RJio	0.01	0.02	99.67	0.00	0.00	0.27	0.58	99.92	0	0.00	0.15	0.00	0.00	100.00	100.00	100.00	96.57	98.68	100.00	100.00
	TATA	0.85	0.50	99.80	0.05	0.00	0.00	0.00	99.83	0	NA	NA	0.00	0.00	100.00	100.00	100.00	98.85	<b>93.56</b>	100.00	100.00
	VIL	Idea	0.32	0.05	99.52	0.30	0.36	0.74	0.99	98.01	0	0.06	0.29	0.07	0.00	99.96	100.00	100.00	98.39	99.46	100.00
	Vodafone	0.02	0.02	99.67	0.05	0.04	0.81	1.06	99.65	0	0.05	0.17	0.06	0.03	100.00	100.00	100.00	100.00	<b>92.02</b>	100.00	100.00

### Annexure 4.1 (Contd.)

Kolkata	Airtel	0.44	0.00	99.60	0.15	0.20	1.62	2.16	98.70	0	0.21	0.43	0.00	0.00	100.00	100.00	100.00	94.11	94.00	100.00	100.00	
	BSNL	0.82	1.54	99.29	0.24	0.16	1.77	1.85	97.93	0	NR	NR	0.00	0.01	100.00	100.00	100.00	95.00	96.09	100.00	100.00	
	RJio	0.03	0.05	99.60	0.00	0.00	0.20	0.31	99.93	0	0.01	0.13	0.00	0.00	100.00	100.00	100.00	97.35	98.50	100.00	100.00	
	TATA	0.43	1.46	99.58	0.02	0.12	0.00	0.00	99.34	0	NA	NA	0.00	0.00	100.00	100.00	100.00	97.79	66.81	100.00	100.00	
	VIL	Idea	0.13	0.65	99.82	0.02	0.03	0.41	0.82	99.41	0	NA	NA	0.02	0.00	100.00	100.00	100.00	97.15	99.52	100.00	100.00
	Vodafone	0.15	0.96	99.28	0.05	0.67	1.40	1.69	98.68	0	0.07	0.13	0.05	0.02	100.00	100.00	100.00	100.00	74.40	100.00	100.00	
Madhya Pradesh	Airtel	0.10	0.23	99.16	0.10	0.31	1.89	2.22	95.57	0	0.08	0.15	0.00	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00	
	BSNL	1.20	1.44	96.22	0.45	1.15	1.88	1.96	98.30	0	NR	NR	0.00	0.00	100.00	100.00	100.00	99.00	98.88	100.00	100.00	
	RJio	0.14	0.29	99.61	0.00	0.00	0.48	0.61	99.88	0	0.02	0.23	0.00	0.00	100.00	100.00	100.00	97.26	98.18	100.00	100.00	
	TATA	0.61	0.00	96.80	0.03	0.28	0.00	0.00	99.47	0	NA	NA	0.00	0.00	100.00	100.00	100.00	98.31	75.78	100.00	100.00	
	VIL	Idea	0.26	0.91	96.39	0.61	3.27	1.80	2.27	97.81	0	0.40	0.52	0.09	0.00	100.00	100.00	100.00	97.10	99.97	100.00	100.00
	Vodafone	0.26	0.91	96.39	0.61	3.27	1.80	2.27	97.81	0	0.40	0.52	0.02	0.02	100.00	100.00	100.00	100.00	93.56	98.93	100.00	
Maharashtra	Airtel	0.03	0.05	99.44	0.13	0.24	1.34	1.62	95.17	0	0.12	0.24	0.01	0.00	100.00	100.00	100.00	96.44	97.00	100.00	100.00	
	BSNL	1.58	1.94	97.54	0.90	1.06	1.91	2.70	96.05	0	NR	NR	0.01	0.01	100.00	100.00	100.00	100.00	96.10	100.00	100.00	
	RJio	0.20	0.87	99.59	0.01	0.00	0.35	0.47	99.90	1	0.02	0.21	0.00	0.00	100.00	100.00	100.00	97.19	98.87	100.00	100.00	
	TATA	1.05	0.00	98.94	0.06	0.32	0.41	1.84	99.06	0	NA	NA	0.00	0.00	100.00	100.00	100.00	98.41	76.39	100.00	100.00	
	VIL	Idea	0.27	1.05	98.49	0.64	0.79	1.64	2.78	97.75	0	0.63	0.44	0.02	0.00	99.93	100.00	100.00	99.44	99.82	99.69	100.00
	Vodafone	0.17	0.60	98.80	0.36	1.14	1.47	2.03	98.98	0	0.11	0.18	0.05	0.03	100.00	100.00	100.00	99.99	96.88	100.00	99.99	
Mumbai	Airtel	0.03	0.11	99.28	0.52	0.52	1.86	1.98	95.93	0	0.21	0.29	0.01	0.00	100.00	100.00	100.00	99.72	96.00	100.00	100.00	
	MTNL	0.50	1.00	97.30	0.50	0.40	1.79	2.87	98.30	0	NA	NA	0.03	0.01	100.00	100.00	100.00	100.00	99.63	100.00	100.00	
	RJio	0.10	0.33	99.52	0.01	0.00	0.19	0.27	99.91	0	0.01	0.17	0.00	0.00	100.00	100.00	100.00	97.04	98.63	100.00	100.00	
	TATA	0.04	0.41	98.42	0.09	0.78	0.00	0.00	99.01	0	NA	NA	0.00	0.00	100.00	100.00	100.00	98.39	76.62	100.00	100.00	
	VIL	Idea	0.13	0.29	99.24	0.29	0.18	1.47	2.44	95.28	0	0.34	0.45	0.07	0.02	99.83	100.00	100.00	97.20	97.10	100.00	100.00
	Vodafone	0.22	1.34	98.88	0.42	0.97	1.92	2.94	98.61	0	0.25	0.31	0.09	0.02	99.81	100.00	99.49	100.00	85.78	100.00	100.00	
North East	Airtel	0.90	1.50	97.13	0.55	0.93	1.97	2.72	97.69	0	0.20	0.39	0.02	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00	
	BSNL	1.76	1.89	98.02	0.91	1.86	1.95	2.32	97.93	0	NR	NR	0.05	0.05	100.00	100.00	100.00	97.00	95.73	100.00	100.00	
	RJio	0.90	1.54	99.56	0.00	0.00	0.69	1.00	99.90	0	0.01	0.19	0.00	0.00	100.00	100.00	100.00	97.25	99.83	100.00	100.00	
	VIL	Idea	0.45	1.67	98.83	0.37	0.98	1.90	2.41	98.21	0	0.28	0.82	0.09	0.00	100.00	100.00	100.00	96.24	100.00	100.00	77.31
		Vodafone	0.45	1.67	98.83	0.37	0.98	1.90	2.41	98.21	0	0.28	0.82	0.01	0.01	100.00	100.00	100.00	99.91	100.00	100.00	100.00
Orissa	Airtel	0.32	0.35	98.94	0.23	0.69	1.65	1.85	97.73	0	0.09	0.25	0.00	0.00	100.00	100.00	100.00	100.00	95.00	100.00	100.00	
	BSNL	1.13	1.73	98.39	0.95	1.38	1.99	2.56	97.53	0	NR	NR	0.02	0.01	100.00	100.00	100.00	98.00	98.94	100.00	100.00	
	RJio	0.11	0.21	99.54	0.01	0.00	0.35	0.50	99.92	0	0.01	0.16	0.00	0.00	100.00	100.00	100.00	96.67	99.49	100.00	100.00	
	TATA	0.76	0.00	99.49	0.02	0.12	0.00	0.00	98.85	0	NA	NA	0.00	0.00	100.00	100.00	100.00	97.78	67.12	100.00	100.00	
	VIL	Idea	0.29	1.13	98.91	0.14	0.40	0.83	1.52	97.49	0	0.17	0.33	0.01	0.00	100.00	100.00	100.00	95.57	99.58	100.00	100.00
	Vodafone	0.25	0.18	99.43	0.36	0.55	1.86	2.71	98.51	0	0.24	0.29	0.03	0.02	100.00	100.00	100.00	100.00	96.35	100.00	100.00	

**Annexure 4.1 (Contd.)**

Punjab	Airtel	0.07	0.13	99.51	0.15	0.18	1.43	2.04	98.15	0	0.18	0.38	0.01	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00		
	BSNL	0.35	1.61	98.56	0.23	0.39	1.69	1.92	97.63	0	NR	NR	0.01	0.00	100.00	100.00	100.00	100.00	99.93	100.00	100.00		
	RJio	0.06	0.09	99.52	0.00	0.00	0.26	0.38	99.94	0	0.00	0.11	0.00	0.00	100.00	100.00	100.00	100.00	96.85	98.57	100.00	100.00	
	TATA	0.72	0.00	99.20	0.96	0.04	0.00	0.00	99.17	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	<b>94.84</b>	<b>78.29</b>	100.00	100.00	
	VIL	Idea	0.15	0.32	99.34	0.12	0.11	0.89	1.44	99.64	0	0.22	0.39	0.02	0.00	100.00	100.00	100.00	100.00	99.90	97.34	100.00	100.00
		Vodafone	0.12	0.15	99.54	0.30	0.40	1.50	2.17	98.68	0	0.08	0.17	0.04	0.02	100.00	100.00	100.00	100.00	100.00	<b>79.98</b>	100.00	100.00
Rajasthan	Airtel	0.12	0.16	98.37	0.15	0.39	1.48	2.01	98.08	0	0.65	0.21	0.01	0.00	100.00	100.00	100.00	100.00	99.00	100.00	100.00		
	BSNL	1.11	1.43	98.54	0.72	1.46	1.68	2.17	98.55	0	NR	NR	0.03	0.01	100.00	100.00	100.00	100.00	98.00	99.00	100.00	100.00	
	RJio	0.04	0.04	99.58	0.00	0.00	0.59	0.74	99.93	0	0.02	0.15	0.00	0.00	100.00	100.00	100.00	100.00	97.00	98.31	100.00	100.00	
	TATA	0.93	0.00	98.70	0.01	0.10	0.00	0.00	99.84	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	98.38	<b>74.84</b>	100.00	100.00	
	VIL	Idea	0.04	0.66	99.52	0.10	0.34	0.97	1.37	99.63	0	0.22	0.54	0.07	0.00	100.00	100.00	100.00	100.00	98.38	99.72	<b>98.19</b>	100.00
		Vodafone	0.12	0.34	98.92	0.23	1.05	1.49	2.17	97.86	0	0.35	0.32	0.02	<b>0.16</b>	100.00	100.00	100.00	100.00	100.00	<b>92.61</b>	100.00	100.00
Tamil Nadu	Airtel	0.05	0.21	99.64	0.20	0.26	1.20	1.66	96.16	0	0.33	0.19	0.01	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00		
	BSNL	0.55	1.42	98.26	0.35	0.78	1.95	2.56	97.47	0	NR	NR	0.00	0.00	100.00	100.00	100.00	100.00	95.80	100.00	100.00		
	RJio	0.02	0.02	99.57	0.00	0.00	0.25	0.36	99.93	0	0.01	0.15	0.00	0.00	100.00	100.00	100.00	100.00	96.89	97.45	100.00	100.00	
	TATA	0.33	1.31	99.73	0.00	0.01	0.00	2.00	99.52	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	98.84	<b>79.39</b>	100.00	100.00	
	VIL	Idea	0.03	0.11	99.79	0.07	0.05	0.44	0.75	99.10	0	0.15	0.14	0.01	0.00	100.00	100.00	100.00	100.00	97.91	99.49	100.00	100.00
		Vodafone	0.06	0.21	98.73	0.67	1.19	1.23	1.83	98.88	0	0.08	0.12	0.08	0.05	100.00	100.00	100.00	100.00	96.69	100.00	100.00	
Uttar Pradesh (East)	Airtel	0.34	0.87	96.85	0.54	1.01	1.52	2.08	97.20	0	0.12	0.22	0.01	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00		
	BSNL	1.91	1.96	97.70	0.92	1.22	1.69	2.22	95.52	0	NR	NR	0.09	0.09	98.90	100.00	100.00	100.00	99.00	96.78	100.00	100.00	
	RJio	0.28	1.20	99.40	0.00	0.00	0.51	0.62	99.87	0	0.02	0.27	0.00	0.00	100.00	100.00	100.00	100.00	96.66	<b>84.19</b>	100.00	100.00	
	TATA	0.68	1.63	98.62	0.01	0.33	0.00	0.56	98.16	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	<b>94.74</b>	<b>75.93</b>	100.00	100.00	
	VIL	Idea	0.39	1.70	98.78	0.57	1.13	1.64	2.70	98.64	0	0.10	0.25	0.04	0.00	100.00	100.00	100.00	100.00	99.82	99.81	100.00	100.00
		Vodafone	0.25	0.30	96.11	0.96	1.82	1.92	2.93	97.92	0	0.10	0.21	0.04	0.03	100.00	100.00	100.00	100.00	99.29	100.00	<b>99.99</b>	
Uttar Pradesh (West)	Airtel	0.46	0.79	99.66	0.21	0.08	1.96	2.86	99.46	0	0.40	0.27	0.01	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00		
	BSNL	1.65	1.79	97.82	0.65	0.98	1.74	1.84	96.62	0	NR	NR	0.00	0.00	100.00	100.00	100.00	100.00	95.89	100.00	100.00		
	RJio	0.11	0.48	99.52	0.00	0.00	0.54	0.68	99.92	0	0.01	0.16	0.00	0.00	100.00	100.00	100.00	100.00	97.05	<b>82.47</b>	100.00	100.00	
	TATA	0.88	0.00	99.66	0.32	0.06	0.00	1.31	99.11	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	<b>94.61</b>	<b>76.42</b>	100.00	100.00	
	VIL	Idea	0.32	1.02	96.31	0.91	<b>3.46</b>	1.95	2.98	97.58	0	0.08	0.30	0.05	0.00	100.00	100.00	100.00	100.00	99.48	99.32	100.00	<b>97.64</b>
		Vodafone	0.39	1.18	97.61	0.95	<b>2.36</b>	1.55	2.08	96.93	0	0.87	0.43	0.06	0.03	100.00	100.00	100.00	100.00	100.00	<b>89.58</b>	100.00	100.00
West Bengal	Airtel	0.30	0.06	99.34	0.47	0.74	1.78	2.86	97.42	0	0.16	0.43	0.01	0.00	100.00	100.00	100.00	100.00	99.47	95.00	100.00	100.00	
	BSNL	0.25	0.44	97.61	0.84	0.96	<b>8.50</b>	<b>10.53</b>	95.03	0	NR	NR	0.02	0.01	99.00	100.00	100.00	100.00	97.00	95.41	100.00	100.00	
	RJio	0.14	0.28	99.52	0.00	0.00	0.69	0.85	99.86	0	0.02	0.29	0.00	0.00	100.00	100.00	100.00	100.00	96.95	98.98	100.00	100.00	
	TATA	0.08	0.00	99.88	0.03	0.03	0.00	0.00	98.86	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	97.70	<b>62.32</b>	100.00	100.00	
	VIL	Idea	0.08	0.30	98.96	0.28	0.98	1.52	2.02	97.84	0	0.06	0.10	0.02	0.00	100.00	100.00	100.00	100.00	96.78	98.53	100.00	100.00
		Vodafone	0.08	0.30	98.96	0.28	0.98	1.52	2.02	97.84	0	0.06	0.10	0.05	0.02	100.00	100.00	100.00	100.00	100.00	<b>77.06</b>	100.00	100.00

Note: VIL-Vodafone Idea Ltd., NR-Not reported and NA- Not applicable

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

Quarterly Performance Monitoring Report (PMR) on QoS of Basic Telephone Service (Wireline) for QE March, 2019																			
Sl. No.	Name of Service Area	Name of Service Provider	Faults incidences (No. of faults/ 100 Subs./ month)	Fault Repair				Rent Rebate	Mean Time to Repair (MTTR)	POI		Metering and Billing				Response time to the customer for Assistance		Termination / Closure of service	
				% of faults repaired by next working day	% of faults repaired within 5 days	% of faults repaired by next working day	% of faults repaired within 7 days			Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark	Metering and Billing-credibility - post paid	Metering and billing credibility - pre paid	Resolution of billing/ validity charging/ validity complaints	Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	Accessibility of call centre/ customer care	Percentage of calls answered by the operators (voice to voice) within 90 seconds	%age requests for Termination / Closure of service complied within 7 days	Time taken for refund of deposits after closures	
				≤7	For urban areas by next working day: ≥85%	For urban areas: ≥ 100%	For rural and hilly areas: ≥ 75%			For rural and hilly areas: ≥ 100%	≤ 10 Hrs	≤0.5%	≤0.1%	≤0.1%	98% within 4 weeks	100% within 6 weeks	1 week of resolution of complaint	≥95%	≥95%
1	A&N	BSNL	4.00	85.00%	100.00%	85.00%	100%	8	7.00	0.00	0.00%	0.00	98.00%	100.00%	100.00%	96.43%	99.33%	100.00%	100.00%
2	AP	Bharti	1.53	90.63%	100.00%	NA	NA	713	5.79	0.00	0.04%	NA	100.00%	100.00%	100.00%	100.00%	98.00%	100.00%	100.00%
3		BSNL	4.00	98.00%	100.00%	97.00%	100%	174	7.00	0.00	0.01%	0.00	100.00%	100.00%	100.00%	96.46%	96.25%	100.00%	100.00%
4		TTSL	5.10	98.00%	100.00%	NA	NA	64	3.97	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	95.20%	95.17%	100.00%	100.00%
5		VIL	0.14	100.00%	100.00%	NA	NA	NA	2.16	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
6	Assam	BSNL	3.00	96.00%	100.00%	79.00%	100%	426	5.00	0.00	0.08%	0.00	100.00%	100.00%	100.00%	99.23%	100.00%	100.00%	100.00%
7		VIL	1.04	100.00%	100.00%	NA	NA	NA	5.51	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	NA	NA
8	Bihar	BSNL	3.00	93.00%	100.00%	90.00%	100%	0	5.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	99.13%	99.67%	100.00%	100.00%
9		TTSL	0.47	100.00%	100.00%	NA	NA	0	2.54	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	97.10%	98.99%	100.00%	100.00%
10		VIL	2.11	100.00%	100.00%	NA	NA	NA	7.29	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
11	Chattisgarh	BSNL	3.00	97.00%	100.00%	97.00%	100%	452	6.00	0.00	0.01%	0.00	99.00%	100.00%	100.00%	95.81%	96.63%	100.00%	100.00%
12	Chennai	BSNL	5.00	91.00%	100.00%	91.00%	100%	388	8.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	97.14%	96.28%	100.00%	100.00%
13	Delhi	Bharti	1.89	92.66%	100.00%	NA	NA	1255	5.29	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	95.00%	100.00%	100.00%
14		MTNL	3.49	90.01%	99.53%	NA	NA	4123	3.73	0.00	0.02%	0.00%	99.71%	100.00%	100.00%	99.79%	99.87%	100.00%	100.00%
15		TTSL	1.67	97.80%	100.00%	NA	NA	0	3.18	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	95.10%	96.29%	99.62%	100.00%
16		VIL	0.58	100.00%	100.00%	NA	NA	NA	2.19	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
17	Gujarat	Bharti	1.48	90.95%	100.00%	NA	NA	134	6.00	0.00	0.06%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%
18		BSNL	4.00	96.00%	100.00%	93.00%	100%	104	4.00	0.00	0.02%	0.00	100.00%	100.00%	100.00%	97.50%	97.50%	100.00%	100.00%
19		TTSL	1.75	83.50%	100.00%	NA	NA	51	10.54	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	95.30%	98.83%	100.00%	100.00%
20		VIL	0.19	100.00%	100.00%	NA	NA	NA	6.43	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA

**Annexure 4.2 (Contd.)**

21	HP	BSNL	5.00	89.00%	100.00%	95.00%	100%	200	6.00	0.00	0.06%	0.00	98.50%	100.00%	100.00%	95.34%	100.00%	100.00%	100.00%
22		VIL	0.00	100.00%	100.00%	NA	NA	NA	0.00	0.00	0.00%	NA	NA	NA	NA	96.00%	95.00%	NA	NA
23	HR	Bharti	2.84	94.07%	100.00%	NA	NA	17	3.67	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	<b>93.00%</b>	100.00%	100.00%
24		BSNL	5.00	94.00%	100.00%	92.00%	100%	242	6.00	0.00	0.07%	0.00	100.00%	100.00%	100.00%	96.25%	100.00%	100.00%	100.00%
25		TTSL	0.00	100.00%	100.00%	NA	NA	0	0.00	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	NA
26		VIL	4.44	100.00%	100.00%	NA	NA	NA	3.45	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	NA	NA
27	J&K	BSNL	4.00	95.00%	100.00%	94.00%	100%	26	7.00	0.00	0.01%	0.00	98.00%	100.00%	100.00%	97.29%	100.00%	100.00%	100.00%
28	JHAR	BSNL	3.00	99.00%	100.00%	96.00%	100%	396	5.00	0.00	0.09%	0.00	98.00%	100.00%	100.00%	98.79%	99.67%	100.00%	100.00%
29	KERALA	Bharti	2.47	90.66%	100.00%	NA	NA	311	9.10	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	<b>92.00%</b>	100.00%	100.00%
30		BSNL	4.00	94.00%	100.00%	93.00%	100%	888	6.00	0.00	0.03%	0.00	98.00%	100.00%	100.00%	95.91%	95.85%	100.00%	100.00%
31		TTSL	0.60	96.70%	100.00%	NA	NA	2	4.53	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	96.30%	98.43%	100.00%	100.00%
32		VIL	0.49	100.00%	100.00%	NA	NA	NA	2.20	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
33	KOL	Bharti	2.30	97.69%	100.00%	NA	NA	414	9.92	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	<b>92.00%</b>	100.00%	100.00%
34		BSNL	6.00	90.00%	100.00%	NA	NA	388	8.00	0.00	0.00%	0.00	98.17%	100.00%	100.00%	98.38%	99.33%	100.00%	100.00%
35		VIL	0.73	100.00%	100.00%	NA	NA	NA	4.39	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	NA	NA
36	KTK	Bharti	2.43	85.00%	100.00%	NA	NA	1827	6.17	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	97.00%	100.00%	100.00%
37		BSNL	4.00	96.00%	100.00%	97.00%	100%	2538	7.00	0.00	0.09%	0.00	98.00%	100.00%	100.00%	95.14%	<b>94.67%</b>	100.00%	100.00%
38		TTSL	0.45	<b>83.40%</b>	100.00%	NA	NA	44	<b>10.71</b>	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	95.50%	95.44%	<b>99.30%</b>	100.00%
39		VIL	0.59	100.00%	100.00%	NA	NA	NA	2.30	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
40	MH	Bharti	0.94	91.57%	100.00%	NA	NA	116	6.39	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	<b>89.00%</b>	100.00%	100.00%
41		BSNL	5.00	92.00%	100.00%	85.00%	100%	876	6.00	0.00	0.01%	0.00	100.00%	100.00%	100.00%	96.90%	96.83%	100.00%	100.00%
42		TTSL	0.50	100.00%	100.00%	NA	NA	0	1.55	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
43		VIL	0.54	100.00%	100.00%	NA	NA	NA	1.55	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
44	MP	Bharti	3.62	87.18%	100.00%	NA	NA	1067	5.54	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	<b>94.00%</b>	100.00%	100.00%
45		BSNL	4.00	88.00%	100.00%	85.00%	100%	242	4.00	0.00	0.03%	0.00	100.00%	100.00%	100.00%	97.92%	97.79%	100.00%	100.00%
46		TTSL	<b>9.32</b>	99.30%	100.00%	NA	NA	0	1.87	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	95.30%	99.11%	100.00%	100.00%
47		VIL	1.16	100.00%	100.00%	NA	NA	NA	3.14	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
48	MUM	Bharti	0.84	91.72%	100.00%	NA	NA	405	5.51	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	<b>88.00%</b>	100.00%	100.00%
49		MTNL	2.60	97.40%	100.00%	NA	NA	9991	4.78	0.21	0.04%	NA	99.46%	100.00%	100.00%	98.92%	98.81%	100.00%	100.00%
50		TTSL	2.77	90.40%	100.00%	NA	NA	453	7.75	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	95.60%	95.71%	<b>99.86%</b>	100.00%
51		VIL	0.54	100.00%	100.00%	NA	NA	NA	3.31	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
52	NE	VIL	0.00	100.00%	NA	NA	NA	NA	0.00	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	NA	NA
53	NE-I	BSNL	6.00	89.00%	100.00%	85.00%	100%	20	7.00	0.00	0.02%	0.00	98.00%	100.00%	100.00%	97.56%	99.00%	100.00%	100.00%
54	NE-II	BSNL	2.00	96.00%	100.00%	99.00%	100%	188	5.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	99.24%	99.33%	100.00%	100.00%

**Annexure 4.2 (Contd.)**

55	ORISA	BSNL	6.00	94.00%	100.00%	85.00%	100%	672	5.00	0.00	0.09%	0.00	99.00%	100.00%	100.00%	98.14%	99.33%	100.00%	100.00%
56		TTSL	0.65	96.00%	100.00%	NA	NA	4	3.75	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
57		VIL	0.70	100.00%	100.00%	NA	NA	NA	5.42	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
58	PUNJAB	Bharti	2.22	86.51%	100.00%	NA	NA	258	5.44	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	<b>94.00%</b>	100.00%	100.00%
59		BSNL	5.00	92.00%	100.00%	89.00%	100%	143	6.00	0.00	0.01%	0.00	99.00%	100.00%	100.00%	96.20%	100.00%	100.00%	100.00%
60		Quadrant	5.15	96.67%	100.00%	100.00%	100%	0	4.25	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	99.00%	96.00%	100.00%	100.00%
61		TTSL	2.92	98.90%	100.00%	NA	NA	2	2.63	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
62	VIL	0.52	100.00%	100.00%	NA	NA	NA	1.26	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA	
63	RAJASTHAN	Bharti	2.10	85.14%	100.00%	NA	NA	477	5.74	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	<b>94.00%</b>	100.00%	100.00%
64		BSNL	5.00	95.00%	100.00%	96.00%	100%	348	6.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	96.31%	100.00%	100.00%	100.00%
65		TTSL	3.53	99.20%	100.00%	NA	NA	0	2.27	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	100.00%	98.48%	100.00%	100.00%
66	VIL	0.36	100.00%	100.00%	NA	NA	NA	3.43	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA	
67	TAMILNADU	Bharti	3.57	91.88%	100.00%	NA	NA	1268	8.54	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	97.00%	100.00%	100.00%
68		BSNL	3.00	91.00%	100.00%	92.00%	100%	1559	8.00	0.00	0.07%	0.00	100.00%	100.00%	100.00%	95.55%	95.90%	100.00%	100.00%
69		TTSL	1.31	96.80%	100.00%	NA	NA	0	3.37	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	95.90%	98.03%	100.00%	100.00%
70		VIL	0.47	100.00%	100.00%	NA	NA	NA	4.40	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
71	UPE	Bharti	2.99	90.74%	100.00%	NA	NA	88	4.55	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	95.00%	100.00%	100.00%
72		BSNL	4.00	92.00%	100.00%	91.00%	100%	1285	5.00	0.00	0.03%	0.00	100.00%	100.00%	100.00%	<b>94.20%</b>	100.00%	100.00%	100.00%
73		TTSL	4.92	100.00%	100.00%	NA	NA	0	1.70	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	98.19%	100.00%	100.00%	NA
74		VIL	0.23	100.00%	100.00%	NA	NA	NA	6.00	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
75	UPW	Bharti	4.05	90.09%	100.00%	NA	NA	97	5.26	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	<b>93.00%</b>	100.00%	100.00%
76		BSNL	6.00	94.00%	100.00%	93.00%	100%	194	5.00	0.00	0.03%	0.00	100.00%	100.00%	100.00%	95.04%	100.00%	100.00%	100.00%
77		TTSL	<b>16.67</b>	100.00%	100.00%	NA	NA	0	1.24	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	97.98%	100.00%	100.00%	NA
78		VIL	1.10	100.00%	100.00%	NA	NA	NA	3.24	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
79	Uttaranchal	BSNL	4.00	95.00%	100.00%	89.00%	100%	152	5.00	0.00	0.00%	0.00	98.00%	100.00%	100.00%	95.18%	100.00%	100.00%	100.00%
80	WB	BSNL	5.00	91.00%	100.00%	91.00%	100%	388	8.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	97.14%	96.28%	100.00%	100.00%
81		TTSL	1.00	100.00%	100.00%	NA	NA	6	2.67	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	96.20%	99.10%	100.00%	NA
82		VIL	0.28	100.00%	100.00%	NA	NA	NA	2.57	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA

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

Performance Monitoring Report on Quality of Service of Service Providers providing broadband (wireline) service for Quarter Ending Mar 2019																				
Sl. No.	Service Provider	Service area	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 (for wired broadband access) in %age	Network latency (for wired broadband access)		
			%age of connections provided within 15 days of registration of demand	% of faults repaired by next working day (>90%)	% of faults repaired within 3 working day	Rent Rebate	%age of bills disputed	%age of billing complaints resolved within 4 weeks	%age of cases to whom refund of deposits is made within 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) <90%	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)
			100%	>90%	=>99%	in nos.	<2%	100%	100%	>60%	>80%	0	0	<90%	>80%	>98%	<1%	<120 ms	<350 ms	<800 ms
1	Bharat Sanchar Nigam Ltd.(BSNL)	All India (except Delhi &	100.00%	93.81%	99.66%	26914	0.04%	100.00%	100.00%	97.61%	98.34%	NA	0	61.40%	91.68%	99.65%	0.40%	15	169	NA
2	Mahanagar Telephone Nigam	Delhi & Mumbai	100.00%	95.61%	99.58%	4626	0.57%	100.00%	100.00%	98.39%	98.81%	Nil	0	82.72%	89.59%	99.76%	0.52%	49	297	NA
3	Airlink Communications Pvt.	All India	100.00%	91.55%	99.13%	0	NA	100.00%	NA	69.58%	100.00%	0	0	88.60%	90.87%	99.88%	0.50%	120	350	NA
4	Airtel Cable and Datacom Pvt.Ltd.	Maharashtra	100.00%	98.88%	99.63%	0	0	Nil	0.00	99.00%	100.00%	0	0	9.29%	103.00%	100.00%	0.56%	3	250.61	
		Mumbai	100.00%	98.00%	99.00%	0	0	Nil	0.00	99.00%	100.00%	0	0	3.73%	103.00%	100.00%	0.64%	3	250.61	
5	Alliance Broadband Services	All India	100.00%	91.93%	100.00%	Nil	0.00%	100.00%	Nil	85.00%	100.00%	0	0	74.75%	99.42%	99.73%	0.14%	67	208	200
6	ANI network Pvt. Ltd.	Delhi	100.00%	98.00%	100.00%	Nil	Nil	Nil	Nil	92.00%	100.00%	Nil	Nil	80.00%	99.00%	99.93%	0.40%	10	288	NA
7	Asianet Satellite	All India	100.00%	90.38%	99.39%	Nil	1.91%	100.00%	100.00%	60.42%	80.44%	Nil	0	68.66%	90.00%	99.50%	1.00%	50	270	NA
8	Atria Convergence Technologies Pvt. Ltd.	All India	100.00%	94.52%	99.20%	36796	0.48%	100.00%	Nil	47.00%	52.00%	0	0	45.00%	90.00%	99.88%	1.00%	33	192.67	NA
9	Bharti Airtel Ltd.	Andhra Pradesh	100.00%	95.13%	100.00%	1010	0.13%	100.00%	100.00%	97.00%	99.00%	0	0	39.00%	100.00%	99.83%	0	41	50	NA
		Delhi	100.00%	92.66%	99.27%	1119	0.07%	100.00%	100.00%	90.00%	95.00%	0	0	50.00%	100.00%	99.96%	0	46	76	NA
		Gujarat	100.00%	94.76%	99.37%	134	0.16%	100.00%	100.00%	89.00%	94.00%	0	0	NA	100.00%	99.99%	0	19	NA	NA
		Haryana	100.00%	96.78%	99.63%	5	0.05%	100.00%	100.00%	89.00%	93.00%	0	NA	NA	100.00%	99.96%	0	37	NA	NA
		Karnataka	100.00%	90.15%	100.00%	1556	0.10%	100.00%	100.00%	97.00%	98.00%	0	0	42.00%	100.00%	99.83%	0	28	41	NA
		Kerala	100.00%	90.96%	99.68%	233	0.05%	100.00%	100.00%	90.00%	93.00%	0	NA	NA	100.00%	99.96%	0	50	NA	NA
		Kolkata	100.00%	92.31%	100.00%	280	0.05%	100.00%	100.00%	90.00%	94.00%	0	0	44.00%	100.00%	99.98%	0	102	73	NA
		Madhya Pradesh	100.00%	91.04%	99.06%	640	0.05%	100.00%	100.00%	89.00%	94.00%	0	0	46.00%	100.00%	99.88%	0	58	67	NA
		Maharashtra	100.00%	94.41%	99.35%	140	0.11%	100.00%	100.00%	88.00%	92.00%	0	NA	NA	100.00%	99.94%	0	24	NA	NA
		Mumbai	100.00%	94.41%	99.23%	386	0.06%	100.00%	100.00%	87.00%	93.00%	0	0	52.00%	100.00%	99.94%	0	34	57	NA
		Punjab	100.00%	90.19%	99.36%	210	0.01%	100.00%	100.00%	91.00%	95.00%	0	0	47.00%	100.00%	99.99%	0	71	81	NA
		Rajasthan	100.00%	90.23%	99.72%	245	0.05%	100.00%	100.00%	90.00%	95.00%	0	NA	NA	100.00%	99.98%	0	40	NA	NA
		Tamilnadu	100.00%	90.99%	99.35%	1145	0.05%	100.00%	100.00%	97.00%	98.00%	0	0	34.00%	100.00%	99.90%	0	36	34	NA
Uttar Pradesh - East	100.00%	91.23%	99.11%	124	0.04%	100.00%	100.00%	90.00%	95.00%	0	0	41.00%	100.00%	99.98%	0	59	88	NA		
Uttar Pradesh - West	100.00%	90.13%	99.15%	130	0.03%	100.00%	100.00%	89.00%	91.00%	0	NA	NA	100.00%	99.96%	0	29	NA	NA		
10	DEN Networks Ltd.	All India	100.00%	97.50%	99.70%	0	NA	NA	NA	80.00%	84.00%	0	0	79.29%	100.00%	98.43%	0.00%	NA	260	NA
11	Digital Satellite Connect Pvt.	Mumbai	100.00%	91.08%	99.45%	0	0.03%	100.00%	NA	62.00%	83.87%	0	0	80.00%	80.00%	99.72%	1.00%	4	255	600
12	Digital Network Associates Pvt. Ltd	Maharashtra & Goa	100.00%	90.56%	99.39%	None	0.13%	100.00%	Nil	61.57%	81.05%	Nil	0	80.00%	80.00%	99.72%	1.00%	4	255	600
		Mumbai	100.00%	97.90%	99.40%	None	0.00%	100.00%	Nil	74.88%	97.32%	Nil	0	80.00%	80.00%	99.72%	1.00%	4	255	600
13	DNA Infotel Pvt. Ltd.	Maharashtra	100.00%	90.69%	99.27%	None	0.03%	100.00%	Nil	60.87%	80.98%	Nil	0	80.00%	80.00%	99.72%	1.00%	4	255	600
14	D-Vois Communications Pvt.Ltd.	All India	100.00%	92.66%	100.00%	0	0.91%	Nil	Nil	83.11%	93.90%	0	Nil	Nil	90.00%	100.00%	0.10%	120	350	800
15	Excitel Broadband Pvt.Ltd.	Delhi	100.00%	90.30%	99.10%	Nil	NA	NA	NA	60.00%	80.00%	Nil	Nil	79.00%	98.30%	98.50%	0.00%	4	199	NIL
		Hyderabad	100.00%	91.00%	99.00%	Nil	NA	NA	NA	84.00%	90.00%	Nil	Nil	78.50%	90.00%	98.46%	0.00%	10	130	NIL



### Annexure 4.3 (Contd.)

16	Five Networks Solution (India)	All India	100.00%	99.50%	100.00%	NA	0.00%	100.00%	100.00%	NA	NA	NA	0	NA	90.00%	99.00%	1.00%	NA	NA	NA
17	Fusionnet Web Services Pvt.	All India	100.00%	91.00%	99.60%	0	0.00%	100.00%	100.00%	81.80%	84.70%	0	0	84.00%	100.00%	100.00%	1.00%	120	350	NA
18	Geocity Network Solutions	Delhi	100.00%	92.67%	100.00%	0	0.00%	100.00%	100.00%	66.00%	85.33%	0	0	89.71%	85.33%	99.30%	0.40%	30	100	400
19	GTPL Broadband Pvt.Ltd.	All India	100.00%	93.00%	99.00%	14	0.25%	100.00%	NA	92.00%	99.00%	NA	0	88.27%	91.00%	99.87%	0.00%	11	300	NA
20	Hathway Cable & Datacom Ltd.	All India	100.00%	94.32%	99.16%	3223	0.59%	100.00%	100.00%	69.23%	90.46%	0	0	78.64%	90.00%	99.95%	0.05%	78	265	NA
21	Honesty Net Solutions (I) Pvt.	Mumbai	100.00%	93.00%	100.00%	0	Nil	100.00%	0.00	68.00%	100.00%	0	NA	NA	95.00%	100.00%	1.00%	NA	66	NA
22	IKF Technologies Ltd	All India	100.00%	92.70%	99.40%	0	0.00%	100.00%	100.00%	65.34%	85.60%	0	0	88.00%	91.00%	98.30%	0.40%	82	307	NA
23	Indinet Service Pvt Ltd	All India	100.00%	91.67%	100.00%	0	0.00%	100.00%	100.00%	82.00%	89.00%	0	0	86.00%	95.00%	99.21%	0.50%	45	253	0
24	Intech Online Pvt.Ltd.	Mum & Mah.	100.00%	91.47%	99.21%	23	0.92%	100.00%	0.00	100.00%	Nil	0	0	33.21%	98.00%	99.99%	1.00%	1	75	455
25	Ishan Netsol Pvt Ltd	Gujarat	100.00%	96.33%	100.00%	0	0.00%	100.00%	100.00%	67.43%	85.01%	0	0	54.64%	95.00%	98.73%	1.00%	100	220	NA
26	Joister Inforserve Pvt. Ltd. (Formerly Syscon Infoway Private Limited)	Mumbai	100.00%	93.67%	100.00%	Nil	0.00%	100.00%	0.00	86.00%	87.00%	0	0	82.00%	99.00%	100.00%	0.00%	1	47	265
		Maharashtra	100.00%	95.00%	100.00%	Nil	0.00%	100.00%	NA	75.00%	86.33%	0	0	76.00%	99.00%	100.00%	1.00%	1	225	265
27	K NET SOLUTIONS PVT LTD	Chennai	100.00%	92.26%	99.40%	43	NA	100.00%	100.00%	87.66%	89.17%	0	0	NA	100.00%	99.99%	0.00%	17	212.19	NA
		Tamilnadu	100.00%	95.73%	99.38%	6	NA	100.00%	100.00%	87.66%	89.17%	0	0	NA	100.00%	99.92%	0.00%	25	219.81	NA
28	Limras Eronet Broadband	All India	100.00%	99.00%	100.00%	0	1.00%	100.00%	0.00	90.00%	100.00%	0	0	0.00%	96.00%	99.50%	1.00%	34	250	0
29	Meghbela Cable & Broadband Services (P) Ltd	All India	100.00%	95.00%	100.00%	0	0.00%	100.00%	100.00%	95.00%	100.00%	0	0	74.00%	95.00%	99.90%	0.00%	60	150	0
30	Nextra Teleservices Pvt. Ltd.	Delhi	100.00%	92.44%	99.21%	2026	1.00%	100.00%	100.00%	82.20%	92.00%	0	0	84.00%	100.00%	100.00%	1.00%	120	350	NA
31	Ortel Communications Ltd.	All India	100.00%	94.97%	99.43%	NA	NA	NA	NA	100.00%	100.00%	0	0	50.84%	92.00%	99.03%	0.00%	81	213	NA
32	ONEOTT Intertainment Limited	All India	100.00%	97.00%	99.00%	102	0.00%	100.00%	100.00%	100.00%	100.00%	0	0	79.67%	80.00%	98.00%	1.00%	45	260	NA
33	Quadrant Televentures Ltd.	Punjab	100.00%	98.60%	100.00%	0	0.01%	100.00%	100.00%	87.00%	92.00%	0	0	74.00%	100.00%	99.97%	0.00%	80	280	NA
34	Quest Consultancy Pvt Ltd.	Gujarat	100.00%	95.00%	100.00%	Nil	Nil	100.00%	Nil	89.00%	99.00%	0	Nil	82.00%	99.00%	99.00%	0.30%	13	267	NA
35	RailTel Corporation of India Ltd.	All India (Pan India)	100.00%	97.60%	100.00%	Nil	0.00%	Nil	Nil	89.66%	95.00%	0	0	46.02%	100.00%	99.95%	1.00%	120	350	NA
36	Rajesh Digital Datacom Pvt.Ltd.	Mumbai	100.00%	97.00%	100.00%	0	0.00%	100.00%	100.00%	97.00%	98.00%	0	0	87.00%	83.00%	99.00%	0.00%	46	250	500
37	Sai Prasad Internet Pvt. Ltd.	Maharashtra	100.00%	93.07%	99.36%	NA	0.11%	100.00%	NA	67.87%	89.81%	0	0	80.00%	80.00%	99.77%	1.00%	4	255	600
38	Siti Broadband Services Pvt.Ltd.	All India (Pan India)	100.00%	90.05%	99.09%	11	NA	NA	100.00%	94.43%	96.39%	0	0	73.94%	99.00%	99.37%	0.00%	32	272	NA
39	Shyam Spectra Pvt. Ltd.	All India	100.00%	98.38%	99.63%	1024	1.17%	100.00%	100.00%	95.00%	96.50%	0	0	25.50%	83.00%	99.30%	0.00%	27	121	NA
40	Tata Sky Broadband Pvt. Ltd.	All India	100.00%	90.05%	<b>94.99%</b>	0	NA	NA	NA	79.00%	83.00%	0	0	84.33%	100.00%	99.67%	0.00%	1	NA	NA
41	Tata Tele.Ltd. (TTSL)	All India (Pan India)	100.00%	<b>89.02%</b>	<b>96.69%</b>	347	0.01%	100.00%	100.00%	81.01%	88.10%	0	0	67.00%	92.00%	99.80%	0.00%	52	64	Nil
42	Tata Tele.(Mah) Ltd. (TTML)	Maharashtra & Goa	100.00%	<b>82.00%</b>	<b>94.00%</b>	132	0.02%	100.00%	100.00%	80.00%	88.00%	0	0	0.00%	89.32%	99.74%	0.00%	0	0	Nil
43	Vasai Cable Pvt. Ltd.	Mumbai	100.00%	99.03%	100.00%	None	0.23%	100.00%	Nil	87.89%	91.80%	Nil	0	63.00%	90.00%	100.00%	1.00%	4	255	NA
44	Wan and Lan Internet Pvt. Ltd.	Mumbai	100.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00	90.00%	90.00%	0	0	90.00%	90.00%	99.90%	0.00%	20	40	80
45	Wish Net Pvt. Ltd.	Kolkata	100.00%	98.68%	100.00%	0	0.00%	100.00%	NA	85.00%	98.66%	0	0	48.21%	100.00%	99.99%	1.00%	20	NA	NA
		West Bengal	100.00%	98.77%	100.00%	0	0.01%	100.00%	NA	95.33%	98.66%	0	0	48.34%	100.00%	99.93%	1.00%	20	NA	NA
46	Yashash Cable Network Pvt Ltd	Karnataka	100.00%	92.80%	99.80%	6	0.00%	NA	NA	94.45%	99.95%	0	0	54.08%	80.00%	99.75%	1.00%	30	301	0
47	You Broadband India Pvt. Ltd.	All India	<b>97.95%</b>	95.76%	<b>98.76%</b>	2191	0.00%	Nil	0.00	92.16%	95.57%	0	0	76.14%	87.08%	99.52%	0.00%	9	277	0
			DNF= Data not as per Format				NR= Data not reported by the Service Provider							NA = Not Applicable			C/DNF= Complied the parameter but Data is not in the required format			

**Annexure 5.1: MRP of pay channels, offered by broadcasters to subscriber as reported to TRAI (New Regulatory Framework)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
1	AETN 18 Media Pvt Limited	1	The History Channel	Infotainment	Hindi	3.00	SD
		2	FY1 TV18	Infotainment	English	0.25	SD
		3	FY1 TV18 (HD)	Infotainment	English	1.00	HD
		4	Histry TV 18 HD	Infotainment	Hindi	7.00	HD
2	Asianet Star Communications Private Limited	5	Vijay TV	GEC	Tamil	17.00	SD
		6	Vijay Super	GEC	Tamil	2.00	SD
		7	Vijay HD	GEC	Tamil	19.00	HD
		8	Asianet	GEC	Malayalam	19.00	SD
		9	Asianet Plus	GEC	Malayalam	5.00	SD
		10	Asianet Movies	Movies	Malayalam	15.00	SD
		11	Suvarna Plus	Movies	Kannada	5.00	SD
		12	Star Suvarna HD	GEC	Kannada	19.00	HD
		13	Asianet HD	GEC	Malayalam	19.00	HD
		14	Star Suvarna	GEC	Kannada	19.00	SD
3	Bangla Entertainment Private Limited	15	AATH	GEC	Bangla	4.00	SD
		16	SONY Marathi	GEC	Marathi	4.00	SD
4	BBC Global News India Pvt. Ltd.	17	BBC World News	News	English	1.00	SD
5	Bennett, Coleman & Company Limited	18	Zoom	GEC	Hindi	0.50	SD
		19	Romedy Now	Movies	English	6.00	SD
		20	MN +	Movies	English	10.00	HD
		21	Mirror Now	News	English/Hindi	2.00	SD
		22	ET NOW	News	English/Hindi	3.00	SD
		23	Times Now	News	English/Hindi	3.00	SD
		24	Romedy Now HD	Movies	English	9.00	HD
		25	Movies Now HD	Movies	English	12.00	HD
		26	MNX HD	Movies	English	9.00	HD
		27	MNX	Movies	English	6.00	SD
		28	Times Now HD	News	English	5.00	HD

**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
6	Celebrities Management Pvt Limited	29	Travel XP HD	Lifestyle	English	9.00	HD
		30	Travel XP Tamil	Lifestyle	Tamil	1.50	SD
7	CSL Info Media Private Limited	31	JAN TV PLUS	News	Hindi	50.00	SD
8	Discovery Communications India	32	Animal Planet	Infotainment	English/Hindi	2.00	SD
		33	Discovery Channel	Infotainment	English/Hindi	4.00	SD
		34	Discovery Channel – Tamil	Infotainment	Tamil	4.00	SD
		35	Discovery Kids Channel	Kids	English	3.00	SD
		36	Discovery Science	Infotainment	English/Hindi	1.00	SD
		37	Discovery Turbo	Infotainment	English/Hindi	1.00	SD
		38	Discovery Jeet	GEC	Hindi	1.00	SD
		39	Discovery HD World	Infotainment	English	6.00	HD
		40	Animal Planet HD World	Infotainment	English/Hindi	3.00	HD
		41	TLC HD world	Infotainment	English/Hindi	3.00	HD
		42	Discovery Jeet HD	GEC	Hindi	2.00	HD
		43	TLC	Infotainment	English/Hindi	2.00	SD
		44	Dsport	Sports	English	4.00	SD
		9	Disney Broadcasting (India) Limited	45	Disney Junior	Kids	English
46	UTV Movies			Movies	Hindi	2.00	SD
47	Marvel HQ			Kids	English/Hindi	4.00	SD
48	Disney International HD			GEC	English	12.00	HD
49	Hungama TV			Kids	English/Hindi	6.00	SD
50	The Disney Channel			Kids	English/Hindi	8.00	SD
51	UTV HD			Movies	Hindi	8.00	HD

**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
10	Eenadu Televisoin Private Limited	52	ETV	GEC	Telugu	17.00	SD
		53	ETV Andhra Pradesh	News	Telugu	1.00	SD
		54	ETV- Telangana	News	Telugu	1.00	SD
		55	ETV Cinema	Movies	Telugu	6.00	SD
		56	ETV Life	GEC	Telugu	1.00	SD
		57	ETV Plus	GEC	Telugu	7.00	SD
		58	ETV Abhiruchi	GEC	Telugu	2.00	SD
		59	ETV HD	GEC	Telugu	19.00	HD
		60	ETV Plus HD	GEC	Telugu	9.00	HD
		61	ETV Cinema HD	Movies	Telugu	8.00	HD
		62	ETV Abhiruchi HD	GEC	Telugu	3.00	HD
		63	ETV Life HD	GEC	Telugu	2.00	HD
11	EPIC Television Networks Pvt Ltd	64	EPIC TV	Infotainment	English/Hindi	2.00	SD
12	Genx Entertainment Limited	65	UTV Bindass	GEC	Hindi	1.00	SD
		66	UTV Action	Movies	Hindi	2.00	SD
13	Greycells18 Media Limited	67	Topper TV	Miscellaneous	English	59.32	SD
14	IBN Lokmat News Private Ltd	68	News 18 Lokmat	News	Hindi	0.10	SD
15	Living Entertainment Enterprises Pvt. Ltd.	69	Living Foodz HD	Infotainment	Hindi	10.00	HD
		70	Living Travelz	Infotainment	Hindi	0.10	SD
16	Mavis Satcom Limited	71	J Movies	Movies	Tamil	2.25	SD
		72	Jaya Max	Music	Tamil	2.25	SD
		73	Jaya Plus	News	Tamil	0.50	SD
		74	Jaya TV HD	GEC	Tamil	6.00	HD
17	MSM World Wide Factual Media Private Limited	75	SONY BBC EARTH	Infotainment	English/Hindi	4.00	SD
		76	SONY BBC EARTH HD	Infotainment	English/Hindi	10.00	HD
18	Media World Wide Limited	77	Travel XP	Lifestyle	English	3.00	SD
19	Lifestyle and Media Broadcasting Limited	78	Good Times	Lifestyle	English	1.50	SD

**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
20	New Delhi Television Limited	79	NDTV 24*7	News	English	3.00	SD
		80	NDTV India	News	Hindi	1.00	SD
		81	NDTV Profit	News	English	1.00	SD
21	NGC Network (India) Pvt Limited	82	Fox Life	Lifestyle	English/ Hindi	1.00	SD
		83	National Geographic Channel (NGC)	Infotainment	English/ Hindi	2.00	SD
		84	Fox Life HD	Lifestyle	English/ Hindi	1.00	HD
		85	Nat Geo Wild	Infotainment	English/ Hindi	1.00	SD
		86	National Geographic HD	Infotainment	English/ Hindi	10.00	HD
		87	Nat Geo Music HD	Music	English/ Hindi	1.00	HD
		88	Nat Geo Wild HD	Infotainment	English/ Hindi	5.00	HD
		89	Nat Geo People HD	Infotainment	English/ Hindi	1.00	HD
		90	Baby TV HD	Kids	English/ Hindi	1.00	HD
22	NOIDA Software Technology Park Limited	91	NHK World Premium (HD Distribution)	Infotainment	Japanese	1800.00	HD
23	Odisha Television Limited	92	Prarthana	Devotional	Odia	2.00	SD
		93	Tarang	GEC	Odia	10.00	SD
		94	Tarang Music	Music	Odia	2.00	SD
		95	Alankar	Movies	Odia	4.00	SD
24	Panorama Television Private Limited	96	News 18 Bihar Jharkhand	News	Hindi	0.10	SD
		97	News 18 Madhya Pradesh / Chattisgarh	News	Hindi	0.10	SD
		98	News 18 Rajasthan	News	Hindi	0.10	SD
		99	News 18 Uttar Pradesh/ Uttaranchal	News	Hindi	0.10	SD
		100	News 18 Urdu	News	Urdu	0.10	SD

**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
		101	News 18 Kannada	News	Kannada	0.10	SD
		102	News 18 Bangla	News	Bangla	0.10	SD
		103	News 18 Punjab/Haryana /Himanchal Pradesh	News	Punjabi	0.10	SD
		104	News 18 Gujarati	News	Gujarati	0.10	SD
		105	News 18 Odia	News	Odia	0.10	SD
25	Raj Television Network Limited	106	Raj Musix Kannada	Music	Kannada	0.25	SD
		107	Raj Digital Plus	Movies	Tamil	1.50	SD
		108	Raj Musix	Music	Tamil	1.00	SD
		109	Raj News	News	Tamil	0.25	SD
		110	Raj TV	GEC	Tamil	3.00	SD
		111	Vissa TV	GEC	Telugu	0.50	SD
26	Sarthak Entertainment Pvt Ltd	112	ZEE Sarthak	GEC	Odia	19.00	SD
27	Silverstar Communications Limited	113	Mega 24	GEC	Tamil	1.00	SD
		114	Mega Musiq	Music	Tamil	2.00	SD
		115	Mega TV	GEC	Tamil	3.00	SD
28	Sony Pictures Networks India Private Limited	116	Sony YAY!	Kids	English	2.00	SD
		117	AXN	GEC	English	5.00	SD
		118	SET MAX	Movies	Hindi	15.00	SD
		119	MIX	Music	Hindi	1.00	SD
		120	SAB	GEC	Hindi	19.00	SD
		121	SONY Entertainment Channel (SET)	GEC	Hindi	19.00	SD
		122	PIX	Movies	English	10.00	SD
		123	SIX	Sports	English/Hindi	15.00	SD
		124	MAX 2	Movies	Hindi	1.00	SD
		125	PAL	GEC	Hindi	1.00	SD
		126	SET HD	GEC	Hindi	19.00	HD

**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
		127	SIX HD	Sports	English/ Hindi	19.00	HD
		128	PIX HD	Movies	English	15.00	HD
		129	MAX HD	Movies	Hindi	17.00	HD
		130	SONY ESPN HD	Sports	English/ Hindi	7.00	HD
		131	Ten 2 HD	Sports	English/ Hindi	17.00	HD
		132	Ten 3 HD	Sports	English/ Hindi	17.00	HD
		133	SONY ESPN	Sports	English/ Hindi	5.00	SD
		134	AXN HD	GEC	English	7.00	HD
		135	Ten 2	Sports	English/ Hindi	15.00	SD
		136	Ten 1	Sports	English	19.00	SD
		137	Ten 3	Sports	English/ Hindi	17.00	SD
		138	Ten 1 HD	Sports	English	19.00	HD
		139	SONY Wah	Movies	Hindi	1.00	SD
		140	SAB HD	GEC	Hindi	19.00	HD
29	Star India Private Limited	141	Star Sports 3	Sports	English/ Hindi	4.00	SD
		142	Star Sports 1 Tamil	Sports	Tamil	17.00	SD
		143	Star Sports Select 2	Sports	English/ Hindi	7.00	SD
		144	Star Bharat	GEC	Hindi	10.00	SD
		145	Movies OK	Movies	Hindi	1.00	SD
		146	Star Sports 1 Hindi	Sports	Hindi	19.00	SD
		147	Star Gold	Movies	Hindi	8.00	SD
		148	Star Jalsha	GEC	Bangla	19.00	SD
		149	Star Movies	Movies	English	12.00	SD
		150	Star Gold Select	Movies	Hindi	7.00	SD
		151	Star Plus	GEC	Hindi	19.00	SD
		152	Star Pravah	GEC	Marathi	9.00	SD
		153	Star Sports 1	Sports	English/ Hindi	19.00	SD

**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
		154	Star Sports 2	Sports	English/ Hindi	6.00	SD
		155	Star World	GEC	English	8.00	SD
		156	Jalsha Movies	Movies	Bangla	6.00	SD
		157	Star Sports HD 2	Sports	English/ Hindi	19.00	HD
		158	Star Sports HD 1	Sports	English/ Hindi	19.00	HD
		159	Star Bharat HD	GEC	Hindi	19.00	HD
		160	Star Gold HD	Movies	Hindi	10.00	HD
		161	Star Movies HD	Movies	English	19.00	HD
		162	Star Plus HD	GEC	Hindi	19.00	HD
		163	Star World Prmiere HD	GEC	English	9.00	HD
		164	Star Sports 1 HD Hindi	Sports	Hindi	19.00	HD
		165	Star Sports Select 1	Sports	English/ Hindi	19.00	SD
		166	Star Movies Select HD	Movies	English	10.00	HD
		167	Star World HD	GEC	English	9.00	HD
		168	Star Sports First	Sports	English/ Hindi	1.00	SD
		169	MAA Gold	Movies	Telugu	2.00	SD
		170	MAA Movies	Movies	Telugu	10.00	SD
		171	MAA Music	Music	Telugu	1.00	SD
		172	MAA TV	GEC	Telugu	19.00	SD
		173	Star Pravah HD	GEC	Marathi	15.00	HD
		174	Star Jalsha HD	GEC	Bangla	19.00	HD
		175	Jalsha Movies HD	Movies	Bangla	19.00	HD
		176	Star Sports Select HD 1	Sports	English/ Hindi	19.00	HD
		177	Star Sports Select HD 2	Sports	English/ Hindi	10.00	HD
		178	MAA HD	GEC	Telugu	19.00	HD
		179	Star Gold Select HD	Movies	Hindi	10.00	HD
		180	MAA Movies HD	Movies	Telugu	19.00	HD



**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
		181	Star Sport 1 Telugu	Sports	Telugu	19.00	SD
		182	Star Sport 1 Kannada	Sports	Kannada	19.00	SD
		183	Star Sports 1 Bangla	Sports	Bangla	19.00	SD
		184	Star Utsav	GEC	Hindi	1.00	SD
		185	Star Utsav Movies	Movies	Hindi	1.00	SD
30	SUN TV Network Limited	186	Adithya TV	Movies	Tamil	9.00	SD
		187	Chintu TV	Kids	Kannada	6.00	SD
		188	Chutti TV	Kids	Tamil	6.00	SD
		189	Gemini Comedy	Movies	Telugu	5.00	SD
		190	Gemini Life	GEC	Telugu	5.00	SD
		191	Gemini Movies	Movies	Telugu	17.00	SD
		192	Gemini Music	Music	Telugu	4.00	SD
		193	Gemini News	News	Telugu	0.10	SD
		194	Gemini TV	GEC	Telugu	19.00	SD
		195	KTV	Movies	Tamil	19.00	SD
		196	Surya Movies	Movies	Malayalam	11.00	SD
		197	Kushi TV	Kids	Telugu	4.00	SD
		198	SUN Life	GEC	Tamil	9.00	SD
		199	Sun Music	Music	Tamil	6.00	SD
		200	Sun News	News	Tamil	1.00	SD
		201	Surya Music	Music	Malayalam	4.00	SD
		202	SUN TV	GEC	Tamil	19.00	SD
		203	Surya Comedy	Movies	Malayalam	4.00	SD
		204	Surya TV	GEC	Malayalam	12.00	SD
		205	Udaya Comedy	Movies	Kannada	6.00	SD
		206	Udaya Movies	Movies	Kannada	16.00	SD
		207	Udaya Music	Music	Kannada	6.00	SD
		208	Udaya News	News	Kannada	0.10	SD
		209	Udaya TV	GEC	Kannada	17.00	SD
		210	Kochu TV	Kids	Malayalam	5.00	SD
		211	Sun TV HD	GEC	Tamil	19.00	HD
		212	KTV HD	Movies	Tamil	19.00	HD
		213	Sun Music HD	Music	Tamil	19.00	HD
		214	Gemini TV HD	GEC	Telugu	19.00	HD

**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
		215	Gemini Music HD	Music	Telugu	19.00	HD
		216	Gemini Movies HD	Movies	Telugu	19.00	HD
		217	Surya TV HD	GEC	Malayalam	19.00	HD
		218	Udaya TV HD	GEC	Kannada	19.00	HD
31	Turmeric Vision Private Limited	219	Food Food TV	Infotainment	Hindi	1.00	SD
32	Turner International India Pvt Ltd	220	Cartoon Network	Kids	Hindi	4.25	SD
		221	CNN International	News	English	0.50	SD
		222	HBO	Movies	English	10.00	SD
		223	POGO	Kids	Hindi	4.25	SD
		224	Cartoon Network HD+	Kids	Hindi	5.00	HD
		225	WB	Movies	English	1.00	SD
33	TV 18 Broadcast Limited	226	HBO HD	Movies	English	12.00	HD
		227	CNN News 18	News	English	0.50	SD
		228	CNBC Bazaar	News	Gujarati	1.00	SD
		229	CNBC TV 18 Prime HD	News	English	1.00	HD
		230	CNBC Awaaz	News	Hindi	1.00	SD
		231	News 18 Tamil Nadu	News	Tamil	0.10	SD
		232	News 18 Kerala	News	Malayalam	0.10	SD
		233	News 18 Assam / North East	News	Assamese	0.10	SD
		234	News 18 India	News	Hindi	0.10	SD
		235	CNBC TV 18	News	English	4.00	SD
34	TV Today Network Limited	236	Aaj Tak	News	Hindi	0.75	SD
		237	India Today	News	English	1.00	SD
		238	AAJ Tak HD	News	Hindi	1.50	HD
		239	Aaj Tak Tez	News	Hindi	0.25	SD
35	Viacom 18 Media Private Limited	240	Colors	GEC	Hindi	19.00	SD
		241	Comedy Central (HD)	GEC	English	9.00	HD
		242	MTV	Music	Hindi	3.00	SD
		243	NICK	Kids	Hindi	6.00	SD

**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
	Viacom 18 Media Private Limited	244	NICK JR	Kids	English	1.00	SD
		245	SONIC	Kids	Hindi	2.00	SD
		246	VH 1 (HD Distribution)	Music	English	2.00	HD
		247	Colors Infinity HD	GEC	English	9.00	HD
		248	Colors Infinity	GEC	English	5.00	SD
		249	Colors HD	GEC	Hindi	19.00	HD
		250	NICKS HD+	Kids	Hindi	10.00	HD
		251	Colors Cineplex	Movies	Hindi	3.00	SD
		252	MTV Beats	Music	Hindi	0.10	SD
		253	Colors Kannada HD	GEC	Kannada	19.00	HD
		254	Colors Marathi HD	GEC	Marathi	17.00	HD
		255	Colors Bangla HD	GEC	Bangla	14.00	HD
		256	Colors Super	GEC	Kannada	3.00	SD
		257	Colors Bangla	GEC	Bangla	7.00	SD
		258	Colors Gujarati	GEC	Gujarati	5.00	SD
		259	Colors Kannada	GEC	Kannada	19.00	SD
		260	Colors Marathi	GEC	Marathi	10.00	SD
		261	Colors Oriya	GEC	Oriya	6.00	SD
		262	MTV Beats HD	Music	Hindi	1.00	HD
		263	Colors Tamil	GEC	Tamil	3.00	SD
264	Colors Cineplex HD	Movies	Hindi	5.00	HD		
36	Zee Akaash News Pvt Ltd	273	Zee 24 Ghanta	News	Bangla	0.10	SD
37	Zee Entertainment Enterprises Limited	274	Zee Bollywood	Movies	Hindi	2.00	SD
		275	Zee Action	Movies	Hindi	1.00	SD
		276	Zee Bangla Cinema	Movies	Bangla	2.00	SD
		277	Zee Café HD	GEC	English	19.00	HD
		278	Zee Café	GEC	English	15.00	SD
		279	Zee Cinema	Movies	Hindi	15.00	SD
		280	Zee Talkies	Movies	Marathi	2.00	SD
		281	Zee TV	GEC	Hindi	19.00	SD
		282	Zing	Music	Hindi	0.10	SD

**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
	Zee Entertainment Enterprises Limited	283	& Picture	Movies	Hindi	6.00	SD
		284	Zee Bangla	GEC	Bangla	19.00	SD
		285	Zee Marathi	GEC	Marathi	19.00	SD
		286	Living Foodz	Infotainment	English/Hindi	1.00	SD
		287	Zee TV HD	GEC	Hindi	19.00	HD
		288	Zee Cinema HD	Movies	Hindi	19.00	HD
		289	& TV	GEC	Hindi	12.00	SD
		290	& TV HD	GEC	Hindi	19.00	HD
		291	Zee Kannada	GEC	Kannada	19.00	SD
		292	Zee Telugu	GEC	Telugu	19.00	SD
		293	& Pictures HD	Movies	English/Hindi	19.00	HD
		294	Zee Cinemalu	Movies	Telugu	10.00	SD
		295	Zee Yuva	GEC	Marathi	1.00	SD
		296	Zee Marathi HD	GEC	Marathi	19.00	HD
		297	Living Zen	Infotainment	Hindi	0.10	SD
		298	& Prive HD	Movies	English	19.00	HD
		299	Zee Bangla HD	GEC	Bangla	19.00	HD
		300	Zee Tamil HD	GEC	Tamil	19.00	HD
		301	Zee Cinemalu HD	Movies	Telugu	16.00	HD
		302	Zee Telugu HD	GEC	Telugu	19.00	HD
		303	Zee Tamil	GEC	Tamil	12.00	SD
		304	Zee Kannada HD	GEC	Kannada	19.00	HD
		305	Zee Anmol Cinema	Movies	Hindi	0.10	SD
		306	& Flix HD	Movies	English	19.00	HD
		307	& Flix	Movies	English	15.00	SD
		308	Zee Keralam HD	GEC	Malayalam	8.00	HD
		309	Zee Keralam	GEC	Malayalam	0.10	SD
		310	Zee ETC	Music	Hindi	0.10	SD
		311	Zee Anmol	GEC	Hindi	0.10	SD
		312	Big Magic	GEC	Hindi	0.10	SD
		313	Big Ganga	GEC	Bhojpuri	0.50	SD
		314	Zee Talkies HD	Movies	Marathi	19.00	HD

**Annexure 5.1(Contd.)**

<b>SL. No.</b>	<b>Name of the broadcaster</b>	<b>Sl. No.</b>	<b>Name of the channel</b>	<b>Reported Genre as per new Regulatory framework</b>	<b>Reported Language</b>	<b>MRP as per New Regulatory Framework 2017(in Rs) (Excl. Taxes)</b>	<b>Declared as SD or HD</b>
38	Zee Media Corporation Limited	315	Zee 24 Taas	News	Marathi	0.10	SD
		316	Zee Odisha	News	Odia	0.10	SD
		317	Zee Business	News	Hindi	0.10	SD
		318	Zee Punjab /Haryana / Himachal Pradesh	News	Hindi	0.10	SD
		319	Zee Madhya Pradesh / Chattisgarh	News	Hindi	0.10	SD
		320	Zee Salaam	News	Urdu	0.10	SD
		321	Zee 24 Kalak	News	Hindi	0.10	SD
		322	WION	News	Hindi	1.00	SD
		323	Zee Uttar Pradesh / Uttrakhand	News	Hindi	0.10	SD
		324	Zee Hindustan	News	Hindi	0.10	SD
		325	Zee Bihar Jharkhand	News	Hindi	0.10	SD
		326	Zee News	News	Hindi	0.10	SD
		327	Zee Rajasthan News	News	Hindi	0.10	SD
39	Zoom Entertainment Network Limited	328	Movies Now	Movies	English	10.00	SD

## **Annexure 5.2 : List of pay DTH Operators**

- 1. M/s. Tata Sky Ltd.,**  
Tata Communications Complex,  
Mandi Road, PO Chattarpur,  
New Delhi – 110 074  
Tel: 011-6616 3000  
Fax-022-6616 3030  
Website : [www.tatasky.com](http://www.tatasky.com)
  
- 2. M/s Dish TV India Ltd.**  
FC-19, Sector-16A, Film City,  
Noida-201301  
Tel: 91-120-2467005 / 2467000  
Fax: 91-120-4357082  
Website : [www.dishtv.in](http://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](http://www.sundirect.in)
  
- 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](http://www.airtel.in)
  
- 5. Independent TV Limited**  
H-67, Sector – 63,  
NOIDA (U.P.)  
Ph: 0120-6270100  
Fax : 0120-4315999  
Website : [www.rcom.co.in](http://www.rcom.co.in)

**Annexure 5.3: List of 98 existing cities with operational FM Radio Channels in India as on 31<sup>st</sup> March, 2019**

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

**Annexure 5.3 (Contd.)**

<b>Sl. No.</b>	<b>City</b>	<b>Category</b>	<b>No. of Stations</b>
35	Hubli - Dharwad	C	2
36	Hyderabad	A	8
37	Itanagar	D	1
38	Indore	B	4
39	Jabalpur	B	4
40	Jaipur	A	6
41	Jalandhar	C	4
42	Jalgaon	C	4
43	Jammu	C	3
44	Jamshedpur	B	4
45	Jhansi	C	4
46	Jodhpur	C	4
47	Junagarh	D	1
48	Kannur	C	3
49	Kanpur	A	6
50	Karnal	D	3
51	Kolhapur	C	4
52	Kolkata	A+	8
53	Kota	C	4
54	Kozhikode	C	4
55	Lucknow	A	6
56	Madurai	B	4
57	Mangalore	C	3
58	Mumbai	A+	9
59	Muzaffarpur	C	4
60	Mysore	C	2
61	Nagpur	A	6
62	Nanded	C	3
63	Nasik	C	4
64	Nellore	C	1
65	Panaji	D	2
66	Patiala	C	4
67	Patna	B	4
68	Puducherry	C	4
69	Pune	A	6
70	Raipur	C	3



**Annexure 5.3 (Contd.)**

<b>S.No</b>	<b>City</b>	<b>Category</b>	<b>No. of Stations</b>
71	Rajahmundry	C	2
72	Rajkot	B	4
73	Ranchi	C	4
74	Rourkela	C	3
75	Sangli	C	5
76	Salem	C	2
77	Shillong	D	3
78	Shimla	D	3
79	Sholapur	C	4
80	Siliguri	C	3
81	Srinagar	C	4
82	Surat	A	6
83	Thiruvananthapuram	C	4
84	Thrissur	C	3
85	Tiruchy	C	3
86	Tirunelveli	C	3
87	Tirupati	C	2
88	Tuticorin	C	2
89	Udaipur	C	4
90	Vadodra	B	4
91	Varanasi	B	5
92	Vellore	C	2
93	Vijayawada	B	2
94	Vishakapatnam	B	3
95	Warrangal	C	2
96	Jamnagar	C	1
97	Mehsana	D	1
98	Palampur	D	1
<b>Total</b>			<b>356</b>

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

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