



Telecom Regulatory Authority of India

The Indian Telecom Services Performance Indicators April – June, 2019

New Delhi, India

1st October, 2019

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Snapshot

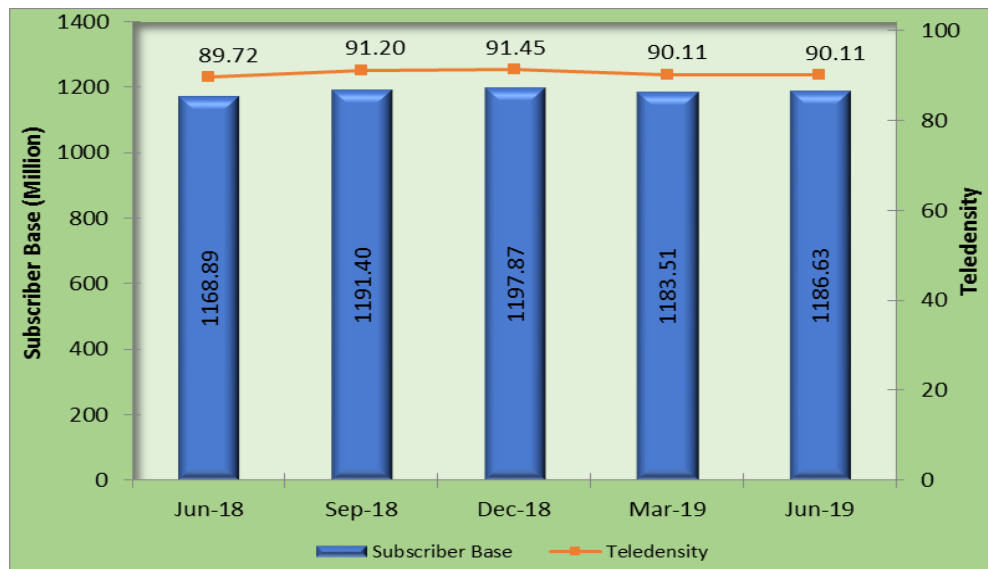
(Data as on Q.E. 30 th June, 2019)	
Telecom Subscribers (Wireless+Wireline)	
Total Subscribers	1,186.63 Million
% change over the previous quarter	0.26%
Urban Subscribers	675.58 Million
Rural Subscribers	511.05 Million
Market share of Private Operators	88.75%
Market share of PSU Operators	11.25%
Teledensity	90.11
Urban Teledensity	160.78
Rural Teledensity	56.99
Wireless Subscribers	
Total Wireless Subscribers	1,165.46 Million
% change over the previous quarter	0.31%
Urban Subscribers	657.27 Million
Rural Subscribers	508.19 Million
Market share of Private Operators	89.73%
Market share of PSU Operators	10.27%
Teledensity	88.50
Urban Teledensity	156.42
Rural Teledensity	56.68
Total Wireless Data Usage during the quarter	17,940,576 TB
No. of total Public Mobile Radio Trunk Services (PMRTS)	58,905
No. of Very Small Aperture Terminals (VSAT)	2,94,590
Wireline Subscribers	
Total Wireline Subscribers	21.17 Million
% change over the previous quarter	-2.43%
Urban Subscribers	18.31 Million
Rural Subscribers	2.85 Million
Market share of Private Operators	34.77%
Market share of PSU Operators	65.23%
Teledensity	1.61
Urban Teledensity	4.36
Rural Teledensity	0.32
No. of Village Public Telephones (VPT)	1,04,466
No. of Public Call Office (PCO)	2,28,371

Telecom Financial Data	
Gross Revenue (GR) during the quarter	₹ 61,535 Crore
% change in GR over the previous quarter	5.34%
Adjusted Gross Revenue (AGR) during the quarter	₹ 39,124 Crore
% change in AGR over the previous quarter	8.88%
Share of Public sector undertakings in Access AGR	10.49%
Monthly Average Revenue Per User (ARPU) for Access Services	₹ 80.65
Internet/Broadband Subscribers	
Total Internet Subscribers	665.31 Million
% change over previous quarter	4.49%
Narrowband subscribers	70.72 Million
Broadband subscribers	594.38 Million
Wired Internet Subscribers	21.67 Million
Wireless Internet Subscribers	643.64 Million
Urban Internet Subscribers	427.05 Million
Rural Internet Subscribers	238.26 Million
Total Internet Subscribers per 100 population	50.52
Urban Internet Subscribers per 100 population	101.63
Rural Internet Subscribers per 100 population	26.57
Broadcasting & Cable Services	
Number of private satellite TV channels permitted by the Ministry of I&B for uplinking only/downlinking /uplinking	908
Number of Pay TV Channels as reported by broadcasters	331
Number of private FM Radio Stations (excluding All India Radio)	366
Average active subscriber base with pay DTH operators	54.36 Million
Number of Operational Community Radio Stations	261
Number of pay DTH Operators	4
Revenue & Usage Parameters	
Monthly ARPU of Wireless Service (GSM including LTE)	₹ 74.30
Minutes of Usage (MOU) per subscriber per month - Wireless Service (GSM including LTE)	701 Minutes
Total Outgoing Minutes of Usage for Internet Telephony	198.34 Million
Wireless Data Usage	
Average Wireless Data Usage per wireless data subscriber per month	9.77 GB
Average cost to subscriber per GB wireless data during the quarter	₹ 7.70

Executive Summary

1. The number of telephone subscribers in India increased from 1,183.51 million at the end of Mar-19 to 1,186.63 million at the end of Jun-19, registering a growth rate of 0.26% over the previous quarter. This reflects year-on-year (Y-O-Y) growth rate of 1.52% over the same quarter of last year. The overall Teledensity¹ in India remained same at 90.11 as on QE Jun-19 as compared to the end of previous quarter.

Trends in Telephone subscribers and Teledensity in India



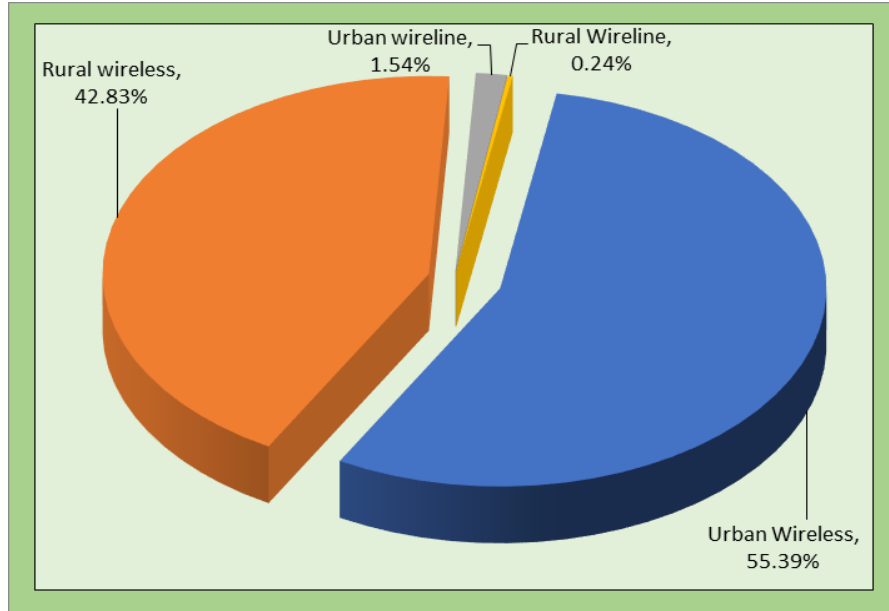
2. Telephone subscription in Urban areas increased from 669.16 million at the end of Mar-19 to 675.58 million at the end of Jun-19 and Urban Teledensity also increased from 159.96 to 160.78 during the same period.
3. Rural telephone subscription declined from 514.35 million at the end of Mar-19 to 511.05 million at the end of Jun-19 and Rural Teledensity also declined from 57.47 at the end of Mar-19 to 56.99 at the end of Jun-19.

¹ 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 43.46% at the end of Mar-19 to 43.07% at the end of Jun-19.

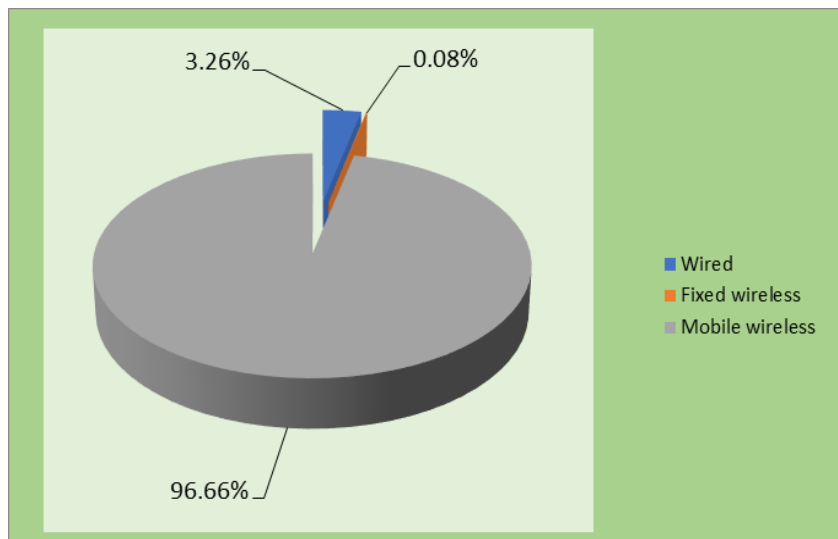
Composition of Telephone Subscribers



5. With a net addition of 3.65 million subscribers during the quarter, total wireless (GSM incl. LTE + CDMA) subscriber base increased from 1,161.81 million at the end of Mar-19 to 1,165.46 million at the end of Jun-19, registering a growth rate of 0.31% over the previous quarter. Wireless subscriptions increased year-on-year (Y-O-Y) at the rate of 1.65% during the quarter.
6. Wireless Tele-density increased from 88.46 at the end of Mar-19 to 88.50 at the end of Jun-19 with quarterly growth rate of 0.05%.
7. Wireline subscriber further declined from 21.70 million at the end of Mar-19 to 21.17 million at the end of Jun-19 with quarterly decline rate of 2.43%. The year-on-year (Y-O-Y) decline rate in wireline subscribers for Jun-19 is 5.47%.
8. Wireline Teledensity also declined from 1.65 at the end of Mar-19 to 1.61 at the end of Jun-19.

9. Total number of Internet² subscribers increased from 636.73 million at the end of Mar-19 to 665.31 million at the end of Jun-19, registering a quarterly growth rate of 4.49%. Out of 665.31 million internet subscribers, number of Wired Internet subscribers are 21.67 million and number of Wireless Internet subscribers are 643.64 million.

Composition of internet subscription



10. The Internet subscriber base is comprised of Broadband³ Internet subscriber base of 594.58 million and Narrowband⁴ Internet subscriber base of 70.72 million.
11. The broadband Internet subscriber base increased by 5.55% from 563.31 million at the end of Mar-19 to 594.58 million at the end of Jun-19. However, the narrowband Internet subscriber base declined by 3.67% from 73.42 million at the end of Mar-19 to 70.72 million at the end of Jun-19.

² Internet: Interconnected global networks that use the internet protocol.

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

⁴ 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)⁵ for wireless service increased by 4.06%, from ₹71.39 in QE Mar-19 to ₹74.30 in QE Jun-19. On yearly (Y-O-Y) basis, monthly ARPU for wireless service increased by 7.43% in this quarter.
13. Prepaid ARPU per month increased from ₹63 in QE Mar-19 to ₹66 in QE Jun-19, however Postpaid ARPU per month declined from ₹261 in QE Mar-19 to ₹253 in QE Jun-19.
14. On an all India average, the overall Minutes of Usage (MOU)⁶ per subscriber per month for wireless service increased by 1.32% from 692 for QE Mar-19 to 701 in QE Jun-19.
15. Prepaid MOU per subscriber per month increased from 694 in QE Mar-19 to 705 in QE Jun-19. However, postpaid MOU per subscriber per month declined from 641 in QE Mar-19 to 626 in QE Jun-19.
16. Gross Revenue⁷ (GR) and Adjusted Gross Revenue⁸ (AGR) of Telecom Service Sector for the QE Jun-19 has been ₹61,535 Crore and ₹39,124 Crore respectively. GR and AGR increased by 5.34% and 8.88% respectively in QE Jun-19 as compared to previous quarter.

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

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

⁷ 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.

⁸ 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 Jun-19 over the same quarter in last year has been 5.37% and 7.03% respectively.
18. Pass-through⁹ charges declined from ₹22,482 Crore in QE Mar-19 to ₹22,411 Crore in QE Jun-19 with quarterly decline rate of 0.32%. However, the year-on-year (Y-O-Y) growth rate of 2.57% has been seen in pass-through charges for QE Jun-19.
19. The License Fee¹⁰ increased from ₹2,888 Crore for the QE Mar-19 to ₹3,133 Crore for the QE Jun-19. The quarterly and the year-on-year (Y-O-Y) growth rates of license fee are 8.48% and 6.95% respectively in this quarter.
20. Access services contributed 73.23% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Adjusted Gross Revenue (AGR), License Fee and Spectrum Usage Charges (SUC)¹¹ increased by 4.57%, 9.79%, 9.28% and 6.05% respectively in QE Jun-19. However, Pass Through Charges declined quarterly by 4.05% during the same period.

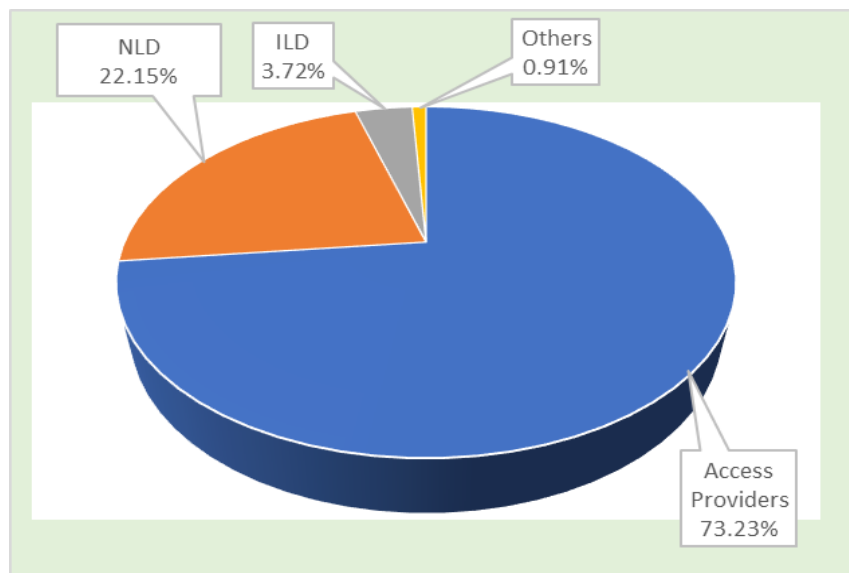
⁹ Pass through charges means the charges excluded from gross revenue to arrive at adjusted gross revenue for the purpose of levying licence fee.

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

¹¹ Spectrum Usage Charge is payable by the licensees providing mobile access services, as a percentage of their Adjusted Gross Revenue (AGR).

(Source – DoT License Agreement)

Composition of Adjusted Gross Revenue in access services



21. Monthly Average Revenue per User (ARPU) for Access Services based on AGR, increased from ₹72.49 in QE Mar-19 to ₹80.66 in QE Jun-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:

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

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:

Parameters showing deterioration in QoS
<ul style="list-style-type: none">• % Fault repaired within 5 days (for urban areas)• Mean time to Repair (MTTR)• %age of calls answered by the operators (voice to voice) within 90 sec• %age requests for Termination/Closure of service complied within 7 days

24. A total number of 908 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 28th May, 2019.
25. As per the reporting to TRAI, done by broadcaster in pursuance of the Tariff Order (Broadcasting & Cable), dated 3rd March 2017, there are 331 pay channels as on 30th June, 2019, which include 233 SD (standard definition) pay TV channels and 98 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 30th June, 2019, there were 4 pay DTH service providers in the country as compared to 5 pay DTH service providers reported in the previous quarter.
27. Pay DTH has attained average active subscriber base of around 54.26 million in QE 30th June, 2019. This is in addition the subscribers of DTH Free Dish (free DTH services of Doordarshan).

28. Apart from the radio stations operated by All India Radio, the public broadcaster, as on 30th June, 2019, there are 366 operational private FM Radio stations in 104 cities with operational 33 Private FM Radio broadcaster as compared to 356 private FM Radio Stations in 98 cities with operational 33 FM Radio broadcasters in the previous quarter.
29. The reported advertisement revenue during the quarter ending 30th June, 2019 in respect of 365 private FM Radio stations is Rs.526.13 crore as against Rs.623.96 crore in respect of 355 private FM Radio stations for the previous quarter.
30. As per data received from MIB, as on 30th June, 2019, 261 Community Radio Stations are operational.

Trends at a Glance

A. Access Service (Wireline + Wireless)

	QE Jun 2018	QE Sep 2018	QE Dec 2018	QE Mar 2019	QE Jun 2019	%age change over Jun-2018	%age change over Sep-2018	%age change over Dec-2018	%age change over Mar-2019
						(12 months)	(9 months)	(6 months)	(3 months)
1) Subscriber Base (in million)									
Wireline	22.40	22.11	21.87	21.70	21.17	-5.47%	-4.27%	-3.19%	-2.43%
Wireless	1146.49	1169.29	1176.00	1161.81	1165.46	1.65%	-0.33%	-0.90%	0.31%
Total	1168.89	1191.40	1197.87	1183.51	1186.63	1.52%	-0.40%	-0.94%	0.26%
Rural	516.13	524.76	531.59	514.35	511.05	-0.98%	-2.61%	-3.86%	-0.64%
Urban	652.76	666.64	666.28	669.16	675.58	-3.50%	1.34%	1.40%	0.96%
2) Teledensity									
Wireline	1.72	1.69	1.67	1.65	1.61	-6.49%	-5.03%	-3.71%	-2.69%
Wireless	88.00	89.51	89.78	88.46	88.50	0.57%	-1.13%	-1.42%	0.05%
Total	89.72	91.20	91.45	90.11	90.11	0.43%	-1.20%	-1.46%	0.00%
Rural	57.99	58.85	59.50	57.47	56.99	-1.72%	-3.15%	-4.21%	-0.82%
Urban	158.16	160.79	159.98	159.96	160.78	1.65%	-0.01%	0.49%	0.51%
3) Service Provider wise Subscribers Base (in Million) (wireless+wireline)									
Bharti	348.52	347.52	344.30	329.36	324.65	-6.85%	-6.58%	-5.71%	-1.43%
Vodafone	222.97	435.22	419.03	395.17	383.77	-13.48%	-11.82%	-8.41%	-2.88%
Idea	220.60								
Reliance Jio	215.26	252.25	280.12	306.72	331.26	53.89%	31.32%	18.26%	8.00%
BSNL	125.00	124.69	125.81	126.91	126.86	1.49%	1.74%	0.83%	-0.04%
Reliance Com.	0.96	0.86	0.78	0.75	0.68	-28.42%	-20.22%	-12.07%	-8.67%
Tata	28.50	23.85	20.86	17.68	12.56	-55.94%	-47.34%	-39.80%	-28.96%
MTNL	6.84	6.78	6.74	6.70	6.63	-3.09%	-2.26%	-1.64%	-1.02%
Quadrant	0.24	0.23	0.23	0.22	0.22	-8.41%	-6.25%	-3.55%	-1.25%
Total	1168.89	1191.40	1197.87	1183.51	1186.63	1.52%	-0.40%	-0.94%	0.26%

B. Internet Services

	QE Jun 2018	QE Sep 2018	QE Dec 2018	QE Mar 2019	QE Jun 2019	%age change over Jun-2018 (12 months)	%age change over Sep-2018 (9 months)	%age change over Dec-2018 (6 months)	%age change over Mar-2019 (3 months)
	1) Subscriber's Base (in million)								
A. Wired Internet Subscribers	21.16	21.25	21.42	21.68	21.67	2.38%	1.95%	1.13%	-0.06%
B. Wireless Internet Subscribers	491.10	538.76	582.79	615.05	643.64	31.06%	19.47%	10.44%	4.65%
i. Mobile Wireless (Mobile & Dongle)	490.66	537.92	582.35	613.75	643.09	31.07%	19.55%	10.43%	4.78%
ii. Fixed Wireless (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	0.44	0.83	0.44	1.31	0.55	26.80%	-33.59%	26.93%	-57.57%
Total Internet Subscribers	512.26	560.01	604.21	636.73	665.31	29.88%	18.80%	10.11%	4.49%
2) No. of Internet Subs per 100 Population	39.32	42.87	46.13	48.48	50.52	28.49%	17.85%	9.53%	4.21%

C. Usage and Revenue for Wireless Services

Traffic(MOU) (minutes of uses/ subscriber/month)	608	627	667	692	701	15.22%	11.81%	5.03%	1.32%
ARPU (Rs./sub/month)	69	67	70	71	74	7.43%	10.24%	5.94%	4.06%

D. Telecom Financial Data

	QE Jun 2018	QE Sep 2018	QE Dec 2018	QE Mar 2019	QE Jun 2019	%age change over Jun-2018 (12 months)	%age change over Sep-2018 (9 months)	%age change over Dec-2018 (6 months)	%age change over Mar-2019 (3 months)
	1. Telecom Sector								
i) Gross Revenue (₹ in Crores)	58401.12	57827.24	58990.60	58414.36	61534.81	5.37%	6.41%	4.31%	5.34%
ii) Adjusted Gross Revenue (₹ in Crores)	36552.48	36142.44	36054.13	35932.44	39123.92	7.03%	8.25%	8.51%	8.88%
2. Access Services									
Adjusted Gross Revenue (₹ in Crores)	25585.07	25727.79	26070.72	26095.71	28650.28	11.98%	11.36%	9.89%	9.79%
ARPU per month (AGR/ Average subscribers/3)	73.34	72.50	72.82	72.49	80.66	9.99%	11.25%	10.77%	11.27%

Introduction

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending 30th June, 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 under the link <http://www.trai.gov.in/release-publication/reports/performance-indicators-reports>). Any suggestion or any clarification pertaining to this report, Pr. Advisor (F&EA), TRAI may be contacted on Tel. +91-11-23221856, Fax. +91-11-23235249 and e-mail: skmishra.trai@nic.in.

Chapter 1 :

Subscription Data

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- In this report, Tele-density 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 increased from 1,183.51 million at the end of Mar-19 to 1,186.63 million at the end of Jun-19, registering a growth rate of 0.26% over the previous quarter. This reflects year-on-year (Y-O-Y) growth rate of 1.52% over the same quarter of last year. The overall Teledensity in India remained same at 90.11 as on 30th June, 2019 as compared to the QE Mar-19.

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

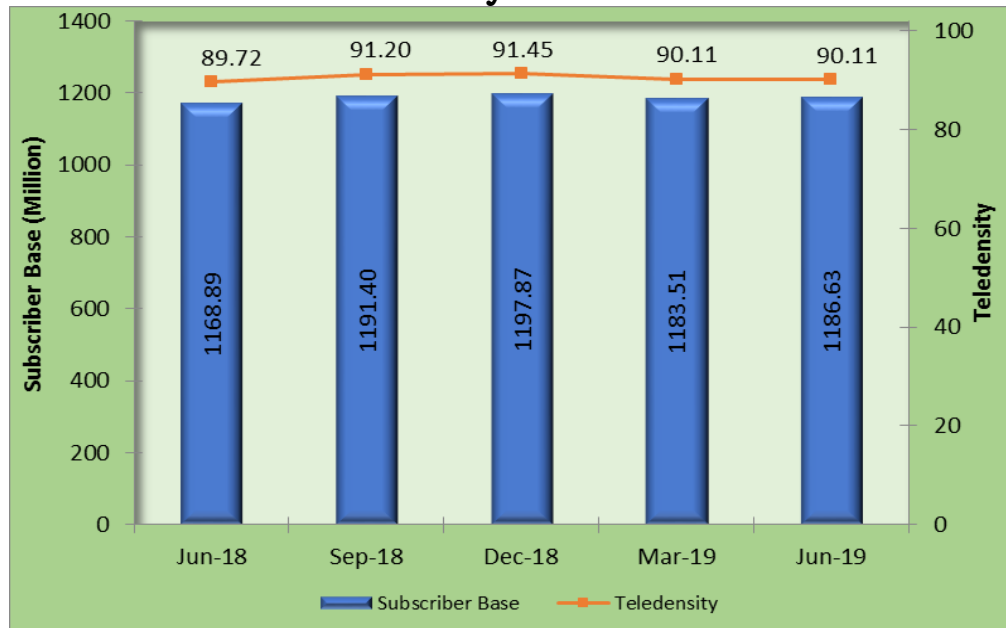
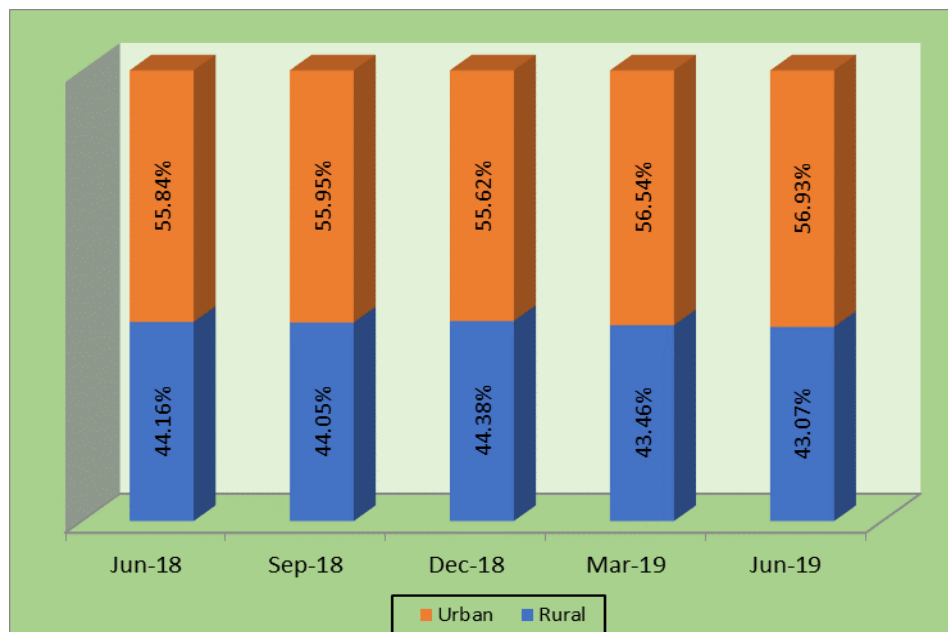


Table 1.1: Subscriber Base & Teledensity - Rural & Urban

Quarter ending	Subscriber Base (million)		Teledensity	
	Rural	Urban	Rural	Urban
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
Jun-19	511.05	675.58	56.99	160.78

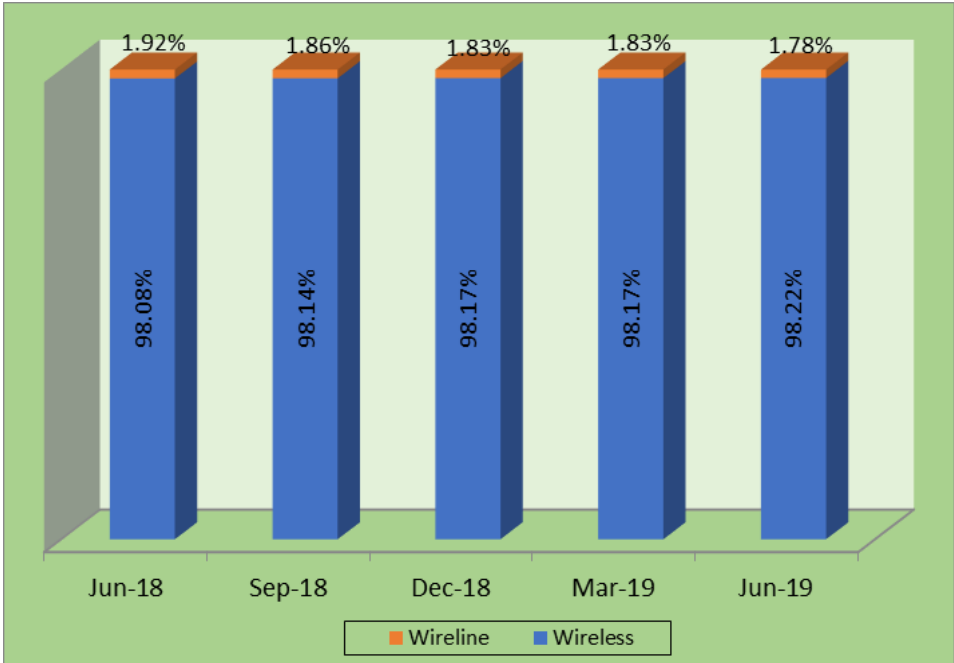
- 1.2 Telephone subscription in Urban areas increased from 669.16 million at the end of Mar-19 to 675.58 million at the end of Jun-19, and Urban Tele-density also increased from 159.96 to 160.78 at the end of the quarter.
- 1.3 Rural telephone subscription declined from 514.35 million at the end of Mar-19 to 511.05 million at the end of Jun-19 and Rural Tele-density also declined from 57.47 at the end of Mar-19 to 56.99 at the end of Jun-19.
- 1.4 The year-on-year(Y-O-Y) growth rate of Urban and Rural telephone subscription from Jun-18 to Jun-19 is 3.50% and -0.98% respectively. Year-on-year (Y-o-Y) growth rate of Urban and Rural Tele-density from Jun-18 to Jun-19 is 1.65% and -1.72% respectively.

Chart 1.2: Market Share - Rural & Urban Subscribers



- 1.5 Share of subscription of rural areas in total telephone subscription declined from 43.46% at the end of Mar-19 to 43.07% at the end of Jun-19.

Chart 1.3: Composition of Access subscription - Wireline & Wireless



1.6 Share of wireline subscription in total telephone subscription declined from 1.83% at the end of Mar-19 to 1.78% at the end of Jun-19.

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

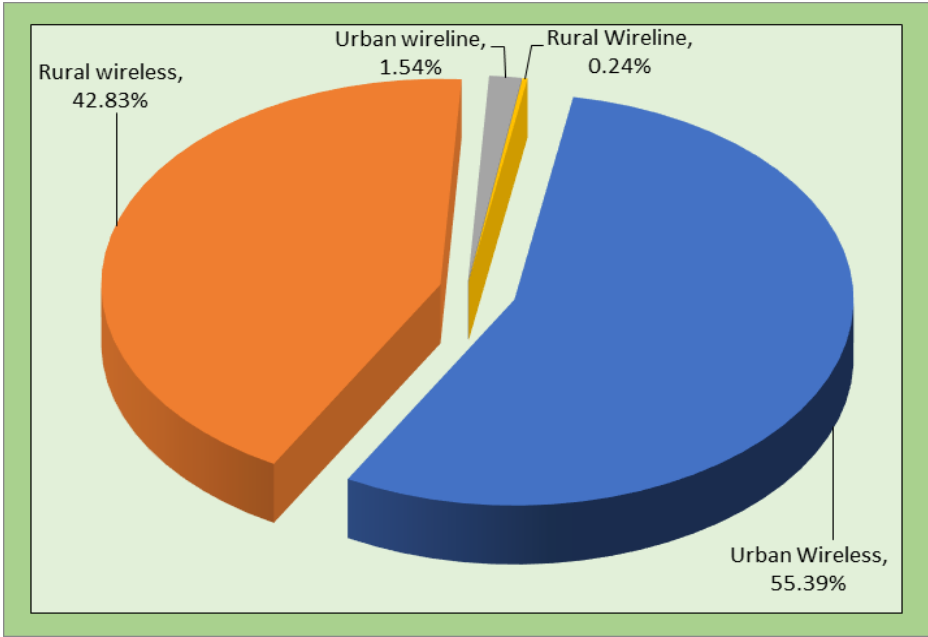


Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base

Service Area	Subscribers (million)			
	Mar-19	Jun-19	Quarterly Net Additions	Rate of Growth (%)
Andhra Pradesh	88.17	88.35	0.18	0.20%
Assam	23.08	23.65	0.57	2.49%
Bihar	85.31	85.79	0.48	0.56%
Delhi	55.39	56.24	0.85	1.53%
Gujarat	70.53	70.03	-0.51	-0.72%
Haryana	27.99	28.16	0.17	0.61%
Himachal Pradesh	10.63	10.67	0.04	0.38%
Jammu & Kashmir	11.44	11.58	0.14	1.25%
Karnataka	70.40	70.27	-0.12	-0.18%
Kerala	45.84	46.12	0.28	0.60%
Madhya Pradesh	75.72	76.31	0.60	0.79%
Maharashtra	94.55	94.07	-0.47	-0.50%
Mumbai	40.93	41.27	0.34	0.83%
North East	12.09	12.14	0.04	0.36%
Orissa	32.93	32.96	0.03	0.09%
Punjab	40.01	40.08	0.06	0.15%
Rajasthan	64.77	65.68	0.91	1.41%
T.N. (incl. Chennai)	84.56	84.25	-0.31	-0.37%
U.P.(E)	99.45	100.24	0.79	0.79%
U.P.(W)	64.89	65.16	0.27	0.42%
Kolkata	27.05	26.99	-0.05	-0.20%
West Bengal	57.77	56.62	-1.15	-1.99%
All India	1,183.51	1,186.63	3.12	0.26%

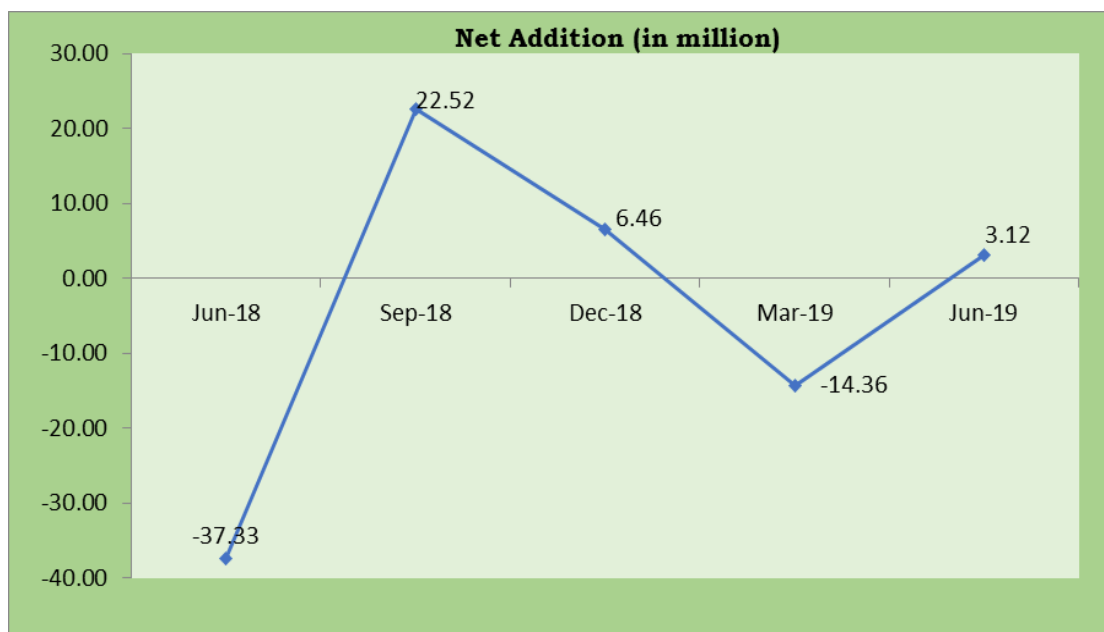
1.7 Assam service area showed maximum quarterly growth of 2.49%, however West Bengal service area showed maximum decline of 1.99% in their subscriber base during the quarter ending Jun-19.

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

Service Area	Number of Subscribers (in million)			
	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	88.35	42.03	46.31	47.58
Assam	23.65	12.01	11.65	50.76
Bihar	85.79	54.69	31.10	63.75
Delhi	56.24	1.69	54.55	3.01
Gujarat	70.03	26.88	43.15	38.38
Haryana	28.16	12.90	15.27	45.79
Himachal Pradesh	10.67	7.10	3.57	66.55
Jammu & Kashmir	11.58	5.14	6.44	44.35
Karnataka	70.27	23.74	46.53	33.79
Kerala	46.12	21.37	24.74	46.35
Madhya Pradesh	76.31	34.35	41.96	45.02
Maharashtra	94.07	43.24	50.83	45.97
Mumbai	41.27	1.70	39.58	4.11
North East	12.14	4.85	7.29	39.96
Orissa	32.96	21.47	11.49	65.14
Punjab	40.08	13.54	26.53	33.80
Rajasthan	65.68	33.23	32.45	50.59
T.N. (incl. Chennai)	84.25	22.47	61.78	26.67
U.P.(E)	100.24	59.03	41.20	58.90
U.P.(W)	65.16	31.34	33.83	48.09
Kolkata	26.99	2.87	24.12	10.63
West Bengal	56.62	35.40	21.22	62.53
All India	1,186.63	511.05	675.58	43.07

1.8 Only seven service areas have more than 50% share of rural subscribers in their total number of subscribers. Himachal Pradesh service area has maximum share of rural subscribers (66.55%) in its total telephone subscribers.

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



1.9 The net addition in telephone subscription is 3.12 million during QE Jun-19 as compared to the net decline of 14.36 million subscribers during QE Mar-19.

Table 1.4 : Service Area wise Teledensity

Service Area/ States	As on 31 st March, 2019			As on 30 th June, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	64.96	181.15	97.55	64.54	182.27	97.58
Assam	42.36	199.70	68.81	42.95	205.32	70.34
Bihar	45.55	149.10	59.95	44.53	156.66	60.13
Delhi	-	-	238.58	-	-	240.53
Gujarat	71.11	155.34	107.21	71.41	152.36	106.17
Haryana	70.82	142.00	97.66	72.14	140.34	97.94
Himachal Pradesh	111.75	396.88	146.39	111.17	402.66	146.69
J&K	56.19	172.74	89.43	56.11	175.96	90.36

Service Area/ States	As on 31 st March, 2019			As on 30 th June, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Karnataka	69.19	171.66	110.04	61.69	181.71	109.64
Kerala	67.01	301.74	126.15	78.53	270.04	126.76
Madhya Pradesh	44.12	137.10	70.11	44.05	138.33	70.45
Maharashtra (incl. Mumbai)*	70.92	143.71	107.05	70.44	143.22	106.64
North East	46.10	192.84	84.01	45.36	195.00	84.11
Orissa	60.27	144.73	75.74	60.39	143.60	75.68
Punjab	78.37	181.50	125.35	77.93	181.42	125.22
Rajasthan	57.60	171.56	85.33	57.69	175.07	86.26
Tamil Nadu (incl. Chennai)	85.94	135.47	117.05	84.06	135.48	116.48
Uttar Pradesh (incl. UPE & UPW)	49.22	132.63	68.63	49.04	133.95	68.83
West Bengal (incl. Kolkata)*	58.29	158.54	87.26	55.28	161.00	85.85
All India	57.47	159.96	90.11	56.99	160.78	90.11

* 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.

1.10 Himachal Pradesh service area has the highest Rural Tele-density of 111.17 followed by Tamil Nadu service area (84.06). Assam service area has the lowest Rural Tele-density of 42.95 followed by Madhya Pradesh service area (44.05).

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

Sl.No.	States/UT	Total Telephone Subscription (million)		
		Total	Rural	Urban
1	Andhra Pradesh	46.02	25.22	20.80
2	Arunachal Pradesh	1.31	0.58	0.74
3	Assam	23.65	12.01	11.65
4	Bihar	63.12	43.11	20.01
5	Chhattisgarh	20.65	9.91	10.75
6	Goa	2.95	1.20	1.75
7	Gujarat	69.29	26.60	42.70
8	Haryana	34.94	13.14	21.80
9	Himachal Pradesh	10.67	7.10	3.57
10	Jammu & Kashmir	11.58	5.14	6.44
11	Jharkhand	22.67	11.58	11.09
12	Karnataka	70.27	23.74	46.53
13	Kerala	46.03	21.29	24.74
14	Madhya Pradesh	55.66	24.45	31.21
15	Maharashtra Incl. Mumbai	132.39	43.74	88.65
16	Manipur	2.46	0.81	1.65
17	Meghalaya	2.30	1.11	1.20
18	Mizoram	1.36	0.38	0.98
19	Nagaland	1.73	0.68	1.05
20	Odisha	32.96	21.47	11.49
21	Punjab	37.94	13.47	24.47
22	Rajasthan	65.68	33.23	32.45
23	Sikkim	0.76	0.43	0.33
24	Tamil Nadu (incl. Chennai)	82.96	22.10	60.85
25	Telangana	42.33	16.82	25.51
26	Tripura	2.97	1.30	1.67
27	Uttar Pradesh (UPE + UPW)	159.87	83.81	76.06
28	Uttarakhand	13.10	6.60	6.51
29	West Bengal Incl. Kolkata	82.42	37.64	44.78
	Union Territories			
1	Andaman & Nicobar Islands	0.43	0.20	0.23
2	Chandigarh	2.12	0.07	2.04
3	Dadar & Nagar Haweli	0.45	0.21	0.24
4	Daman & Diu	0.28	0.07	0.21
5	Delhi	41.91	1.41	40.50
6	Lakshdweep	0.09	0.09	0.003
7	Puduchery	1.29	0.36	0.93
	Total	1186.63	511.05	675.58

Table 1.6 : State/UT wise total Teledensity

Sl.No.	State/UT	Total Teledensity		
		Total	Rural	Urban
1	Andhra Pradesh	50.83	64.54	182.27
2	Arunachal Pradesh	96.68	74.98	125.14
3	Assam	70.34	42.95	205.32
4	Bihar	58.63	44.78	175.84
5	Chhattisgarh	76.85	49.69	154.90
6	Goa	138.34	162.94	125.40
7	Gujarat	106.44	71.51	152.99
8	Haryana	121.52	73.52	200.38
9	Himachal Pradesh	146.69	111.17	402.66
10	Jammu & Kashmir	90.36	56.11	175.96
11	Jharkhand	64.74	43.62	130.90
12	Karnataka	109.64	61.69	181.71
13	Kerala	126.81	78.40	270.63
14	Madhya Pradesh	68.34	42.11	133.42
15	Maharashtra Incl. Mumbai	106.10	69.36	143.62
16	Manipur	91.63	40.01	247.10
17	Meghalaya	80.32	49.10	194.01
18	Mizoram	123.63	77.91	159.46
19	Nagaland	70.40	33.49	246.47
20	Odisha	75.68	60.39	143.60
21	Punjab	126.68	78.43	191.54
22	Rajasthan	86.26	57.69	175.07
23	Sikkim	113.66	76.80	311.68
24	Tamil Nadu (incl. Chennai)	117.78	84.43	137.50
25	Tripura	75.02	41.54	203.29
26	Uttar Pradesh (UPE +UPW)	69.74	47.45	144.56
27	Uttarakhand	118.59	86.18	191.66
28	West Bengal Incl. Kolkata	85.74	55.08	161.14
Union Territories				
1	Andaman & Nicobar Islands	72.45	60.80	86.71
2	Chandigarh	102.72	35.29	110.34
3	Dadar & Nagar Haweli	95.14	153.87	71.51
4	Daman & Diu	74.21	23.39	279.53
5	Delhi	179.24	186.26	179.01
6	Lakshdweep	104.12	134.52	12.47
7	Puduchery	68.23	66.37	68.99
	Total	90.11	56.99	160.78

*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 Mar-19 (%)	Market Share in QE Jun-19 (%)
	Mar-19	Jun-19	Net Additions			
Vodafone Idea Ltd	395.17	383.77	-11.39	-2.88	33.39	32.34
Reliance Jio	306.72	331.26	24.53	8.00	25.92	27.92
Bharti	329.36	324.65	-4.71	-1.43	27.83	27.36
BSNL	126.91	126.86	-0.05	-0.04	10.72	10.69
Tata Tele.	17.68	12.56	-5.12	-28.96	1.49	1.06
MTNL	6.70	6.63	-0.07	-1.02	0.57	0.56
Reliance Com.	0.75	0.68	-0.06	-8.67	0.06	0.06
Quadrant	0.22	0.22	0.00	0.00	0.02	0.02
Total	1,183.51	1,186.63	3.12	0.26	100	100

1.11 M/s Vodafone Idea Ltd continued to be the market leader with 32.34% in access segment in terms of number of subscribers with 383.77 million subscribers at the end of Jun-19. M/s Reliance Jio has got the second position with 331.26 million subscribers at the end of Jun-19. M/s Bharti Airtel slipped at third position with total telephone subscriber base of 324.65 million at QE Jun-19.

1.12 In term of net addition, only Reliance Jio Infocom Ltd became the gainer with net addition of 24.53 million telephone subscribers during the QE Jun-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

Service Provider	No. of Total Subscribers (in millions)	No. of Rural Subscribers (in millions)	Percentage of Rural subscribers	Market share of Rural subscribers (%)
Bharti Airtel	324.65	143.00	44.05	27.98
Vodafone Idea Ltd	383.77	199.15	51.89	38.97
Reliance Com.	0.68	0.00	0.00	0.00
Tata Tele.	12.56	1.34	10.70	0.26
Quadrant	0.22	0.04	19.78	0.01
Reliance Jio	331.26	128.02	38.65	25.05
BSNL	126.86	39.45	31.09	7.72
MTNL	6.63	0.05	0.70	0.01
Total	1,186.63	511.05	43.07	100

1.13 M/s Vodafone Idea Ltd is the telecom service provider with highest proportion of rural telephone subscribers (51.89%) followed by Bharti Airtel (44.05%) to their total telephone subscribers at the end of Jun-19.

Section B : Wireless Service

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

- 1.14 Total Wireless (GSM including LTE+CDMA) subscriber base increased from 1,161.81 million at the end of Mar-19 to 1,165.46 million at the end of Jun-19, thereby showing a quarterly growth rate of 0.31%. During the quarter, net addition of 3.65 million wireless subscribers has been recorded.
- 1.15 Total wireless subscriber base showed year-on-year (Y-O-Y) growth rate of 1.65% in QE Jun-19 over same quarter in previous year.
- 1.16 Wireless Teledensity increased from 88.46 at the end of Mar-19 to 88.50 at the end of Jun-19.

Chart 1.6: Wireless Subscriber Base and Teledensity

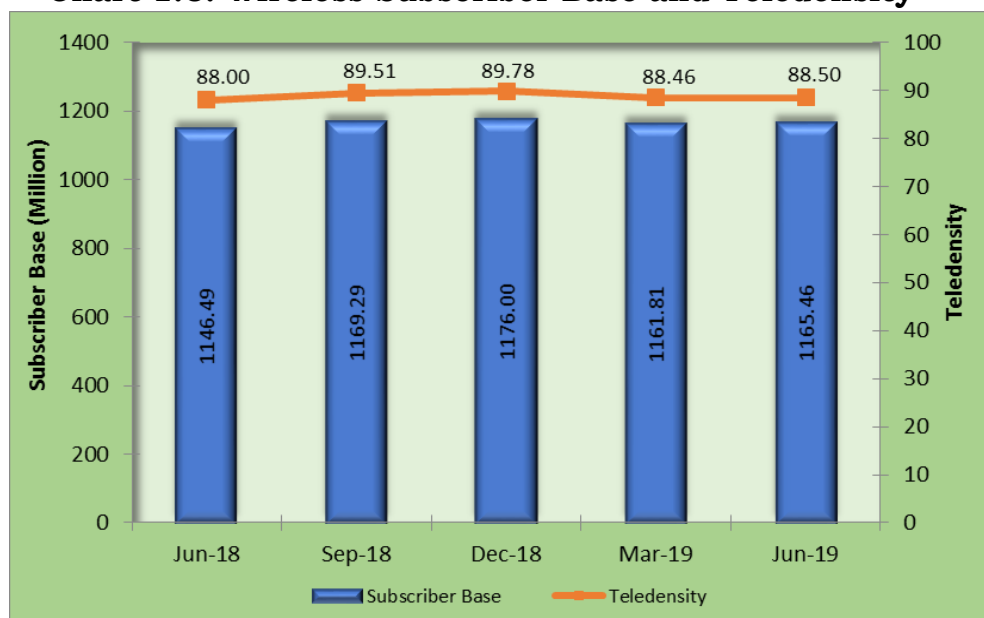


Table 1.10: Wireless Subscriber Base & Teledensity - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density	
	Rural	Urban	Rural	Urban
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
Jun-19	508.19	657.27	56.68	156.42

1.17 The Rural Wireless subscribers declined from 511.32 million at the end of Mar-19 to 508.19 million at the end of Jun-19, however the urban wireless subscribers increased from 650.49 million to 657.27 million during the quarter. Quarterly Growth rates of Rural and Urban wireless subscriptions are -0.61% and 1.04% respectively in QE Jun-19.

1.18 The share of rural wireless subscription declined from 44.01% to 43.60% in total wireless subscription in this quarter.

Chart 1.7: Wireless Market Share - Rural & Urban

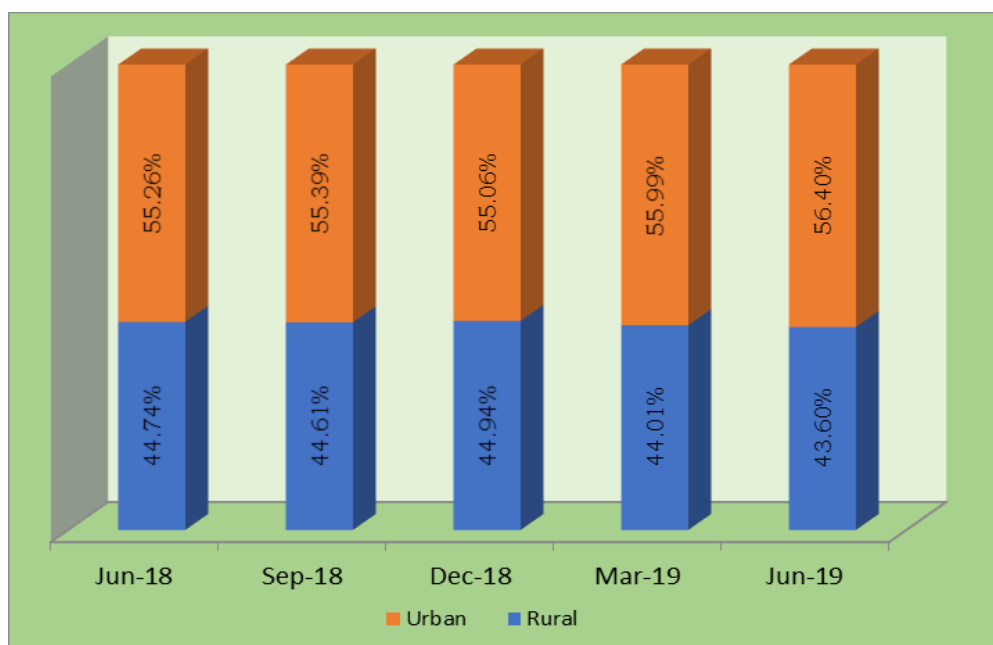


Table 1.11: Growth in Wireless Subscriber base

Service Provider	Subscriber Base (millions)			Rate of Growth (%)	Market Share Mar-19 (%)	Market Share Jun-19 (%)
	Mar-19	Jun-19	Net Additions			
Vodafone Idea Ltd	394.84	383.41	-11.43	-2.89	33.98	32.90
Reliance Jio	306.72	331.26	24.53	8.00	26.40	28.42
Bharti Airtel	325.18	320.35	-4.83	-1.48	27.99	27.49
BSNL	115.74	116.27	0.52	0.45	9.96	9.98
Tata Tele.	15.85	10.74	-5.11	-32.26	1.36	0.92
MTNL	3.45	3.41	-0.04	-1.12	0.30	0.29
Reliance Com.	0.02	0.02	0.00	0.00	0.002	0.002
Total	1,161.81	1,165.46	3.65	0.31	100	100

1.19 M/s Vodafone Idea Ltd is still a leading operator with market share of 32.90% in total wireless subscription at the end of Jun-19, despite losing of 11.43 million wireless subscribers during the quarter. M/s Reliance Jio became the second largest service provider in respect of wireless subscription at the QE Jun-19.

1.20 In terms of net additions during the quarter ending Jun-19, only Reliance Jio and BSNL showed positive growth in their wireless subscriber base with net addition of 24.53 million and 0.52 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)			
	Mar-19	Jun-19	Net Additions	Rate of change (%)
Andhra Pradesh	86.73	86.97	0.24	0.28
Assam	22.97	23.54	0.58	2.52
Bihar	85.08	85.57	0.49	0.57
Delhi	52.14	52.96	0.82	1.57
Gujarat	69.30	68.93	-0.37	-0.54
Haryana	27.72	27.90	0.18	0.64
Himachal Pradesh	10.52	10.56	0.05	0.43
Jammu & Kashmir	11.33	11.48	0.14	1.27
Karnataka	68.24	68.15	-0.09	-0.13
Kerala	43.96	44.27	0.31	0.70
Madhya Pradesh	74.80	75.40	0.60	0.81
Maharashtra	93.03	92.61	-0.42	-0.45
Mumbai	38.01	38.36	0.35	0.91
North East	11.99	12.04	0.05	0.39
Orissa	32.69	32.73	0.04	0.12
Punjab	39.24	39.32	0.08	0.20
Rajasthan	64.23	65.16	0.92	1.44
T.N. (incl. Chennai)	82.37	82.11	-0.26	-0.31
U.P.(E)	99.00	99.82	0.82	0.83
U.P.(W)	64.59	64.87	0.28	0.44
Kolkata	26.34	26.30	-0.04	-0.14
West Bengal	57.54	56.41	-1.13	-1.96
All India	1,161.81	1,165.46	3.65	0.31

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	86.97	41.84	45.13	48.11
Assam	23.54	11.99	11.55	50.92
Bihar	85.57	54.66	30.91	63.88
Delhi	52.96	1.69	51.26	3.20
Gujarat	68.93	26.73	42.20	38.78
Haryana	27.90	12.84	15.05	46.04
Himachal Pradesh	10.56	7.04	3.52	66.67
Jammu & Kashmir	11.48	5.13	6.35	44.65
Karnataka	68.15	23.61	44.54	34.64
Kerala	44.27	20.27	24.00	45.78
Madhya Pradesh	75.40	34.25	41.15	45.43
Maharashtra	92.61	43.01	49.60	46.44
Mumbai	38.36	1.70	36.66	4.42
North East	12.04	4.83	7.20	40.16
Orissa	32.73	21.42	11.31	65.45
Punjab	39.32	13.39	25.93	34.05
Rajasthan	65.16	33.16	32.00	50.89
T.N. (incl. Chennai)	82.11	22.16	59.95	26.99
U.P.(E)	99.82	58.97	40.85	59.08
U.P.(W)	64.87	31.31	33.56	48.26
Kolkata	26.30	2.87	23.43	10.91
West Bengal	56.41	35.32	21.10	62.60
All India	1,165.46	508.19	657.27	43.60

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

Table 1.14 : Service Area wise Wireless Tele-density

Service Area	As on 31 st March, 2019			As on 30 th June, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
A.P.	64.62	176.34	95.96	64.25	177.61	96.07
Assam	42.30	198.00	68.47	42.89	203.70	70.01
Bihar	45.53	148.09	59.79	44.51	155.71	59.98
Delhi	-	-	224.55	-	-	226.48
Gujarat	70.63	151.61	105.33	71.02	149.00	104.50
Haryana	70.53	139.98	96.72	71.86	138.37	97.02
H.P.	110.78	390.95	144.81	110.23	397.07	145.18
J&K	56.07	170.23	88.63	56.00	173.47	89.57
Karnataka	68.81	163.78	106.67	61.34	173.96	106.33
Kerala	62.85	293.51	120.96	74.46	261.94	121.67
M.P.	43.99	134.39	69.26	43.92	135.66	69.61
Maharashtra (incl. Mumbai)*	70.52	137.04	103.54	70.07	136.66	103.19
North East	45.89	190.64	83.29	45.21	192.75	83.42
Orissa	60.13	142.39	75.20	60.26	141.36	75.16
Punjab	77.42	177.32	122.92	77.03	177.33	122.86
Rajasthan	57.47	169.06	84.62	57.57	172.62	85.57
Tamil Nadu (incl. Chennai)	84.78	131.33	114.02	82.92	131.46	113.52
Uttar Pradesh (incl. UPE&UPW)*	49.17	131.45	68.32	48.99	132.85	68.54
West Bengal (incl. Kolkata)*	58.15	155.55	86.30	55.16	158.11	84.93
All India	57.13	155.49	88.46	56.68	156.42	88.50

* 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	45.47	25.07	20.41
2	Arunachal Pradesh	1.29	0.57	0.72
3	Assam	23.54	11.99	11.55
4	Bihar	63.01	43.09	19.92
5	Chhattisgarh	20.48	9.89	10.59
6	Goa	2.85	1.17	1.69
7	Gujarat	68.20	26.45	41.75
8	Haryana	34.63	13.09	21.54
9	Himachal Pradesh	10.56	7.04	3.52
10	Jammu & Kashmir	11.48	5.13	6.35
11	Jharkhand	22.56	11.57	10.99
12	Karnataka	68.15	23.61	44.54
13	Kerala	44.18	20.18	24.00
14	Madhya Pradesh	54.92	24.36	30.56
15	Maharashtra	128.12	43.53	84.58
16	Manipur	2.44	0.80	1.64
17	Meghalaya	2.29	1.10	1.18
18	Mizoram	1.35	0.38	0.97
19	Nagaland	1.73	0.68	1.04
20	Odisha	32.73	21.42	11.31
21	Punjab	37.36	13.31	24.04
22	Rajasthan	65.16	33.16	32.00
23	Sikkim	0.75	0.43	0.32
24	Tamil Nadu	80.87	21.80	59.07
25	Telangana	41.50	16.77	24.73
26	Tripura	2.95	1.30	1.65
27	Uttar Pradesh	159.23	83.73	75.50
28	Uttarakhand	13.01	6.59	6.43
29	West Bengal	81.55	37.56	43.98
	Union Territories			
1	Andaman & Nicobar Islands	0.41	0.19	0.22
2	Chandigarh	1.94	0.07	1.87
3	Dadar & Nagar Haweli	0.45	0.21	0.24
4	Daman & Diu	0.28	0.07	0.21
5	Delhi	38.70	1.41	37.28
6	Lakshdweep	0.08	0.08	0.00
7	Puduchery	1.24	0.36	0.88
	Total	1165.46	508.19	657.27

Table 1.16 : State/UT wise Wireless Tele-density

Sl.No.	State/UT	Wireless Teledensity		
		Total	Rural	Urban
1	Andhra Pradesh*	96.07	64.25	177.61
2	Arunachal Pradesh	94.92	74.11	122.20
3	Assam	70.01	42.89	203.70
4	Bihar	58.53	44.76	175.02
5	Chhattisgarh	76.19	49.60	152.62
6	Goa	133.70	158.80	120.49
7	Gujarat	104.76	71.11	149.61
8	Haryana	120.44	73.24	197.98
9	Himachal Pradesh	145.18	110.23	397.07
10	Jammu & Kashmir	89.57	56.00	173.47
11	Jharkhand	64.43	43.59	129.76
12	Karnataka	106.33	61.34	173.96
13	Kerala	121.72	74.32	262.54
14	Madhya Pradesh	67.44	41.97	130.63
15	Maharashtra	102.67	69.04	137.03
16	Manipur	90.87	39.76	244.82
17	Meghalaya	79.74	49.02	191.63
18	Mizoram	122.45	77.73	157.50
19	Nagaland	70.11	33.46	244.88
20	Odisha	75.16	60.26	141.36
21	Punjab	124.75	77.53	188.22
22	Rajasthan	85.57	57.57	172.62
23	Sikkim	112.79	76.74	306.39
24	Tamil Nadu	114.81	83.29	133.46
25	Tripura	74.52	41.48	201.11
26	Uttar Pradesh	69.46	47.40	143.50
27	Uttarakhand	117.76	86.06	189.22
28	West Bengal	84.83	54.97	158.27
	Union Territories			
1	Andaman & Nicobar Islands	69.59	58.79	82.81
2	Chandigarh	94.17	34.48	100.92
3	Dadar & Nagar Haweli	94.40	152.92	70.85
4	Daman & Diu	72.74	22.63	275.15
5	Delhi	165.50	186.26	164.80
6	Lakshdweep	98.90	131.70	0.00
7	Puduchery	65.45	64.97	65.65
	All India Teledensity	88.50	56.68	156.42

*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 30.06.2019

Service Provider	Total number of wireless Subscribers (in millions)	Rural Subscribers (in millions)	% of Rural subscribers in total	Market Share of Rural Subscribers (%)
Bharti	320.35	143.00	44.64	28.14
Vodafone Idea Ltd	383.41	199.15	51.94	39.19
Reliance Com.	0.02	0.00	0.00	0.00
Tata	10.74	1.30	12.07	0.26
BSNL	116.27	36.68	31.55	7.22
MTNL	3.41	0.05	1.35	0.01
Reliance Jio	331.26	128.02	38.65	25.19
Total	1,165.46	508.19	43.60	100

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

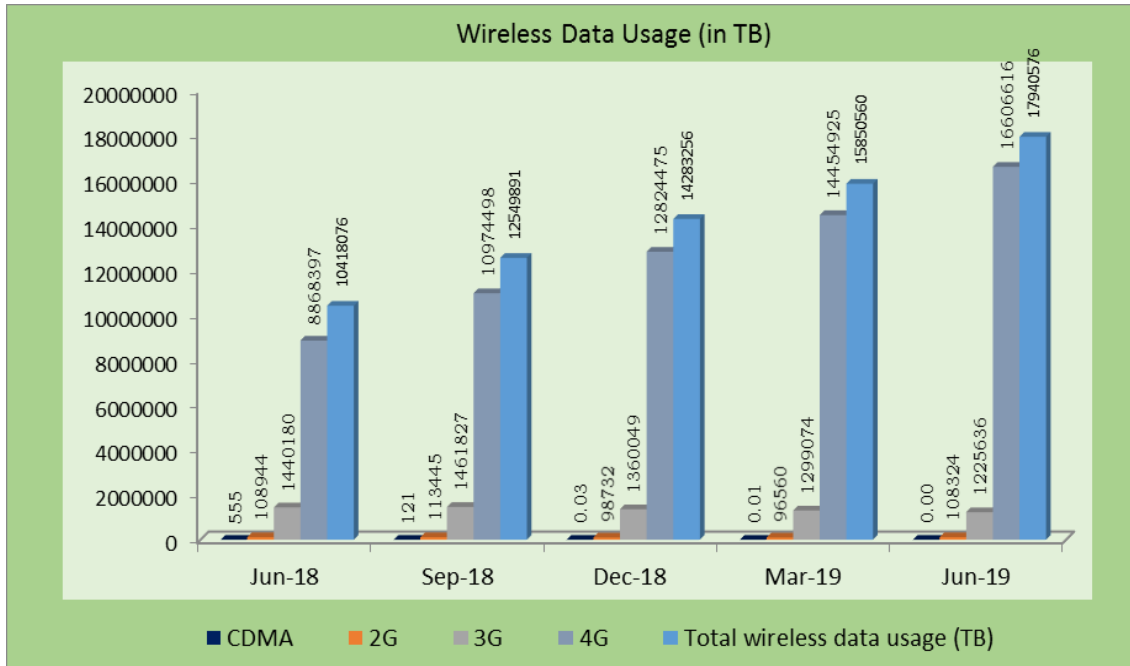
1.22 Volume of total wireless data usage increased from 15,850,560 terabytes during Q.E. Mar-19 to 17,940,576 terabytes during Q.E. Jun-19. Out of total data wireless usage, 2G data usage was 108,324 terabytes, 3G data usage was 1,225,636 terabyte and 4G data usage was 16,606,616 terabytes during the quarter.

1.23 Total number of wireless data subscribers increased from 613.75 million at the end of Mar-19 to 643.09 million at the end of Jun-19.

1.24 The contribution of 3G and 4G data usage in total volume of wireless data usage are about 6.83% and 92.56% respectively during the QE Jun-19. Share of 2G data usage remained 0.60% during the quarter.

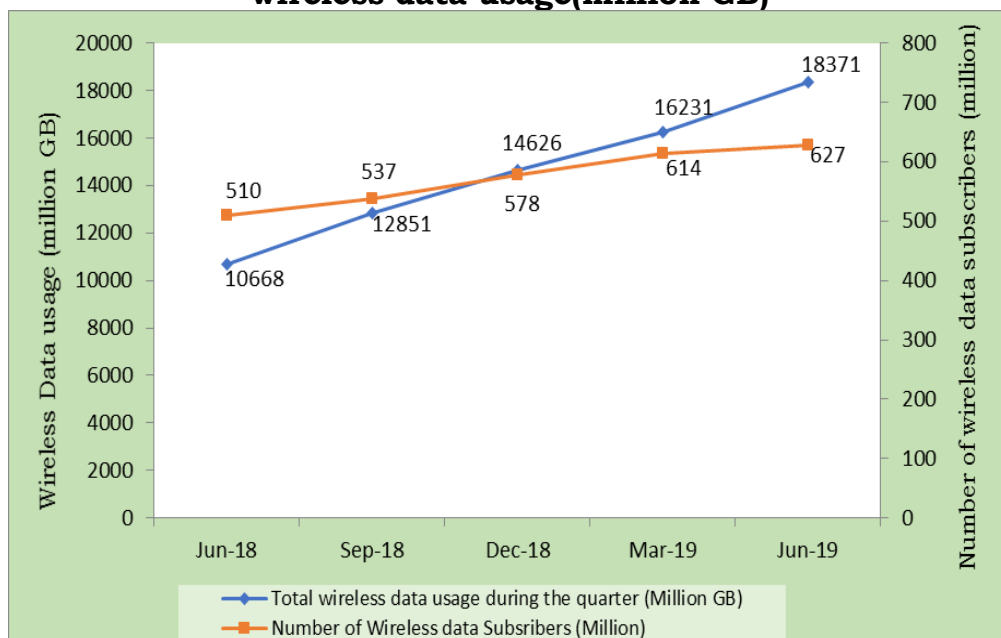
1.25 Technology-wise trend of growth in volume of wireless data usage is depicted in the following chart.

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



1.26 It may be noted that there is no volume of data usage reported for CDMA technology during the QE Jun-19.

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



Section C : Wireline Service

Table 1.18 : Service Providers providing Wireline Service

[As on 30th June, 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), Uttarakhand and West Bengal (Excluding Andaman & Nicobar and Sikkim)
6	Tata Teleservices (Maharashtra) Ltd.	Maharashtra & Goa, Mumbai
	Tata Teleservices Ltd.	Andhra Pradesh (Excluding Telangana), Telangana, 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)

1.27 Total Wireline subscriber base declined from 21.70 million at the end of Mar-19 to 21.17 at the end of Jun-19 with quarterly decline rate of 2.43%. Overall Wireline Teledensity also declined from 1.65 at the end of Mar-19 to 1.61 at the end of Jun-19.

1.28 Rural wireline subscriber base declined by 5.62%, from 3.02 Million at the end of Mar-19 to 2.85 Million at the end of Jun-19. Urban wireline subscription also recorded decline rate of 1.91%, from 18.67 million to 18.31 million during the same period.

Chart 1.10: Wireline Subscriber Base and Teledensity

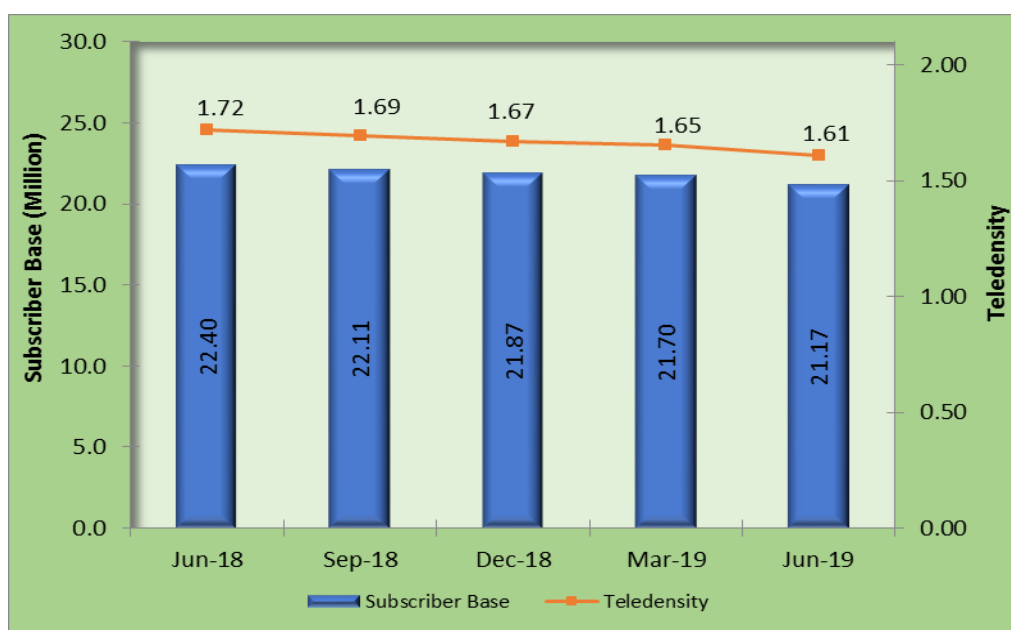


Table 1.19 : Wireline Subscriber Base & Teledensity - Rural & Urban

Quarter ending	Subscriber Base (million)		Teledensity (%)	
	Rural	Urban	Rural	Urban
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
Jun-19	2.85	18.31	0.32	4.36

**Table 1.20 : Service Provider wise Subscriber base (Rural - Urban)
- As on 30.06.2019**

Service Provider	Subscriber Base (million)			Share of Rural subscription (%)
	Rural	Urban	Total	
BSNL	2.76	7.83	10.59	26.07
Bharti	--	4.29	4.29	--
MTNL	--	3.21	3.21	--
Tata	0.05	1.77	1.82	2.63
Reliance	0.001	0.66	0.67	0.20
Quadrant	0.04	0.18	0.22	19.78
Vodafone	--	0.36	0.36	--
Total	2.85	18.31	21.17	13.49

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

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

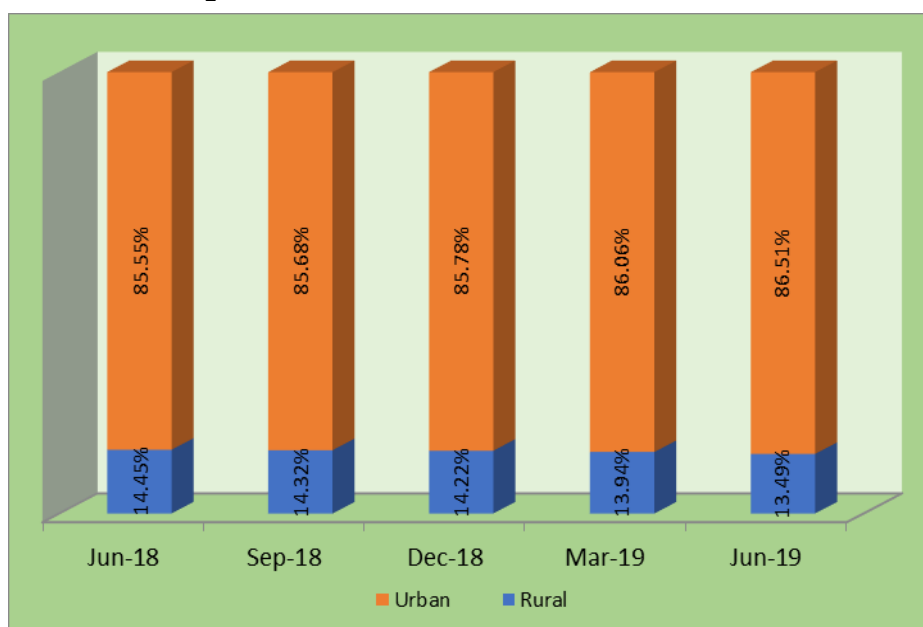


Table 1.21 : Service Provider wise growth in Wireline Subscriber base

Service Provider	Subscriber Base (million)			Rate of change (%)	Market share-Mar-19(%)	Market share-Jun-19(%)
	Mar-19	Jun-19	Net Addition			
BSNL	11.17	10.59	-0.57	-5.13	51.47	50.05
Bharti	4.17	4.29	0.12	2.84	19.24	20.28
MTNL	3.24	3.21	-0.03	-0.90	14.95	15.18
Tata	1.83	1.82	-0.01	-0.36	8.42	8.59
Reliance	0.73	0.67	-0.06	-8.88	3.37	3.14
Quadrant	0.22	0.22	0.00	-1.25	1.02	1.03
Vodafone	0.33	0.36	0.03	9.29	1.53	1.72
Total	21.70	21.17	-0.53	-2.43	100	100

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

Service Area	Mar-19	Jun-19	Net Additions	Rate of Change (%)
Andhra Pradesh	1.44	1.37	-0.068	-4.73
Assam	0.11	0.11	-0.005	-4.14
Bihar	0.23	0.22	-0.011	-4.94
Delhi	3.26	3.28	0.028	0.86
Gujarat	1.24	1.10	-0.135	-10.95
Haryana	0.27	0.26	-0.006	-2.18
Himachal Pradesh	0.11	0.11	-0.005	-4.33
Jammu & Kashmir	0.10	0.10	-0.001	-0.72
Karnataka	2.15	2.12	-0.034	-1.57
Kerala	1.88	1.85	-0.034	-1.81
Madhya Pradesh	0.92	0.91	-0.007	-0.79
Maharashtra	1.52	1.47	-0.058	-3.83
Mumbai	2.92	2.91	-0.009	-0.32
North East	0.10	0.10	-0.003	-3.20
Orissa	0.24	0.23	-0.009	-3.72
Punjab	0.77	0.76	-0.018	-2.36
Rajasthan	0.54	0.52	-0.012	-2.31
T.N. (incl. Chennai)	2.19	2.14	-0.053	-2.42
U.P.(E)	0.45	0.42	-0.035	-7.78

Service Area	Mar-19	Jun-19	Net Additions	Rate of Change (%)
U.P.(W)	0.30	0.29	-0.011	-3.55
Kolkata	0.71	0.69	-0.016	-2.32
West Bengal	0.23	0.20	-0.023	-10.19
All India	21.70	21.17	-0.527	-2.43

1.30 All service areas except Delhi showed decline in their wireline subscriber base during the QE Jun-19.

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

Service Area	Total Subscribers	Rural Subscribers	Urban Subscribers	% of Rural Subscribers
Andhra Pradesh	1.37	0.19	1.18	13.77
Assam	0.11	0.02	0.09	16.26
Bihar	0.22	0.03	0.19	12.71
Delhi	3.28	0.00	3.28	0.00
Gujarat	1.10	0.15	0.95	13.62
Haryana	0.26	0.05	0.21	19.06
Himachal Pradesh	0.11	0.06	0.05	54.81
Jammu & Kashmir	0.10	0.01	0.09	10.26
Karnataka	2.12	0.13	1.99	6.35
Kerala	1.85	1.11	0.74	59.90
Madhya Pradesh	0.91	0.10	0.81	11.21
Maharashtra	1.47	0.24	1.23	16.06
Mumbai	2.91	0.00	2.91	0.00
North East	0.10	0.02	0.08	16.76
Orissa	0.23	0.05	0.18	21.09
Punjab	0.76	0.16	0.60	20.71
Rajasthan	0.52	0.07	0.45	13.43
T.N. (incl. Chennai)	2.14	0.31	1.83	14.27
U.P.(E)	0.42	0.06	0.36	14.49
U.P.(W)	0.29	0.03	0.26	9.75
Kolkata	0.69	0.00	0.69	0.00
West Bengal	0.20	0.08	0.12	41.16
All India	21.17	2.85	18.31	13.49

Table 1.24: Service Area wise Wireline Teledensity

Service Area	As on 31 st March, 2019			As on 30 th June, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	0.34	4.81	1.59	0.29	4.66	1.52
Assam	0.07	1.70	0.34	0.06	1.62	0.33
Bihar	0.02	1.01	0.16	0.02	0.96	0.15
Delhi	-	-	14.03	-	-	14.05
Gujarat	0.48	3.74	1.88	0.40	3.36	1.67
Haryana	0.29	2.02	0.94	0.28	1.97	0.92
Himachal Pradesh	0.98	5.93	1.58	0.94	5.59	1.51
Jammu & Kashmir	0.12	2.51	0.80	0.11	2.49	0.79
Karnataka	0.38	7.87	3.37	0.35	7.76	3.31
Kerala	4.16	8.22	5.18	4.07	8.10	5.08
Madhya Pradesh	0.13	2.70	0.85	0.13	2.67	0.84
Maharashtra (incl. Mumbai)*	0.39	6.68	3.51	0.37	6.56	3.45
North East	0.21	2.21	0.72	0.16	2.25	0.70
Orissa	0.14	2.34	0.54	0.13	2.24	0.52
Punjab	0.95	4.19	2.42	0.90	4.10	2.36
Rajasthan	0.13	2.50	0.71	0.12	2.45	0.69
Tamil Nadu (incl. Chennai)	1.16	4.14	3.03	1.14	4.02	2.96
Uttar Pradesh (incl. UPE & UPW)	0.05	1.18	0.31	0.05	1.10	0.29
West Bengal (incl. Kolkata)*	0.14	2.98	0.96	0.12	2.89	0.92
All India	0.34	4.46	1.65	0.32	4.36	1.61

* 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	0.54	0.15	0.40
2	Arunachal Pradesh	0.02	0.01	0.02
3	Assam	0.11	0.02	0.09
4	Bihar	0.11	0.02	0.09
5	Chhattisgarh	0.18	0.02	0.16
6	Goa	0.10	0.03	0.07
7	Gujarat	1.09	0.15	0.94
8	Haryana	0.31	0.05	0.26
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	2.12	0.13	1.99
13	Kerala	1.85	1.11	0.74
14	Madhya Pradesh	0.74	0.08	0.65
15	Maharashtra Incl. Mumbai	4.28	0.20	4.07
16	Manipur	0.02	0.01	0.02
17	Meghalaya	0.02	0.002	0.01
18	Mizoram	0.01	0.001	0.01
19	Nagaland	0.01	0.000	0.01
20	Odisha	0.23	0.05	0.18
21	Punjab	0.58	0.15	0.42
22	Rajasthan	0.52	0.07	0.45
23	Sikkim	0.01	0.00	0.01
24	Tamil Nadu (incl. Chennai)	2.09	0.30	1.79
25	Telangana	0.83	0.04	0.79
26	Tripura	0.02	0.00	0.02
27	Uttar Pradesh (UPE +UPW)	0.64	0.08	0.56
28	Uttarakhand	0.09	0.01	0.08
29	West Bengal Incl. Kolkata	0.87	0.08	0.80
	Union Territories			
1	Andaman & Nicobar Islands	0.02	0.01	0.01
2	Chandigarh	0.18	0.002	0.17
3	Dadar & Nagar Haweli	0.004	0.001	0.002
4	Daman & Diu	0.01	0.002	0.003
5	Delhi	3.21	0.00	3.21
6	Lakshdweep	0.004	0.002	0.003
7	Puduchery	0.05	0.01	0.04
	Total	21.17	2.85	18.31

Table 1.26: State/UT wise Wireline Teledensity

Sl.No.	State/UT	Wireline Teledensity		
		Total	Rural	Urban
1	Andhra Pradesh	1.52	0.29	4.66
2	Arunachal Pradesh	1.76	0.86	2.94
3	Assam	0.33	0.06	1.62
4	Bihar	0.10	0.02	0.82
5	Chhattisgarh	0.66	0.10	2.28
6	Goa	4.64	4.14	4.91
7	Gujarat	1.68	0.39	3.39
8	Haryana	1.08	0.28	2.40
9	Himachal Pradesh	1.51	0.94	5.59
10	Jammu & Kashmir	0.79	0.11	2.49
11	Jharkhand	0.30	0.04	1.14
12	Karnataka	3.31	0.35	7.76
13	Kerala	5.08	4.07	8.09
14	Madhya Pradesh	0.90	0.14	2.79
15	Maharashtra Incl. Mumbai	3.43	0.32	6.60
16	Manipur	0.76	0.25	2.29
17	Meghalaya	0.58	0.09	2.38
18	Mizoram	1.18	0.18	1.96
19	Nagaland	0.29	0.02	1.59
20	Odisha	0.52	0.13	2.24
21	Punjab	1.93	0.90	3.32
22	Rajasthan	0.69	0.12	2.45
23	Sikkim	0.88	0.05	5.30
24	Tamil Nadu (incl. Chennai)	2.96	1.14	4.04
25	Tripura	0.50	0.06	2.17
26	Uttar Pradesh (UPE + UPW)	0.28	0.04	1.06
27	Uttarakhand	0.83	0.12	2.44
28	West Bengal incl. Kolkata	0.91	0.11	2.87
	Union Territories			
1	Andaman & Nicobar Islands	2.85	2.00	3.90
2	Chandigarh	8.55	0.81	9.42
3	Dadar & Nagar Haweli	0.75	0.95	0.66
4	Daman & Diu	1.48	0.76	4.38
5	Delhi	13.75	0.00	14.21
6	Lakshdweep	5.22	2.82	12.47
7	Puduchery	2.78	1.39	3.34
	Total	1.61	0.32	4.36

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

Public Call Offices (PCO)

1.31 Total number of PCOs in the country declined from 2,55,268 at the end of Mar-19 to 2,28,371 at the end of Jun-19. Detailed table of service provider wise PCOs is available at Annexure -1.3.

Chart 1.12: Trend of Number of PCOs



1.32 Number of PCOs continued shows declining trend over the year. It has recorded a overall quarterly decline rate of 10.54% and the year-on-year (Y-O-Y) decline rate of 30.90% at the QE Jun-19.

Table 1.27 : Rate of change & Market share of PCOs

Service Provider	Mar-19	Jun-19	Rate of change (%)	Market share (%) (Jun-19)
BSNL	173,234	149,332	-13.80	65.39
MTNL	70,727	68,064	-3.77	29.80
Bharti	10,415	10,121	-2.82	4.43
Quadrant	892	854	-4.26	0.37
Total	255,268	228,371	-10.54	100

Village Public Telephones (VPTs)

- 1.33 There are 5,93,731 inhabited villages in India as per census 2001. At the end of Jun-19, only 17.59% of the total inhabited villages in India have been connected by VPTs.
- 1.34 Number of VPTs declined from 1,30,376 at the end of Mar-19 to 1,04,466 at the end of Jun-19 with quarterly decline rate of 19.87%. It shows yearly decline of 44.12% in QE Jun-19 over same quarter in previous year.
- 1.35 As per the information received in TRAI, at the end of Jun-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



Section D: Internet Service

1.36 This section summarizes information submitted by internet service providers for the quarter ending Jun-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)

1.37 As per reports received from 341 operators as compared to 332 operators in last quarter, total number of internet subscribers increased from 636.73 million at the end of Mar-19 to 665.31 million at the end of Jun-19 with quarterly growth rate of 4.49%. Out of total 665.31 million internet subscribers, 594.58 million were broadband subscribers and 70.72 million were narrowband subscribers.

1.38 Wired Internet subscribers slightly declined from 21.68 million at the end of Mar-19 to 21.67 million at the end of Jun-19 with quarterly decline rate of 0.06%. However, Wireless Internet subscribers increased from 615.05 million at the end of Mar-19 to 643.64 million at the end of Jun-19 with quarterly growth rate of 4.65%.

1.39 The number of Broadband subscribers increased from 563.31 million at the end of Mar-19 to 594.58 million at the end of Jun-19 with quarterly growth rate of 5.55%. However, the number of Narrowband subscribers declined from 73.42 million at the end of Mar-19 to 70.72 million at the end of Jun-19 with quarterly growth rate of -3.67%.

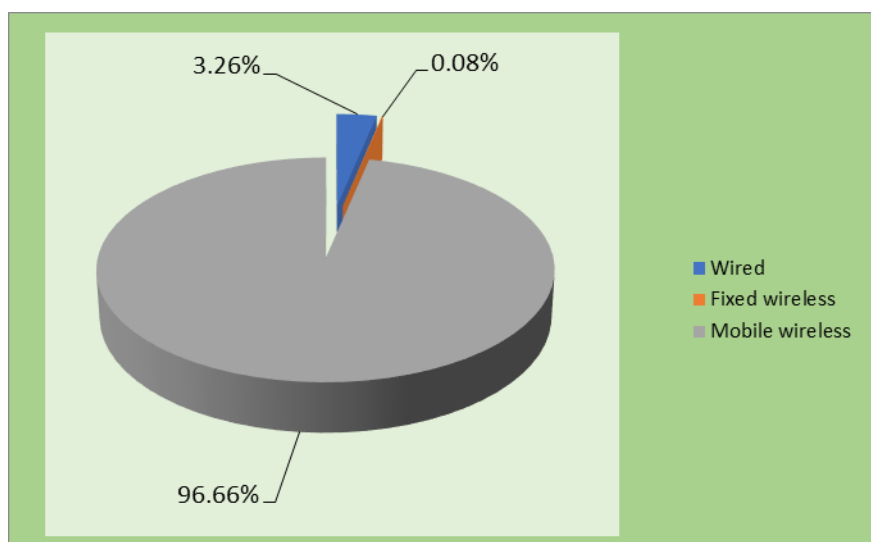
Table 1.28: Trend of Internet subscriber base

Segment	Mode of Access								Total Subscribers (in million)	
	Wired Subscribers (in million)		Wireless Subscribers (in million)							
			Fixed Wireless (Wi-Fi, Wi-Max, Radio & VSAT)		Mobile Wireless (Phone + Dongle)		Total Wireless			
	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19
Broadband	18.42	18.42	1.30	0.54	543.59	575.62	544.89	576.16	563.31	594.58
Narrowband	3.26	3.25	0.01	0.01	70.16	67.47	70.16	67.48	73.42	70.72
Total	21.68	21.67	1.31*	0.55	613.75	643.09	615.05	643.64	636.73	665.31

*major variation seen in the number of fixed wireless subscribers due to incorrect presentation of number of *wi-fi* subscribers by M/s BSNL.

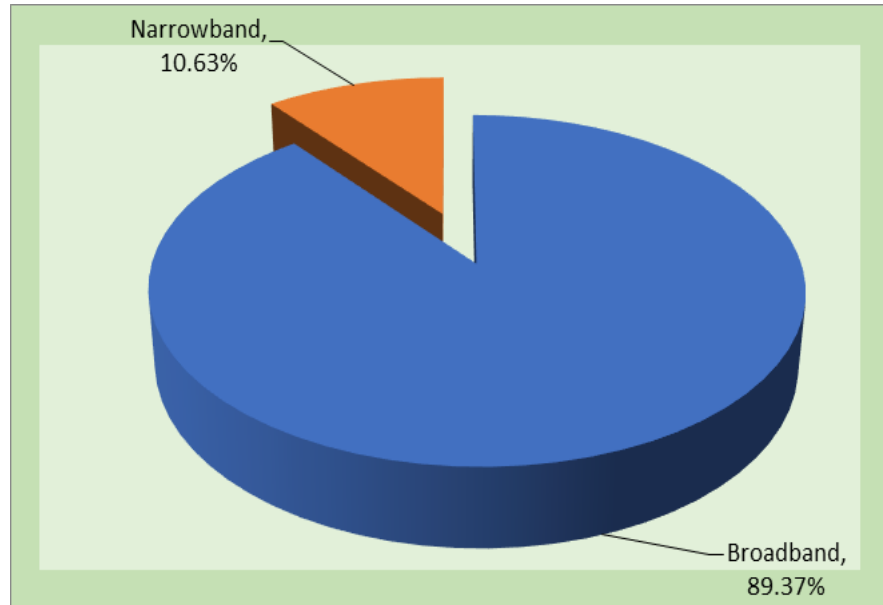
1.40 The following charts present the composition of Internet Subscribers by mode of access and composition of Broadband & Narrowband subscription as on 30th June, 2019.

Chart 1.9: Composition of Internet subscription



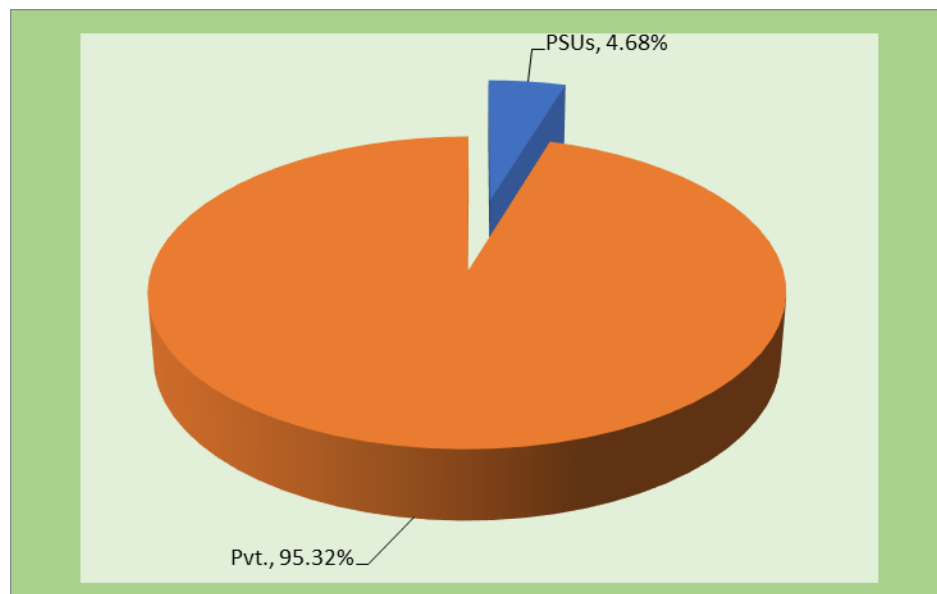
1.41 Out of total internet subscribers, 96.66% subscribers are using Mobile devices for access of internet service.

Chart 1.10 : Composition of Broadband & Narrowband subscription



1.42 Share of private internet service providers in total internet subscriber base, increased from 95.06% at QE Mar-19 to 95.32% at QE Jun-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



1.43 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	2.60	2.40	18.36	28.55	20.95	30.95
Assam	0.67	0.70	5.38	5.57	6.05	6.26
Bihar	3.96	2.02	20.05	15.61	24.01	17.63
Delhi	0.21	2.63	0.50	33.75	0.71	36.38
Gujarat	1.40	1.68	10.24	28.09	11.64	29.77
Haryana	0.63	0.71	5.14	8.88	5.78	9.58
Himachal Pradesh	0.29	0.21	3.02	1.83	3.31	2.04
Jammu & Kashmir	0.40	0.27	2.24	4.03	2.65	4.30
Karnataka	1.67	1.99	10.73	27.86	12.40	29.85
Kerala	1.00	1.15	9.40	13.79	10.40	14.95
Kolkata	0.16	1.48	1.39	13.25	1.55	14.73
Madhya Pradesh	3.15	2.44	13.33	24.34	16.48	26.78
Maharashtra	2.74	3.11	18.09	31.25	20.82	34.36
Mumbai	0.11	2.51	1.18	23.98	1.28	26.50
North East	0.33	0.39	2.54	3.81	2.87	4.20
Orissa	1.55	0.52	8.77	5.98	10.32	6.49
Punjab	0.82	1.08	6.42	15.71	7.25	16.79
Rajasthan	2.43	1.78	14.08	19.86	16.51	21.64
Tamil Nadu	1.66	2.72	10.33	32.24	11.99	34.97
Uttar Pradesh(East)	4.88	2.44	19.63	20.98	24.51	23.41
Uttar Pradesh(West)	2.35	1.89	10.20	19.37	12.55	21.26
West Bengal	2.40	1.19	11.83	13.02	14.23	14.21
Total	35.42	35.31	202.85	391.74	238.26	427.05

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

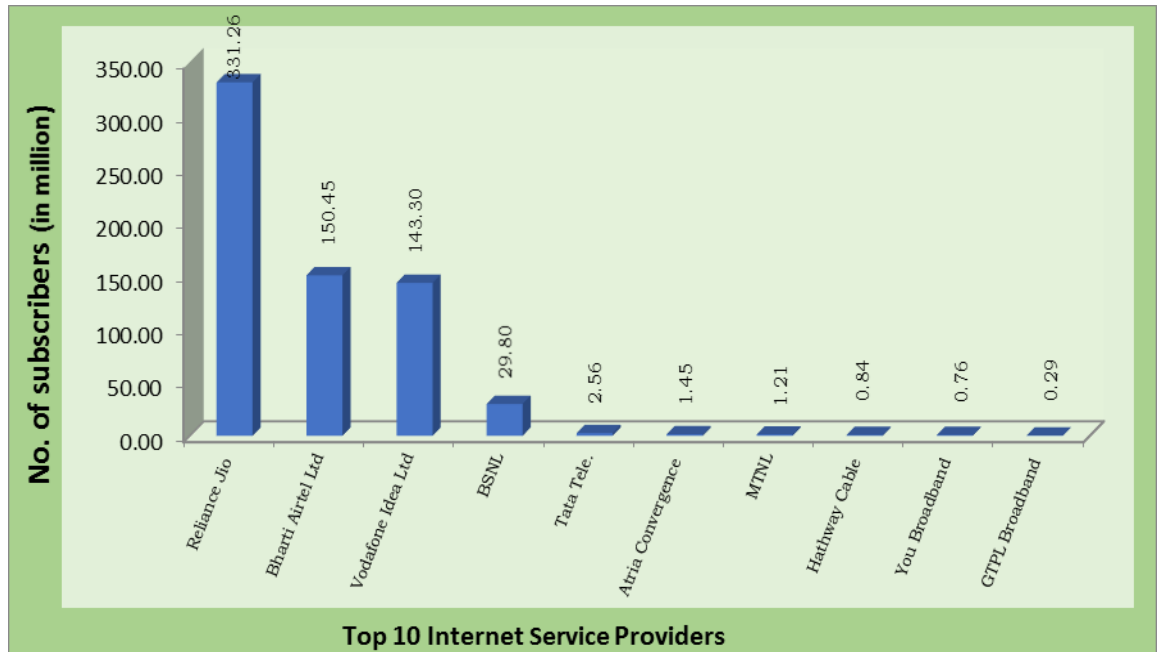
S.No	ISP	No. of Subscribers	Share (%)
1	Reliance Jio Infocomm Ltd	331,255,614	49.79
2	Bharti Airtel Ltd.	150,449,455	22.61
3	Vodafone Idea Limited	143,303,721	21.54
4	Bharat Sanchar Nigam Ltd.	29,801,449	4.48
5	Tata Teleservices Limited	2,555,708	0.38
6	Atria Convergence Technologies Pvt. Ltd.	1,449,044	0.22
7	Mahanagar Telephone Nigam Ltd.	1,208,760	0.18
8	Hathway Cable & Datacom Pvt. Ltd.	835,987	0.13
9	You Broadband India Pvt. Ltd.	758,409	0.11
10	GTPL Broadband Pvt. Ltd.	290,968	0.04
	Total of Top 10 ISPs	661,909,115	99.49
	Others	3,400,417	0.51
	Grand Total	665,309,532	100

1.44 Reliance Jio holds the top position with 49.79% of market share of internet subscribers followed by Bharti Airtel Ltd with 22.61% at the QE Jun-19. M/s Vodafone Idea Ltd held the third position in respect of internet subscriber base with market share of 21.54%.

1.45 Out of total 341 internet service providers, top 10 Service Providers together hold 99.49% of total internet subscriber base at the QE Jun-19. Detailed table of number of internet subscriber base (broadband and narrowband) of all the service providers is available at **Annexure-1.5**.

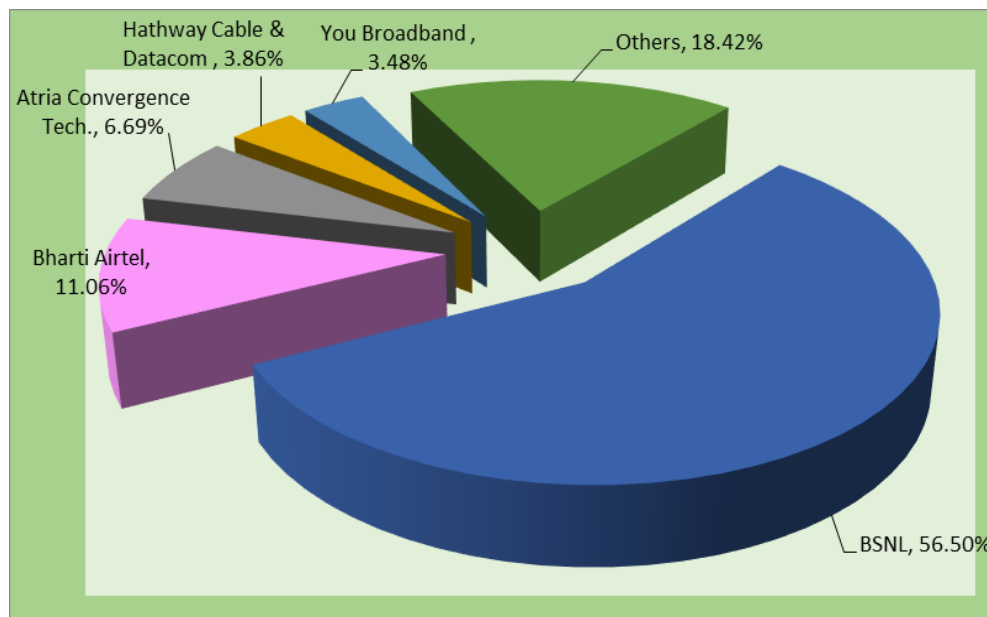
1.46 The following chart depicts the internet subscriber base of top ten Internet Service Providers (ISPs) in the QE Jun-19.

Chart 1.17 : Subscriber base of top ten ISPs



1.47 Out of total 21.67 million wired internet subscribers, BSNL holds 56.50% market share with 12.24 million subscribers, followed by Bharti with 2.40 million subscribers.

Chart 1.18 : Composition of Wired Internet subscribers



1.48 In wireless internet segment, Reliance Jio holds 51.51% market share with 331.26 million subscribers followed by Bharti Airtel Ltd with 23.02% of wireless internet subscribers at the QE Jun-19.

Chart 1.19 : Composition of Wireless Internet subscription

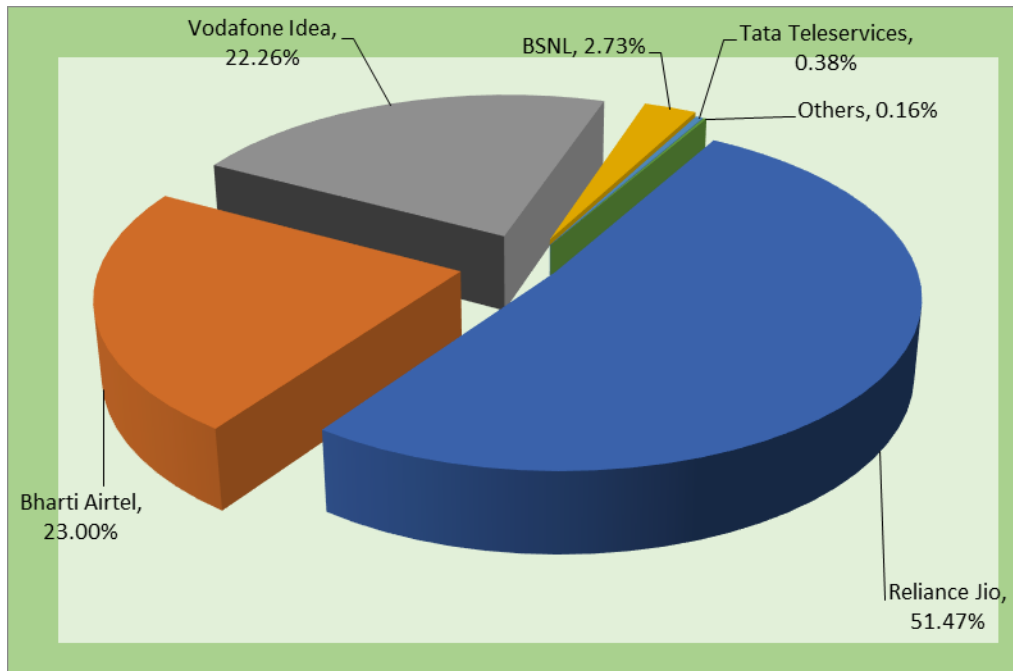


Chart 1.20 : Technology trend for Wireless Internet Access

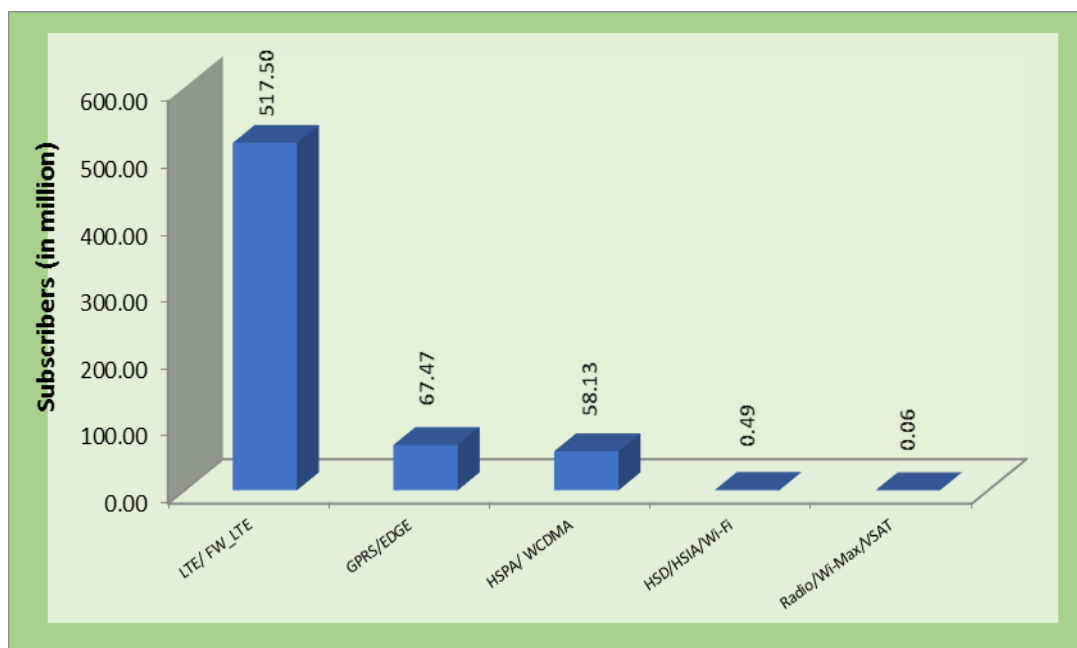
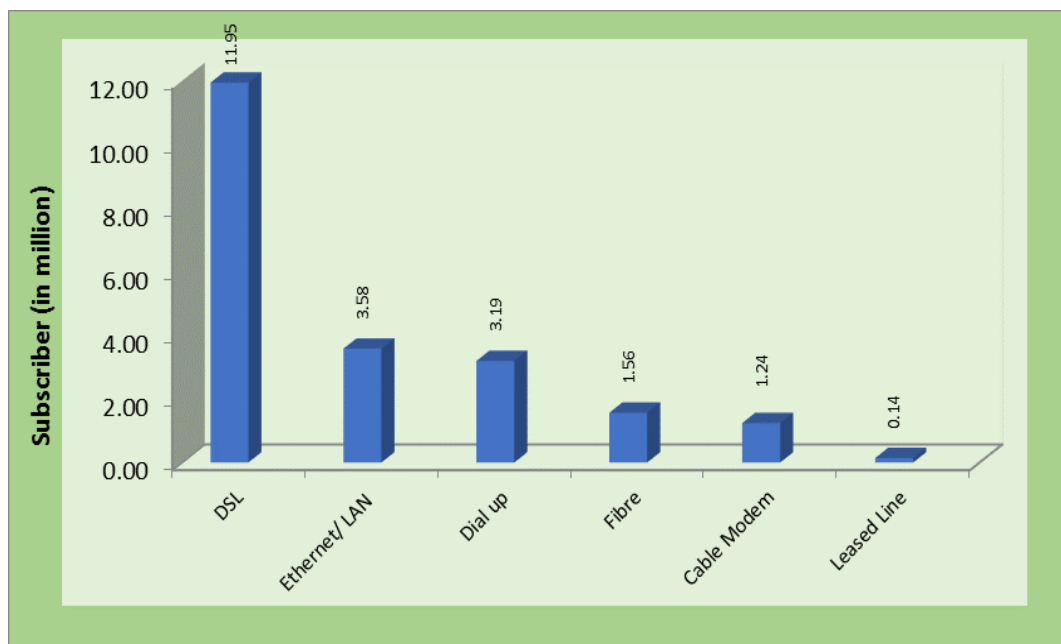


Chart 1.21 : Technology trend for Wired Internet Access



1.49 Top five service areas in terms of internet subscriptions (wired+ wireless) are Maharashtra (55.18 million), Andhra Pradesh (51.90 million), U.P.(East) (47.92 million) Tamil Nadu including Chennai (46.96 million) and Madhya Pradesh (43.26 million).

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

Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	20.95	30.95	51.90	32.17	121.82	57.33
Assam	6.05	6.26	12.32	21.66	110.38	36.62
Bihar	24.01	17.63	41.64	19.55	88.81	29.19
Delhi	0.71	36.38	37.09	93.97	160.81	158.64
Gujarat	11.64	29.77	41.41	30.93	105.12	62.78
Haryana	5.78	9.58	15.36	32.32	88.09	53.42
Himachal Pradesh	3.31	2.04	5.36	51.86	230.24	73.60
Jammu & Kashmir	2.65	4.30	6.95	28.91	117.42	54.20
Karnataka	12.40	29.85	42.25	32.22	116.57	65.92

Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Kerala	10.40	14.95	25.34	38.20	163.12	69.66
Madhya Pradesh	16.48	26.78	43.26	21.13	88.28	39.93
Maharashtra	20.82	34.36	55.18	34.65	96.40	65.36
Mumbai	1.28	26.50	27.78			
North East	2.87	4.20	7.07	26.87	112.38	49.01
Orissa	10.32	6.49	16.82	29.03	81.17	38.61
Punjab	7.25	16.79	24.04	41.69	114.84	75.11
Rajasthan	16.51	21.64	38.15	28.66	116.77	50.11
Tamil Nadu	11.99	34.97	46.96	44.86	76.68	64.92
UP (East)	24.51	23.41	47.92	20.11	79.75	34.01
UP (West)	12.55	21.26	33.81			
Kolkata	1.55	14.73	16.28	22.79	102.73	45.91
West Bengal	14.23	14.21	28.43			
Total	238.26	427.05	665.31	26.57	101.63	50.52

* 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 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.

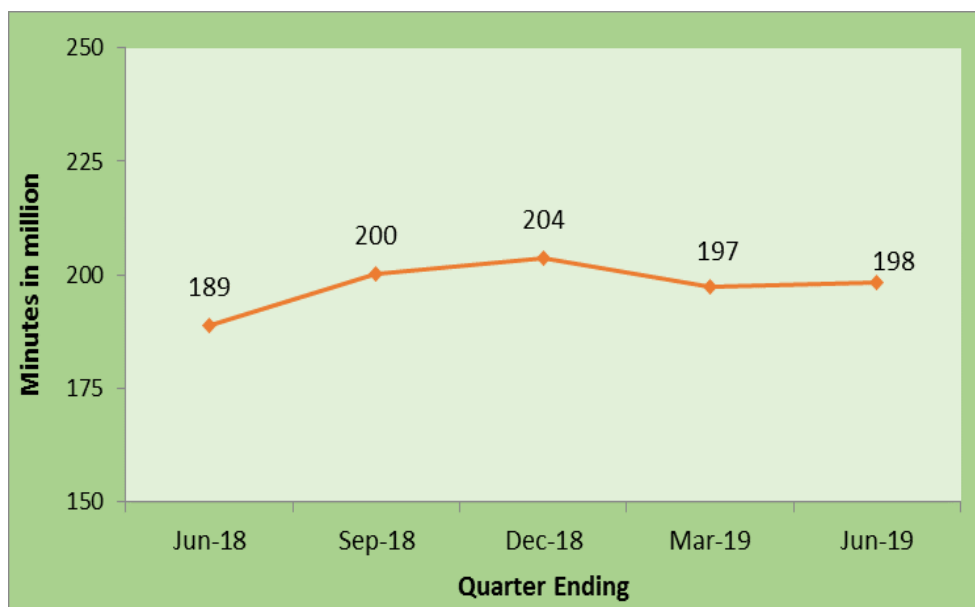
ISP Connectivity

1.50 The International Internet bandwidth owned by various service providers is reported to be 11,597 Gbps during the quarter ending Jun-19 as compared to 12,394 Gbps during the previous quarter.

Internet Telephony

1.51 As per the reports received from 15 service providers, providing Internet Telephony services, the total outgoing minutes of usage for internet telephony is 198.34 million during the Q.E. Jun-19 as compared to 197.32 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)

1.52 The total number of broadband subscribers increased from 563.31 million at the end of Mar-19 to 594.58 million at the end of Jun-19. Out of which number of wired broadband subscribers are 18.42 million and wireless broadband subscribers are 576.17 million.

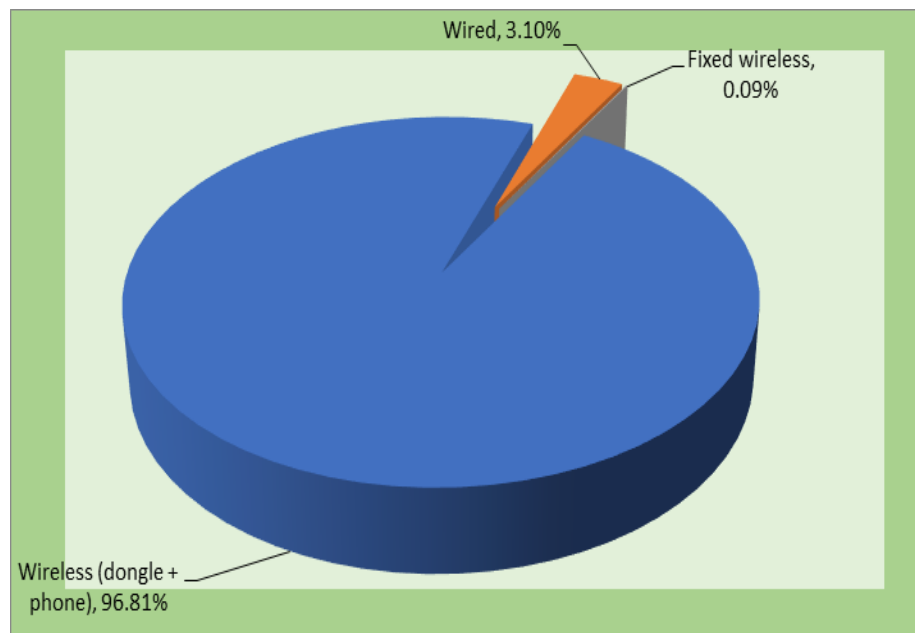
1.53 Top five broadband (wired+wireless) service providers in term of subscribers are Reliance Jio (331.26 million), Bharti Airtel (121.49 million), Vodafone Idea Ltd (110.52 million), BSNL (21.93 million) and Tata Teleservices (1.76 million).

1.54 In wired broadband segment, BSNL holds 49.21% market share with 9.05 million subscribers followed by Bharti with 2.40 million subscribers.

1.55 In wireless broadband segment, Reliance Jio holds 57.49% market share with 331.26 million subscribers followed by Bharti Airtel Ltd (20.67%) with 119.09 million subscribers.

1.56 Top five service areas in respect of broadband subscriptions at Q.E. Jun-19 are Maharashtra (49.33 million), Andhra Pradesh including Telengana (46.90 million), Tamil Nadu including Chennai (42.58 million), U.P.-East (40.60 million) and Karnataka (38.59 million).

Chart 1.23 : Composition of Broadband subscription – Technology wise

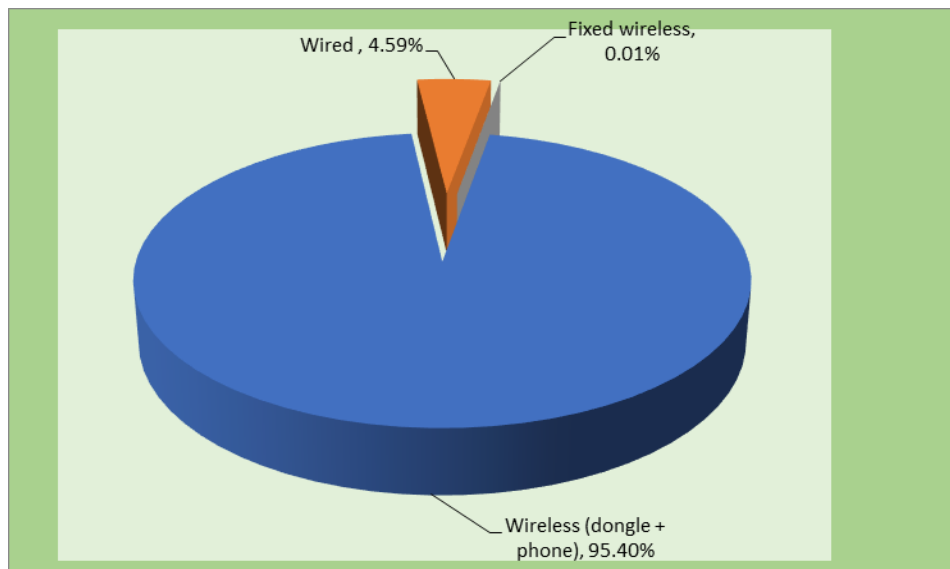


1.57 Mobile Device Users (dongle+phone) constitute 96.81% of total broadband subscribers at the end of Jun-19.

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

- 1.58 Total number of narrowband subscribers declined from 73.42 million at the end of Mar-19 to 70.72 million at the end of Jun-19 with the quarterly decline rate of 3.67%. Out of 70.72 million narrowband subscribers, Wired Narrowband subscribers are 3.25 million and Wireless Narrowband subscribers are 67.48 million.
- 1.59 The top five narrowband (wired+wireless) service providers in term of subscriber base are Vodafone Idea Ltd (32.78 million), Bharti Airtel (28.96 million), BSNL (7.87 million), Tata Teleservices (0.80 million) and MTNL (0.25 million).
- 1.60 In wired narrowband segment, BSNL holds 98.33% market share with 3.195 million subscribers followed by You Broadband India Pvt Ltd with 0.015 million.
- 1.61 In wireless narrowband segment, Vodafone Idea Ltd holds 48.59% market share with 32.78 million subscribers followed by Bharti Airtel with 28.96 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)

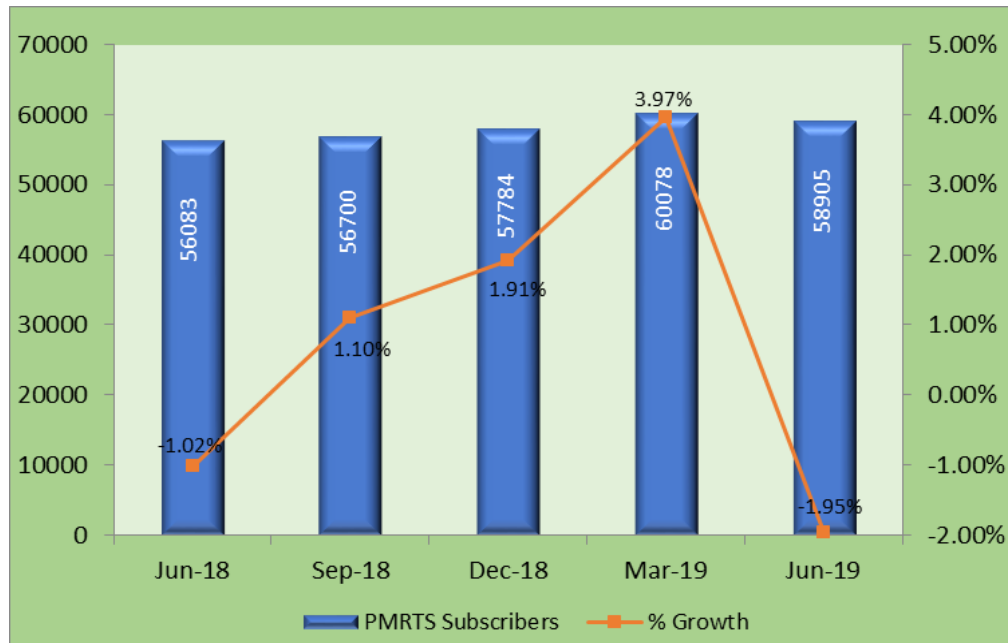
1.62 The subscriber base of PMRTS declined from 60,078 at the end of Mar-19 to 58,905 at the end of Jun-19 with quarterly decline rate of 1.95%.

Table 1.32 : PMRTS Subscriber base - Service Provider wise

Sl. No	Name of the Service Provider	Subscriber Base as on 31.03.2019	Subscriber Base as on 30.06.2019	Growth in Subscribers	% Growth in subscribers in QE Jun-19
1	Arya Omnitalk Radio Trunking Services Pvt. Ltd.	50,178	48,796	-1382	-2.75
4	Procall Ltd.	3,261	3,261	0	0.00
2	Quick Call	2,151	2,146	-5	-0.23
3	Inative Networks Pvt Ltd	1,820	1,820	0	0.00
5	Smartlink Pvt Ltd	1,063	1,071	8	0.75
6	Bhilwara Telenet Services Pvt Ltd	881	894	13	1.48
7	Wiwonet Solutions Pvt Ltd	363	406	43	11.85
8	Airtalk Solutions & Services Pvt Ltd	361	511	150	41.55
	Total	60,078	58,905	-1,173	-1.95

1.63 Detailed table on Service Area wise subscriber base of PMRTS as on 30th June, 2019 is available at **Annexure-1.7**.

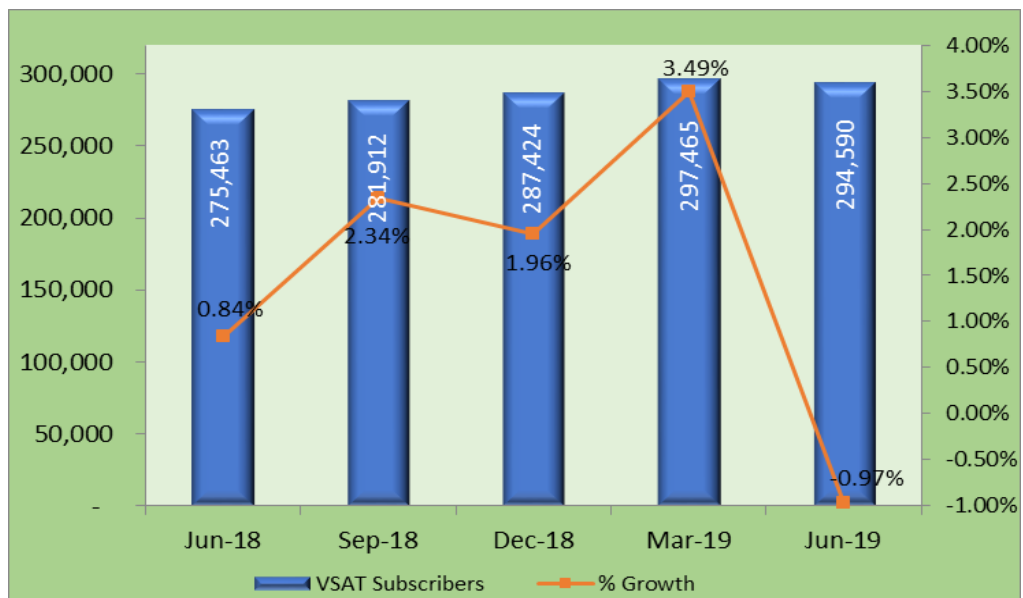
Chart 1.25 : Number of PMRTS subscribers & Rate of Growth (%)



Very Small Aperture Terminal (VSAT)

1.64 The total number of VSAT subscribers declined from 2,97,465 at the end of Mar-19 to 2,94,590 at the end of Jun-19. Net decline during the quarter has been 2,875 at the decline rate of 0.97%.

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



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

Sr. No	Name of Service Providers	Subscriber base at the Quarter ending		Net Addition	%age Growth	Market Share (%) Jun-19
		Mar-19	Jun-19			
1	Hughes Communications Ltd.	106,407	110,176	3,769	3.54	37.40
2	Bharti Airtel Limited	81,309	80,886	-423	-0.52	27.46
3	Tatanet Services	73,627	68,843	-4,784	-6.50	23.37
4	HCL Comnet	17,720	17,353	-367	-2.07	5.89
5	BSNL	15,809	14,777	-1,032	-6.53	5.02
6	Infotel Satcom	2,519	2,505	-14	-0.56	0.85
7	Cloudcast Digital Ltd (earthwhile Planetcast Media Services Ltd)	74	50	-24	-32.43	0.02
	Total	297,465	294,590	-2,875	-0.97	100

1.65 Hughes Communication Limited continues to be the market leader with 37.40% share in VSAT with subscriber base of 1,10,176 followed by Bharti Airtel Ltd (80,886) at the end of Jun-19.

1.66 Only Huges Communications Ltd added VSAT subscribers (3,769 subscribers) during the QE Jun-19. All other service providers have lost their VSAT subscribers during the quarter.

Chapter 2 :

Revenue and Usage

Wireless Services

-
- For all the parameters, Metros indicate data for Delhi, Mumbai & Kolkata. Data for Chennai service area has been included in Circle A, as part of TN.
 - ARPU arrived after adjusting interconnect usage charges and roaming settlement charges.
 - The data contained in this section covers the licensees, who have been providing service during the entire period from 1st April, 2019 to 30th June, 2019 in the various service areas.

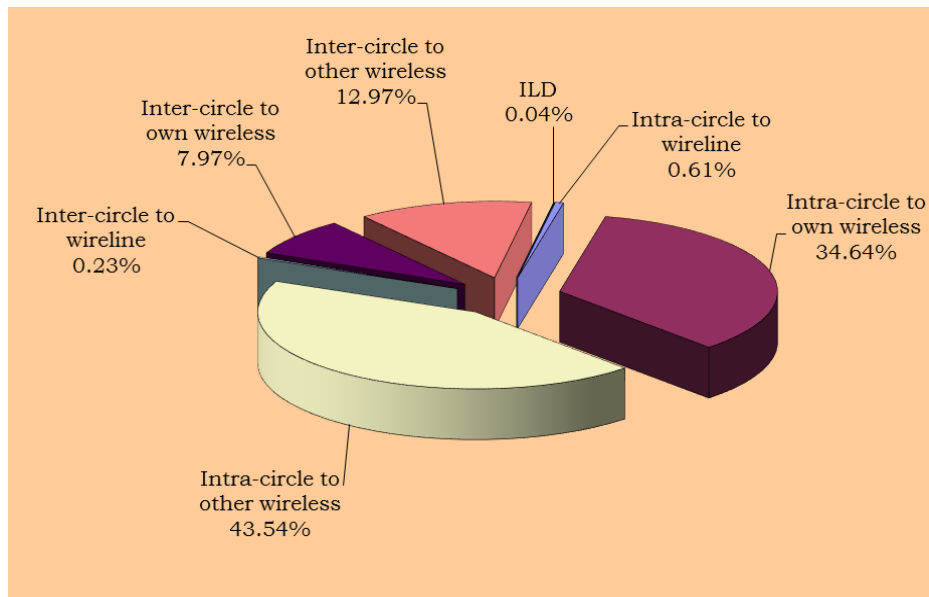
Table 2.1: Key Indicators – Wireless Services (GSM including LTE)

Parameter	Jun-19	Mar-19	Jun-18	QoQ %age change	YoY %age change
Subscriber Base* (million)	1166.59	1179.02	1143.45	-1.05	2.02
Share of Prepaid (%)	95.65%	94.42%	95.86%	1.30	-0.22
Incoming MOU per subscriber per month	348.88	343.25	302.28	1.64	15.42
Outgoing MOU per subscriber per month	352.12	348.59	306.13	1.01	15.02
No. of Outgoing SMS per subscriber per month	17.07	16.27	18.92	4.90	-9.79
Average Revenue Per User (ARPU) per month (₹)	74.30	71.39	69.25	4.06	7.43

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

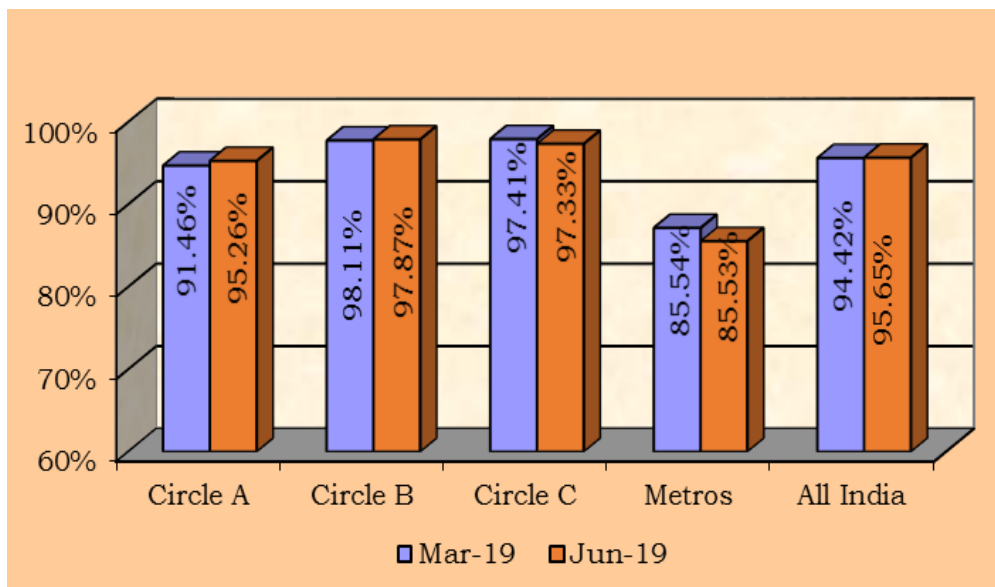
2.1 The following chart presents % break-up of outgoing minutes from Home Service Area (HSA) in the QE Jun-19.

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 increased from 94.42% at the end of Mar-19 to 95.65% at the end of Jun-19.

2.4 The Average Revenue Per User (ARPU) per month (all India, blended) increased from ₹71.39 in Q.E. Mar-19 to ₹74.30 in Q.E. Jun-19 with quarterly growth rate of 4.06%. Year-on-year basis, ARPU per month increased by 7.43% in this quarter.

2.5 The ARPU per month for pre-paid segment is ₹66 and ARPU per month for postpaid segment is ₹253 in QE Jun-19.

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

Table 2.2: Monthly ARPU – Wireless Services in QE Jun-19

Circle Category	ARPU per month (in ₹)		
	Post-paid	Pre-paid	Blended
Circle A	260	75	85
Circle B	269	64	69
Circle C	219	65	69
Metros	244	40	69
All India	253.18	65.73	74.30
All private SPs	255	69	78
BSNL/MTNL	225	34	39

2.7 The following table presents the composition of ARPU per month for QE Jun-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	Usage from Home Service Area		
1.1.	Rental Revenue	33.24	37.97
1.2.	Revenue from calls	8.21	9.37
1.3.	Revenue from SMS	0.79	0.91
1.4.	Revenue from data usage	40.44	46.19
1.5.	Revenue from other VAS	1.66	1.90
1.6.	Other revenue	1.51	1.73
2	Usage outside Home Service Area		
2.1.	Revenue from outroamers	1.70	1.94
3	Total revenue from subscribers (1+2)	87.56	100
4	Net inter-operator settlement charges receivable *	-13.26	
5	Net Revenue (ARPU) per month (3+4)	74.30	

* includes Interconnect Usages Charges and roaming settlement charges

2.8 From the above table, it may be seen that the net inter-operator settlement charges payable (₹13.26) accounts for 15.15% of the total revenue from subscribers.

2.9 On an all India average, the overall minutes of usage (MOU) per subscriber per month increased from 692 in QE Mar-19 to 701 in QE Jun-19 with quarterly growth rate of 1.32%.

2.10 The following table presents the total MOU (usage from, and outside, the home service area) per subscriber per month for various categories of circles.

Table 2.4: MOU per subscriber per month - QE Jun-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	295	275	570	315	298	613	314	297	611
Circle B	366	353	719	351	362	713	351	362	713
Circle C	556	412	967	405	448	853	409	448	856
Metro	295	257	551	421	337	758	403	326	728
All India	331	296	626	353	351	705	352	349	701

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

2.11 The overall ratio of incoming MOU and outgoing MOUs for the QE Jun-19 is 50.2 : 49.8.

2.12 Number of outgoing SMS per subscriber per month increased from 16 in Q.E. Jun-19 to 17 in Q.E. Jun-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 Jun-19

Circle category	Outgoing SMS per subscriber month		
	Postpaid	Prepaid	Blended
Circle A	36	19	20
Circle B	31	14	14
Circle C	31	18	18
Metro	29	14	17
All India	33	16	17

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

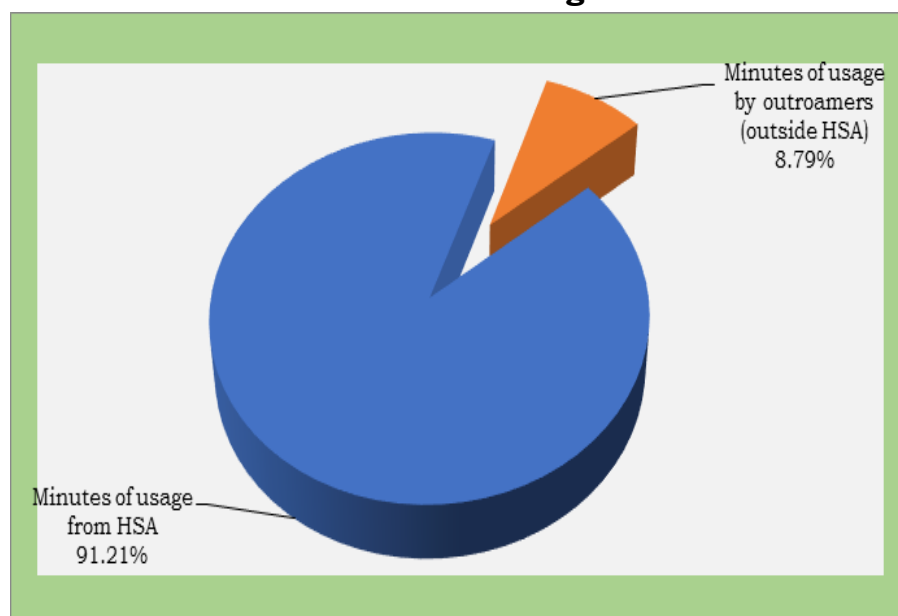
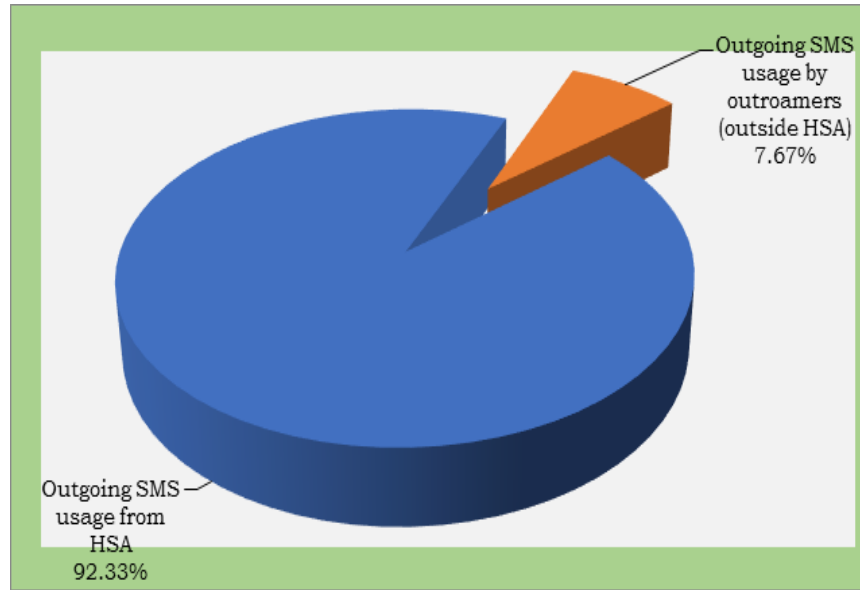


Chart 2.4: Outgoing SMS Usage by Out-roamers as a % of Total No. of Outgoing SMS Usage



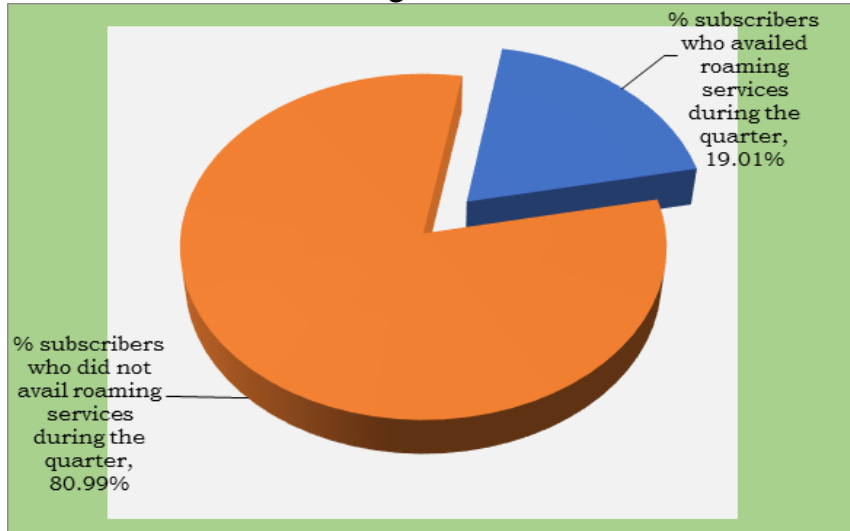
2.13 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks.

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

Circle Category	% Intra-circle to wireline	% Intra-circle to own wireless	% Intra-circle to other wireless	% Inter-circle to wireline	% Inter-circle to own wireless	% Inter-circle to other wireless	% ILD
Circle A	0.74	36.21	47.26	0.27	5.85	9.64	0.03
Circle B	0.48	35.26	44.54	0.18	7.31	12.17	0.05
Circle C	0.24	37.30	40.08	0.19	9.03	13.14	0.01
Metros	1.27	23.48	34.42	0.38	14.96	25.40	0.10
All India	0.61	34.64	43.54	0.23	7.97	12.97	0.04

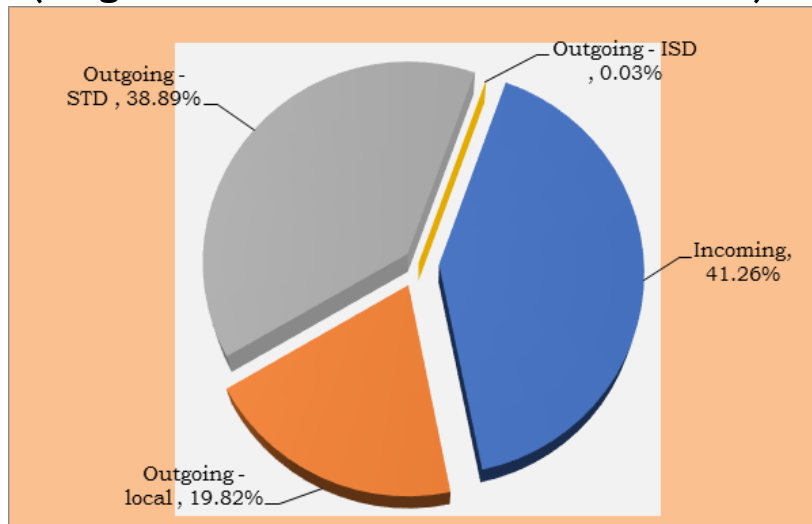
2.14 The chart given below presents the percentage of subscribers who availed roaming services (out-roamers) during the quarter ending Jun-19.

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



2.15 The usage pattern of out-roamers i.e. usage from outside the home service area shows that incoming minutes accounts 41.26% of the total minutes of usage by out-roamers in QE Jun-19 as compare to 39.60% in the previous quarter. The chart given below presents the break-up of minutes of usage of out-roamers during the QE Jun-19.

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



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

$$\text{*Average Outgo per Outgoing Minute for usage from HSA} = \frac{\text{Rental revenue} + \text{revenue from outgoing calls from HSA}}{\text{No. of outgoing minutes from HSA}}$$

Table 2.7: Average outgo per outgoing minute from HSA

Circle Category	(₹ per minute)		
	Postpaid	Prepaid	Blended
Circle A	0.60	0.13	0.15
Circle B	0.50	0.11	0.12
Circle C	0.21	0.10	0.10
Metros	0.59	0.11	0.16
All India	0.52	0.11	0.13

2.17 All India average outgo per outgoing minute remained same at ₹0.13 in the Q.E. Jun-19 as compared to previous quarter.

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

Parameter	Jun-18	Sep-18	Dec-18	Mar-19	Jun-19
1. ARPU (₹ Per month)	69	67	70	71	74
3. Average outgo (tariff) per GB wireless data (in ₹)	12.07	10.91	10.51	7.95	7.70
3. MOU per subscriber per month	608	627	667	692	701
4. Outgoing MOU per subscriber per month					
4.1 Local (Intra-circle)	223	224	248	248	261
4.2 NLD (inter-circle)	83	85	90	100	91
4.3 ILD	0.34	0.15	0.15	0.17	0.15
5. No. of Outgoing SMS per subscriber per month	19	17	16	16	17
6. Average Outgo (voice) per outgoing minute from HSA (in ₹)	0.14	0.12	0.11	0.13	0.13

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

Chapter 3 :

Financial Data of

Telecom Service

Sector

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

Particulars	QE Jun-18 (₹ in Crore)	QE Mar-19 (₹ in Crore)	QE Jun-19 (₹ in Crore)	Q-O-Q % Change	Y-O-Y % Change
Gross Revenue (GR)	58,401	58,414	61,535	5.34	5.37
Adjusted Gross Revenue (AGR)	36,552	35,932	39,124	8.88	7.03
Pass Through Charges (GR-AGR)	21,849	22,482	22,411	-0.32	2.57
License Fee	2,929	2,888	3,133	8.48	6.95
Spectrum Usage Charges	1,028	1,055	1,121	6.33	9.08

3.1 Gross Revenue (GR) increased quarterly by 5.34% and yearly by 5.37% in QE Jun-19. Adjusted Gross Revenue (AGR) quarterly and yearly increased by 8.88% and 7.03% respectively in QE Jun-19.

3.2 Pass through charges quarterly declined by 0.32%, however on annual basis it increased by 2.57% in the QE Jun-19.

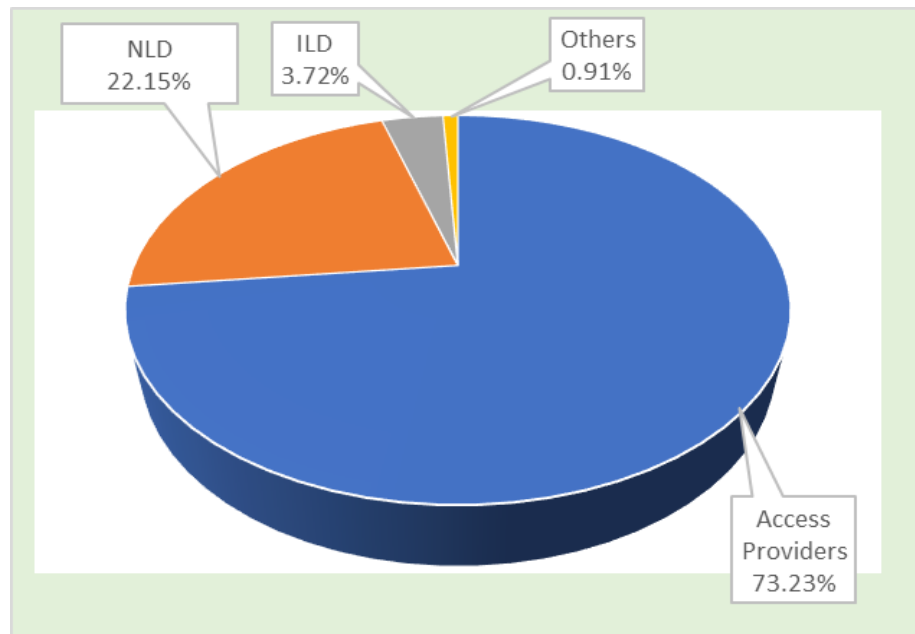
3.3 Pass-through charges as a percentage of Gross Revenue are 36.42% in QE Jun-19 as against 38.49% in the previous quarter.

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

(in ₹ Crore)

Service	GR	AGR	LF	Spectrum Usage Charges
Access Providers	43,793.60	28,650.28	2,296.46	1,116.64
NLD	10,814.75	8,665.12	693.21	-
ILD	3,010.18	1,453.55	116.08	-
Others	3,916.28	354.98	26.85	4.58
Total	61,534.81	39,123.92	3,132.59	1,121.22

Chart 3.1: Composition of Adjusted Gross Revenue



3.4 Access services contributed 73.23% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue (GR), Adjusted Gross Revenue (AGR), License Fee and Spectrum Usage Charges (SUC)^{§§§} increased by 4.57%, 9.79%, 9.28% and 6.05% respectively in QE Jun-19. However, Pass Through Charges quarterly declined by 4.05% during the same period.

3.5 Monthly Average Revenue per User (ARPU) for Access Services based on AGR increased from ₹72.49 in QE Mar-19 to ₹80.66 in QE Jun-19. Trend of ARPU per month for Access Services is depicted in the following chart 3.2.

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

(Source – DoT License Agreement)

Chart 3.2: Trend in ARPU per month for Access Services



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

(in ₹ Crore)

Service Provider	QE Jun-19	QE Mar-19	% Change
Vodafone Idea	6721.06	7133.40	-5.78
Bharti Airtel	7468.63	5920.22	26.15
BSNL	2598.61	2031.07	27.94
Tata Tele.	566.20	531.00	6.63
Reliance Com.	83.41	170.90	-51.19
MTNL	407.19	466.74	-12.76
Quadrant	4.74	3.47	36.54
Reliance Jio	10800.44	9838.91	9.77
Grand Total (Access)	28650.28	26095.71	9.79

3.6 Public Sector Undertakings' share in the Access AGR of telecom services is 10.49% in the QE Jun-19.

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

Category	AGR of Access Services for QE Jun-19 (in ₹ crore)	%age share of AGR
Metro	3264.14	11.39
A	11314.78	39.49
B	10382.60	36.24
C	3688.76	12.88
Total	28650.28	100

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	Benchmark	Performance in respect of UASL/CMTS Licensees for the Parameters and Benchmarks			
			For Q. E. March, 2019		For Q. E. June, 2019	
			Out Of 129 (Nos.)	Out Of 129 (%)	Out Of 129 (Nos.)	Out Of 129 (%)
I.	Network Related Parameters					
1	Network Availability					
(i)	BS Accumulated down-time (not available for service) (%age)	$\leq 2\%$	0	0%	0	0%
(ii)	Worst affected BSs due to down-time (%age)	$\leq 2\%$	0	0%	0	0%
2	Connection Establishment (Accessibility)					
(i)	Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network)	$\geq 95\%$	0	0%	0	0%
(ii)	SDCCH/ Paging Channel Congestion/RRC Congestion(%age)	$\leq 1\%$	0	0%	0	0%
(iii)	TCH, RAB and E-RAB Congestion (%age)	$\leq 2\%$	4	3.10%	3	2.33%
3	Connection Maintenance (Retain ability)					
(i)	Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)]	$\leq 2\%$	1	0.78%	1	0.78%
(ii)	Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)]	$\leq 3\%$	1	0.78%	1	0.78%
4	Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality					
5	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)	$\leq 0.5\%$	1	0.78%	0	0%
6*	Down Link (DL) Packet Drop Rate or DL-PDR	$\leq 2\%$	0	0%	0	0%
7*	Up Link (UL) Packet Drop Rate or UL-PDR	$\leq 2\%$	0	0%	0	0%

Sl. No.	Parameters	Benchmark	Performance in respect of UASL/CMTS Licensees for the Parameters and Benchmarks			
			For Q. E. March, 2019		For Q. E. June, 2019	
			Out Of 129 (Nos.)	Out Of 129 (%)	Out Of 129 (Nos.)	Out Of 129 (%)
II.	Customer Service Quality Parameters					
6	Metering and Billing					
(i)	Metering and billing credibility - post paid	≤ 0.1%	0	0%	0	0%
(ii)	Metering and billing credibility - pre paid	≤ 0.1%	1	0.78%	0	0%
(iii)	Resolution of billing/charging/ validity complaints	98% within 4 weeks	0	0%	0	0%
	Resolution of billing/charging/ validity complaints	100% within 6 weeks	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	1	0.78%	2	1.55%
7	Response time to the customer for assistance					
(i)	Accessibility of call centre/ customer care	≥ 95%	6	4.65%	5	3.88%
(ii)	%age of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	38	29.46%	27	20.93%
8	Termination / closure of service					
(i)	%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	5	3.88%	6	4.65%
(ii)	Time taken for refund of deposits after closures	100% within 60 days	11	8.53%	9	6.98%

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

- a. TCH , RAB and E-RAB Congestion (%age)
- b. Metering and billing credibility - pre paid
- c. Accessibility of call centre/ customer care

- d. %age of calls answered by the operators (voice to voice) within 90 sec
- e. Time taken for refund of deposits after closures

4.2 The performance has deteriorated 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
- b. %age requests for Termination/Closure of service complied within 7 days

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

Parameter	Bench mark	Service Provider	Service Area	Performance
TCH, RAB and E-RAB Congestion (%age)	≤ 2%	VIL-Brand Idea	Madhya Pradesh	2.22
			Uttar Pradesh (West)	2.72
		VIL-Brand Vodafone	Madhya Pradesh	2.22
Network QoS DCR Spatial Distribution Measure [Network_ QSD(90,90)]	≤ 2%	BSNL	West Bengal	8.33
Network QoS DCR Temporal Distribution Measure [Network_ QTD(97,90)]	≤ 3%	BSNL	West Bengal	10.00
Period of applying credit/waiver/adjustment to customer's account from the date of resolution of complaints	within 1 week of resolution of complaint	VIL-Brand Idea	Odisha	98.86
		VIL-Brand Vodafone	Mumbai	99.80
Accessibility of call centre/customer care	≥ 95%	Airtel	Assam	87.00
			Maharashtra	86.00
		TATA	Andhra Pradesh	94.76
			Karnataka	94.70
			Kerala	94.40
Airtel		Assam	91.00	
		Bihar	93.00	
		Kolkata	82.00	
		Maharashtra	94.00	
		Mumbai	93.00	
		North East	89.00	
		Odisha	92.00	

Parameter	Bench mark	Service Provider	Service Area	Performance	
Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%		West Bengal	82.00	
		TATA	Gujarat	91.52	
			Haryana	94.98	
			Kerala	93.91	
			Punjab	94.78	
			Rajasthan	94.82	
			Maharashtra	85.93	
	Tamil Nadu		94.70		
	Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	VIL-Brand Idea	Kerala	87.21
			VIL-Brand Vodafone	Delhi	92.58
				Gujarat	90.35
				Haryana	93.90
				Kolkata	87.93
				Kerala	80.41
Karnataka				89.44	
Mumbai				88.77	
Odisha				94.79	
Tamil Nadu				94.03	
Uttar Pradesh (East)				94.10	
West Bengal				85.42	
%age requests for Termination / Closure of service complied within 7 days				100% within 7 days	VIL-Brand Idea
	VIL-Brand Vodafone	Gujarat	99.99		
		Maharashtra	99.79		
		Madhya Pradesh	97.96		
		Odisha	98.76		
		Uttar Pradesh (East)	99.97		
Time taken for refund of deposits after closures	100% within 60 days	VIL-Brand Idea	Bihar	99.79	
			Jammu And Kashmir	97.41	
			Kerala	99.91	
			Karnataka	93.74	
			Madhya Pradesh	81.80	
			Punjab	99.30	
			Rajasthan	74.59	
		Uttar Pradesh (West)	75.85		
VIL-Brand Vodafone	Jammu And Kashmir	99.82			

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	Benchmark	No of license areas where operators not meeting the benchmarks			
			QE March, 2019		QE June, 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)	≤ 7	2	2.44%	2	2.44%
(ii)	% Fault repaired by next working day (for urban areas)	≥ 85%	2	2.44%	2	2.44%
	% Fault repaired within 5 days (for urban areas)	≥100%	1	1.22%	2	2.44%
(iii)	% Fault repaired by next working day (for rural and hilly areas)	≥ 75%	0	0.00%	0	0.00%
	% Fault repaired within 7 days (for rural and hilly areas)	≥100%	0	0.00%	0	0.00%
(iv)	Mean time to Repair(MTTR)	≤10Hs	2	2.44%	4	4.88%
(v)	Point of Interconnection (POI) Congestion (No. of PoIs not meeting benchmark)	≤ 0.5%	0	0.00%	0	0.00%
(vi)	Metering and Billing credibility - post-paid	≤ 0.1%	0	0.00%	0	0.00%
	Metering and Billing credibility - pre-paid	≤ 0.1%	0	0.00%	0	0.00%
(vii)	Resolution of billing/charging /Credit & validity complaints	98% within 4 weeks	0	0.00%	0	0.00%
	Resolution of billing/charging / Credit & validity complaints	100% within 6 weeks	0	0.00%	0	0.00%
(viii)	Period of applying credit /waiver /adjustment to customer's	1 week of resolution of complaint	0	0.00%	0	0.00%
(ix)	Accessibility of call centre/ customer care	≥ 95%	1	1.22%	1	1.22%
	%age of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	10	12.20%	16	19.51%
(x)	%age of request for Termination / closure of service complied within 7 days	100% within 7 days	3	3.66%	9	10.98%
(xi)	Time taken for refund of deposits after closures	100% within 60 days	0	0.00%	0	0.00%

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

- a. %Fault Fault repaired within 5 days (for urban areas)
- b. Mean time to Repair (MTTR)
- c. %age of calls answered by the operators (voice to voice) within 90 seconds
- d. %age of request for Termination/Closure of service compiled within 7 days.

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

Parameters	Bench- marks	Service Provider	Service areas	Parameters not met
“Fault Incidences” (No. of faults/ 100 Subs./month)	≤ 7	TATA	MP	13.23
			UP(E)	8.50
“Fault Repair” %age of fault repaired by next working day (for urban areas)	$\geq 85\%$	TATA	HR	50.00%
			OR	33.30%
“Fault Repair” % Fault repaired within 5 days (for urban areas)	$\geq 100\%$	MTNL	DEL	99.62%
			MUM	99.80%
Mean time to Repair (MTTR)	≤ 10 Hrs	TATA	HR	19.66
			KTK	10.14
			OR	31.79
		VIL	OR	15.10
“Metering and Billing” Resolution of billing/charging / credit & validity complaints	98% within 4 weeks	TATA	MH	90.91%
“Response time to the customer for assistance for Assistance” - Accessibility of call centre/ customer care	$\geq 95\%$	BSNL	KR	94.02%

Parameters	Bench- marks	Service Provider	Service areas	Parameters not met
Response time to the customer for assistance - Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	BSNL	KR	92.10%
“Termination / closure of service” %age of request for Termination / closure of service complied within 7 days	100% within 7 days	MTNL	MUM	99.99%
		TATA	AP	99.90
			BHR	99.67
			KTK	99.76
			MP	99.78
			MUM	99.88
			MH	99.94
			WB	99.53

4.5 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

4.6 There are 307 Internet Service Providers (ISPs) providing broadband (wireline) service at the end of June, 2019. Out of these 307 ISPs, 53 Service Providers are having broadband subscriber base >10,000 and market share of these 53 SPs is 98.13% of total broadband subscriber base. This report covers performance of 49 broadband Service Providers vis-à-vis the QoS benchmarks prescribed by TRAI, for the QE June, 2019.

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

S. No.	Parameter	Benchmark	Quarter Ending		Quarter Ending	
			March, 2019		June, 2019	
			Out of 67 (No.)	Out of 67 (%)	Out of 75 (No.)	Out of 75 (%)
1	Service Provisioning	100% in =<15 working days				
1.2	%age of connections provided within 15 days of registration of demand	100%	1	1.49%	1	1.33%
2	Faults Repair					
2.2	% of faults repaired by next working day (>90%)	>90%	2	2.99%	5	6.67%
2.3	% of faults repaired within 3 working day	=>99%	4	5.97%	6	8.00%
3	Billing Performance					
3.3	%age of bills disputed	<2%	0	0.00%	0	0.00%
3.4	%age of billing complaints resolved within 4 weeks	100% within 4 weeks	0	0.00%	0	0.00%
3.5	%age of cases to whom refund of deposits is made within 60 days of closures	100% within 60 days	0	0.00%	0	0.00%
4	Response Time to the Customer for assistance					
4.2	%age of calls answered by operator (Voice to voice) within 60 sec	>60%	1	1.49%	3	4.00%

S. No.	Parameter	Benchmark	Quarter Ending		Quarter Ending	
			March, 2019		June, 2019	
			Out of 67 (No.)	Out of 67 (%)	Out of 75 (No.)	Out of 75 (%)
4.3	%age of calls answered by operator (Voice to voice) within 90 sec	>80%	1	1.49%	8	10.67%
5	Bandwidth utilisation/ throughput					
5.2	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	0	0	0.00%	1	1.33%
5.4	No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	0	0	0.00%	0	0.00%
5.7	% International bandwidth utilization during peak hours (TCBH) (Enclose MRTG) <90%	<90%	0	0.00%	0	0.00%
5.8	Broadband Connection Speed available (download) from ISP node to user	>80%	0	0.00%	0	0.00%
6	Service availability /uptime (for all users) in %age					
6.3	Service availability /uptime (for all users) in %age	>98%	0	0.00%	1	1.33%
7	Packet loss (for wired broadband access) in %age					
		<1%	0	0.00%	0	0.00%
8	Network latency (for wired broadband access)					
8.1	User reference point at POP/ISP Gateway node to IGSP/NIXI	<120 ms	0	0.00%	0	0.00%
8.2	User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	<350 ms	0	0.00%	0	0.00%
8.3	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)	<800 ms	0	0.00%	0	0.00%

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

Parameters	Bench- mark	Name of the Service Provider not meeting the Benchmark
Service Provisioning		
%age of connections provided within 15 days of registration of demand	100%	You Broadband - All India (98.29%)
Faults Repair		
% of faults repaired by next working day (>90%)	>90%	Atria Convergence - All India (86.77%) Ortel Communications - All India (31.66%) TATA(TTSL) - All India (89.00%) TATA(TTML) - Mah. & Goa (84.00%) You Broadband - All India (81.30%)
% of faults repaired within 3 working day	=>99%	Atria Convergence - All India (96.70%) Ortel Communications - All India (33.00%) Tata Sky Broadband - All India (92.21%) TATA(TTSL) - All India (96.00%), TATA(TTML) - Mah. & Goa (95.00%) You Broadband - All India (89.44%)
Response Time to the Customer for assistance		
%age of calls answered by operator (Voice to voice) within 60 sec	>60%	Atria Convergence - All India (39.00%) Tata Sky Broadband - All India (43.00%) Wish Net - Kolkata (58.14%)
%age of calls answered by operator (Voice to voice) within 90 sec	>80%	Atria Convergence - All India (44.00%) Bharti Airtel - Haryana (78.00%), MP (79.00%), MH (78.00%), Punjab (76.00%), UP-East (78.00%), UP-West (78.00%) Tata Sky Broadband - All India (48.00%)
Bandwidth utilisation/throughput		
No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	0	Tata Sky Broadband - All India (2)
Service availability /uptime (for all users) in %age	>98%	Ortel Communications - All India (37.28%)

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

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

Table 5.1: Key Parameters - Broadcasting & Cable TV Services

S.No	Parameter	QE Mar-19	QE Jun-19
1	Number of Private satellite TV channels permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/ downlinking / uplinking	902	908
2	Number of Pay TV Channels as reported by broadcasters	328	331
3	Number of FM Radio Stations (excluding All India Radio)	356	366
4	Number of pay DTH Operators	5	4
5	Number of Operational Community Radio Stations	251	261

A. Satellite TV Channels

5.1 A total of 908 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 28th May, 2019. The quarter-wise figures in the total number of TV channels depicted in below chart.

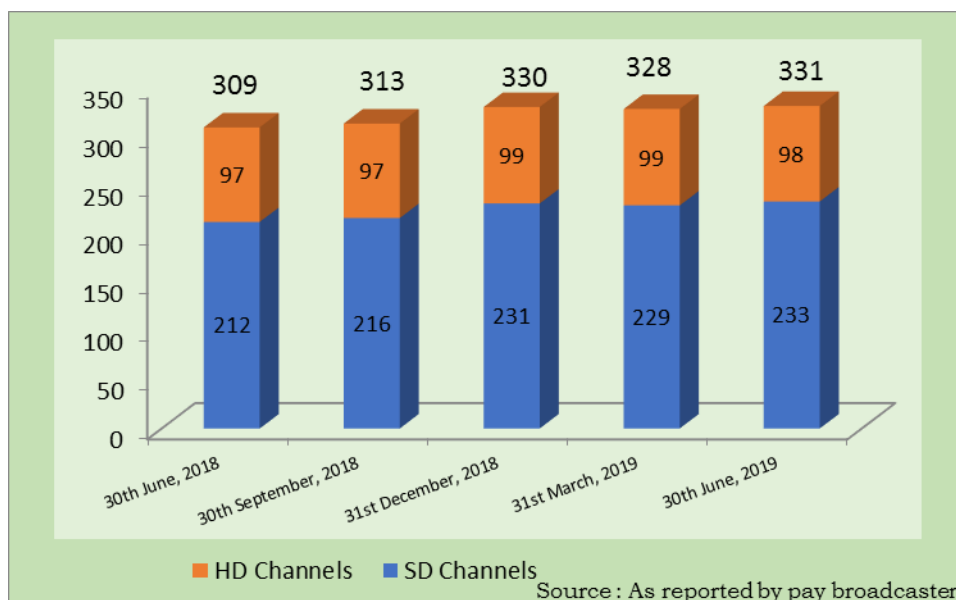
Chart 5.1: Quarterly growth in number of Satellite TV channels (FTA & Pay) registered with Ministry of I&B



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 3rd July 2018 with revised timelines for implementation. All the timelines prescribed in the above-mentioned framework commenced from 3rd July 2018. The new regulatory framework has come into effect on 29th December, 2018.
- 5.3 As per the Telecommunication (Broadcasting and Cable) Services (Eighth) (Addressable Systems) Tariff Order, 2017 dated 3rd March 2017, every broadcaster has to offer all its channels on a-la-carte basis to all distributors of television channels and declare maximum retail price, per month, payable by a subscriber for each of its pay channel offered on a-la-carte basis. Further, it is also permissible for a broadcaster to offer its pay channels in the form of bouquet and declare the maximum retail price, per month, of such bouquet payable by a subscriber.
- 5.4 As per the reporting done by broadcasters in pursuance of the Tariff Order dated 3rd March 2017, there are 331 pay channels, as on 30th June, 2019, which include 233 SD pay TV channels and 98 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 30th June, 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 30th June, 2019, there were 4 pay DTH service providers in India as compared to 5 pay DTH service providers in previous quarter.

5.7 Ministry of Information and Broadcasting (MIB) has suspended the interim renewal of DTH license granted in the name of M/s Independent TV Limited for the present and will be reconsidered only after resumption of transmission of channels by the said service provider. The decision was taken by the Ministry as it had received numerous complaints from the consumers against M/s Independent TV Limited regarding total black out of DTH service.

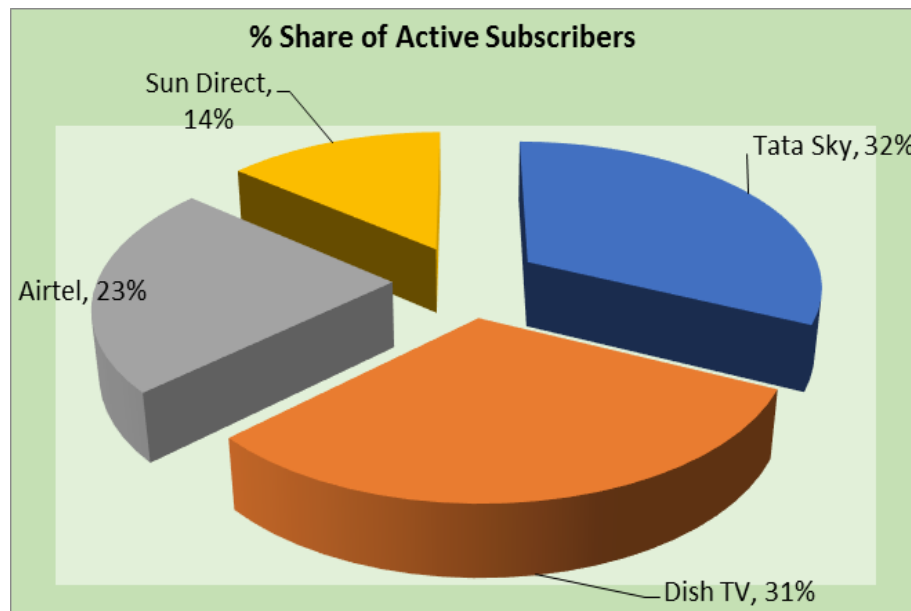
5.8 As per the new regulatory framework for Broadcasting and Cable TV Services which came into effect from 29th December 2018, the monthly subscription of a channel or bouquet shall be arrived at, by averaging the number of subscribers subscribing that channel or bouquet, as the case may be, recorded four times in a month. The number of subscribers shall be recorded at any point of time between 19:00 Hrs to 23:00 Hrs of the day.

“Average active subscriber base” means the number arrived by averaging the active subscriber base as on 7th day, 14th day, 21st day, 28th day, of the month.

5.9 DTH has attained average active subscriber base of around 54.36 million. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan).

5.10 Market share of pay DTH operators in terms of the percentage of average active subscriber base during the quarter ending 30th June 2019 is depicted in the following charts 5.3.

Chart 5.3 : Percentage Market share of DTH Operators in term of average active subscriber base during the QE June, 2019



Source : As reported by DTH service providers

E. FM Radio Services

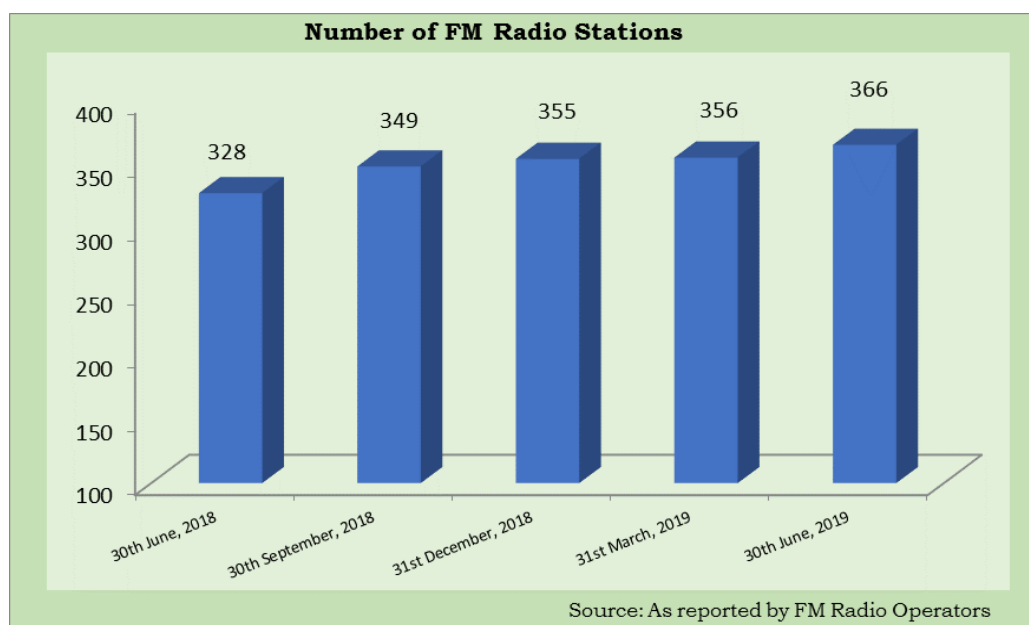
5.11 Apart from the radio stations operated by All India Radio- the public broadcaster, as on 30th June 2019, there are 366 operational private FM Radio stations in 104 cities with operational 33 Private FM Radio broadcaster as compared to 356 private FM Radio Stations in 98 cities with operational 33 FM Radio broadcasters in the previous quarter. A list of 104 existing cities with operational private FM radio channels in India as on 30th June, 2019 is placed at **Annexure 5.3**.

5.12 During the quarter ending 30th June, 2019, ten 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	Entertainment Network (India) Limited	07	Asansol Mysuru (Mysore)	Amravati, Bhavanagar, Durg, Bhillainagar, Rajgarh, Ujjain
2	The Malayala Manorama Co Ltd	01	Alappuzha	-----
3	Purvy Broadcasts Pvt Ltd	02	Aizwal	Haflong
Total		10		

Chart 5.4 : Quarterly growth in private FM Radio stations

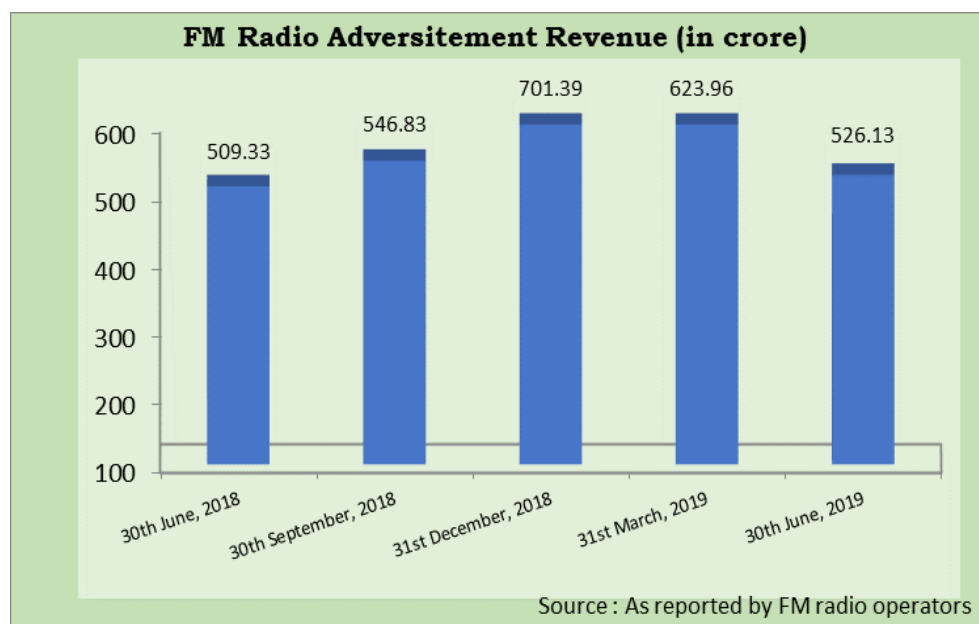


5.13 The reported advertisement revenue during the quarter ending 30th June, 2019 in respect of 365 private FM Radio stations is Rs 526.13 crore as against Rs 623.96 crore in respect of 355 private FM Radio stations for the previous quarter i.e March 2019. One

FM Radio Broadcaster, M/s Gwalior Firm Private Limited, operating in the city of Guwahati, has not submitted the advertisement revenue.

5.14 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.

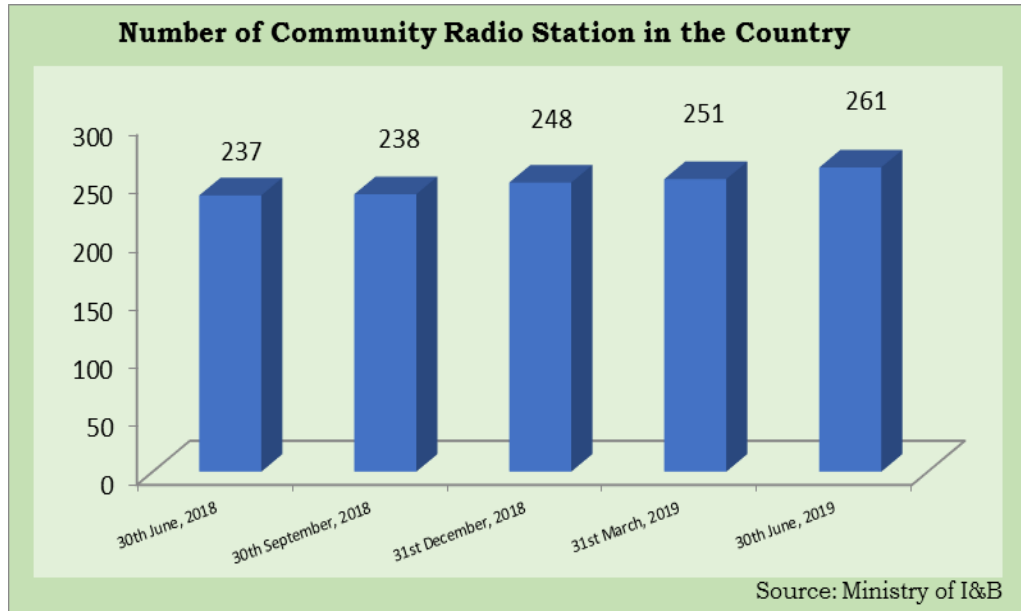
Chart 5.5 : Quarterly growth in FM Radio Advertisement Revenue



F. Community Radio

5.15 As on 30th June, 2019, there are 261 Community Radio stations in operation as compared to 251 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 following chart 5.6.

Chart 5.6 : Quarterly Growth in number of Operational Community Radio Stations



Annexures

Annexure 1.1: Wireless Subscriber Base

Service Area	Vodafone Idea		Bharti		Reliance Com.		Tata		BSNL	
	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19
Andhra Pradesh	22,283,084	21,546,770	28,220,681	27,865,264	1,923	2,055	1,484,357	1,057,674	10,171,597	10,086,993
Assam	5,993,877	5,724,541	8,188,605	8,256,291	-	-	-	-	2,560,859	2,627,522
Bihar	20,887,026	19,836,397	36,979,492	36,581,493	192	221	246,948	150,191	4,566,337	4,759,554
Delhi	18,983,299	19,042,181	15,644,514	15,480,285	2,623	2,473	20	20	-	-
Gujarat	31,642,967	30,758,854	11,527,108	10,821,334	490	581	687,200	411,284	5,958,786	6,035,935
Haryana	10,605,018	10,387,003	3,937,921	3,882,928	167	182	707,059	508,760	4,928,753	4,982,715
Himachal Pradesh	1,409,059	1,290,579	3,395,637	3,336,699	72	72	2,774	1,347	2,822,517	2,866,605
Jammu & Kashmir	1,242,344	1,145,475	5,462,946	5,575,369	-	-	-	-	1,242,060	1,188,249
Karnataka	14,931,069	14,197,272	26,776,908	26,717,239	1,761	1,666	2,751,604	1,958,861	7,197,784	7,213,935
Kerala	20,249,640	20,199,999	5,249,759	5,216,404	379	498	252,872	154,633	10,890,618	10,917,598
Madhya Pradesh	29,061,279	28,465,545	14,820,329	14,250,639	727	839	1,621,001	1,078,651	6,181,330	6,400,394
Maharashtra	45,872,515	44,465,283	15,217,675	14,821,509	728	4,897	1,311,424	815,897	7,204,097	7,108,632
Mumbai	15,224,742	14,973,795	8,966,426	9,098,608	5,070	-	658,572	419,481	-	-
North East	2,375,119	2,287,414	5,192,375	5,211,537	-	-	-	-	1,601,944	1,456,548
Orissa	5,161,435	4,563,459	12,178,352	12,050,968	138	299	427,153	250,289	5,747,860	5,707,785
Punjab	10,916,410	10,994,036	10,087,180	9,926,077	219	294	756,145	538,027	5,452,464	5,464,880
Rajasthan	16,662,225	16,224,497	21,816,582	21,388,759	347	396	90,625	45,853	5,907,492	6,048,835
Tamil Nadu (incl. Chennai)	24,207,464	23,497,069	25,206,041	24,787,901	2,829	2,784	1,189,091	811,497	12,129,547	12,274,298
UP(E)	33,836,712	33,500,937	30,403,507	30,075,971	732	869	1,529,282	1,015,730	11,844,571	11,703,066
UP(W)	28,936,225	28,434,559	12,722,363	12,422,236	62	-	1,189,200	853,305	5,942,389	5,853,201
Kolkata	9,085,628	8,792,103	6,150,183	6,009,035	34	-	921,787	658,279	1,571,580	1,639,440
West Bengal	25,269,876	23,083,463	17,036,682	16,576,929	497	747	26,562	10,135	1,819,980	1,929,929
Total	394,837,013	383,411,231	325,181,266	320,353,475	18,990	18,873	15,853,676	10,739,914	115,742,565	116,266,114

Annexure 1.1 (contd.)

Service Area	MTNL		Reliance Jio		Total		Net Additions
	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	
Andhra Pradesh			24,568,739	26,415,879	86,730,381	86,974,635	244,254
Assam			6,223,002	6,936,372	22,966,343	23,544,726	578,383
Bihar			22,399,889	24,241,071	85,079,884	85,568,927	489,043
Delhi	2,213,046	2,205,188	15,294,371	16,226,566	52,137,873	52,956,713	818,840
Gujarat			19,482,308	20,898,968	69,298,859	68,926,956	(371,903)
Haryana			7,541,842	8,136,927	27,720,760	27,898,515	177,755
Himachal Pradesh			2,888,273	3,068,725	10,518,332	10,564,027	45,695
Jammu & Kashmir			3,387,436	3,569,571	11,334,786	11,478,664	143,878
Karnataka			16,584,577	18,064,488	68,243,703	68,153,461	(90,242)
Kerala			7,313,052	7,777,070	43,956,320	44,266,202	309,882
Madhya Pradesh			23,113,410	25,204,518	74,798,076	75,400,586	602,510
Maharashtra			23,418,625	25,393,380	93,025,064	92,609,598	(415,466)
Mumbai	1,240,177	1,209,351	11,918,598	12,659,717	38,013,585	38,360,952	347,367
North East			2,818,913	3,079,691	11,988,351	12,035,190	46,839
Orissa			9,179,431	10,160,361	32,694,369	32,733,161	38,792
Punjab			12028762	12397296	39,241,180	39,320,610	79,430
Rajasthan			19,754,424	21,446,728	64,231,695	65,155,068	923,373
Tamil Nadu (incl. Chennai)			19,631,847	20,734,996	82,366,819	82,108,545	(258,274)
UP(E)			21,384,985	23,523,837	98,999,789	99,820,410	820,621
UP(W)			15,795,454	17,306,295	64,585,693	64,869,596	283,903
Kolkata			8,608,156	9,200,591	26,337,368	26,299,448	(37,920)
West Bengal			13,388,741	14,812,567	57,542,338	56,413,770	(1,128,568)
Total	3,453,223	3,414,539	306,724,835	331,255,614	1,161,811,568	1,165,459,760	3,648,192

Annexure 1.2: Wireline Subscriber Base

Service Area	Bharti Airtel		Reliance Com.		Quadrant		Tata Tele.		MTNL		BSNL		Vodafone Idea		Total		Net Additions
	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	Mar-19	Jun-19	
Andhra Pradesh	199,419	212,945	47,011	42,141			173,298	173,592			960,344	882,330	59,790	60,820	1,439,862	1,371,828	-68,034
Assam											111,518	106,661	2,850	2,970	114,368	109,631	-4,737
Bihar			3,234	2,957			8,369	8,428			215,515	204,211	1,740	1,950	228,858	217,546	-11,312
Delhi	1,443,935	1,496,226	119,290	107,370			155,756	155,335	1,481,900	1,466,619			55,670	59,040	3,256,551	3,284,590	28,039
Gujarat	91,049	97,329	19,608	16,648			87,465	88,408			1,009,423	866,711	27,803	30,940	1,235,348	1,100,036	-135,312
Haryana	23,203	23,336	2,701	2,170			35,083	36,461			209,003	202,096	210	240	270,200	264,303	-5,897
Pradesh			2,795	1,710			1,789	1,772			110,078	106,212	60	60	114,722	109,754	-4,968
Kashmir											102,447	101,706			102,447	101,706	-741
Karnataka	683,367	702,520	132,910	114,402			272,238	272,182			1,021,570	978,200	44,497	53,407	2,154,582	2,120,711	-33,871
Kerala	61,265	62,207	16,836	14,491			18,915	18,923			1,783,570	1,750,579	3,450	3,750	1,884,036	1,849,950	-34,086
Madhya Pradesh	243,345	244,404	10,478	9,478			14,571	14,354			650,594	643,404	1,050	1,140	920,038	912,780	-7,258
Maharashtra	94,489	101,564	46,613	43,420			278,280	269,841			1,084,062	1,026,765	20,274	23,777	1,523,718	1,465,367	-58,351
Mumbai	370,665	383,620	173,263	167,421			559,627	555,495	1,761,740	1,747,717			55,302	57,129	2,920,597	2,911,382	-9,215
North East											103,881	100,547	270	270	104,151	100,817	-3,334
Orissa			2,490	2,195			8,219	8,304			223,052	214,462	2,280	2,310	236,041	227,271	-8,770
Punjab	132,046	137,834	11,361	10,651	221,854	219,089	12,326	12,084			394,359	374,052	1,680	1,680	773,626	755,390	-18,236
Rajasthan	55,275	57,651	20,589	18,901			11,455	11,617			439,056	423,266	10,030	12,600	536,405	524,035	-12,370
Tamil Nadu (incl. Chennai)	556,766	551,464	70,448	64,152			120,153	124,018			1,423,913	1,375,905	20,360	23,060	2,191,640	2,138,599	-53,041
U.P.(E)	66,160	65,091	6,327	5,495			8,233	8,203			357,470	324,057	12,020	12,350	450,210	415,196	-35,014
U.P.(W)	23,671	24,134	3,381	3,056			4,820	4,954			265,817	254,593	4,170	4,410	301,859	291,147	-10,712
Kolkata	129,470	132,527	39,406	37,334			53,116	53,053			479,590	459,691	8,900	11,380	710,482	693,985	-16,497
West Bengal			1,688	1,562			2,370	2,453			222,417	199,373	120	120	226,595	203,508	-23,087
Total	4,174,125	4,292,852	730,429	665,554	221,854	219,089	1,826,083	1,819,477	3,243,640	3,214,336	11,167,679	10,594,821	332,526	363,403	21,696,336	21,169,532	-526,804

Annexure 1.3: Service Area and Operator wise details of PCOs

Name of the Circle/Service Area	Service Provider	Number of PCOs as on 31.03.2019	Number of PCOs as on 30.06.2019	Net PCO increase/ decrease as on 30.06.2019
Andhra Pradesh (Excl. Telangana)	Bharat Sanchar Nigam Ltd.	6,752	5,827	-925
	Bharti Group	181	181	0
Telangana	Bharat Sanchar Nigam Ltd.	4,827	4,390	-437
Andhra Pradesh (Incl. Telangana)	Bharat Sanchar Nigam Ltd.	11,579	10,217	-1,362
	Bharti Group	181	181	0
Assam	Bharat Sanchar Nigam Ltd.	4,763	4,485	-278
Bihar (excluding Jharkhand)	Bharat Sanchar Nigam Ltd.	1,117	949	-168
Jharkhand	Bharat Sanchar Nigam Ltd.	2,441	2,441	0
Bihar (including Jharkhand)	Bharat Sanchar Nigam Ltd.	3,558	3,390	-168
Delhi	Bharti Group	330	330	0
	Mahanagar Telephone Nigam Ltd./MTNL	46,210	46,042	-168
Gujarat	Bharat Sanchar Nigam Ltd.	5,297	12,482	7,185
	Bharti Group	14	14	0
Haryana	Bharat Sanchar Nigam Ltd.	952	887	-65
	Bharti Group	141	141	0
Himachal Pradesh	Bharat Sanchar Nigam Ltd.	832	800	-32
Jammu & Kashmir	Bharat Sanchar Nigam Ltd.	983	914	-69
Karnataka	Bharat Sanchar Nigam Ltd.	16,834	15,443	-1,391
	Bharti Group	3,221	3,153	-68
Kerala	Bharat Sanchar Nigam Ltd.	15,040	14,620	-420
	Bharti Group	422	416	-6
Kolkata	Bharat Sanchar Nigam Ltd.	3,412	3,207	-205
	Bharti Group	31	33	2
Madhya Pradesh (excl. Chhattisgarh)	Bharat Sanchar Nigam Ltd.	15,694	14,525	-1,169
	Bharti Group	1,452	1,408	-44
Chhattisgarh	Bharat Sanchar Nigam Ltd.	1,001	975	-26
Madhya Pradesh (incl. Chhattisgarh)	Bharat Sanchar Nigam Ltd.	16,695	15,500	-1,195
	Bharti Group	1,452	1,408	-44
Maharashtra & Goa	Bharat Sanchar Nigam Ltd.	32,830	10,444	-22,386
Mumbai	Bharti Group	50	50	0
	Mahanagar Telephone Nigam Ltd./MTNL	24,517	22,022	-2,495

Annexure 1.3 (contd.)

Name of the Circle/Service Area	Service Provider	Number of PCOs as on 31.03.2019	Number of PCOs as on 30.06.2019	Net PCO increase/ decrease as on 30.06.2019
Maharashtra (including Mumbai & Goa)	Bharat Sanchar Nigam Ltd.	32,830	10,444	-22,386
	Bharti Group	50	50	0
	Mahanagar Telephone Nigam Ltd./MTNL	24,517	22,022	-2,495
Arunachal Pradesh	Bharat Sanchar Nigam Ltd.	1,352	1,353	1
Manipur	Bharat Sanchar Nigam Ltd.	845	842	-3
Meghalaya	Bharat Sanchar Nigam Ltd.	431	431	0
Mizoram	Bharat Sanchar Nigam Ltd.	126	122	-4
Nagaland	Bharat Sanchar Nigam Ltd.	61	10	-51
Tripura	Bharat Sanchar Nigam Ltd.	518	499	-19
Orissa	Bharat Sanchar Nigam Ltd.	1,583	1,410	-173
Punjab	Bharat Sanchar Nigam Ltd.	1,745	1,653	-92
	Bharti Group	12	12	0
	Quadrant Televentures Ltd.	892	854	-38
Rajasthan	Bharat Sanchar Nigam Ltd.	2,640	2,542	-98
	Bharti Group	209	209	0
Sikkim	Bharat Sanchar Nigam Ltd.	12	12	0
Tamilnadu (excluding chennai)	Bharat Sanchar Nigam Ltd.	29,082	27,582	-1,500
	Bharti Group	4,276	4,099	-177
Chennai	Bharat Sanchar Nigam Ltd.	8,129	7,646	-483
Tamil Nadu (including Chennai)	Bharat Sanchar Nigam Ltd.	37,211	35,228	-1,983
	Bharti Group	4,276	4,099	-177
Uttar Pradesh-East	Bharat Sanchar Nigam Ltd.	8,294	7,669	-625
	Bharti Group	76	75	-1
Uttarakhand	Bharat Sanchar Nigam Ltd.	676	594	-82
Uttar Pradesh-West (excl. Uttarakhand)	Bharat Sanchar Nigam Ltd.	1,627	1,563	-64
Uttar Pradesh-West (incl. Uttarakhand)	Bharat Sanchar Nigam Ltd.	2,303	2,157	-146
West Bengal (excl. Andaman & Nicobar)	Bharat Sanchar Nigam Ltd.	3,196	2,881	-315
Andaman and Nicobar	Bharat Sanchar Nigam Ltd.	142	134	-8
West Bengal (incl. Andaman & Nicobar)	Bharat Sanchar Nigam Ltd.	3,338	3,015	-323
Total		255,268	228,371	-26,897

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

Name of Circle/Service Area	Service Provider	Number of VPTs as on 31.03.2019	Number of VPTs as on 30.06.2019	Net VPTs increase/ decreased as on 30.06.2019
Andhra Pradesh (Excluding Telangana)	Bharat Sanchar Nigam Ltd.	2,487	2,298	-189
Telangana	Bharat Sanchar Nigam Ltd.	1,073	1,048	-25
Andhra Pradesh (Including Telangana)	Bharat Sanchar Nigam Ltd.	3,560	3,346	-214
Assam	Bharat Sanchar Nigam Ltd.	105	105	0
Bihar (excluding Jharkhand)	Bharat Sanchar Nigam Ltd.	6,368	6,359	-9
Jharkhand	Bharat Sanchar Nigam Ltd.	489	475	-14
Bihar (including Jharkhand)	Bharat Sanchar Nigam Ltd.	6,857	6,834	-23
Gujarat	Bharat Sanchar Nigam Ltd.	5,297	5,297	0
Haryana	Bharat Sanchar Nigam Ltd.	672	651	-21
Himachal Pradesh	Bharat Sanchar Nigam Ltd.	1,931	1,926	-5
Jammu & Kashmir	Bharat Sanchar Nigam Ltd.	1,051	1,048	-3
Karnataka	Bharat Sanchar Nigam Ltd.	4,055	4,052	-3
Kerala	Bharat Sanchar Nigam Ltd.	342	333	-9
Kolkata	Bharat Sanchar Nigam Ltd.	130	130	0
Madhya Pradesh (excl. Chhattisgarh)	Bharat Sanchar Nigam Ltd.	39,692	39,692	0
Chhattisgarh	Bharat Sanchar Nigam Ltd.	446	251	-195
Madhya Pradesh (incl. Chhattisgarh)	Bharat Sanchar Nigam Ltd.	40,138	39,943	-195
Maharashtra & Goa	Bharat Sanchar Nigam Ltd.	8,101	8,101	0
Maharashtra (incl. Mumbai & Goa)	Bharat Sanchar Nigam Ltd.	8,101	8,101	0
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	25	-16
Tripura	Bharat Sanchar Nigam Ltd.	222	222	0

Annexure 1.4 (contd.)

Name of Circle/Service Area	Service Provider	Number of VPTs as on 31.03.2019	Number of VPTs as on 30.06.2019	Net VPTs increase/ decreased as on 30.06.2019
Orissa	Bharat Sanchar Nigam Ltd.	1,817	1,817	0
Punjab	Bharat Sanchar Nigam Ltd.	5,046	4,966	-80
Rajasthan	Bharat Sanchar Nigam Ltd.	1,198	792	-406
Sikkim	Bharat Sanchar Nigam Ltd.	429	324	-105
Tamilnadu (excluding chennai)	Bharat Sanchar Nigam Ltd.	6,021	6,009	-12
Tamil Nadu (including Chennai)	Bharat Sanchar Nigam Ltd.	6,021	6,009	-12
Uttar Pradesh- East	Bharat Sanchar Nigam Ltd.	568	568	0
Uttarakhand	Bharat Sanchar Nigam Ltd.	2,676	2,676	0
Uttar Pradesh - West (excl. Uttarakhand)	Bharat Sanchar Nigam Ltd.	1,848	1,826	-22
Uttar Pradesh - West (incl. Uttarakhand)	Bharat Sanchar Nigam Ltd.	4,524	4,502	-22
West Bengal (excl. Andaman & Nicobar)	Bharat Sanchar Nigam Ltd.	36,352	11,557	-24,795
Andaman & Nicobar	Bharat Sanchar Nigam Ltd.	94	93	-1
West Bengal (including Andaman & Nicobar)	Bharat Sanchar Nigam Ltd.	36,446	11,650	-24,796
Total		1,30,376	1,04,466	-25,910

**Annexure 1.5 : Internet Service Provider(ISP) wise Internet Subscriber base
as on 30.06.2019**

Sl.No.	Name of Service Provider	Narrowband	Broadband	Total
1.	Reliance Jio Infocomm Ltd	0	331255614	331255614
2.	Bharti Airtel Ltd.	28960669	121488786	150449455
3.	Vodafone Idea Limited	32781067	110522654	143303721
4.	Bharat Sanchar Nigam Ltd.	7873402	21928047	29801449
5.	Tata Teleservices Limited	796090	1759618	2555708
6.	Atria Convergence Technologies Pvt. Ltd.	0	1449044	1449044
7.	Mahanagar Telephone Nigam Ltd.	251982	956778	1208760
8.	Hathway Cable & Datacom Pvt. Ltd.	0	835987	835987
9.	You Broadband India Pvt. Ltd.	14816	743593	758409
10.	GTPL Broadband Pvt. Ltd.	0	290968	290968
11.	Tikona Infinet Ltd.	0	246918	246918
12.	Excitel Broadband Private Limited	0	245676	245676
13.	D-Vois Broadband Private Limited	0	217117	217117
14.	Asianet Satellite Communications Ltd.	0	208936	208936
15.	Alliance Broadband Services Pvt. Ltd.	0	204001	204001
16.	Quadrant Televentures Ltd.	118	196769	196887
17.	Joister Infoserve Pvt. Ltd.	0	160825	160825
18.	INTECH ONLINE PVT LTD	0	152184	152184
19.	Planet E-Shop Holdings India Ltd.	0	141834	141834
20.	Indinet Service Pvt Ltd	0	133196	133196
21.	DEN Networks Ltd	0	114627	114627
22.	RailTel Corporation of India Ltd.	0	104457	104457
23.	Airlink Communications Pvt. Ltd	0	63160	63160
24.	Five Network Solution (India) Ltd.	0	59093	59093
25.	Nextra Teleservices Pvt. Ltd.	0	50668	50668
26.	Honesty Net Solutions (I) Pvt Ltd	98	46996	47094
27.	Wish Net Pvt. Ltd.	0	43367	43367
28.	Limras Eronet Broadband Service Pvt Ltd	5997	29831	35828
29.	ANI network Pvt Ltd	0	34525	34525
30.	Citycom Networks Pvt. Ltd.	0	34466	34466
31.	AIRNET CABLE AND DATACOM PVT LTD	0	34232	34232
32.	Wan and Lan Internet Pvt. Ltd.	0	32270	32270
33.	Fusionnet Web Services Pvt. Ltd.	0	30580	30580
34.	K NET SOLUTIONS PVT LTD	0	26487	26487
35.	Reliance Communications Ltd.	0	26261	26261
36.	Tata Sky Broadband Private Limited	0	26238	26238
37.	Ishan Netsol Pvt Ltd	0	23181	23181
38.	DNA Infotel Pvt Ltd	0	21352	21352
39.	Vasai Cable Pvt. Ltd.	0	20980	20980
40.	SITI Broadband Services Pvt. Ltd.	0	20234	20234

Annexure 1.5 (contd.)

Sl.No.	Name of Service Provider	Narrowband	Broadband	Total
41.	MICROSCAN COMPUTERS PVT LTD	7450	10977	18427
42.	City Online Services Ltd	0	18272	18272
43.	Digital Satellite Connect Pvt. Ltd.	0	17776	17776
44.	Ortel Communication Ltd.	0	16868	16868
45.	RAJESH DIGITAL DATACOM PVT LTD	21	15381	15402
46.	Tata Communications Limited	252	14987	15239
47.	IKF Technologies Ltd	0	15166	15166
48.	Quest Consultancy Pvt. Ltd.	0	14417	14417
49.	Digital Network associates Pvt. Ltd	0	14079	14079
50.	Sikka Broadband (P) Ltd.	0	13402	13402
51.	CSC e-Governance Services India Ltd.	0	13056	13056
52.	Geocity Network Solutions Pvt. Ltd.	0	13013	13013
53.	Meghbela Cable & Broadband Servies(P) Ltd	0	12667	12667
54.	Sai Prasad Internet Pvt Ltd	0	11012	11012
55.	Netplus Broadband Services Pvt. Ltd	0	10640	10640
56.	Yashash Cable Network Pvt Ltd	0	10583	10583
57.	RI Networks Pvt Ltd	0	10525	10525
58.	Pioneerelabs	351	9643	9994
59.	Sifi Online Pvt. Ltd.	0	9828	9828
60.	World Phone Internet Services Pvt Ltd	0	9649	9649
61.	North East Dataa Network Pvt Ltd.	0	9531	9531
62.	United Telecoms Ltd.	188	8761	8949
63.	CANDOR INFOSOLUTION PVT LTD	8496	0	8496
64.	Bittel Telecom Pvt.Ltd	0	8230	8230
65.	Jetway Broadband India Pvt.Ltd.	0	8193	8193
66.	GBPS Networks Pvt. Ltd.	0	7499	7499
67.	Apna Telelink Ltd.	0	7348	7348
68.	FOXTEL TELECOMMUNICATIONS PVT LTD	7325	0	7325
69.	Broadband Pacenet (I) Pvt. Ltd.	0	7284	7284
70.	WOW SOLUTIONS & SYSTEM PVT LTD	0	7226	7226
71.	Ethernet Xpress India Pvt. Ltd	0	7056	7056
72.	SmartLink Broadband Services	0	6993	6993
73.	Shree Omkar Infocom Pvt. Ltd.	0	6977	6977
74.	Cityzone Infonet Pvt. Ltd	0	6925	6925
75.	Kappa Internet Services Pvt Ltd.	0	6754	6754
76.	Readylink Internet Services Pvt Ltd	28	6717	6745
77.	Swiftmail Communications Ltd.	153	6547	6700
78.	DL GTPL BROADBAND PVT LTD	0	6560	6560
79.	L S Fibernet Pvt. Ltd.	0	6127	6127
80.	SSCN PVT LTD	0	6081	6081
81.	Swiftnet Broadband Pvt Ltd	0	5414	5414

Annexure 1.5 (contd.)

Sl.No.	Name of Service Provider	Narrowband	Broadband	Total
82.	Intermedia Cable Communication Pvt Ltd	0	5394	5394
83.	Shree Balaji Infoway Pvt Ltd	0	5140	5140
84.	Narmada Cyberzone Pvt Ltd	1858	3097	4955
85.	IAXN Telecom Pvt. Ltd.	0	4766	4766
86.	Multinet (Udaipur) Pvt. Ltd.	0	4523	4523
87.	Siliguri Internet & Cable TV Pvt. Ltd.	0	4408	4408
88.	Multicraft Digital Technologies Private Ltd	0	4359	4359
89.	Mukand Infotel Pvt. Ltd.	4176	0	4176
90.	Powernet Communication Pvt Ltd	2086	2086	4172
91.	Blazenet Ltd.	0	4017	4017
92.	Aerocast Networks Pvt Ltd.	0	3791	3791
93.	Spiderlink Networks Pvt. Ltd.	0	3708	3708
94.	SONALI INTERNET SERVICES PVT LTD	0	3692	3692
95.	Zoram Business Enterprise Private Limited	0	3624	3624
96.	GIGATEL NETWORKS PVT LTD	0	3561	3561
97.	FIVE NET SERVICE PROVIDER PVT LTD	0	3517	3517
98.	GETWAY BROADBAND PVT LTD	0	3478	3478
99.	Spacenet Internet Services Pvt Ltd	0	3344	3344
100.	Pink Broadband Services Pvt. Ltd.	1633	1633	3266
101.	Rainbow Internet teleservices Pvt Ltd	16	3184	3200
102.	SUPER SONIC BROADBAND PVT LTD	0	3084	3084
103.	Star Broadband Services (I) Pvt Ltd	0	3076	3076
104.	Vision Smartlink Networking Pvt. Ltd.	0	3044	3044
105.	TGN NETWORKS PVT LTD	0	2679	2679
106.	Juweriyah Networks Pvt Ltd	0	2532	2532
107.	Kaizen Infonet Pvt Ltd	0	2526	2526
108.	Airgenie Communications Pvt. Ltd.	0	2524	2524
109.	Blu Ultraband Internet Services Pvt Ltd	0	2523	2523
110.	NISS INTERNET SERVICES PVT. LTD.	0	2453	2453
111.	F/X Wireless Technology Services Pvt. Ltd.	0	2443	2443
112.	Chandra Net Pvt. Limited	0	2435	2435
113.	S.S. Netcom Pvt Ltd	0	2432	2432
114.	TRANSMEDIA Technologies (AP) Pvt Ltd	0	2308	2308
115.	WSNS PVT LTD	0	2291	2291
116.	Jetspot Networks Pvt. Ltd.	0	2041	2041
117.	Speed Online.net Pvt. Ltd.	0	1982	1982
118.	SMARTLINK SOLUTIONS PVT. LTD.	0	1965	1965
119.	Capture Network Systems Pvt. Ltd.	288	1517	1805
120.	SCUD COMMUNICATION PVT LTD	0	1801	1801
121.	GALAXYNET CONNECTIONS PVT LTD	0	1744	1744
122.	LM ENERGY & SOFTWARE PVT LTD	0	1729	1729

Annexure 1.5 (contd.)

Sl.No.	Name of Service Provider	Narrowband	Broadband	Total
123.	Symbois Creations Pvt. Ltd.	0	1710	1710
124.	Assistive networks & technologie Pvt Ltd	0	1701	1701
125.	INET FIBER INDIA PVT LTD	0	1631	1631
126.	ULTRANET INFOTECH Solution Pvt Ltd.	0	1600	1600
127.	Southern Online Bio Technologies Ltd.	1	1595	1596
128.	Nettlinx Ltd.	0	1591	1591
129.	Touch Net India Pvt. Ltd.	0	1570	1570
130.	Rajesh Patel Net Services Pvt. Ltd.	20	1524	1544
131.	Sphier Infotech Pvt. Ltd.	0	1515	1515
132.	Netfirre Communications Pvt Ltd	0	1408	1408
133.	Prompt infracom Pvt Ltd	0	1387	1387
134.	Wnet Telecom Private Limited	0	1371	1371
135.	delDSL Internet Pvt Ltd	0	1338	1338
136.	Imperium Digital Network Pvt. Ltd.	0	1322	1322
137.	Skylink Fibernet Pvt. Ltd.	0	1307	1307
138.	Craze IT Solutions Pvt Ltd	0	1300	1300
139.	Hughes Communications India Ltd.	422	874	1296
140.	Sanchit Infocomm Pvt Ltd	0	1259	1259
141.	HARDWORK CABLE & INTERNET SERVICES PVT LTD	0	1248	1248
142.	MAKS COMMUNICATIONS PVT. LTD.	0	1248	1248
143.	Fiberzone Communications Pvt. Ltd.	0	1210	1210
144.	CJ Online Pvt. Ltd.	0	1197	1197
145.	Elyzium Technologies Pvt. Ltd.	0	1160	1160
146.	GIGACAST NETWORK PVT LTD	0	1115	1115
147.	Aeroway Networks Pvt Ltd.	0	1108	1108
148.	Click4Net Internet Services Private Limited	0	1095	1095
149.	Smart Net India Pvt Ltd	0	980	980
150.	Touchnet Broadband Services Pvt. Ltd.	0	947	947
151.	SS Fibernet Optical Communications Pvt Ltd	0	918	918
152.	VARESHA AIR WORLD Networks Pvt Ltd	433	433	866
153.	SKY ONLINE TECHNOSYSTEM PVT LTD	0	863	863
154.	Grace Teleinfra Pvt Ltd	0	855	855
155.	DREAMLINK TECHNOLOGIES PVT LTD	0	848	848
156.	Japra Tele Link Pvt. Ltd.	0	843	843
157.	NetMagic Solutions(P) Ltd.	0	835	835
158.	NGC Broadband Pvt. Ltd.	833	0	833
159.	Correl IT Services Pvt. Ltd.	0	826	826
160.	ESTO BORADNAD PVT LTD./ESTO INTERNET PVT LTD	0	824	824
161.	ANTARIKSH BROADBAND & WIRELESS SOLUTIONS PVT LTD	800	0	800

Annexure 1.5 (contd.)

Sl.No.	Name of Service Provider	Narrowband	Broadband	Total
162.	FASTNET COMMUNICATION PVT LTD	197	595	792
163.	HOSTAXIS NETWORKS PVT LTD	0	770	770
164.	Ani Broadband Service Pvt. Ltd.	0	763	763
165.	Datawave IT solutions Pvt. Ltd.	0	761	761
166.	CLOUDNET COMMUNICATIONS PVT LTD	0	714	714
167.	Light Air Transmission Pvt. Ltd.	355	355	710
168.	Daksh Broadband Services Pvt Ltd	0	709	709
169.	Unitel Media Pvt Ltd	0	694	694
170.	SVD DIGITAL NETWORKS PVT LTD	0	686	686
171.	HPS DIGITAL BROADBAND PVT LTD	0	672	672
172.	STN Communication & Advertising Pvt Ltd.	1	626	627
173.	Primenet Global Ltd.	0	620	620
174.	Wi-Link Network Pvt. Ltd	0	614	614
175.	SEFARO NETWORKS PRIVATE LTD	0	603	603
176.	Sify Technologies Ltd.	319	283	602
177.	DATAMAX TECHNOLOGY PVT LTD	59	538	597
178.	WEBRIDERS INTERNET PVT LTD	0	594	594
179.	Smart Wi5 Pvt. Ltd.	0	590	590
180.	SPIRENET Digital Communications Pvt Ltd	0	572	572
181.	Alphanet Broadband Pvt Ltd	0	571	571
182.	LAIRONET COMMUNICATION PVT LTD	0	571	571
183.	ACN Fiber Pvt. Ltd.	0	565	565
184.	Alegra Communication Pvt Ltd	0	552	552
185.	VIVA Communications Pvt Ltd	0	552	552
186.	Digital2Virtual ISP Pvt. Ltd.	0	549	549
187.	Reticule Infotech Pvt. Ltd.	0	536	536
188.	PACKNET SOLUTIONS PVT Ltd	0	525	525
189.	Packenet Solutions Pvt. Ltd.	0	499	499
190.	Data Ingenious Global Ltd	0	497	497
191.	Amar Broadband Private Limited	0	493	493
192.	NETVISION AWADH NETWORKS PVT LTD	110	383	493
193.	Power Grid Corporation of India Ltd.	0	486	486
194.	Rida Communication Pvt. Ltd.	0	486	486
195.	SHREE MANORANJAN Broadband Pvt Ltd	0	471	471
196.	Barani Data Solutions Private Limited	232	236	468
197.	HELM CONSULTANTS PVT LTD	193	274	467
198.	ADRI INFOCOM PVT. LTD.	0	464	464
199.	Speedmaxx Digital Networks Pvt Ltd	0	462	462
200.	Oasis Cable Pvt Ltd.	0	445	445
201.	ELECON INFOTMATION TECHNOLOGY Ltd	0	432	432
202.	Suncity Broadband Pvt Ltd.	0	430	430

Annexure 1.5 (contd.)

Sl.No.	Name of Service Provider	Narrowband	Broadband	Total
203.	Gleam Worldwide Services Pvt. Ltd.	0	428	428
204.	Gorakhpur Net Services Pvt. Ltd.	0	408	408
205.	Tamana Winet Pvt. Ltd.	0	400	400
206.	CNS INFOTEL SERVICES PVT LTD	0	392	392
207.	Oistel Telecom Pvt. Ltd.	195	195	390
208.	BASS JOKERNET PRIVATE LIMITED	0	383	383
209.	Bass Networks Pvt Ltd	0	377	377
210.	WINDSOR INTERNET PVT LTD	0	374	374
211.	Panav Network and Communications Private Limited	0	368	368
212.	Pulse Telesystems Pvt. Ltd.	0	362	362
213.	Harisree CableNet Pvt. Ltd.	0	359	359
214.	REVOLUTION BROADBAND PVT LTD	0	352	352
215.	Spider Broadband and Cable Pvt Ltd	0	345	345
216.	DEVELOPMENT LOGICS Solution Pvt Pvt	0	340	340
217.	MORADABAD INTERNET Services Pvt Ltd	0	336	336
218.	PANCHSHEEL Broadband Service Pvt Ltd	0	333	333
219.	Sai Akshay Internet Services Pvt Ltd.	0	332	332
220.	CATLA IT&ENGG. CO. PVT LTD.	0	327	327
221.	Twincity Communication Private Limited	0	325	325
222.	AUSPICE INFRATAL PVT LTD	198	110	308
223.	Bhiwani Communications Pvt. Ltd.	73	233	306
224.	Dhanam Internet Services India Pvt. Ltd.	0	305	305
225.	SHEEN TELECOM CONSULTANTS Pvt Ltd	278	0	278
226.	Citylink Broadband Services Pvt. Ltd.	0	262	262
227.	Singh Internet Services Pvt. Ltd.	0	260	260
228.	NEXTGEN COMPUSOFT PVT LTD	0	254	254
229.	Goodwill Smartlink Pvt. Ltd.	0	252	252
230.	Cityline Networks Pvt Ltd	0	251	251
231.	ALWAR ONLINE PVT LTD	250	0	250
232.	Kartik Network Pvt. Ltd.	0	246	246
233.	Faiconet Internet Pvt Ltd	0	245	245
234.	Lotus Broadband Pvt Ltd	0	235	235
235.	ANUSHREE DIGITAL NETWORK PVT LTD	0	229	229
236.	Khetan Cable Network (P) Ltd	0	228	228
237.	VMO BROADBAND PVT LTD	225	0	225
238.	WAVETREE NETWORKS PVT LTD	0	224	224
239.	ACEBROWSE PVT LTD	0	219	219
240.	CIT SOLUTIONS PVT. LTD.	0	217	217
241.	SRINAGAR TECHNOLOGY Consultant Ltd	213	0	213
242.	Wi5 Internet Services Pvt Limited	0	207	207

Annexure 1.5 (contd.)

Sl.No.	Name of Service Provider	Narrowband	Broadband	Total
243.	Saibaba Broadband Pvt. Ltd.	0	206	206
244.	CERALINK COMMUNICATION PVT LTD	0	196	196
245.	Pimoonny Broadband Serives Pvt Ltd	0	180	180
246.	Gazillio Technologies Pvt. Ltd.	0	177	177
247.	STN Infotech Pvt. Ltd	0	175	175
248.	SOUTHNET BROADBAND PVT LTD	0	174	174
249.	Microsense Pvt. Ltd.	0	173	173
250.	AirFiber IT Solutions Pvt. Ltd	0	170	170
251.	Optisky Fiber Pvt Ltd	0	168	168
252.	Kataria Net Solutions Pvt. Ltd.	0	163	163
253.	Nanjil Internet Services Pvt. Ltd.	0	158	158
254.	NETTECH INFOVISION PVT LTD	0	158	158
255.	NR DATA SERVICE PVT LTD	0	158	158
256.	AIRMAX INTERNET PVT LTD	0	157	157
257.	Shineplus Networks Pvt Ltd	0	154	154
258.	Sense Connect IT Pvt. Ltd.	0	146	146
259.	PROLINE DATATECH SERVICCES Pvt Ltd	0	145	145
260.	ERNET India	52	90	142
261.	Global India Tele Infra Pvt. Ltd.	36	100	136
262.	Texas Connect Private Limited	112	24	136
263.	Verizon Communications India Pvt. Ltd.	0	134	134
264.	NETWIRE INTERNET SOLUTIONS Pvt Ltd.	0	132	132
265.	Airmesh Communications Limited	0	131	131
266.	ROYAL WIRELESS SERVICES PVT LTD	0	127	127
267.	MLC INTERNET PVT LTD	0	126	126
268.	Airtechzone Services India Pvt Ltd	78	47	125
269.	Achiever Communication and Services Pvt. Ltd.	0	122	122
270.	Shri Vinayagaa Internet Pvt Ltd	0	121	121
271.	Invensys Networks pvt ltd	2	118	120
272.	V NET NETWORKS PVT. LTD	0	118	118
273.	AT&T Global Network Services India Pvt Ltd	0	115	115
274.	SHRI RAM BRAOADBAND Service Pvt Ltd	0	112	112
275.	Angel Air Network Solutions Pvt Ltd	0	108	108
276.	White Stallion Networks Pvt. Ltd.	0	108	108
277.	Pronoc Technologies Pvt. Ltd.	0	107	107
278.	Shreepad Communication Pvt. Ltd.	0	104	104
279.	DA Smartzone Pvt Ltd	0	98	98
280.	Rajdhani Telecom Pvt. Ltd.	4	94	98
281.	PMG NETWORKD PVT LTD	0	97	97
282.	Micronova Network Solutions Ltd	95	0	95

Annexure 1.5 (contd.)

Sl.No.	Name of Service Provider	Narrowband	Broadband	Total
283.	SATH TECHNOLOGIES PVT LTD	0	95	95
284.	Cheetah Networks Pvt Ltd	0	94	94
285.	Telstra Telecommunications Pvt. Ltd.	0	92	92
286.	INFINITY WIRELESS SERVICES PVT. LTD.	0	89	89
287.	Satpar Infotech Pvt Ltd	0	85	85
288.	ARP INFONET PVT. LTD.	0	84	84
289.	Vidarbha Wi-Fi & Network Services Pvt.Ltd	84	0	84
290.	Dream Plus Multi Services Pvt. Ltd.	0	82	82
291.	DigiStar Info Solutions Pvt Ltd	40	40	80
292.	TRIPLE LINK PVT LTD	0	80	80
293.	QBC Infotech Pvt. Ltd.	0	73	73
294.	Malang Solutions Pvt. Ltd.	0	71	71
295.	BSL Technologies Pvt. Ltd.	0	68	68
296.	M-TEL Networks (P) Ltd	0	65	65
297.	Wireline Solution(India) Pvt. Ltd.	0	65	65
298.	DRONAGIRI INFOTECH PVT LTD	0	60	60
299.	Veer Point Pvt. Ltd.	0	59	59
300.	Mtel Networks Pvt. Ltd.	0	58	58
301.	S A INTERNET SOLUTION PVT LTD	0	58	58
302.	Edge Telecommunications Pvt. Ltd.	0	57	57
303.	Infiber Broadnet Pvt. Ltd.	0	56	56
304.	Airlink Broadband Pvt Ltd	0	54	54
305.	City Broadband Pvt. Ltd.	0	52	52
306.	Trans Virtual Pvt. Ltd.	0	47	47
307.	GURU NETCOMM PVT LTD	0	41	41
308.	IWAVE TELECOMMUNICATIONS PVT LTD	0	38	38
309.	JAI MATA DI TELETRONIX PVT LTD	0	37	37
310.	CLASSIC INTERNET AND CABLE SERVICES PVT LTD	33	0	33
311.	Navariya Satellite Services Pvt.Ltd.	33	0	33
312.	Divine Broadband Services Pvt Ltd	0	31	31
313.	Dreamnet Pvt.Ltd.	0	30	30
314.	Sanyog Networks Pvt Ltd	0	29	29
315.	SUN Boardband and Data Services Pvt Ltd	0	28	28
316.	WE INTERNET LIMITED	0	27	27
317.	West Bengal Electronics Industry Development Corp. Ltd.	0	26	26
318.	Orange Business Services India Network Pvt. Ltd.	0	23	23
319.	Pacific Internet India Pvt. Ltd.	0	23	23
320.	Adya Tech One Services Pvt Ltd	0	20	20
321.	Mastek Infosystems OPC Pvt. Ltd.	0	19	19

Annexure 1.5 (contd.)

Sl.No.	Name of Service Provider	Narrowband	Broadband	Total
322.	FASTHOOK NETWORKS PVT LTD	0	18	18
323.	INSTANET TECHNOLOGIES Pvt Ltd	0	17	17
324.	Microtel Internet Network Pvt ltd	0	15	15
325.	Hienet Internet Services Pvt Ltd	0	14	14
326.	Novanet India Ltd.	0	14	14
327.	Angrow Netcomm Pvt. Ltd.	13	0	13
328.	UBERCORE DATA LABS PVT LTD	0	13	13
329.	Marutham Networks Pvt. Ltd.	0	12	12
330.	Financial Technologies Communications Ltd.	9	0	9
331.	Clear Beam Communication Pvt Ltd	8	0	8
332.	SKYNETZONE WIFI SERVICES PVT LTD	1	7	8
333.	Essel Shyam Communications Limited	0	7	7
334.	Critel Technologies Pvt. Ltd.	0	6	6
335.	A TO Z INFOLINK PVT.LTD.	0	5	5
336.	Nelco Ltd.	0	4	4
337.	Tatanet Services Ltd	0	4	4
338.	ABT Ltd.	3	0	3
339.	Aristo Telenet Pvt Ltd	0	3	3
340.	KIIRUS INFONET PVT. LTD.	0	2	2
341.	Sabse Internet Services Provider Pvt Ltd	0	2	2
	Total	70724570	594584962	665309532
	Total (in million)	70.72	594.58	665.31

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. Jun-19**

S. No.	Name of Service Providers which reported IP Telephony Minutes
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	
			31.03.2019	30.06.2019
1	Delhi(Faridabad/ Gurgaon)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	6270	5934
		Procall(Delhi)	2971	2978
		Procall (Faridabad)		
		Procall (Gurgaon)		
		Total	9241	8912
2	Mumbai (Navi Mumbai)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	8831	8581
		Smartalk (Mumbai)	611	627
		Bhilwara Telenet(Mumbai)	881	894
		Airtalk Solutions & Services Pvt. Ltd	361	511
		Total	10684	10613
3	Kolkata	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2440	2397
		Total	2440	2397
4	TN(Chennai)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7447	7281
		Quick Calls	583	581
		Total	8030	7862
5	Karnataka (Bangalore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7190	7087
		Quick Calls	710	716
		Total	7900	7803
6	Andhra Pradesh (Vishakhapatnam & Hyderabad)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	6007	5803
		Quick Calls (Hyderabad Urban)	858	849
		Total	6865	6652
7	Madhya Pradesh (Indore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1500	1495
		Total	1500	1495
8	Rajasthan (Jaipur)	Procall	290	283
		Arya Omnitalk Radio Trunking Services Pvt.Ltd.	540	525
		Total	830	808

Annexure- 1.7 (Contd.)

Sl. No.	Operative Area	Service Provider	Subscriber Base	
			31.03.2019	30.06.2019
9	Gujarat (Ahmedaba/Surat /Vadodara/ Bharuch/Dahej/ Kutch/Amrela /Jamnagar)	Arya Omnitalk Radio Trunking Services Pvt.Ltd. (Ahmedaba/Surat/Vadodara / Bharuch/Dahej)	7114	7130
		Inative Network Pvt. Ltd. (Ahmedaba/Surat/Vadodara /Bharuch/ Kutch/Amrela / Jamnagar)	1820	1820
		Total	8934	8950
10	Maharashtra (Pune)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1919	1663
		Smartalk	452	444
		Total	2371	2107
11	Kerala (Cochin City & Quilon)	Wiwonet Solutions Pvt. Ltd.	363	406
		Arya Omnitalk Radio Trunking Services Pvt.Ltd.	920	900
		Total	1283	1306
Grand Total			60,078	58,905

Annexure 2.1: Wireless Revenue Service - Service Area wise Statistics for QE Jun-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	95.78	95	23	323	315	638
Gujarat	95.57	72	16	315	274	590
Karnataka	94.05	87	23	318	299	617
MH	95.71	78	19	304	285	589
TN (incl. Chennai)	94.93	91	20	311	308	620

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	339	330	669
Kerala	97.39	93	13	244	263	507
MP	98.21	70	18	344	342	687
Punjab	96.11	76	12	341	310	650
Rajasthan	97.79	73	13	369	364	733
UP(E)	98.59	56	12	391	447	838
UP(W)	98.42	57	13	358	367	725
WB	97.17	81	19	356	359	715

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	97.94	80	31	362	389	751
Bihar	99.29	60	12	444	511	955
HP	98.52	70	11	325	312	637
J&K	75.25	87	26	492	442	934
NE	98.47	77	39	317	323	640
Orissa	98.90	72	19	381	414	795

Key parameters for service areas of category-Metro

Service Area	% of pre-paid in total subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Kolkata	94.11	56	15	320	298	619
Delhi	85.32	66	19	441	355	796
Mumbai	79.91	83	14	406	305	710

Annexure 4.1: Performance of QoS Parameters for Cellular Mobile Service

Performance monitoring report on Quality of Services for Cellular Mobile Service Providers for quarter ending June, 2019																						
Name of Service Area	Name of Service Provider	Network Related Parameters											Customer Service Quality Parameters									
		Network Availability		Connection Establishment (Accessibility)				Connection Maintenance (Retainability)			POI				Metering and billing				Response time to customer for assistance		Termination / Closure of service	
		BS Accumulated down-time (not available for service) (%age)	Worst affected BSs due to down-time (%age)	Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable (within licensee's own network)	SDCCH/ Paging Channel Congestion/ RRC Congestion (%age)	TCH, RAB and E-RAB Congestion (%age)	Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)]	Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)]	Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)	Down Link (DL) Packet Drop Rate or DL-PDR	Up Link (UL) Packet Drop Rate or UL-PDR	Metering and billing credibility - post paid	Metering and billing credibility - pre paid	Resolution of billing/ charging complaints	Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints	Accessibility of call centre/ customer care	Percentage of calls answered by the operators (voice to voice) within 90 seconds	%age requests for Termination / Closure of service complied within 7 days	Time taken for refund of deposits after 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	0.17	0.57	98.83	0.22	0.41	1.27	1.68	96.69	0	0.23	0.30	0.01	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00	
	BSNL	0.96	1.59	97.75	0.60	1.33	1.91	2.33	98.69	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	97.00	96.00	100.00	100.00
	RJio	0.08	0.09	99.61	0.00	0.00	0.26	0.34	99.92	0	0.01	0.15	0.00	0.00	100.00	100.00	100.00	100.00	96.82	99.13	100.00	100.00
	TATA	0.39	0.00	99.55	0.25	0.00	0.00	1.81	98.79	0	NA	NA	0.00	0.00	100.00	100.00	100.00	94.76	95.48	100.00	100.00	
	VIL-Brand Idea	0.49	1.30	98.35	0.63	0.10	1.98	2.56	99.39	0	0.08	0.23	0.01	0.00	99.40	100.00	100.00	100.00	98.97	97.83	100.00	100.00
Assam	VIL-Brand Vodafone	0.49	1.30	98.35	0.63	0.10	1.98	2.56	99.39	0	0.08	0.23	0.01	0.02	99.76	100.00	100.00	100.00	100.00	96.96	100.00	100.00
	Airtel	0.34	1.23	97.64	0.48	0.52	1.93	2.22	98.65	0	0.17	0.36	0.02	0.00	99.00	100.00	100.00	87.00	91.00	100.00	100.00	
	BSNL	1.98	1.95	98.22	0.83	1.78	1.93	2.31	96.90	0	NA	NA	0.01	0.00	100.00	100.00	100.00	97.00	96.70	100.00	100.00	
	RJio	0.41	1.38	99.55	0.00	0.00	0.50	0.61	99.85	0	0.02	0.31	0.00	0.00	100.00	100.00	100.00	97.11	99.66	100.00	100.00	
	VIL-Brand Idea	0.12	0.21	98.27	0.69	1.70	1.92	2.93	98.21	0	0.22	0.28	0.03	0.00	100.00	100.00	100.00	96.19	100.00	100.00	100.00	
Bihar	VIL-Brand Vodafone	0.12	0.21	98.27	0.69	1.70	1.92	2.93	98.21	0	0.22	0.28	0.01	0.01	100.00	100.00	100.00	99.99	100.00	100.00	100.00	
	Airtel	0.25	0.83	97.72	0.45	0.62	1.75	1.87	97.86	0	0.10	0.38	0.01	0.00	100.00	100.00	100.00	100.00	93.00	100.00	100.00	
	BSNL	1.84	1.79	96.18	0.35	0.46	1.71	2.35	98.40	0	NA	NA	0.00	0.00	99.39	100.00	100.00	98.00	95.73	100.00	100.00	
	RJio	0.20	0.54	99.50	0.00	0.00	0.42	0.54	99.89	0	0.01	0.23	0.00	0.00	100.00	100.00	100.00	97.45	96.84	100.00	100.00	
	TATA	0.32	1.32	100.00	0.29	0.00	0.00	0.00	99.46	0	NA	NA	0.00	0.00	100.00	100.00	100.00	96.04	97.07	100.00	100.00	
Chennai	VIL-Brand Idea	1.20	0.05	98.82	0.43	1.17	1.57	2.32	99.52	0	0.01	0.02	0.00	0.00	100.00	100.00	100.00	96.88	99.99	100.00	99.79	
	VIL-Brand Vodafone	1.20	0.05	98.82	0.43	1.17	1.57	2.32	99.52	0	0.01	0.02	0.00	0.00	100.00	100.00	100.00	100.00	98.21	100.00	100.00	
	BSNL	0.95	1.53	99.25	0.20	0.09	1.75	1.82	97.93	0	NA	NA	0.01	0.01	99.73	100.00	100.00	95.00	95.11	100.00	100.00	
	Airtel	0.10	0.00	99.31	0.22	0.27	1.85	2.70	95.87	0	1.06	0.34	0.02	0.00	100.00	100.00	100.00	100.00	95.00	100.00	100.00	100.00
	MTNL	0.05	0.03	97.42	0.17	1.05	1.41	1.57	96.69	0	NA	NA	0.01	0.00	100.00	100.00	100.00	99.93	99.63	100.00	100.00	
Delhi	RJio	0.09	0.26	99.63	0.00	0.00	0.16	0.24	99.92	0	0.01	0.16	0.00	0.00	100.00	100.00	100.00	97.29	97.74	100.00	100.00	
	TATA	0.13	0.55	100.00	0.00	0.27	0.00	0.00	98.91	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	VIL-Brand Idea	0.15	0.68	99.42	0.05	0.10	1.67	2.22	98.82	0	NA	NA	0.03	0.00	99.88	100.00	100.00	98.84	98.43	100.00	100.00	
	VIL-Brand Vodafone	0.12	0.66	99.60	0.18	0.33	1.54	2.00	99.39	0	0.77	0.30	0.07	0.03	99.97	100.00	100.00	100.00	92.58	100.00	100.00	100.00

Annexure 4.1 (Contd.)

Gujarat	Airtel	0.07	0.05	99.63	0.21	0.20	1.56	1.90	95.69	0	0.08	0.15	0.02	0.00	100.00	100.00	100.00	99.00	96.00	100.00	100.00
	BSNL	1.34	1.19	98.06	0.07	0.36	1.73	2.38	100.00	0	NA	NA	0.01	0.00	100.00	100.00	100.00	98.00	96.70	100.00	100.00
	RJio	0.16	0.53	99.55	0.00	0.00	0.30	0.41	99.92	0	0.01	0.16	0.00	0.00	100.00	100.00	100.00	97.90	98.34	100.00	100.00
	TATA	0.25	0.00	99.10	0.06	0.00	0.00	0.00	99.62	0	NA	NA	0.00	0.00	100.00	100.00	100.00	96.44	91.52	100.00	100.00
	VIL-Brand Idea	0.13	0.36	99.29	0.21	0.40	1.27	1.64	98.53	0	0.44	0.47	0.00	0.00	99.79	100.00	100.00	96.07	99.74	100.00	100.00
	VIL-Brand Vodafone	0.09	0.14	99.58	0.10	0.34	1.18	1.56	99.07	0	0.14	0.18	0.08	0.03	99.92	100.00	100.00	97.95	90.35	99.99	100.00
Haryana	Airtel	0.09	0.20	99.82	0.11	0.12	1.23	1.61	97.62	0	0.26	0.34	0.02	0.00	99.00	100.00	100.00	100.00	97.00	100.00	100.00
	BSNL	0.61	0.24	99.14	0.27	0.39	1.47	1.71	97.56	0	1.78	1.19	0.02	0.00	100.00	100.00	100.00	100.00	99.79	100.00	100.00
	RJio	0.08	0.36	99.58	0.00	0.00	0.35	0.52	99.95	0	0.00	0.10	0.00	0.00	100.00	100.00	100.00	97.28	99.98	100.00	100.00
	TATA	0.46	0.00	99.74	0.07	0.94	0.00	0.00	98.60	0	NA	NA	0.00	0.00	100.00	100.00	100.00	95.93	94.98	100.00	100.00
	VIL-Brand Idea	0.40	0.49	99.80	0.43	0.50	1.45	2.13	98.90	0	0.11	0.17	0.02	0.00	100.00	100.00	100.00	98.52	99.49	100.00	100.00
	VIL-Brand Vodafone	0.40	0.49	99.80	0.43	0.50	1.45	2.13	98.90	0	0.11	0.17	0.04	0.03	100.00	100.00	100.00	100.00	93.90	100.00	100.00
Himachal Pradesh	Airtel	0.18	0.67	99.42	0.16	0.13	1.17	1.59	95.14	0	0.28	0.35	0.03	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00
	BSNL	1.71	1.92	98.42	0.51	1.02	1.96	2.35	95.85	0	NA	NA	0.01	0.00	100.00	100.00	100.00	100.00	99.75	100.00	100.00
	RJio	0.11	0.35	99.60	0.00	0.00	0.23	0.36	99.95	0	0.00	0.11	0.00	0.00	100.00	100.00	100.00	97.27	99.97	100.00	100.00
	TATA	0.05	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0	NA	NA	0.00	0.00	100.00	100.00	100.00	95.96	98.89	100.00	100.00
	VIL-Brand Idea	0.27	0.16	99.07	0.21	0.74	1.95	2.30	97.68	0	0.38	0.36	0.09	0.00	100.00	100.00	100.00	98.74	98.19	100.00	100.00
	VIL-Brand Vodafone	0.27	0.16	99.07	0.21	0.74	1.95	2.30	97.68	0	0.38	0.36	0.04	0.02	100.00	100.00	100.00	100.00	97.10	100.00	100.00
Jammu And Kashmir	Airtel	0.15	0.23	97.93	0.13	0.10	1.44	2.17	97.80	0	0.27	0.48	0.04	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00
	BSNL	1.32	1.73	98.40	0.60	1.40	1.98	2.56	96.30	0	NA	NA	0.01	0.00	100.00	100.00	100.00	100.00	99.38	100.00	100.00
	RJio	0.16	0.57	99.63	0.00	0.00	0.47	0.60	99.93	0	0.01	0.13	0.00	0.00	100.00	100.00	100.00	96.02	98.30	100.00	100.00
	VIL-Brand Idea	0.42	0.39	98.94	0.26	0.87	1.96	2.27	98.01	0	0.37	0.47	0.03	0.01	100.00	100.00	100.00	97.08	98.62	100.00	97.41
	VIL-Brand Vodafone	0.42	0.39	98.94	0.26	0.87	1.96	2.27	98.01	0	0.37	0.47	0.02	0.01	100.00	100.00	100.00	100.00	95.03	100.00	99.82
	Karnataka	Airtel	0.27	0.59	99.39	0.48	0.25	1.90	2.56	95.26	0	0.41	0.27	0.03	0.00	100.00	100.00	100.00	100.00	98.00	100.00
BSNL	1.66	1.81	97.73	0.51	0.51	1.96	2.08	97.18	0	0.99	1.17	0.00	0.00	99.78	100.00	100.00	96.00	97.73	100.00	100.00	
RJio	0.21	0.62	99.62	0.00	0.00	0.32	0.46	99.93	0	0.01	0.15	0.00	0.00	100.00	100.00	100.00	96.88	97.73	100.00	100.00	
TATA	0.65	0.00	98.39	0.07	0.00	0.69	2.46	99.24	0	NA	NA	0.00	0.00	100.00	100.00	100.00	94.70	96.13	100.00	100.00	
VIL-Brand Idea	0.16	0.53	99.82	0.31	0.17	0.82	1.10	97.53	0	0.16	0.41	0.06	0.01	100.00	100.00	100.00	99.56	98.28	100.00	93.74	
VIL-Brand Vodafone	0.63	1.93	99.31	0.26	0.11	1.15	1.67	99.76	0	0.25	0.85	0.05	0.03	99.86	100.00	100.00	100.00	89.44	100.00	100.00	
Kerala	Airtel	0.09	0.06	99.35	0.14	0.18	1.83	2.56	97.39	0	0.08	0.19	0.02	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00
	BSNL	0.44	1.15	99.10	0.28	0.81	1.90	2.36	98.65	0	NA	NA	0.01	0.00	99.00	100.00	100.00	97.00	98.14	100.00	100.00
	RJio	0.08	0.11	99.70	0.00	0.00	0.28	0.50	99.91	0	0.00	0.18	0.00	0.00	100.00	100.00	100.00	96.66	98.09	100.00	100.00
	TATA	0.60	1.13	99.57	0.00	0.16	0.00	0.00	99.79	0	NA	NA	0.00	0.00	100.00	100.00	100.00	94.40	93.91	100.00	100.00
	VIL-Brand Idea	0.76	0.18	99.59	0.28	0.30	1.23	1.89	97.74	0	0.20	0.33	0.07	0.00	99.94	100.00	100.00	98.55	87.21	100.00	99.91
	VIL-Brand Vodafone	0.10	0.11	99.71	0.19	0.14	0.99	1.41	99.62	0	0.07	0.16	0.08	0.01	100.00	100.00	100.00	100.00	80.41	100.00	100.00

Annexure 4.1 (Contd.)

Kolkata	Airtel	0.69	0.00	99.60	0.25	0.32	1.52	2.22	95.63	0	0.23	0.99	0.01	0.00	100.00	100.00	100.00	100.00	82.00	100.00	100.00
	RJio	0.03	0.04	99.62	0.00	0.00	0.17	0.25	99.93	0	0.01	0.13	0.00	0.00	100.00	100.00	100.00	97.49	96.75	100.00	100.00
	TATA	0.60	1.69	99.66	0.03	0.03	0.00	0.00	99.39	0	NA	NA	0.00	0.00	100.00	100.00	100.00	96.04	97.31	100.00	100.00
	VIL-Brand Idea	0.15	0.96	99.57	0.02	0.03	0.39	0.88	99.45	0	NA	NA	0.02	0.01	100.00	100.00	100.00	96.92	98.88	100.00	100.00
	VIL-Brand Vodafone	0.21	1.22	99.17	0.13	0.76	1.16	1.64	98.65	0	0.09	0.14	0.04	0.01	100.00	100.00	100.00	100.00	87.93	100.00	100.00
Madhya Pradesh	Airtel	0.19	0.25	99.24	0.10	0.22	1.87	2.15	95.88	0	0.08	0.15	0.01	0.00	99.00	100.00	100.00	100.00	97.00	100.00	100.00
	BSNL	1.37	1.51	98.90	0.30	1.09	1.88	2.07	98.90	0	NA	NA	0.00	0.00	100.00	100.00	100.00	99.00	99.97	100.00	100.00
	RJio	0.23	0.91	99.60	0.00	0.00	0.40	0.51	99.89	0	0.01	0.22	0.00	0.00	100.00	100.00	100.00	97.58	96.95	100.00	100.00
	TATA	1.42	0.00	98.55	0.05	1.08	0.00	0.00	99.54	0	NA	NA	0.00	0.00	100.00	100.00	100.00	96.44	96.32	100.00	100.00
	VIL-Brand Idea	0.41	0.62	96.71	0.65	2.22	1.61	2.33	98.01	0	0.36	0.50	0.08	0.00	100.00	100.00	100.00	95.93	99.96	99.82	81.80
VIL-Brand Vodafone	0.41	0.62	96.71	0.65	2.22	1.61	2.33	98.01	0	0.36	0.50	0.01	0.01	100.00	100.00	100.00	100.00	97.23	97.96	100.00	
Maharashtra	Airtel	0.03	0.05	99.44	0.14	0.18	1.32	1.65	95.42	0	0.11	0.19	0.01	0.00	99.00	100.00	100.00	86.00	94.00	100.00	100.00
	BSNL	1.44	1.99	97.82	0.89	1.03	1.89	2.86	96.12	0	0.04	0.06	0.01	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00
	RJio	0.31	1.17	99.59	0.01	0.00	0.32	0.42	99.90	0	0.01	0.21	0.00	0.00	100.00	100.00	100.00	97.94	97.73	100.00	100.00
	TATA	0.93	0.00	99.71	0.02	0.07	0.00	0.16	99.70	0	NA	NA	0.00	0.00	100.00	100.00	100.00	96.47	85.93	100.00	100.00
	VIL-Brand Idea	0.48	1.82	99.04	0.71	0.52	1.71	2.97	97.92	0	0.70	0.53	0.03	0.00	99.16	100.00	100.00	99.50	99.34	100.00	100.00
VIL-Brand Vodafone	0.25	1.25	98.93	0.47	1.01	1.65	2.35	99.00	0	0.13	0.18	0.08	0.03	100.00	100.00	100.00	100.00	96.74	99.79	100.00	
Mumbai	Airtel	0.20	0.53	99.38	0.27	0.27	1.82	1.96	95.90	0	0.19	0.29	0.01	0.00	99.00	100.00	100.00	100.00	93.00	100.00	100.00
	MTNL	0.65	1.16	97.78	0.37	0.47	1.79	2.88	98.31	0	NA	NA	0.02	0.00	100.00	100.00	100.00	100.00	99.31	100.00	100.00
	RJio	0.15	0.47	99.57	0.01	0.00	0.17	0.25	99.91	0	0.01	0.17	0.00	0.00	100.00	100.00	100.00	97.24	97.36	100.00	100.00
	TATA	0.05	0.00	100.00	0.09	0.00	0.00	0.00	98.39	0	NA	NA	0.00	0.00	100.00	100.00	100.00	96.44	96.60	100.00	100.00
	VIL-Brand Idea	0.10	0.15	99.34	0.18	0.24	1.37	1.92	95.73	0	0.04	0.46	0.00	0.00	99.57	100.00	100.00	96.80	96.38	100.00	100.00
VIL-Brand Vodafone	0.27	1.59	98.78	0.47	1.10	1.86	2.95	98.65	0	0.24	0.29	0.08	0.02	99.99	100.00	99.80	100.00	88.77	100.00	100.00	
North East	Airtel	0.63	1.82	97.42	0.49	0.64	1.79	2.20	97.88	0	0.31	0.48	0.01	0.00	100.00	100.00	100.00	100.00	89.00	100.00	100.00
	BSNL	1.84	1.85	98.12	0.97	1.89	1.92	2.46	98.00	0	NA	NA	0.05	0.05	100.00	100.00	100.00	96.00	95.72	100.00	100.00
	RJio	0.92	1.34	99.51	0.00	0.00	0.72	1.00	99.88	0	0.01	0.25	0.00	0.00	100.00	100.00	100.00	96.88	99.67	100.00	100.00
	VIL-Brand Idea	0.84	0.60	98.42	0.32	1.46	1.92	2.46	97.85	0	0.67	0.41	0.03	0.00	100.00	100.00	100.00	96.66	100.00	100.00	100.00
	VIL-Brand Vodafone	0.84	0.60	98.42	0.32	1.46	1.92	2.46	97.85	0	0.67	0.41	0.00	0.04	100.00	100.00	100.00	99.97	100.00	100.00	100.00
Odisha	Airtel	0.41	0.32	98.74	0.31	0.85	1.64	1.89	97.70	0	0.11	0.17	0.01	0.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00
	RJio	0.16	0.35	99.46	0.01	0.00	0.32	0.54	99.90	0	0.01	0.20	0.00	0.00	100.00	100.00	100.00	96.97	98.73	100.00	100.00
	BSNL	0.77	1.93	96.72	0.89	1.71	1.97	2.76	95.45	0	NA	NA	0.00	0.01	98.49	100.00	100.00	98.00	97.05	100.00	100.00
	TATA	0.70	0.00	99.89	0.13	0.00	0.00	0.00	99.86	0	NA	NA	0.00	0.00	100.00	100.00	100.00	96.04	97.38	100.00	100.00
	VIL-Brand Idea	0.26	0.42	97.04	0.51	0.86	1.30	2.51	96.84	0	0.17	0.33	0.00	0.01	100.00	100.00	98.86	97.36	99.88	100.00	100.00
VIL-Brand Vodafone	0.35	1.26	98.62	0.85	1.34	1.65	2.51	98.43	0	NA	NA	0.03	0.03	100.00	100.00	100.00	99.85	94.79	98.76	100.00	

Annexure 4.1 (Contd.)

Punjab	Airtel	0.05	0.08	99.78	0.11	0.10	1.27	1.54	98.30	0	0.17	0.35	0.02	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	
	BSNL	0.37	1.40	98.72	0.40	0.13	1.67	1.85	97.79	0	1.27	1.27	0.01	0.00	100.00	100.00	100.00	100.00	99.64	100.00	100.00	
	RJio	0.10	0.36	99.55	0.00	0.00	0.18	0.30	99.95	0	0.00	0.10	0.00	0.00	100.00	100.00	100.00	100.00	97.33	97.88	100.00	100.00
	TATA	0.46	0.00	99.30	0.71	0.01	0.00	0.00	99.07	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	95.93	94.78	100.00	100.00
	VIL-Brand Idea	0.10	0.35	99.78	0.17	0.20	1.12	1.61	99.28	0	0.14	0.40	0.04	0.00	100.00	100.00	100.00	100.00	99.85	95.84	100.00	99.30
	VIL-Brand Vodafone	0.10	0.35	99.78	0.17	0.20	1.12	1.61	99.28	0	0.14	0.40	0.04	0.01	100.00	100.00	100.00	100.00	100.00	95.03	100.00	100.00
Rajasthan	Airtel	0.13	0.19	98.52	0.18	0.38	1.47	2.00	98.45	0	0.44	0.23	0.01	0.00	99.00	100.00	100.00	100.00	98.00	100.00	100.00	
	BSNL	1.20	1.80	98.74	0.64	1.26	1.59	2.04	98.58	0	NA	NA	0.02	0.02	98.09	100.00	100.00	100.00	97.00	99.00	100.00	100.00
	RJio	0.09	0.26	99.59	0.00	0.00	0.43	0.56	99.94	0	0.01	0.12	0.00	0.00	100.00	100.00	100.00	100.00	97.47	97.99	100.00	100.00
	TATA	1.19	0.00	98.28	0.01	0.00	0.00	0.00	99.74	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	96.45	94.82	100.00	100.00
	VIL-Brand Idea	0.47	1.50	99.59	0.09	0.24	1.03	1.48	99.66	0	0.22	0.42	0.08	0.01	100.00	100.00	100.00	100.00	98.02	99.78	100.00	74.59
	VIL-Brand Vodafone	0.20	0.70	99.12	0.22	0.86	1.45	2.13	97.82	0	0.25	0.28	0.02	0.04	100.00	100.00	100.00	100.00	100.00	98.22	100.00	100.00
Tamil Nadu	Airtel	0.05	0.12	99.67	0.22	0.27	1.14	1.49	95.66	0	0.30	0.22	0.01	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	
	BSNL	0.64	1.57	99.11	0.24	0.59	1.96	2.70	97.63	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	95.30	100.00	100.00	100.00
	RJio	0.04	0.10	99.60	0.00	0.00	0.25	0.34	99.93	0	0.01	0.14	0.00	0.00	100.00	100.00	100.00	100.00	97.19	98.75	100.00	100.00
	TATA	0.92	1.64	99.44	0.23	0.07	1.74	2.52	99.66	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	95.01	94.70	100.00	100.00
	VIL-Brand Idea	0.06	0.12	99.43	0.04	0.05	0.49	1.38	99.28	0	0.11	0.15	0.01	0.00	100.00	100.00	100.00	100.00	98.19	99.41	100.00	100.00
	VIL-Brand Vodafone	0.10	0.33	98.98	0.60	0.94	1.11	1.63	98.91	0	0.09	0.13	0.04	0.02	100.00	100.00	100.00	100.00	100.00	94.03	100.00	100.00
Uttar Pradesh (East)	Airtel	0.42	1.06	97.28	0.55	0.92	1.59	2.08	97.15	0	0.12	0.25	0.01	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	
	BSNL	1.85	1.93	98.06	0.84	0.83	1.75	2.17	97.68	0	NA	NA	0.09	0.08	98.30	100.00	100.00	100.00	99.00	96.14	100.00	100.00
	RJio	0.27	1.21	99.44	0.00	0.00	0.44	0.54	99.85	0	0.02	0.30	0.00	0.00	100.00	100.00	100.00	100.00	97.13	97.01	100.00	100.00
	TATA	0.35	0.00	99.41	0.00	0.28	0.00	0.56	98.51	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	95.94	96.55	100.00	100.00
	VIL-Brand Idea	0.47	1.89	99.41	0.46	0.42	1.88	2.90	98.92	0	0.11	0.26	0.03	0.00	100.00	100.00	100.00	100.00	99.60	99.86	100.00	100.00
	VIL-Brand Vodafone	0.62	1.68	97.84	0.90	1.85	1.96	2.82	98.48	0	0.11	0.18	0.06	0.02	100.00	100.00	100.00	100.00	100.00	94.10	99.97	100.00
Uttar Pradesh (West)	Airtel	0.35	0.57	99.28	0.25	0.10	1.57	2.06	99.49	0	0.22	0.16	0.02	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00	
	BSNL	1.69	1.82	97.42	0.69	1.06	1.74	2.13	96.39	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	97.40	100.00	100.00	100.00
	RJio	0.18	0.87	99.53	0.00	0.00	0.41	0.52	99.92	0	0.01	0.15	0.00	0.00	100.00	100.00	100.00	100.00	97.30	97.53	100.00	100.00
	TATA	0.61	0.00	99.54	0.29	0.03	0.00	0.00	99.19	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	95.93	95.62	100.00	100.00
	VIL-Brand Idea	0.35	1.39	96.93	0.96	2.72	1.89	2.98	97.50	0	0.11	0.31	0.04	0.01	100.00	100.00	100.00	100.00	99.34	98.42	100.00	75.85
	VIL-Brand Vodafone	0.38	1.84	98.01	0.97	1.96	1.89	2.84	96.86	0	0.72	0.43	0.05	0.03	100.00	100.00	100.00	100.00	100.00	97.93	100.00	100.00
West Bengal	Airtel	0.40	0.06	98.85	0.40	0.53	1.79	2.88	97.29	0	0.18	0.50	0.01	0.00	100.00	100.00	100.00	100.00	82.00	100.00	100.00	
	BSNL	0.38	0.75	97.66	0.93	1.16	8.33	10.00	95.06	0	NA	NA	0.01	0.01	100.00	100.00	100.00	100.00	95.00	96.33	100.00	100.00
	RJio	0.17	0.20	99.48	0.00	0.00	0.58	0.74	99.86	0	0.02	0.27	0.00	0.00	100.00	100.00	100.00	100.00	97.43	96.80	100.00	100.00
	TATA	0.52	0.00	99.41	0.01	0.00	0.00	0.00	98.56	0	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	96.04	97.69	100.00	100.00
	VIL-Brand Idea	0.06	0.23	99.44	0.19	0.51	1.47	2.03	97.79	0	0.08	0.13	0.03	0.01	100.00	100.00	100.00	100.00	96.84	99.15	100.00	100.00
	VIL-Brand Vodafone	0.06	0.23	99.44	0.19	0.51	1.47	2.03	97.79	0	0.08	0.13	0.04	0.03	100.00	100.00	100.00	100.00	100.00	85.42	100.00	100.00

Note: NA= Not applicable and NR=Not reported

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 June, 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 (MTR)	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 - creditability - post paid	Metering and billing creditability - pre paid	Resolution of billing/ charging/ validity complaints	Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	Accessibility of call centre/ customer care	Percentage of calls answered by the operators (voice to voice) within 90 seconds	%age requests for Termination / Closure of service complied within 7 days	Time taken for refund of deposits after closures			
																				Benchmarks		
				≤7	For urban areas by next working day: ≥85%	For urban areas: ≥ 100%	For rural and hilly areas: ≥ 75%				For rural and hilly areas: ≥ 100%	≤ 10 Hrs	≤0.5%	≤0.1%	≤0.1%	98% within 4 weeks	100% within 6 weeks	1 week of resolution of complaint	≥95%	≥95%	100% within 7 days	100% within 60 days
1	A&N	BSNL	5.00	86.00%	100.00%	83.00%	100%	37	7.00	0.00	0.00%	0.00	98.00%	100.00%	100.00%	100.00%	98.67%	100.00%	100.00%			
2	AP	Bharti	1.46	89.39%	100.00%	NA	NA	2041	5.85	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	81.00%	100.00%	100.00%			
3		BSNL	3.00	94.00%	100.00%	93.00%	100%	185	6.00	0.01	0.00%	0.00	100.00%	100.00%	100.00%	97.92%	97.54%	100.00%	100.00%			
4		TTSL	4.82	96.80%	100.00%	NA	NA	110	4.95	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	95.34%	97.43%	99.90%	NA			
5		VIL	0.14	100.00%	100.00%	NA	NA	NA	2.38	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	100.00%	NA		
6	Assam	BSNL	3.00	96.00%	100.00%	84.00%	100%	770	6.00	0.03	0.00%	0.00	100.00%	100.00%	100.00%	98.88%	99.67%	100.00%	100.00%			
7		VIL	1.73	100.00%	100.00%	NA	NA	NA	4.38	NA	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA			
8	Bihar	BSNL	4.00	93.00%	100.00%	90.00%	100%	0	5.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%			
9		TTSL	0.37	100.00%	100.00%	NA	NA	NA	1.24	0.00	0.00%	NA	NA	NA	NA	96.36%	97.97%	100.00%	NA			
10		VIL	2.07	100.00%	100.00%	NA	NA	NA	5.11	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	100.00%	NA		
11	Chattisgarh	BSNL	3.00	96.00%	100.00%	96.00%	100%	75	6.00	0.00	0.01%	0.00	99.00%	100.00%	100.00%	97.35%	97.67%	100.00%	100.00%			
12	Chennai	BSNL	5.00	93.00%	100.00%	93.00%	100%	345	8.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	98.27%	98.07%	100.00%	100.00%			
13	Delhi	Bharti	1.89	92.68%	100.00%	NA	NA	1544	5.34	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	90.00%	100.00%	100.00%			
14		MTNL	3.59	91.33%	99.62%	NA	NA	4156	3.72	0.00	0.01%	0.00%	99.81%	100.00%	100.00%	97.93%	98.04%	100.00%	100.00%			
15		TTSL	2.19	96.10%	100.00%	NA	NA	13	3.77	0.00	0.00%	NA	NA	NA	NA	95.31%	96.36%	99.67%	NA			
16		VIL	0.73	100.00%	100.00%	NA	NA	NA	3.38	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	100.00%	NA		
17	Gujarat	Bharti	0.74	91.35%	100.00%	NA	NA	261	6.24	0.00	0.04%	NA	100.00%	100.00%	100.00%	100.00%	79.00%	100.00%	100.00%			
18		BSNL	4.00	96.00%	100.00%	94.00%	100%	115	5.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	97.66%	97.67%	100.00%	100.00%			
19		TTSL	1.57	90.80%	100.00%	NA	NA	59	7.04	0.35	0.00%	NA	NA	NA	NA	95.18%	96.99%	100.00%	NA			
20		VIL	0.20	100.00%	100.00%	NA	NA	NA	3.10	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	100.00%	NA		

Annexure 4.2 (Contd.)

21	HP	BSNL	5.00	91.00%	100.00%	95.00%	100%	168	6.00	0.00	0.00%	0.00	98.50%	100.00%	100.00%	96.33%	100.00%	100.00%	100.00%
22		VIL	0.56	100.00%	100.00%	NA	NA	NA	0.00	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
23	HR	Bharti	2.94	96.07%	100.00%	NA	NA	7	3.36	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	75.00%	100.00%	100.00%
24		BSNL	5.00	92.00%	100.00%	92.00%	100%	209	6.00	0.00	0.08%	0.00	100.00%	100.00%	100.00%	97.41%	100.00%	100.00%	100.00%
25		TTSL	0.04	50.00%	100.00%	NA	NA	2	19.66	0.00	0.00%	NA	NA	NA	NA	100.00%	NA	100.00%	NA
26		VIL	4.44	100.00%	100.00%	NA	NA	NA	5.39	0.00	0.00%	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
27	J&K	BSNL	4.00	95.00%	100.00%	94.00%	100%	20	7.00	0.00	0.01%	0.00	98.00%	100.00%	100.00%	96.99%	100.00%	100.00%	100.00%
28	JHAR	BSNL	4.00	96.00%	100.00%	96.00%	100%	30	5.00	0.00	0.00%	0.00	98.00%	100.00%	100.00%	99.00%	99.67%	100.00%	100.00%
29	KERALA	Bharti	3.06	89.93%	100.00%	NA	NA	882	9.43	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	88.00%	100.00%	100.00%
30		BSNL	4.00	94.00%	100.00%	92.00%	100%	1052	7.00	0.00	0.02%	0.00	98.00%	100.00%	100.00%	94.02%	92.10%	100.00%	100.00%
31		TTSL	0.30	88.90%	100.00%	NA	NA	NA	5.31	0.00	0.00%	NA	NA	NA	NA	95.24%	97.56%	100.00%	NA
32		VIL	0.90	100.00%	100.00%	NA	NA	NA	2.45	NA	NA	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%	86.00%	100.00%	100.00%
34		BSNL	6.00	90.00%	100.00%	NA	NA	390	8.00	0.00	0.00%	0.00	98.17%	100.00%	100.00%	99.54%	99.00%	100.00%	100.00%
35		VIL	0.67	100.00%	100.00%	NA	NA	NA	3.21	NA	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA
36	KTK	Bharti	2.14	98.52%	100.00%	NA	NA	707	9.96	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	87.00%	100.00%	100.00%
37		BSNL	4.00	96.00%	100.00%	94.00%	100%	2276	7.00	0.00	0.09%	0.00	98.00%	100.00%	100.00%	97.05%	96.91%	100.00%	100.00%
38		TTSL	0.36	87%	100.00%	NA	NA	79	10.14	0.20	0.00%		100.00%	100.00%	100.00%	96.29%	96.37%	99.76%	NA
39		VIL	0.59	100.00%	100.00%	NA	NA	NA	4.18	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
40	MH	Bharti	0.41	92.38%	100.00%	NA	NA	155	6.38	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	84.00%	100.00%	100.00%
41		BSNL	5.00	89.00%	100.00%	82.00%	100%	675	6.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	96.43%	96.33%	100.00%	100.00%
42		TTSL	3.04	94.20%	100.00%	NA	NA	138	4.82	0.00	0.00%	NA	100.00%	100.00%	100.00%	95.32%	96.77%	99.94%	100.00%
43		VIL	0.39	100.00%	100.00%	NA	NA	NA	3.70	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
44	MP	Bharti	3.95	85.62%	100.00%	NA	NA	1684	6	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	82.00%	100.00%	100.00%
45		BSNL	4.00	89.00%	100.00%	86.00%	100%	318	4.00	0.00	0.04%	0.00	100.00%	100.00%	100.00%	97.85%	98.00%	100.00%	100.00%
46		TTSL	13.23	99.40%	100.00%	NA	NA	NA	1.43	0.00	0.00%	NA	NA	NA	NA	97.06%	94.21%	99.78%	NA
47		VIL	2.46	100.00%	100.00%	NA	NA	NA	2.59	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
48	MUM	Bharti	0.38	91.45%	100.00%	NA	NA	550	6.00	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	82.00%	100.00%	100.00%
49		MTNL	2.80	95.20%	99.80%	NA	NA	11791	5.83	0.21	0.04%	NA	99.46%	100.00%	100.00%	99.09%	99.00%	99.99%	100.00%
50		TTSL	3.04	90.50%	100.00%	NA	NA	952	7.68	0.00	0.00%	NA	100.00%	100.00%	100.00%	95.33%	97.08%	99.88%	100.00%
51		VIL	0.74	100.00%	100.00%	NA	NA	NA	3.56	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA

Annexure 4.2 (Contd.)

52	NE	VIL	0.00	100.00%	NA	NA	NA	NA	0.00	NA	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA
53	NE-I	BSNL	6.00	94.00%	100.00%	82.00%	100%	8	7.00	0.00	0.01%	0.00	98.00%	100.00%	100.00%	98.88%	99.00%	100.00%	100.00%
54	NE-II	BSNL	2.00	95.00%	100.00%	97.00%	100%	175	4.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	100.00%	99.67%	100.00%	100.00%
55	ORISA	BSNL	6.00	93.00%	100.00%	88.00%	100%	688	4.00	0.00	0.00%	0.00	99.00%	100.00%	100.00%	99.11%	99.00%	100.00%	100.00%
56		TTSL	0.10	33.30%	100.00%	NA	NA	4	31.79	0.00	0.00%	NA	NA	NA	NA	NA	NA	100.00%	NA
57		VIL	2.29	100.00%	100.00%	NA	NA	NA	15.10	NA	NA	NA	NA	NA	NA	NA	96.00%	100.00%	NA
58	PUNJAB	Bharti	2.57	86.00%	100.00%	NA	NA	436	5.67	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	79.00%	100.00%	100.00%
59		BSNL	5.00	92.00%	100.00%	86.00%	100%	172	6.00	0.00	0.00%	0.00	99.00%	100.00%	100.00%	96.69%	100.00%	100.00%	100.00%
60		Quadrant	4.80	92.00%	100.00%	100.00%	100%	0	6.35	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	99.00%	95.40%	100.00%	100.00%
61		TTSL	1.74	100.00%	100.00%	NA	NA	2	2.30	0.00	0.00%	NA	NA	NA	NA	100.00%	100.00%	100.00%	NA
62		VIL	0.73	100.00%	100.00%	NA	NA	NA	2.57	NA	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%
63	RAJASTHAN	Bharti	2.45	85.20%	100.00%	NA	NA	680	6.31	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	88.00%	100.00%	100.00%
64		BSNL	5.00	95.00%	100.00%	95.00%	100%	195	6.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	96.49%	100.00%	100.00%	100.00%
65		TTSL	2.86	100.00%	100.00%	NA	NA	NA	1.94	0.00	0.00%	NA	NA	NA	NA	100.00%	97.94%	100.00%	NA
66		VIL	0.33	100.00%	100.00%	NA	NA	NA	4.38	NA	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%
67	TAMILNADU	Bharti	3.65	91.08%	100.00%	NA	NA	1937	9.05	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	77.00%	100.00%	100.00%
68		BSNL	3.00	90.00%	100.00%	91.00%	100%	1807	8.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	97.60%	97.77%	100.00%	100.00%
69		TTSL	0.77	97.40%	100.00%	NA	NA	9	2.74	0.00	0.00%	NA	NA	NA	NA	95.00%	97.36%	100.00%	NA
70		VIL	0.48	100.00%	100.00%	NA	NA	NA	2.70	NA	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%
71	UPE	Bharti	2.66	86.40%	100.00%	NA	NA	137	5.64	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	81.00%	100.00%	100.00%
72		BSNL	4.00	91.00%	100.00%	81.00%	100%	720	5.00	0.00	0.10%	0.00	100.00%	100.00%	100.00%	96.41%	100.00%	100.00%	100.00%
73		TTSL	8.50	100.00%	100.00%	NA	NA	NA	1.64	0.00	0.00%	NA	NA	NA	NA	NA	100.00%	NA	NA
74		VIL	0.48	100.00%	100.00%	NA	NA	NA	3.11	NA	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%
75	UPW	Bharti	4.67	87.05%	100.00%	NA	NA	96	5.87	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	81.00%	100.00%	100.00%
76		BSNL	6.00	94.00%	100.00%	90.00%	100%	8703	5.00	0.00	0.06%	0.00	100.00%	100.00%	100.00%	96.42%	100.00%	100.00%	100.00%
77		TTSL	6.49	100.00%	100.00%	NA	NA	NA	2.09	0.00	0.00%	NA	NA	NA	NA	NA	NA	100.00%	NA
78		VIL	1.56	100.00%	100.00%	NA	NA	NA	4.33	NA	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%
79	Uttaranchal	BSNL	4.00	98.00%	100.00%	87.00%	100%	90	6.00	0.00	0.00%	0.00	98.00%	100.00%	100.00%	97.08%	100.00%	100.00%	100.00%
80	WB	BSNL	5.00	93.00%	100.00%	93.00%	100%	9513	4.00	0.00	0.03%	0.00	100.00%	100.00%	100.00%	99.06%	99.00%	100.00%	100.00%
81		TTSL	1.16	99.40%	100.00%	NA	NA	24	2.93	0.00	0.00%	NA	NA	NA	NA	96.64%	97.47%	99.53%	NA
82		VIL	0.00	100.00%	100.00%	NA	NA	NA	0.00	NA	NA	NA	NA	NA	NA	NA	96.00%	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 June 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	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 band width 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)	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)
			100%	>90%	=>99%	in nos.	<2%	100%	100%	>60%	>80%	0	0	<90%	>80%		>98%	<1%	<120 ms	<350 ms
1	Bharat Sanchar Nigam Ltd.(BSNL)	All India (except Delhi & Mumbai)	100.00%	93.83%	99.63%	16202	0.05%	100.00%	100.00%	96.28%	97.25%	NA	0	64.20%	91.86%	99.65%	0.90%	16	165	NA
2	Mahanagar Telephone Nigam Ltd.	Delhi & Mumbai	100.00%	94.32%	99.34%	6624	0.63%	100.00%	100.00%	98.49%	98.83%	Nil	0	81.62%	89.55%	99.75%	0.53%	46	297	NA
3	Airlink Communications Pvt.	All India	100.00%	92.64%	99.24%	0	NA	100.00%	NA	70.85%	100.00%	0	0	88.83%	98.33%	99.85%	0.50%	120	350	NA
4	Alliance Broadband Services Pvt.	All India	100.00%	92.23%	100.00%	Nil	0.00%	100.00%	Nil	88.00%	100.00%	0	0	71.01%	99.11%	99.45%	0.14%	67	208	200
5	ANI network Pvt. Ltd.	All India	100.00%	99.60%	100.00%	0	0.00%	Nil	0.00	95.66%	100.00%	Nil	Nil	87.00%	100.00%	99.00%	0.40%	20	288	NA
6	Asianet Satellite	All India	100.00%	90.39%	99.46%	Nil	1.79%	100.00%	100.00%	60.38%	80.49%	Nil	0	68.84%	90.00%	99.50%	1.00%	50	270	NA
7	Atria Convergence Technologies Pvt. Ltd.	All India	100.00%	86.77%	96.70%	9626	1.04%	100.00%	Nil	39.00%	44.00%	0	0	43.00%	90.00%	99.93%	1.00%	23	195	NA
8	Bharti Airtel Ltd.	Andhra Pradesh	100.00%	93.91%	100.00%	2330	0.12%	100.00%	100.00%	74.00%	81.00%	0	0	46.00%	100.00%	99.90%	0	35	47	NA
		Delhi	100.00%	93.81%	99.13%	1579	0.06%	100.00%	100.00%	83.00%	89.00%	0	0	53.00%	100.00%	99.96%	0	40	72	NA
		Gujarat	100.00%	94.76%	99.19%	446	0.07%	100.00%	100.00%	73.00%	81.00%	0	NA	NA	100.00%	99.93%	0	45	NA	NA
		Haryana	100.00%	95.10%	99.33%	18	0.06%	100.00%	100.00%	71.00%	78.00%	0	NA	NA	100.00%	99.98%	0	30	NA	NA
		Karnataka	100.00%	90.12%	100.00%	4178	0.10%	100.00%	100.00%	80.00%	87.00%	0	0	47.00%	100.00%	99.77%	0	35	40	NA
		Kerala	100.00%	90.77%	99.78%	742	0.09%	100.00%	100.00%	82.00%	86.00%	0	NA	NA	100.00%	99.94%	0	26	NA	NA
		Kolkata	100.00%	90.57%	100.00%	666	0.04%	100.00%	100.00%	82.00%	88.00%	0	0	48.00%	100.00%	99.97%	0	27	73	NA
		Madhya Pradesh	100.00%	90.78%	99.09%	1437	0.04%	100.00%	100.00%	70.00%	79.00%	0	0	53.00%	100.00%	99.86%	0	61	64	NA
		Maharashtra	100.00%	94.50%	99.25%	206	0.13%	100.00%	100.00%	71.00%	78.00%	0	NA	NA	100.00%	99.89%	0	15	NA	NA
		Mumbai	100.00%	95.00%	99.15%	610	0.05%	100.00%	100.00%	75.00%	83.00%	0	0	61.00%	100.00%	99.94%	0	38	63	NA
		Punjab	100.00%	90.51%	99.09%	490	0.01%	100.00%	100.00%	67.00%	76.00%	0	0	54.00%	100.00%	99.96%	0	15	77	NA
		Rajasthan	100.00%	90.29%	99.78%	534	0.05%	100.00%	100.00%	76.00%	84.00%	0	NA	NA	100.00%	99.95%	0	37	NA	NA
		Tamilnadu	100.00%	90.22%	99.81%	1889	0.08%	100.00%	100.00%	77.00%	83.00%	0	0	35.00%	100.00%	99.83%	0	29	34	NA
		Uttar Pradesh - East	100.00%	90.44%	99.15%	127	0.04%	100.00%	100.00%	69.00%	78.00%	0	0	38.00%	100.00%	99.92%	0	38	86	NA
Uttar Pradesh - West	100.00%	90.15%	99.05%	159	0.04%	100.00%	100.00%	71.00%	78.00%	0	NA	NA	100.00%	99.95%	0	35	NA	NA		

Annexure 4.3 (Contd.)

9	DEN Broadband Pvt. Ltd.	All India	100.00%	96.52%	99.74%	0	Nil	Nil	Nil	82.24%	85.38%	0	0	78.88%	100.00%	98.58%	0.00%	NA	260	NA
10	Digital Satellite Connect Pvt.	Mumbai	100.00%	90.83%	99.20%	0	0.01%	100.00%	NA	74.27%	86.16%	0	0	80.00%	80.00%	99.82%	1.00%	4	255	600
11	Digital Network Associates Pvt. Ltd	Maharashtra &	100.00%	90.36%	99.25%	None	0.13%	100.00%	Nil	61.54%	80.96%	Nil	0	80.00%	80.00%	99.68%	1.00%	4	255	600
		Mumbai	100.00%	95.02%	99.34%	None	0.00%	100.00%	Nil	68.72%	83.25%	Nil	0	80.00%	80.00%	99.68%	1.00%	4	255	600
12	DNA Infotel Pvt. Ltd.	Maharashtra	100.00%	90.12%	99.17%	None	0.03%	100.00%	Nil	61.92%	82.73%	Nil	0	80.00%	80.00%	99.82%	1.00%	4	255	600
13	D-Vois Communications Pvt.Ltd.	All India	100.00%	92.06%	99.77%	0	0.81%	Nil	Nil	82.49%	89.59%	0	Nil	Nil	90.00%	100.00%	0.10%	25	25	59
14	Excitel Broadband Pvt.Ltd.	Delhi	100.00%	90.30%	99.10%	Nil	NA	NA	NA	60.00%	80.00%	0	Nil	79.50%	98.50%	98.48%	0.00%	4	199	NIL
		Hyderabad	100.00%	91.00%	99.00%	Nil	Nil	Nil	Nil	84.00%	90.00%	0	Nil	85.00%	90.00%	98.00%	0.00%	10	130	NIL
15	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
16	Fusionnet Web Services Pvt. Ltd.	All India	100.00%	91.80%	99.20%	48	0.00%	100.00%	100.00%	79.40%	82.40%	0	0	80.00%	100.00%	100.00%	1.00%	120	350	NA
17	Geocity Network Solutions Pvt.Ltd.	Delhi	100.00%	92.67%	100.00%	0	0.00%	100.00%	100.00%	67.33%	86.33%	0	0	89.74%	85.33%	99.27%	0.40%	30	100	400
18	GTPL Broadband Pvt.Ltd.	All India	100.00%	96.00%	99.00%	1118	0.14%	100.00%	NA	92.00%	99.00%	NA	0	85.03%	91.00%	99.59%	0.00%	11	300	NA
19	Hathway Cable & Datacom Ltd.	All India	100.00%	92.70%	99.21%	1223	0.13%	100.00%	100.00%	64.87%	86.30%	0	0	75.00%	90.00%	99.95%	0.29%	78	264	NA
20	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
21	IKF Technologies Ltd	All India	100.00%	92.70%	99.30%	0	0.00%	100.00%	100.00%	61.68%	85.70%	0	0	61.00%	88.00%	98.30%	0.50%	87	310	NA
22	Indinet Service Pvt Ltd	All India	100.00%	91.67%	100.00%	0	0.00%	100.00%	100.00%	75.00%	83.00%	0	0	84.00%	95.00%	99.38%	0.50%	44	253	0
23	Intech Online Pvt.Ltd.	Maharashtra	100.00%	90.77%	99.14%	10	1.03%	100.00%	0.00	87.65%	88.08%	0	0	31.73%	82.30%	99.98%	1.00%	15	90	455
		Mumbai	100.00%	90.44%	99.08%	7	1.64%	100.00%	0.00	86.85%	87.24%	0	0	29.68%	82.30%	99.98%	1.00%	1	75	455
24	Ishan Netsol Pvt Ltd	Gujarat	100.00%	94.03%	100.00%	0	0.00%	100.00%	100.00%	68.66%	83.07%	0	0	53.94%	91.00%	98.09%	1.00%	100	250	NA
25	Joister Inforserve Pvt. Ltd. (Formerly Syscon Infoway Pvt. Ltd.)	Mumbai	100.00%	93.00%	100.00%	Nil	0.00%	100.00%	0.00	86.00%	87.00%	0	0	68.00%	99.00%	100.00%	0.00%	1	47	265
		Maharashtra	100.00%	95.00%	100.00%	Nil	0.00%	100.00%	NA	76.00%	83.67%	0	0	78.00%	99.00%	100.00%	1.00%	1	225	265
26	K NET SOLUTIONS PVT. LTD.	Chennai	100.00%	91.15%	99.30%	93	NA	100.00%	100.00%	94.79%	95.28%	0	0	NA	100.00%	99.99%	0.00%	18	213	NA
		Tamilnadu	100.00%	95.72%	99.89%	2	NA	100.00%	100.00%	94.79%	95.28%	0	0	NA	100.00%	99.98%	0.00%	23	220	NA
27	Limras Eronet Broadband Service Pvt. Ltd.	All India	100.00%	99.00%	100.00%	0	1.00%	100.00%	0.00	90.00%	100.00%	0	0	0.00%	97.00%	99.00%	1.00%	32	260	0
28	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
	Microscan Computers Pvt. Ltd.																			
29	Netplus Broadband Services Pvt. Ltd.	Delhi	100.00%	93.33%	100.00%	0	0.30%	100.00%	100.00%	76.00%	88.00%	0	0	62.33%	95.15%	100.00%	0.10%	38	139	NA
		Haryana	100.00%	93.92%	99.50%	11	0.54%	100.00%	100.00%	76.00%	88.00%	0	0	63.00%	95.07%	100.00%	0.10%	38	139	NA
		Himachal	100.00%	94.00%	100.00%	0	0.24%	100.00%	100.00%	76.00%	88.00%	0	0	78.00%	96.30%	100.00%	0.10%	38	139	NA
		Punjab	100.00%	91.08%	99.44%	175	1.66%	100.00%	100.00%	76.00%	88.00%	0	0	84.00%	96.45%	100.00%	0.10%	38	139	NA
		Rajasthan	100.00%	100.00%	100.00%	0	0.00%	100.00%	100.00%	76.00%	88.00%	0	0	63.00%	95.14%	100.00%	0.10%	38	139	NA
		UP-West	100.00%	100.00%	100.00%	0	0.00%	100.00%	100.00%	76.00%	88.00%	0	0	61.08%	95.00%	100.00%	0.10%	38	139	NA
30	Nextra Teleservices Pvt. Ltd.	Delhi	100.00%	91.62%	99.22%	1775	1.00%	100.00%	100.00%	65.00%	83.00%	0	0	84.00%	100.00%	100.00%	1.00%	120	350	NA
31	Ortel Communications Ltd.	All India	100.00%	31.66%	33.00%	NA	NA	NA	NA	100.00%	100.00%	0	0	23.91%	0.00%	37.28%	0.00%	81	213	NA

Annexure 4.3 (Contd.)

32	ONEOTT Intertainment Limited (formerly Planet E-shop Holdings India Ltd.)	All India	100.00%	97.00%	99.00%	7	0.00%	100.00%	100.00%	100.00%	100.00%	0	0	71.67%	80.00%	99.00%	1.00%	44	271	NA
33	Quadrant Televentures Ltd.	Punjab	100.00%	97.30%	99.72%	0	0.00%	100.00%	100.00%	90.00%	94.00%	0	0	71.50%	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	100.00%	97.60%	100.00%	Nil	0.00%	Nil	Nil	89.30%	94.60%	0	0	47.82%	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%	98.00%	98.00%	0	0	87.00%	83.00%	99.00%	0.00%	46	250	500
37	RI Networks Pvt. Ltd.	All India	100.00%	90.41%	99.28%	626	NA	NA	NA	76.40%	85.87%	0	0	85.00%	100.00%	100.00%	1.00%	120	350	NA
38	Sai Prasad Internet Pvt. Ltd.	Maharashtra	100.00%	97.90%	99.81%	NA	0.01%	100.00%	NA	68.52%	89.81%	0	0	80.00%	80.00%	99.82%	1.00%	4	255	600
39	Siti Broadband Services Pvt.Ltd.	All India (Pan	100.00%	91.96%	99.19%	19	Nil	Nil	100.00%	96.77%	98.17%	0	0	66.20%	94.00%	99.21%	0.00%	45	254	NA
40	Shyam Spectra Pvt. Ltd.	All India	100.00%	93.10%	99.40%	3738	0.86%	100.00%	100.00%	79.90%	84.70%	0	0	22.10%	86.00%	99.20%	1.00%	17	141	NA
41	Tata Communications Limited	All India	NA	Nil	Nil	0	0.00%	Nil	0.00	Nil	Nil	0	0	0.00%	0.00%	Nil	0.00%	15	253	NA
42	Tata Sky Broadband Pvt. Ltd.	All India	100.00%	90.65%	92.21%	NA	NA	NA	NA	43.00%	48.00%	2	0	72.23%	100.00%	99.25%	0.00%	1	NA	NA
43	Tata Tele.Ltd. (TTSL)	All India	100.00%	89.00%	96.00%	467	0.00%	100.00%	100.00%	93.71%	96.88%	0	0	75.00%	92.00%	99.63%	0.00%	56	63	Nil
44	Tata Tele.(Mah) Ltd. (TTML)	Maharashtra &	100.00%	84.00%	95.00%	113	0.01%	100.00%	100.00%	94.00%	97.00%	0	0	41.97%	83.42%	99.69%	0.00%	76	213	Nil
45	Vasai Cable Pvt. Ltd.	Mumbai	100.00%	97.63%	100.00%	None	0.22%	100.00%	Nil	81.29%	87.66%	Nil	0	63.00%	90.00%	100.00%	1.00%	4	255	NA
46	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
		Maharashtra &	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
47	Wish Net Pvt. Ltd.	Kolkata	100.00%	98.85%	100.00%	0	0.00%	100.00%	NA	58.14%	98.66%	0	0	45.00%	100.00%	99.96%	1.00%	20	NA	NA
		West Bengal	100.00%	98.85%	100.00%	0	0.00%	100.00%	NA	71.79%	98.66%	0	0	48.34%	100.00%	99.93%	1.00%	20	NA	NA
48	Yashash Cable Network Pvt Ltd	Karnataka	100.00%	91.10%	99.50%	8	0.00%	NA	NA	82.28%	96.98%	0	0	57.67%	80.00%	99.79%	1.00%	30	301	0
49	You Broadband India Pvt. Ltd.	All India	98.29%	81.30%	89.44%	2800	0.00%	100.00%	100.00%	88.76%	97.22%	0	0	73.72%	87.04%	99.10%	0.00%	8	275	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)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or HD
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
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 Private Limited	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 World	News	English	5.00	HD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or HD
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 Pvt Ltd	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	4.00	SD
		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.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or HD
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 Limited	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 Pvt Ltd	68	News 18 Lokmat	News	Hindi	0.10	SD
15	Living Entertainment Enterprises Private 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 Ltd	78	Good Times	Lifestyle	English	1.50	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or HD
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	National Geographic Tamil	Infotainment	Tamil	2.00	SD
		88	Nat Geo Wild HD	Infotainment	English/Hindi	5.00	HD
		89	National Geographic Telugu	Infotainment	Telugu	2.00	SD
		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 M.P./Chattisgarh	News	Hindi	0.10	SD
		98	News 18 Rajasthan	News	Hindi	0.10	SD
		99	News 18 U.P./Uttaranchal	News	Hindi	0.10	SD
		100	News 18 Urdu	News	Urdu	0.10	SD
		101	News 18 Kannada	News	Kannada	0.10	SD
		102	News 18 Bangla	News	Bangla	0.10	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or HD
		103	News 18 Punjab/Haryana /H.P.	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 Limited	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
		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

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or 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
		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

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or 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
		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 Sports 1 Marathi	Sports	Marathi	19.00	SD
		186	Star Utsav Movies	Movies	Hindi	1.00	SD

Annexure 5.1(Contd.)

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

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or HD
31	Turmeric Vision Pvt. Limited	220	Food Food TV	Infotainment	Hindi	1.00	SD
32	Turner International India Pvt Ltd	221	Cartoon Network	Kids	Hindi	4.25	SD
		222	CNN International	News	English	0.50	SD
		223	HBO	Movies	English	10.00	SD
		224	POGO	Kids	Hindi	4.25	SD
		225	Cartoon Network HD+	Kids	Hindi	5.00	HD
		226	WB	Movies	English	1.00	SD
		227	HBO HD	Movies	English	12.00	HD
33	TV 18 Broadcast Limited	228	CNN News 18	News	English	0.50	SD
		229	CNBC Bazaar	News	Gujarati	1.00	SD
		230	CNBC TV 18 Prime HD	News	English	1.00	HD
		231	CNBC Awaaz	News	Hindi	1.00	SD
		232	News 18 Tamil Nadu	News	Tamil	0.10	SD
		233	News 18 Kerala	News	Malayalam	0.10	SD
		234	News 18 Assam / North East	News	Assamese	0.10	SD
		235	News 18 India	News	Hindi	0.10	SD
		236	CNBC TV 18	News	English	4.00	SD
34	TV Today Network Limited	237	Aaj Tak	News	Hindi	0.75	SD
		238	India Today	News	English	1.00	SD
		239	AAJ Tak HD	News	Hindi	1.50	HD
		240	Aaj Tak Tez	News	Hindi	0.25	SD
35	Viacom 18 Media Private Limited	241	Colors	GEC	Hindi	19.00	SD
		242	Comedy Central (HD)	GEC	English	9.00	HD
		243	MTV	Music	Hindi	3.00	SD
		244	NICK	Kids	Hindi	6.00	SD
		245	NICK JR	Kids	English	1.00	SD
		246	SONIC	Kids	Hindi	2.00	SD
		247	VH 1 (HD Distribution)	Music	English	2.00	HD
		248	Colors Infinity HD	GEC	English	9.00	HD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or HD
		249	Colors Infinity	GEC	English	5.00	SD
		250	Colors HD	GEC	Hindi	19.00	HD
		251	NICKS HD+	Kids	Hindi	10.00	HD
		252	Colors Cineplex	Movies	Hindi	3.00	SD
		253	MTV Beats	Music	Hindi	0.10	SD
		254	Colors Kannada HD	GEC	Kannada	19.00	HD
		255	Colors Marathi HD	GEC	Marathi	17.00	HD
		256	Colors Bangla HD	GEC	Bangla	14.00	HD
		257	Colors Super	GEC	Kannada	3.00	SD
		258	Colors Bangla	GEC	Bangla	7.00	SD
		259	Colors Gujarati	GEC	Gujarati	5.00	SD
		260	Colors Kannada	GEC	Kannada	19.00	SD
		261	Colors Marathi	GEC	Marathi	10.00	SD
		262	Colors Oriya	GEC	Oriya	6.00	SD
		263	MTV Beats HD	Music	Hindi	1.00	HD
		264	Colors Tamil	GEC	Tamil	3.00	SD
		265	Colors Cineplex HD	Movies	Hindi	5.00	HD
		266	VH 1	Music	English	1.00	SD
		267	Colors Tamil HD	GEC	Tamil	7.00	HD
		268	MTV HD+	Music	Hindi	5.00	HD
		269	Colors Rishtey	GEC	Hindi	1.00	SD
		270	Colors Kannada Cinema	Movies	Kannada	2.00	SD
		271	Colors Gujarati Cinema	Movies	Gujarati	1.00	SD
		272	Comedy Central	GEC	English	5.00	SD
		273	Colors Bangla Cinema	Movies	Bangla	1.00	SD
36	Zee Akaash News Pvt.Ltd.	274	Zee 24 Ghanta	News	Bangla	0.10	SD
37	Zee Entertainment Enterprises Limited	275	Zee Bollywood	Movies	Hindi	2.00	SD
		276	Zee Action	Movies	Hindi	1.00	SD
		277	Zee Bangla Cinema	Movies	Bangla	2.00	SD
		278	Zee Café HD	GEC	English	19.00	HD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or HD
		279	Zee Café	GEC	English	15.00	SD
		280	Zee Cinema	Movies	Hindi	15.00	SD
		281	Zee Talkies	Movies	Marathi	2.00	SD
		282	Zee TV	GEC	Hindi	19.00	SD
		283	Zing	Music	Hindi	0.10	SD
		284	& Picture	Movies	Hindi	6.00	SD
		285	Zee Bangla	GEC	Bangla	19.00	SD
		286	Zee Marathi	GEC	Marathi	19.00	SD
		287	Living Foodz	Infotainment	English/ Hindi	1.00	SD
		288	Zee TV HD	GEC	Hindi	19.00	HD
		289	Zee Cinema HD	Movies	Hindi	19.00	HD
		290	& TV	GEC	Hindi	12.00	SD
		291	& TV HD	GEC	Hindi	19.00	HD
		292	Zee Kannada	GEC	Kannada	19.00	SD
		293	Zee Telugu	GEC	Telugu	19.00	SD
		294	& Pictures HD	Movies	English/ Hindi	19.00	HD
		295	Zee Cinemalu	Movies	Telugu	10.00	SD
		296	Zee Yuva	GEC	Marathi	1.00	SD
		297	Zee Marathi HD	GEC	Marathi	19.00	HD
		298	Living Zen	Infotainment	Hindi	0.10	SD
		299	& Prive HD	Movies	English	19.00	HD
		300	Zee Bangla HD	GEC	Bangla	19.00	HD
		301	Zee Tamil HD	GEC	Tamil	19.00	HD
		302	Zee Cinemalu HD	Movies	Telugu	16.00	HD
		303	Zee Telugu HD	GEC	Telugu	19.00	HD
		304	Zee Tamil	GEC	Tamil	12.00	SD
		305	Zee Kannada HD	GEC	Kannada	19.00	HD
		306	Zee Anmol Cinema	Movies	Hindi	0.10	SD
		307	& Flix HD	Movies	English	19.00	HD
		308	& Flix	Movies	English	15.00	SD
		309	Zee Keralam HD	GEC	Malayalam	8.00	HD
		310	Zee Keralam	GEC	Malayalam	0.10	SD
		311	Zee ETC	Music	Hindi	0.10	SD
		312	Zee Anmol	GEC	Hindi	0.10	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Reported Genre as per new Regulatory framework	Reported Language	MRP as per New Regulatory Framework 2017 (in Rs) (Excl. Taxes)	Declared as SD or HD
		313	Big Magic	GEC	Hindi	0.10	SD
		314	Big Ganga	GEC	Bhojpuri	0.50	SD
		315	Zee Classic	Movies	Hindi	0.50	SD
		316	&Xplore HD	Movies	Hindi	4.00	HD
		317	Zee Talkies HD	Movies	Marathi	19.00	HD
38	Zee Media Corporation Limited	318	Zee 24 Taas	News	Marathi	0.10	SD
		319	Zee Odisha	News	Odia	0.10	SD
		320	Zee Business	News	Hindi	0.10	SD
		321	Zee Punjab / Haryana / Himachal	News	Hindi	0.10	SD
		322	Zee Madhya Pradesh / Chattisgarh	News	Hindi	0.10	SD
		323	Zee Salaam	News	Urdu	0.10	SD
		324	Zee 24 Kalak	News	Hindi	0.10	SD
		325	WION	News	Hindi	1.00	SD
		326	Zee Uttar Pradesh / Uttrakhand	News	Hindi	0.10	SD
		327	Zee Hindustan	News	Hindi	0.10	SD
		328	Zee Bihar / Jharkhand	News	Hindi	0.10	SD
		329	Zee News	News	Hindi	0.10	SD
		330	Zee Rajasthan News	News	Hindi	0.10	SD
39	Zoom Entertainment Network Ltd	331	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

- 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

- 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

- 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

Annexure 5.3: List of 104 existing cities with operational FM Radio Channels in India as on 30th June, 2019

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

Annexure 5.3 (Contd.)

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

Annexure 5.3 (Contd.)

Sl.No.	City	Category	Stations
75	Puducherry	C	4
76	Pune	A	6
77	Raigarh	D	1
78	Raipur	C	3
79	Rajahmundry	C	2
80	Rajkot	B	4
81	Ranchi	C	4
82	Rourkela	C	3
83	Salem	C	2
84	Sangli	C	5
85	Shillong	D	3
86	Shimla	D	3
87	Sholapur	C	4
88	Siliguri	C	3
89	Srinagar	C	4
90	Surat	A	6
91	Thiruvananthapuram	C	4
92	Thrissur	C	3
93	Tiruchy	C	3
94	Tirunelveli	C	3
95	Tirupati	C	2
96	Tuticorin	C	2
97	Udaipur	C	4
98	Ujjain	C	1
99	Vadodra	B	4
100	Varanasi	B	5
101	Vellore	C	2
102	Vijayawada	B	2
103	Vishakapatnam	B	3
104	Warrangal	C	2
			366

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

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