



Telecom Regulatory Authority of India

The Indian Telecom Services Performance Indicators July – September, 2019

New Delhi, India

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Snapshot

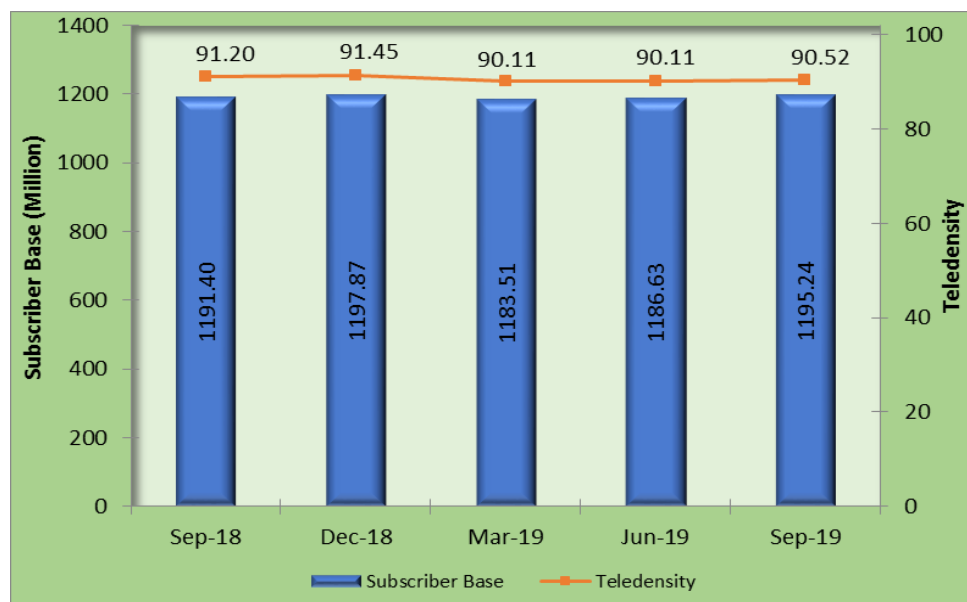
(Data as on Q.E. 30 th September, 2019)	
Telecom Subscribers (Wireless+Wireline)	
Total Subscribers	1,195.24 Million
% change over the previous quarter	0.73%
Urban Subscribers	677.95 Million
Rural Subscribers	517.29 Million
Market share of Private Operators	88.81%
Market share of PSU Operators	11.19%
Teledensity	90.52
Urban Teledensity	160.63
Rural Teledensity	57.59
Wireless Subscribers	
Total Wireless Subscribers	1,173.75 Million
% change over the previous quarter	0.71%
Urban Subscribers	659.18 Million
Rural Subscribers	514.56Million
Market share of Private Operators	89.74%
Market share of PSU Operators	10.26%
Teledensity	88.90
Urban Teledensity	156.18
Rural Teledensity	57.28
Total Wireless Data Usage during the quarter	20,315 million TB
Number of Public Mobile Radio Trunk Services (PMRTS)	59,118
Number of Very Small Aperture Terminals (VSAT)	2,97,047
Wireline Subscribers	
Total Wireline Subscribers	21.49 Million
% change over the previous quarter	1.52%
Urban Subscribers	18.77 Million
Rural Subscribers	2.72 Million
Market share of Private Operators	38.07%
Market share of PSU Operators	61.93%
Teledensity	1.63
Urban Teledensity	4.45
Rural Teledensity	0.30
No. of Village Public Telephones (VPT)	70,834
No. of Public Call Office (PCO)	2,07,243

Telecom Financial Data	
Gross Revenue (GR) during the quarter	₹ 59,992 Crore
% change in GR over the previous quarter	-2.51%
Adjusted Gross Revenue (AGR) during the quarter	₹ 37,338 Crore
% change in AGR over the previous quarter	-4.56%
Share of Public sector undertakings in Access AGR	7.88%
Monthly Average Revenue Per User (ARPU) for Access Services	₹ 78.17
Internet/Broadband Subscribers	
Total Internet Subscribers	687.62 Million
% change over previous quarter	3.35%
Narrowband subscribers	62.20 Million
Broadband subscribers	625.42 Million
Wired Internet Subscribers	22.26 Million
Wireless Internet Subscribers	665.37 Million
Urban Internet Subscribers	439.99 Million
Rural Internet Subscribers	247.63 Million
Total Internet Subscribers per 100 population	52.08
Urban Internet Subscribers per 100 population	104.25
Rural Internet Subscribers per 100 population	27.57
Broadcasting & Cable Services	
Number of private satellite TV channels permitted by the Ministry of I&B for uplinking only/downlinking /uplinking	910
Number of Pay TV Channels as reported by broadcasters	330
Number of private FM Radio Stations (excluding All India Radio)	367
Number of total active subscribers with pay DTH operators	69.30 Million
Number of Operational Community Radio Stations	275
Number of pay DTH Operators	4
Revenue & Usage Parameters	
Monthly ARPU of Wireless Service (GSM including LTE)	₹ 74.38
Minutes of Usage (MOU) per subscriber per month - Wireless Service (GSM including LTE)	691 Minutes
Total Outgoing Minutes of Usage for Internet Telephony	197.09 Million
Wireless Data Usage	
Average Wireless Data Usage per wireless data subscriber per month	10.37 GB
Average cost to subscriber per GB wireless data during the quarter	₹ 6.98

Executive Summary

1. The number of telephone subscribers in India increased from 1,186.63 million at the end of Jun-19 to 1,195.24 million at the end of Sep-19, registering a growth rate of 0.73% over the previous quarter. This reflects year-on-year (Y-O-Y) growth rate of 0.32% over the same quarter of last year. The overall Teledensity¹ in India increased from 90.11 as on QE Jun-19 to 90.52 as on QE Sep-19.

Trends in Telephone subscribers and Teledensity in India



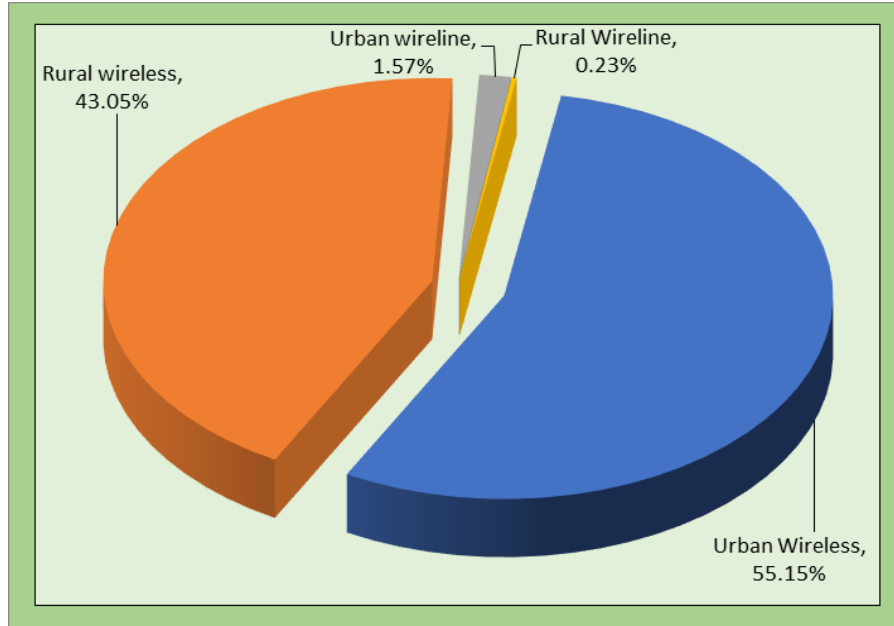
2. Telephone subscription in Urban areas increased from 675.58 million at the end of Jun-19 to 677.95 million at the end of Sep-19. However, Urban Teledensity declined from 160.78 to 160.63 during the same period.
3. Rural telephone subscription increased from 511.05 million at the end of Jun-19 to 517.29 million at the end of Sep-19 and Rural Teledensity also increased from 56.99 at the end of Jun-19 to 57.59 at the end of Sep-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 increased from 43.07% at the end of Jun-19 to 43.28% at the end of Sep-19.

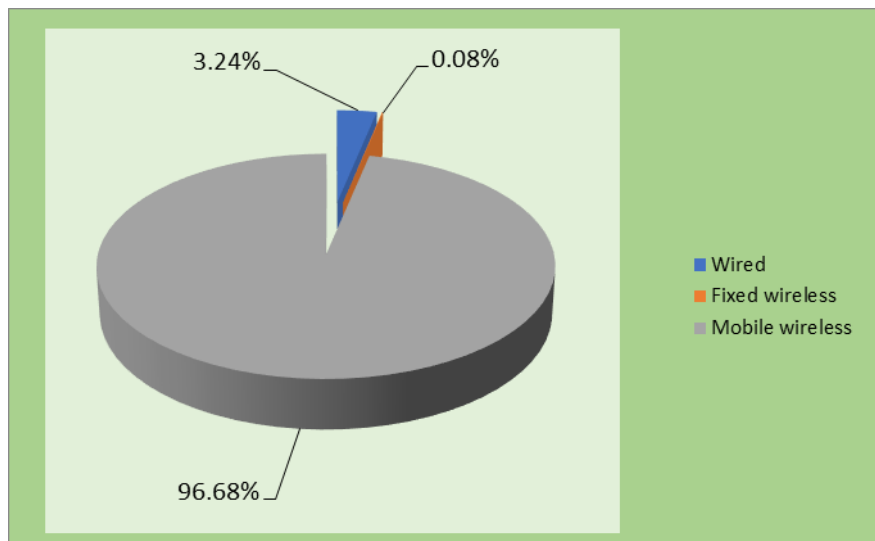
Composition of Telephone Subscribers



5. With a net addition of 8.29 million subscribers during the quarter, total wireless subscriber base increased from 1,165.46 million at the end of Jun-19 to 1,173.75 million at the end of Sep-19, registering a growth rate of 0.71% over the previous quarter. Wireless subscriptions increased year-on-year (Y-O-Y) at the rate of 0.38% during the quarter.
6. Wireless Tele-density increased from 88.50 at the end of Jun-19 to 88.90 at the end of Sep-19 with quarterly growth rate of 0.45%.
7. Wireline subscriber increased from 21.17 million at the end of Jun-19 to 21.49 million at the end of Sep-19 with quarterly growth rate of 1.52%. However, year-on-year (Y-O-Y) basis, wireline subscription declined by 2.81% in QE Sep-19.
8. Wireline Teledensity increased from 1.61 at the end of Jun-19 to 1.63 at the end of Sep-19.

9. Total number of Internet² subscribers increased from 665.31 million at the end of Jun-19 to 687.62 million at the end of Sep-19, registering a quarterly growth rate of 3.35%. Out of 687.62 million internet subscribers, number of Wired Internet subscribers are 22.26 million and number of Wireless Internet subscribers are 665.37 million.

Composition of internet subscription



10. The Internet subscriber base is comprised of Broadband³ Internet subscriber base of 625.42 million and Narrowband⁴ Internet subscriber base of 62.20 million.
11. The broadband Internet subscriber base increased by 5.19% from 594.58 million at the end of Jun-19 to 625.42 million at the end of Sep-19. However, the narrowband Internet subscriber base declined by 12.05% from 70.72 million at the end of Jun-19 to 62.20 million at the end of Sep-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 0.11%, from ₹74.30 in QE Jun-19 to ₹74.38 in QE Sep-19. On yearly (Y-O-Y) basis, monthly ARPU for wireless service increased by 10.37% in this quarter.
13. Prepaid ARPU per month increased from ₹66 in QE Jun-19 to ₹67 in QE Sep-19, however Postpaid ARPU per month declined from ₹253 in QE Jun-19 to ₹247 in QE Sep-19.
14. On an all India average, the overall Minutes of Usage (MOU)⁶ per subscriber per month for wireless service declined by 1.49% from 701 for QE Jun-19 to 691 in QE Sep-19.
15. Prepaid MOU per subscriber per month declined from 705 in QE Jun-19 to 694 in QE Sep-19. Postpaid MOU per subscriber per month also declined from 626 in QE Jun-19 to 617 in QE Sep-19.
16. Gross Revenue⁷ (GR) and Adjusted Gross Revenue⁸ (AGR) of Telecom Service Sector for the Q.E. Sep-19 has been ₹59,992 Crore and ₹37,338 Crore respectively. GR and AGR declined by 2.51% and 4.56% respectively in Q.E. Sep-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 Q.E. Sep-19 over the same quarter in last year has been 3.74% and 3.31% respectively.
18. Pass-through⁹ charges increased from ₹22,411 Crore in QE Jun-19 to ₹22,654 Crore in QE Sep-19 with quarterly growth rate of 1.08%. The year-on-year (Y-O-Y) growth rate of 4.47% has been recorded in pass-through charges for QE Sep-19.
19. The License Fee¹⁰ declined from ₹3,133 Crore for the QE Jun-19 to ₹2,989 Crore for the QE Sep-19. The quarterly and the year-on-year (Y-O-Y) growth rates of license fee are -4.59% and 3.44% respectively in this quarter.
20. Access services contributed 74.78% 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 declined by 0.86%, 2.55%, 2.56% and 0.59% respectively in QE Sep-19. However, Pass Through Charges increased quarterly by 2.33% during the same period.

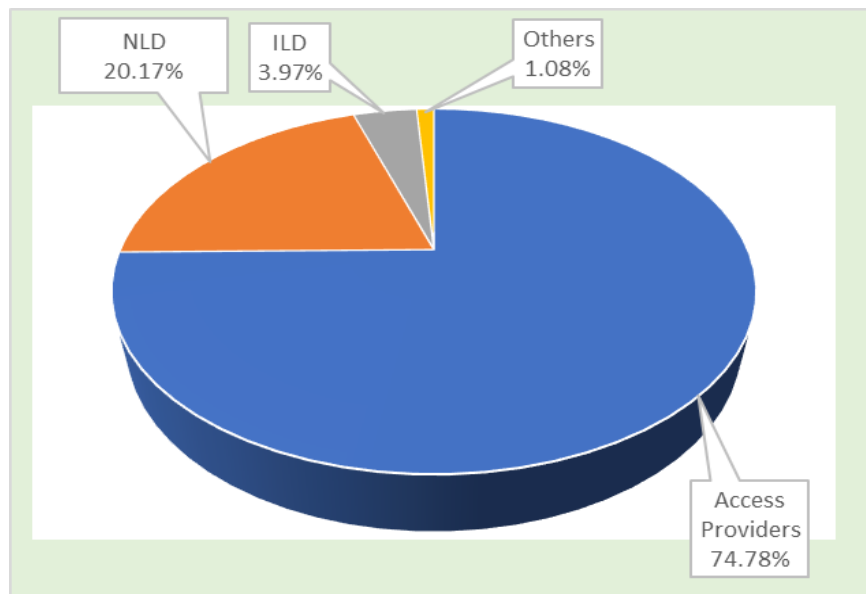
⁹ Pass through charges means the charges excluded from gross revenue to arrive at adjusted gross revenue for the purpose of levying licence fee.

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, declined from ₹80.66 in QE Jun-19 to ₹78.17 in QE Sep-19.
22. 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)• Fault incidences – number of faults per 100 subs/month• Mean time to Repair (MTTR)• Response time to the customer for Assistance - Accessibility of call centre/customer care• Response time to the customer for Assistance - %age of calls answered by the operators (voice to voice) within 90 sec• Termination/closure of service - %age requests for Termination/Closure of service complied within 7 days

23. 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) • Accessibility of call centre/customer care • %age requests for Termination/Closure of service complied within 7 days • Time taken for refund of deposits after closures 	<ul style="list-style-type: none"> • BS Accumulated down-time (not available for service) • Worst affected BSs due to down-time • SDCCH/Paging Channel Congestion/RRC Congestion • Network QoS DCR Spatial Distribution Measure [Network_ QSD (90,90)] • Network QoS DCR Temporal Distribution Measure [Network_ QTD (97,90)] • Metering and billing - postpaid • Period of applying credit/ waiver/adjustment to customer's account from the date of resolution of complaints • %age of calls answered by the operators (voice to voice) within 90 sec

24. A total number of 910 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 31st October, 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 330 pay channels as on 30th September, 2019, which include 232 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 September, 2019, there were 4 pay DTH service providers in the country.
27. Pay DTH has attained total active subscriber base of around 69.30 million in QE 30th September, 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 September, 2019, there are 367 operational private FM Radio stations in 104 cities with operational 33 Private FM Radio broadcaster as compared to 366 private FM Radio Stations in 104 cities with operational 33 FM Radio broadcasters in the previous quarter.
29. The reported advertisement revenue during the quarter ending 30th September, 2019 in respect of 366 private FM Radio stations is Rs.466.70 crore as against Rs.526.13 crore in respect of 365 private FM Radio stations for the previous quarter.
30. As per data received from MIB, as on 30th September, 2019, 275 Community Radio Stations are operational in the country.

Trends at a Glance

A. Access Service (Wireline + Wireless)

	QE Sep 2018	QE Dec 2018	QE Mar 2019	QE Jun 2019	QE Sep 2019	%age change over Sep-2018	%age change over Dec-2018	%age change over Mar-2019	%age change over Jun-2019
						(12 months)	(9 months)	(6 months)	(3 months)
1) Subscriber Base (in million)									
Wireline	22.11	21.87	21.70	21.17	21.49	-2.81%	-1.73%	-0.95%	1.52%
Wireless	1169.29	1176.00	1161.81	1165.46	1173.75	0.38%	-0.19%	1.03%	0.71%
Total	1191.40	1197.87	1183.51	1186.63	1195.24	0.32%	-0.22%	0.99%	0.73%
Rural	524.76	531.59	514.35	511.05	517.29	-1.42%	-2.69%	0.57%	1.22%
Urban	666.64	666.28	669.16	675.58	677.95	1.70%	1.75%	1.31%	0.35%
2) Teledensity									
Wireline	1.69	1.67	1.65	1.61	1.63	-3.85%	-2.51%	-1.47%	1.25%
Wireless	89.51	89.78	88.46	88.50	88.90	-0.69%	-0.98%	0.50%	0.45%
Total	91.20	91.45	90.11	90.11	90.52	-0.74%	-1.01%	0.46%	0.46%
Rural	58.85	59.50	57.47	56.99	57.59	-2.14%	-3.22%	0.21%	1.04%
Urban	160.79	159.98	159.96	160.78	160.63	-0.11%	0.40%	0.42%	-0.09%
3) Service Provider wise Subscribers Base (in Million) (wireless+wireline)									
Bharti Airtel	347.52	344.30	329.36	324.65	329.88	-5.08%	-4.19%	0.16%	1.61%
Vodafone Idea	435.22	419.03	395.17	383.77	372.86	-14.33%	-11.02%	-5.65%	-2.84%
Reliance Jio	252.25	280.12	306.72	331.26	356.08	41.16%	27.12%	16.09%	7.49%
BSNL	124.69	125.81	126.91	126.86	127.19	2.01%	1.10%	0.22%	0.26%
MTNL	6.78	6.74	6.70	6.63	6.57	-3.08%	-2.46%	-1.84%	-0.83%
Tata Tele.	23.85	20.86	17.68	12.56	1.82	-92.38%	-91.29%	-89.72%	-85.53%
Reliance Com.	0.86	0.78	0.75	0.68	0.63	-26.64%	-19.14%	-16.02%	-8.05%
Quadrant	0.23	0.23	0.22	0.22	0.21	-10.52%	-7.95%	-5.74%	-4.56%
Total	1191.40	1197.87	1183.51	1186.63	1195.24	0.32%	-0.22%	0.99%	0.73%

B. Internet Services

	QE Sep 2018	QE Dec 2018	QE Mar 2019	QE Jun 2019	QE Sep 2019	%age change over Sep-2018	%age change over Dec-2018	%age change over Mar-2019	%age change over Jun-2019
						(12 months)	(9 months)	(6 months)	(3 months)
1) Subscriber's Base (in million)									
A. Wired Internet Subscribers	21.25	21.42	21.68	21.67	22.26	4.74%	3.89%	2.67%	2.73%
B. Wireless Internet Subscribers	538.76	582.79	615.05	643.64	665.37	23.50%	14.17%	8.18%	3.37%
i. Mobile Wireless (Mobile & Dongle)	537.92	582.35	613.75	643.09	664.79	23.58%	14.15%	8.32%	3.37%
ii. Fixed Wireless (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	0.83	0.44	1.31	0.55	0.58	-30.38%	33.06%	-55.51%	4.84%
Total Internet Subscribers	560.01	604.21	636.73	665.31	687.62	22.79%	13.80%	7.99%	3.35%
2) No. of Internet Subs per 100 Population	42.87	46.13	48.48	50.52	52.08	21.48%	12.90%	7.42%	3.08%

C. Usage and Revenue for Wireless Services

Traffic(MOU) (minutes of uses/subscriber/month)	627	667	692	701	691	10.14%	3.46%	-0.19%	-1.49%
ARPU (Rs./sub/month)	67	70	71	74	74	10.37%	6.06%	4.18%	0.11%

D. Telecom Financial Data

	QE Sep 2018	QE Dec 2018	QE Mar 2019	QE Jun 2019	QE Sep 2019	%age change over Sep-2018	%age change over Dec-2018	%age change over Mar-2019	%age change over Jun-2019
						(12 months)	(9 months)	(6 months)	(3 months)
1. Telecom Sector									
i) Gross Revenue (₹ in Crores)	57827.24	58990.60	58414.36	61534.81	59992.13	3.74%	1.70%	2.70%	-2.51%
ii) Adjusted Gross Revenue (₹ in Crores)	36142.44	36054.13	35932.44	39123.92	37338.49	3.31%	3.56%	3.91%	-4.56%
2. Access Services									
Adjusted Gross Revenue (₹ in Crores)	25727.79	26070.72	26095.71	28650.28	27921.03	8.52%	7.10%	6.99%	-2.55%
ARPU per month (AGR/ Average subscribers/3)	72.50	72.82	72.49	80.66	78.17	7.81%	7.35%	7.83%	-3.09%

Introduction

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending 30th September, 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

-
- 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 1,186.63 million at the end of Jun-19 to 1,195.24 million at the end of Sep-19, registering a growth rate of 0.73% over the previous quarter. This reflects year-on-year (Y-O-Y) growth rate of 0.32% over the same quarter of last year. The overall Teledensity in India increased from 90.11 as on 30th June, 2019 to 90.52 as on 30th September, 2019 with quarterly growth rate of 0.46%.

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
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
Sep-19	517.29	677.95	57.59	160.63

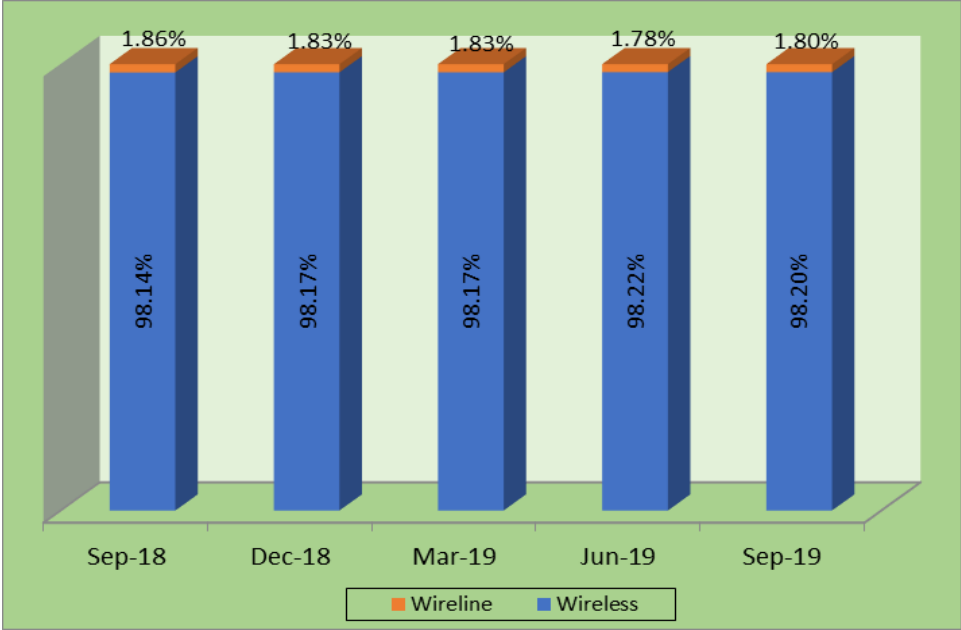
- 1.2 Telephone subscription in Urban areas increased from 675.58 million at the end of Jun-19 to 677.95 million at the end of Sep-19, however Urban Tele-density slightly declined from 160.78 to 160.63 at the end of the quarter.
- 1.3 Rural telephone subscription increased from 511.05 million at the end of Jun-19 to 517.29 million at the end of Sep-19 and Rural Tele-density also increased from 56.99 at the end of Jun-19 to 57.59 at the end of Sep-19.
- 1.4 The year-on-year(Y-O-Y) growth rates of Urban and Rural telephone subscriptions from Sep-18 to Sep-19 are 1.70% and -1.42% respectively. Year-on-year (Y-o-Y) growth rates of Urban and Rural Tele-density from Sep-18 to Sep-19 are -0.11% and -2.14% respectively.

Chart 1.2: Market Share - Rural & Urban Subscribers



- 1.5 Share of subscription of rural areas in total telephone subscription increased from 43.07% at the end of Jun-19 to 43.28% at the end of Sep-19.

Chart 1.3: Composition of Access subscription - Wireline & Wireless



1.6 Share of wireline subscription in total telephone subscription increased from 1.78% at the end of Jun-19 to 1.80% at the end of Sep-19.

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

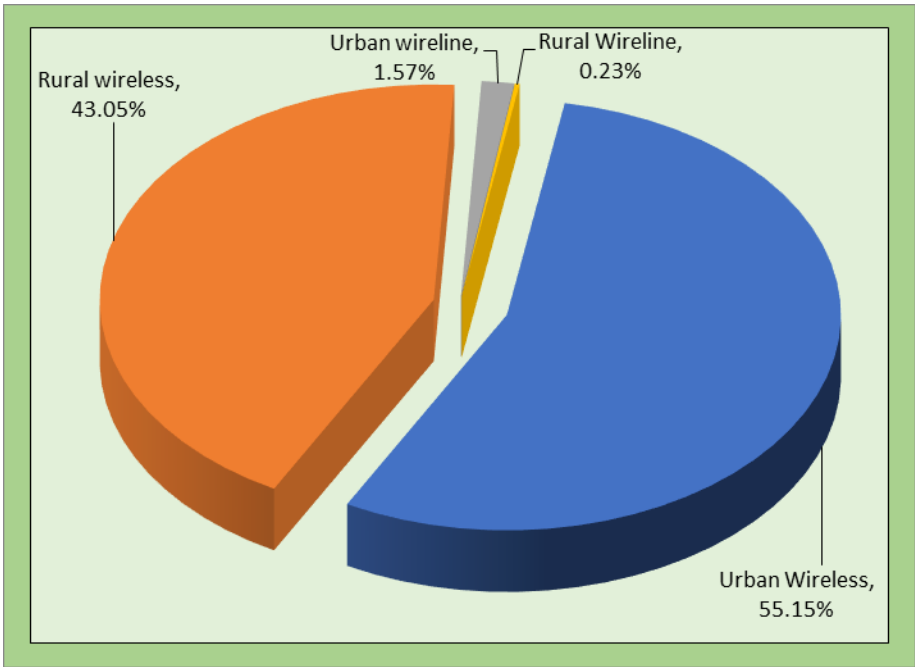


Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base

Service Area	Subscribers (million)			
	Jun-19	Sep-19	Quarterly Net Additions	Rate of Growth (%)
Andhra Pradesh	88.35	88.97	0.62	0.71
Assam	23.65	24.15	0.50	2.11
Bihar	85.79	85.42	-0.37	-0.43
Delhi	56.24	57.01	0.77	1.37
Gujarat	70.03	69.95	-0.07	-0.11
Haryana	28.16	28.52	0.35	1.26
Himachal Pradesh	10.67	10.87	0.20	1.86
Jammu & Kashmir	11.58	11.45	-0.13	-1.09
Karnataka	70.27	71.26	0.98	1.40
Kerala	46.12	46.71	0.60	1.30
Madhya Pradesh	76.31	76.36	0.04	0.06
Maharashtra	94.07	95.13	1.05	1.12
Mumbai	41.27	41.88	0.60	1.46
North East	12.14	12.40	0.26	2.15
Orissa	32.96	33.10	0.14	0.42
Punjab	40.08	40.82	0.74	1.85
Rajasthan	65.68	66.20	0.52	0.79
T.N. (incl. Chennai)	84.25	84.88	0.63	0.75
U.P.(E)	100.24	100.77	0.53	0.53
U.P.(W)	65.16	65.39	0.23	0.36
Kolkata	26.99	27.09	0.10	0.36
West Bengal	56.62	56.91	0.30	0.52
All India	1,186.63	1,195.24	8.61	0.73

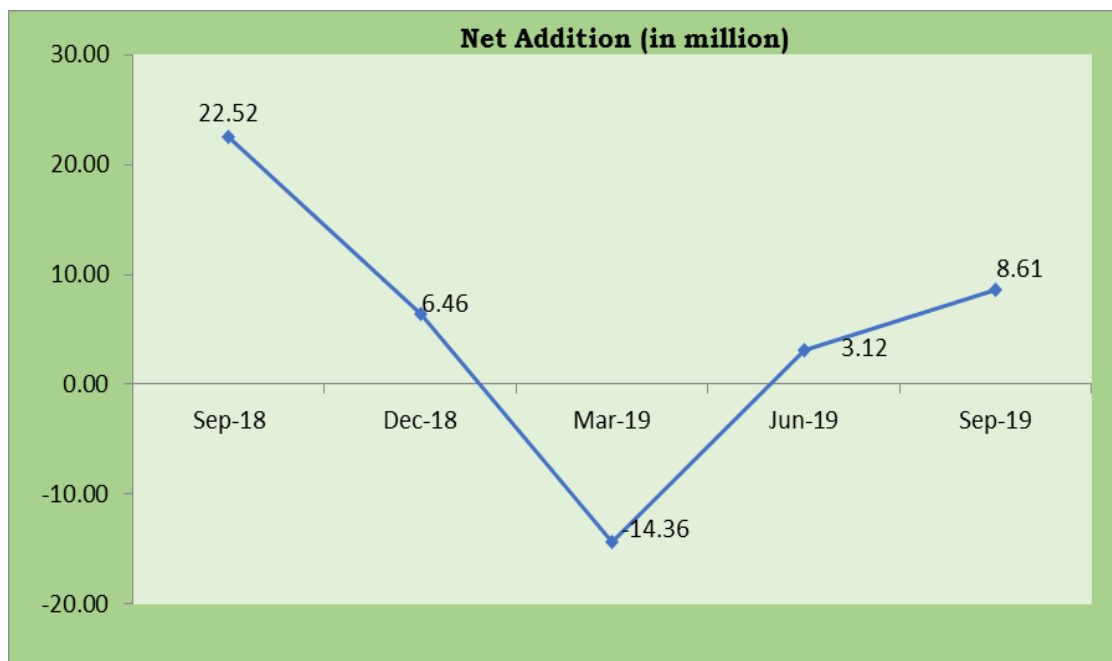
1.7 North East service area showed maximum quarterly growth of 2.15% followed by Assam service area with 2.11%. However, J&K, Gujarat and Bihar service areas showed decline in their subscriber base during the quarter ending Sep-19.

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

Service Area	Number of Subscribers (in million)			
	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	88.97	41.65	47.32	46.82
Assam	24.15	12.45	11.70	51.55
Bihar	85.42	54.14	31.28	63.38
Delhi	57.01	1.76	55.25	3.09
Gujarat	69.95	27.52	42.43	39.34
Haryana	28.52	13.12	15.40	46.00
Himachal Pradesh	10.87	7.28	3.59	66.95
Jammu & Kashmir	11.45	4.89	6.57	42.68
Karnataka	71.26	26.47	44.79	37.14
Kerala	46.71	21.68	25.03	46.42
Madhya Pradesh	76.36	34.12	42.24	44.68
Maharashtra	95.13	43.50	51.63	45.72
Mumbai	41.88	1.85	40.03	4.41
North East	12.40	4.92	7.47	39.71
Orissa	33.10	21.24	11.86	64.17
Punjab	40.82	14.04	26.78	34.40
Rajasthan	66.20	34.00	32.20	51.36
T.N. (incl. Chennai)	84.88	23.82	61.06	28.07
U.P.(E)	100.77	57.20	43.57	56.77
U.P.(W)	65.39	33.79	31.60	51.67
Kolkata	27.09	2.89	24.20	10.69
West Bengal	56.91	34.95	21.96	61.41
All India	1,195.24	517.29	677.95	43.28

1.8 Only eight service areas have more than 50% share of rural subscribers in their total number of subscribers. Himachal Pradesh service area has maximum share of rural subscribers (66.95%) 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 8.61 million during QE Sep-19 as compared to the net addition of 3.12 million subscribers during QE Jun-19.

Table 1.4 : Service Area wise Teledensity

Service Area/ States	As on 30 th June, 2019			As on 30 th September, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	64.54	182.27	97.58	63.86	185.83	98.10
Assam	42.95	205.32	70.34	44.46	205.05	71.64
Bihar	44.53	156.66	60.13	43.97	157.10	59.72
Delhi	-	-	240.53	-	-	242.13
Gujarat	71.41	152.36	106.17	73.03	149.17	105.78
Haryana	72.14	140.34	97.94	73.31	140.60	98.85
Himachal Pradesh	111.17	402.66	146.69	113.77	403.32	149.16
J&K	56.11	175.96	90.36	53.33	178.58	89.19

Service Area/ States	As on 30 th June, 2019			As on 30 th September, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Karnataka	61.69	181.71	109.64	68.74	174.22	110.97
Kerala	78.53	270.04	126.76	79.55	272.99	128.25
Madhya Pradesh	44.05	138.33	70.45	43.64	138.61	70.28
Maharashtra (incl. Mumbai)*	70.44	143.22	106.64	71.02	144.50	107.64
North East	45.36	195.00	84.11	45.98	199.10	85.72
Orissa	60.39	143.60	75.68	59.67	147.55	75.86
Punjab	77.93	181.42	125.22	80.79	182.07	127.22
Rajasthan	57.69	175.07	86.26	58.86	173.08	86.68
Tamil Nadu (incl. Chennai)	84.06	135.48	116.48	89.62	133.22	117.21
Uttar Pradesh (incl. UPE & UPW)	49.04	133.95	68.83	49.22	133.55	68.91
West Bengal (incl. Kolkata)*	55.28	161.00	85.85	54.57	163.50	86.09
All India	56.99	160.78	90.11	57.59	160.63	90.52

* 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 113.77 followed by Tamil Nadu service area (89.62). Madhya Pradesh service area has the lowest Rural Tele-density of 43.64 followed by Bihar service area with rural tele-density of 43.97 in QE Sep-19.

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

Sl.No.	States/UT	Total Telephone Subscription (million)		
		Total	Rural	Urban
1	Andhra Pradesh	45.80	24.92	20.88
2	Arunachal Pradesh	1.41	0.63	0.78
3	Assam	24.15	12.45	11.70
4	Bihar	62.99	42.67	20.33
5	Chhattisgarh	20.99	10.16	10.82
6	Goa	3.05	1.21	1.83
7	Gujarat	69.21	27.30	41.92
8	Haryana	34.93	13.31	21.62
9	Himachal Pradesh	10.87	7.28	3.59
10	Jammu & Kashmir	11.45	4.89	6.57
11	Jharkhand	22.43	11.47	10.95
12	Karnataka	71.26	26.47	44.79
13	Kerala	46.63	21.60	25.03
14	Madhya Pradesh	55.37	23.96	31.42
15	Maharashtra Incl. Mumbai	133.96	44.13	89.83
16	Manipur	2.40	0.67	1.73
17	Meghalaya	2.33	1.15	1.18
18	Mizoram	1.34	0.44	0.90
19	Nagaland	1.74	0.76	0.98
20	Odisha	33.10	21.24	11.86
21	Punjab	38.60	13.97	24.64
22	Rajasthan	66.20	34.00	32.20
23	Sikkim	0.74	0.42	0.33
24	Tamil Nadu (incl. Chennai)	83.81	23.46	60.35
25	Telangana	43.17	16.73	26.44
26	Tripura	3.18	1.28	1.90
27	Uttar Pradesh (UPE + UPW)	160.40	84.27	76.13
28	Uttarakhand	13.46	6.77	6.68
29	West Bengal Incl. Kolkata	82.85	37.25	45.60
Union Territories				
1	Andaman & Nicobar Islands	0.41	0.18	0.23
2	Chandigarh	2.19	0.07	2.11
3	Dadar & Nagar Haweli	0.44	0.17	0.27
4	Daman & Diu	0.30	0.05	0.24
5	Delhi	42.93	1.52	41.40
6	Lakshdweep	0.09	0.08	0.003
7	Puduchery	1.07	0.36	0.71
	Total	1195.24	517.29	677.95

Table 1.6 : State/UT wise total Teledensity

Sl.No.	State/UT	Total Teledensity		
		Total	Rural	Urban
1	Andhra Pradesh	50.50	63.86	185.83
2	Arunachal Pradesh	103.54	82.25	131.02
3	Assam	71.64	44.46	205.05
4	Bihar	58.37	44.21	178.18
5	Chhattisgarh	77.88	50.89	155.11
6	Goa	141.84	164.92	129.81
7	Gujarat	106.05	73.30	149.56
8	Haryana	121.09	74.37	197.43
9	Himachal Pradesh	149.16	113.77	403.32
10	Jammu & Kashmir	89.19	53.33	178.58
11	Jharkhand	63.86	43.11	128.81
12	Karnataka	110.97	68.74	174.22
13	Kerala	128.31	79.43	273.59
14	Madhya Pradesh	67.77	41.16	133.71
15	Maharashtra Incl. Mumbai	107.05	69.92	144.83
16	Manipur	89.36	33.11	258.98
17	Meghalaya	80.98	50.86	190.55
18	Mizoram	121.79	91.20	145.67
19	Nagaland	70.45	37.10	229.39
20	Odisha	75.86	59.67	147.55
21	Punjab	128.66	81.35	191.94
22	Rajasthan	86.68	58.86	173.08
23	Sikkim	110.91	73.52	310.56
24	Tamil Nadu (incl. Chennai)	118.88	90.14	135.70
25	Tripura	80.06	40.70	230.39
26	Uttar Pradesh (UPE +UPW)	69.72	47.56	143.99
27	Uttarakhand	121.46	88.34	195.88
28	West Bengal Incl. Kolkata	86.02	54.41	163.70
	Union Territories			
1	Andaman & Nicobar Islands	68.86	56.34	84.08
2	Chandigarh	104.93	34.41	112.89
3	Dadar & Nagar Haweli	92.95	127.94	79.27
4	Daman & Diu	77.05	16.90	322.42
5	Delhi	182.32	201.59	181.68
6	Lakshdweep	103.31	133.28	12.55
7	Puduchery	55.82	65.31	51.96
	Total	90.52	57.59	160.63

*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 Jun-19 (%)	Market Share in QE Sep-19 (%)
	Jun-19	Sep-19	Net Additions			
Vodafone Idea Ltd	383.77	372.86	-10.91	-2.84	32.34	31.20
Reliance Jio	331.26	356.08	24.83	7.49	27.92	29.79
Bharti Airtel	324.65	329.88	5.23	1.61	27.36	27.60
BSNL	126.86	127.19	0.33	0.26	10.69	10.64
MTNL	6.63	6.57	-0.06	-0.83	0.56	0.55
Tata Teleservices	12.56	1.82	-10.74	-85.53	1.06	0.15
Reliance Com.	0.68	0.63	-0.06	-8.05	0.06	0.05
Quadrant	0.22	0.21	-0.01	-4.56	0.02	0.02
Total	1,186.63	1,195.24	8.61	0.73	100	100

- Note: 1. M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd. However, DoT has not yet approved merger of them.
2. M/s Reliance Jio has reported number of its wireline subscriber for QE September, 2019.
3. M/s BSNL includes number of subscribers of its Virtual Network Operator (VNO).

1.11 M/s Vodafone Idea Ltd continued to be the market leader with 31.20% in access segment in terms of number of subscribers with 372.86 million subscribers at the end of Sep-19 despite decline of 10.91 million subscribers during the quarter.

1.12 In term of net addition, Reliance Jio Infocomm Ltd became the biggest gainer with net addition of 24.83 million telephone subscribers during the QE Sep-19.

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 (%)
Vodafone Idea Ltd	372.86	193.67	51.94	37.44
Reliance Jio	356.08	142.87	40.12	27.62
Bharti Airtel	329.88	138.34	41.94	26.74
BSNL	127.19	42.28	33.24	8.17
MTNL	6.57	0.05	0.70	0.01
Tata Teleservices	1.82	0.05	2.60	0.01
Reliance Com.	0.63	0.001	0.20	0.00
Quadrant	0.21	0.04	19.75	0.01
Total	1,195.24	517.29	43.28	100

1.13 M/s Vodafone Idea Ltd is the telecom service provider with highest proportion of rural telephone subscribers (51.94%) followed by Bharti Airtel (41.94%) to their total telephone subscribers at the end of Sep-19.

Section B : Wireless Service

Table 1.9: List of Cellular Mobile (GSM, LTE & CDMA) Service Providers currently providing service [As on 30th September, 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 September, 2019

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

Source : As reported by telecom service providers

1.14 Number of total Wireless (2G+3G+4G) subscribers increased from 1,165.46 million at the end of Jun-19 to 1,173.75 million at the end of Sep-19, thereby showing a quarterly growth rate of 0.71%. During the quarter, net addition of 8.29 million wireless subscribers has been recorded.

1.15 Total wireless subscriber base showed year-on-year (Y-O-Y) growth rate of 0.38% in QE Sep-19 over same quarter in previous year.

1.16 Wireless Teledensity in the country increased from 88.50 at the end of Jun-19 to 88.90 at the end of Sep-19.

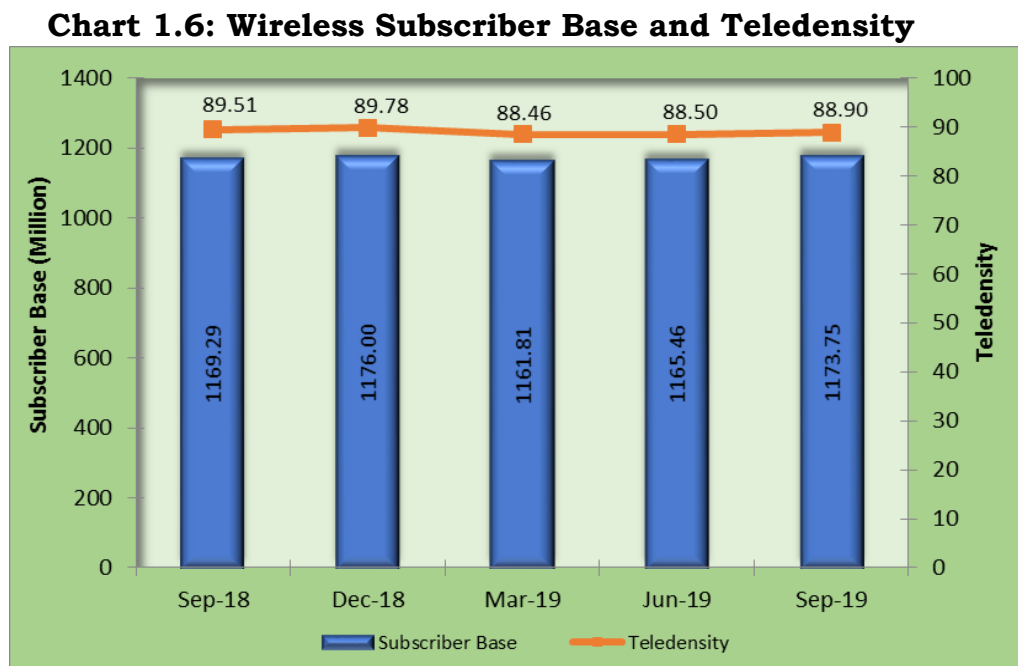


Table 1.10: Wireless Subscriber Base & Teledensity - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density	
	Rural	Urban	Rural	Urban
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
Sep-19	514.56	659.18	57.28	156.18

1.17 Number of Rural Wireless subscribers increased from 508.19 million at the end of Jun-19 to 514.56 million at the end of Sep-19, and the number of urban wireless subscribers increased from 657.27 million to 659.18 million during the quarter. Quarterly Growth rates of Rural and Urban wireless subscriptions are 1.25% and 0.29% respectively during QE Sep-19.

1.18 The share of rural wireless subscription increased from 43.60% to 43.84% in total wireless subscription in this quarter.

Chart 1.7: Wireless Market Share - Rural & Urban

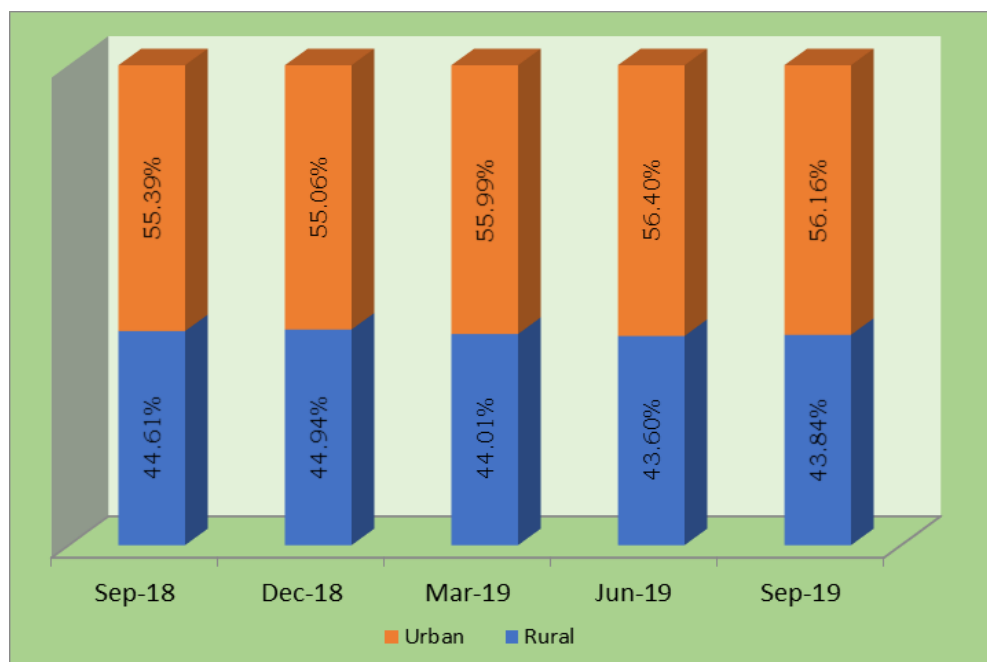


Table 1.11: Growth in Wireless Subscriber base

Service Provider	Subscriber Base (millions)			Rate of Growth (%)	Market Share Jun-19 (%)	Market Share Sep-19 (%)
	Jun-19	Sep-19	Net Additions			
Bharti Airtel*	320.35	325.57	-5.53	1.63	27.49	27.74
Tata Teleservices*	10.74				0.92	
Vodafone Idea Ltd	383.41	372.49	-10.92	-2.85	32.90	31.73
Reliance Com.	0.02	0.02	0.00	-6.18	0.002	0.002
BSNL	116.27	117.06	0.79	0.68	9.98	9.97
MTNL	3.41	3.39	-0.02	-0.62	0.29	0.29
Reliance Jio	331.26	355.22	23.97	7.24	28.42	30.26
Total	1,165.46	1,173.75	8.29	0.71	100	100

* M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd for QE September, 2019. However, DoT has not yet approved merger of them.

- 1.19 M/s Vodafone Idea Ltd is still a leading operator with market share of 31.73% in total wireless subscription at the end of Sep-19, despite loosing of 10.92 million wireless subscribers during the quarter.
- 1.20 In terms of net additions during QE Sep-19, only Reliance Jio and BSNL showed positive growth in their wireless subscribers with net addition of 23.97 million and 0.79 million subscribers respectively.

Table 1.12: Service Area wise Wireless Subscriber base

Service Area	Subscriber base (in million)			
	Jun-19	Sep-19	Net Additions	Rate of change (%)
Andhra Pradesh	86.97	87.59	0.62	0.71
Assam	23.54	24.04	0.50	2.10
Bihar	85.57	85.24	-0.33	-0.39
Delhi	52.96	53.66	0.70	1.33
Gujarat	68.93	68.74	-0.18	-0.26
Haryana	27.90	28.26	0.36	1.28
Himachal Pradesh	10.56	10.77	0.20	1.92
Jammu & Kashmir	11.48	11.34	-0.14	-1.24
Karnataka	68.15	69.11	0.95	1.40
Kerala	44.27	44.89	0.62	1.40
Madhya Pradesh	75.40	75.42	0.02	0.03
Maharashtra	92.61	93.69	1.08	1.16
Mumbai	38.36	38.80	0.44	1.14
North East	12.04	12.30	0.26	2.17
Orissa	32.73	32.87	0.14	0.42
Punjab	39.32	40.07	0.75	1.90
Rajasthan	65.16	65.67	0.51	0.78
T.N. (incl. Chennai)	82.11	82.74	0.63	0.77
U.P.(E)	99.82	100.34	0.52	0.52
U.P.(W)	64.87	65.10	0.23	0.36
Kolkata	26.30	26.39	0.09	0.36
West Bengal	56.41	56.72	0.31	0.55
All India	1,165.46	1,173.75	8.29	0.71

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	87.59	41.48	46.11	47.36
Assam	24.04	12.43	11.61	51.72
Bihar	85.24	54.11	31.12	63.49
Delhi	53.66	1.76	51.90	3.28
Gujarat	68.74	27.37	41.37	39.82
Haryana	28.26	13.07	15.18	46.26
Himachal Pradesh	10.77	7.22	3.55	67.07
Jammu & Kashmir	11.34	4.88	6.46	43.01
Karnataka	69.11	26.34	42.76	38.12
Kerala	44.89	20.60	24.29	45.89
Madhya Pradesh	75.42	34.02	41.40	45.10
Maharashtra	93.69	43.28	50.41	46.19
Mumbai	38.80	1.85	36.95	4.76
North East	12.30	4.91	7.39	39.90
Orissa	32.87	21.19	11.68	64.47
Punjab	40.07	13.90	26.17	34.68
Rajasthan	65.67	33.94	31.73	51.68
T.N. (incl. Chennai)	82.74	23.53	59.21	28.44
U.P.(E)	100.34	57.14	43.20	56.95
U.P.(W)	65.10	33.76	31.34	51.86
Kolkata	26.39	2.89	23.50	10.97
West Bengal	56.72	34.88	21.85	61.49
All India	1,173.75	514.56	659.18	43.84

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 30 th June, 2019			As on 30 th September, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
A.P.	64.25	177.61	96.07	63.60	181.09	96.59
Assam	42.89	203.70	70.01	44.40	203.36	71.31
Bihar	44.51	155.71	59.98	43.95	156.29	59.59
Delhi	-	-	226.48	-	-	227.90
Gujarat	71.02	149.00	104.50	72.65	145.43	103.96
Haryana	71.86	138.37	97.02	73.04	138.65	97.95
H.P.	110.23	397.07	145.18	112.87	397.91	147.71
J&K	56.00	173.47	89.57	53.19	175.73	88.27
Karnataka	61.34	173.96	106.33	68.41	166.35	107.62
Kerala	74.46	261.94	121.67	75.58	264.89	123.24
M.P.	43.92	135.66	69.61	43.52	135.86	69.42
Maharashtra (incl. Mumbai)*	70.07	136.66	103.19	70.67	137.73	104.09
North East	45.21	192.75	83.42	45.82	196.86	85.03
Orissa	60.26	141.36	75.16	59.54	145.31	75.34
Punjab	77.03	177.33	122.86	79.95	177.95	124.87
Rajasthan	57.57	172.62	85.57	58.74	170.57	85.98
Tamil Nadu (incl. Chennai)	82.92	131.46	113.52	88.53	129.19	114.26
Uttar Pradesh (incl. UPE&UPW)*	48.99	132.85	68.54	49.18	132.43	68.61
West Bengal (incl. Kolkata)*	55.16	158.11	84.93	54.47	160.61	85.18
All India	56.68	156.42	88.50	57.28	156.18	88.90

* 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	45.26	24.79	20.47
2	Arunachal Pradesh	1.39	0.62	0.76
3	Assam	24.04	12.43	11.61
4	Bihar	62.89	42.65	20.24
5	Chhattisgarh	20.81	10.14	10.66
6	Goa	2.95	1.19	1.77
7	Gujarat	68.01	27.15	40.86
8	Haryana	34.62	13.26	21.36
9	Himachal Pradesh	10.77	7.22	3.55
10	Jammu & Kashmir	11.34	4.88	6.46
11	Jharkhand	22.34	11.46	10.88
12	Karnataka	69.11	26.34	42.76
13	Kerala	44.80	20.52	24.29
14	Madhya Pradesh	54.62	23.88	30.74
15	Maharashtra	129.53	43.94	85.60
16	Manipur	2.38	0.66	1.72
17	Meghalaya	2.31	1.15	1.17
18	Mizoram	1.33	0.44	0.89
19	Nagaland	1.73	0.76	0.98
20	Odisha	32.87	21.19	11.68
21	Punjab	38.01	13.82	24.19
22	Rajasthan	65.67	33.94	31.73
23	Sikkim	0.74	0.41	0.32
24	Tamil Nadu	81.73	23.18	58.55
25	Telangana	42.34	16.70	25.64
26	Tripura	3.16	1.28	1.88
27	Uttar Pradesh	159.73	84.19	75.54
28	Uttarakhand	13.37	6.76	6.60
29	West Bengal	81.99	37.18	44.81
	Union Territories			
1	Andaman & Nicobar Islands	0.39	0.18	0.22
2	Chandigarh	2.03	0.07	1.95
3	Dadar & Nagar Haweli	0.44	0.17	0.27
4	Daman & Diu	0.29	0.05	0.24
5	Delhi	39.68	1.52	38.15
6	Lakshdweep	0.08	0.08	0.00
7	Puduchery	1.02	0.35	0.66
	Total	1173.75	514.56	659.18

Table 1.16 : State/UT wise Wireless Tele-density

Sl.No.	State/UT	Wireless Teledensity		
		Total	Rural	Urban
1	Andhra Pradesh*	96.59	63.60	181.09
2	Arunachal Pradesh	101.79	81.39	128.14
3	Assam	71.31	44.40	203.36
4	Bihar	58.28	44.19	177.42
5	Chhattisgarh	77.21	50.80	152.79
6	Goa	137.45	161.05	125.15
7	Gujarat	104.21	72.92	145.79
8	Haryana	120.02	74.10	195.06
9	Himachal Pradesh	147.71	112.87	397.91
10	Jammu & Kashmir	88.27	53.19	175.73
11	Jharkhand	63.63	43.08	127.95
12	Karnataka	107.62	68.41	166.35
13	Kerala	123.29	75.45	265.50
14	Madhya Pradesh	66.85	41.02	130.84
15	Maharashtra	103.52	69.62	138.01
16	Manipur	88.59	32.87	256.63
17	Meghalaya	80.40	50.78	188.11
18	Mizoram	120.68	91.03	143.82
19	Nagaland	70.17	37.08	227.87
20	Odisha	75.34	59.54	145.31
21	Punjab	126.68	80.50	188.45
22	Rajasthan	85.98	58.74	170.57
23	Sikkim	110.06	73.48	305.41
24	Tamil Nadu	115.92	89.05	131.65
25	Tripura	79.56	40.64	228.19
26	Uttar Pradesh	69.43	47.51	142.86
27	Uttarakhand	120.64	88.23	193.47
28	West Bengal	85.12	54.31	160.84
	Union Territories			
1	Andaman & Nicobar Islands	66.05	54.38	80.23
2	Chandigarh	97.25	33.94	104.39
3	Dadar & Nagar Haweli	92.54	127.72	78.78
4	Daman & Diu	75.25	15.87	317.49
5	Delhi	168.51	201.59	167.42
6	Lakshdweep	98.07	130.46	0.00
7	Puduchery	53.15	63.97	48.75
	All India Teledensity	88.90	57.28	156.18

*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 30.09.2019

Service Provider	Total number of wireless Subscribers (in millions)	Rural Subscribers (in millions)	% of Rural subscribers in total	Market Share of Rural Subscribers (%)
Vodafone Idea Ltd	372.49	193.67	51.99%	37.64
Reliance Jio	355.22	142.87	40.22	27.76
Bharti Airtel	325.57	138.34	42.49	26.88
BSNL	117.06	39.65	33.87	7.70
MTNL	3.39	0.05	1.35	0.01
Reliance Com.	0.02	-	-	-
Total	1,173.75	514.56	43.84	100

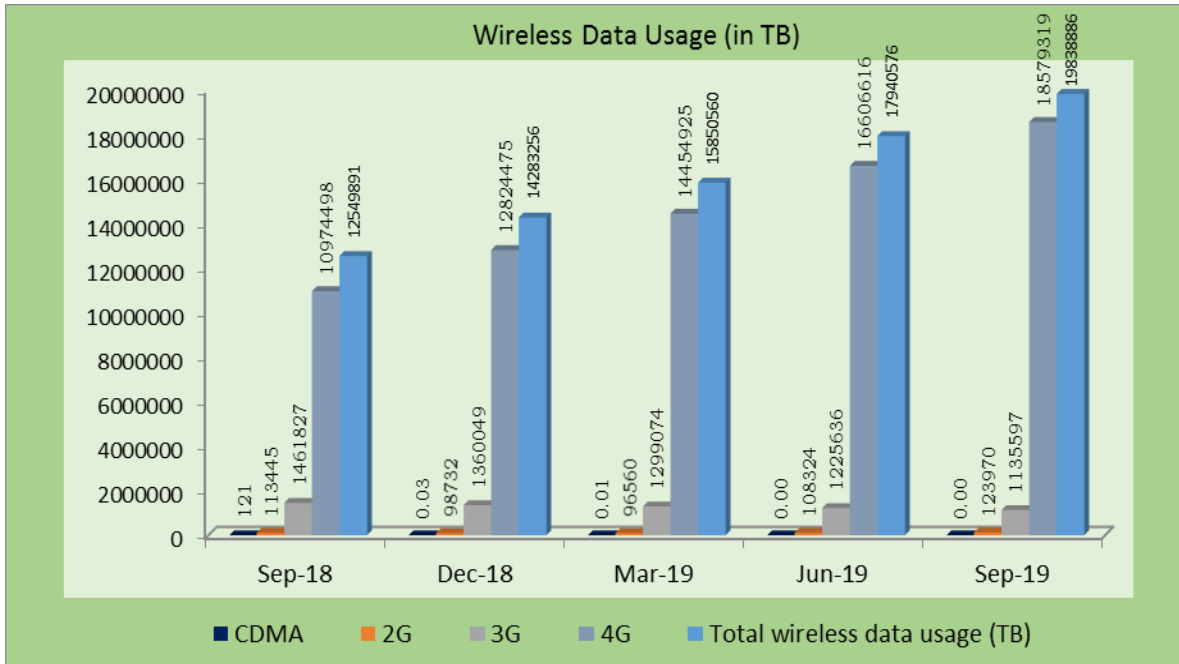
- Note:** 1. M/s Reliance Com. has not reported number of its rural wireless subscribers and hence its rural wireless subscription has been taken as NIL.
2. M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd for QE September, 2019. However, DoT has not yet approved merger of them.

Wireless Data Usage

- 1.22 Volume of total wireless data usage increased from 17,940,576 TB during Q.E. Jun-19 to 19,838,886 TB during Q.E. Sep-19 with quarterly growth rate of 10.58%. Out of total data wireless usage, 2G data usage was 123,970 terabytes, 3G data usage was 1,135,597 terabyte and 4G data usage was 18,579,319 TB during the quarter.
- 1.23 Total number of wireless data subscribers increased from 643.09 million at the end of Jun-19 to 664.80 million at the end of Sep-19.
- 1.24 The contribution of 3G and 4G data usage in total volume of wireless data usage are about 5.72% and 93.65% respectively during the QE Sep-19. Share of 2G data usage remained 0.62% during the quarter.

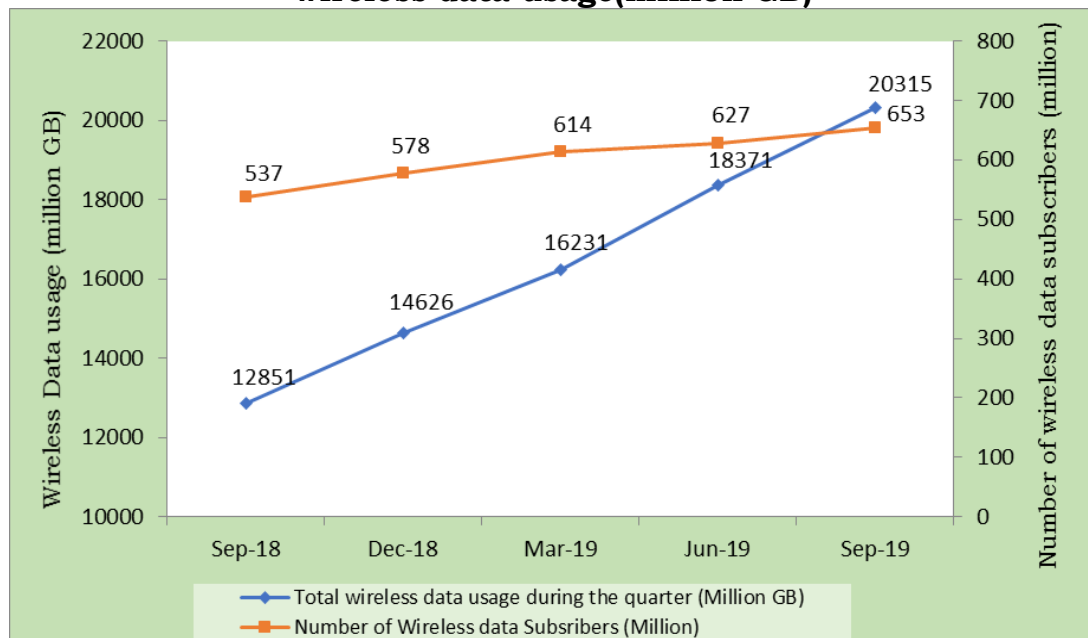
1.25 Technology-wise trend of growth in volume of wireless data usage is depicted in the following chart.

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



1.26 The following chart depicts the trend of number of wireless data subscribers and volume of wireless data usage in QE Sep-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 September, 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 and Sikkim)

8	Reliance Jio	Andhra Pradesh (Excluding Telangana), Telangana, Assam, Bihar (Excluding Jharkhand), Jharkhand, Delhi, Gujarat, Haryana, Himachal Pradesh, J&K, Karnataka, Kerala, Kolkata, Madhya Pradesh (Excluding Chattisgarh), Chattisgarh, Maharashtra (Excluding Mumbai), Mumbai Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Tamilnadu (Excluding Chennai), Chennai, UP-East, UP-West (Excluding Uttarakhand), Uttarakhand and West Bengal (Excluding Andaman & Nicobar and Sikkim)
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1.27 Total number of Wireline subscribers increased from 21.17 million at the end of Jun-19 to 21.49 at the end of Sep-19 with quarterly growth rate of 1.52%. Overall Wireline Teledensity also increased from 1.61 at the end of Jun-19 to 1.63 at the end of Sep-19. Wireline subscription increased in this quarter due to reporting of wireline subscribers by M/s Reliance Jio Infomm Ltd in QE Sep-19.

1.28 Urban wireline subscriber base increased by 2.47%, from 18.31 Million at the end of Jun-19 to 18.77 Million at the end of Sep-19. However, Rural wireline subscription declined by 4.62%, from 2.85 million to 2.72 million during the same period.

Chart 1.10: Wireline Subscriber Base and Teledensity

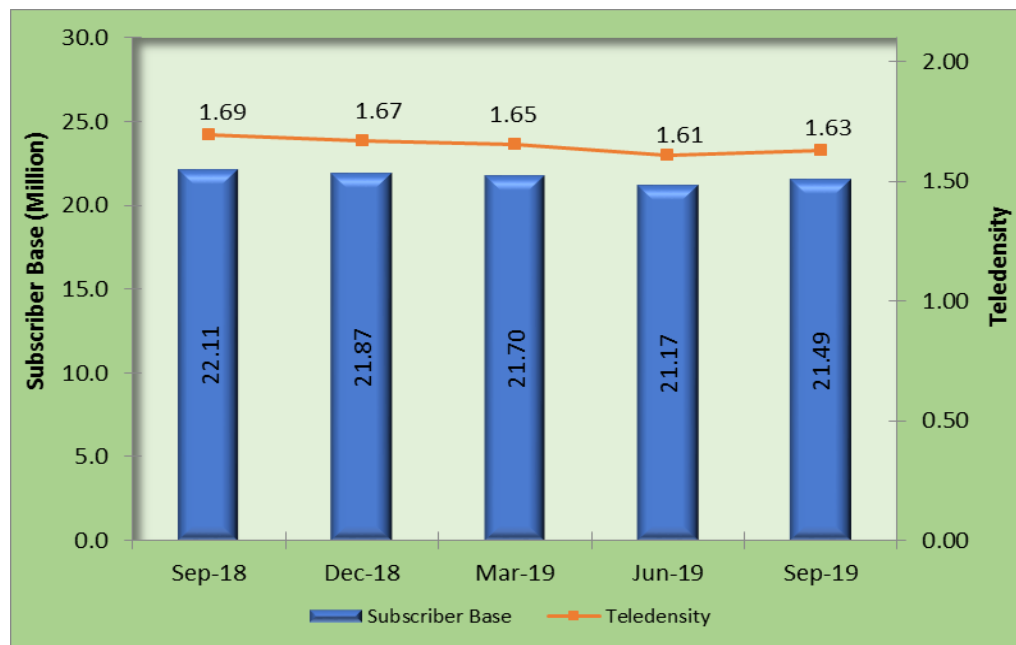


Table 1.19 : Wireline Subscriber Base & Teledensity - Rural & Urban

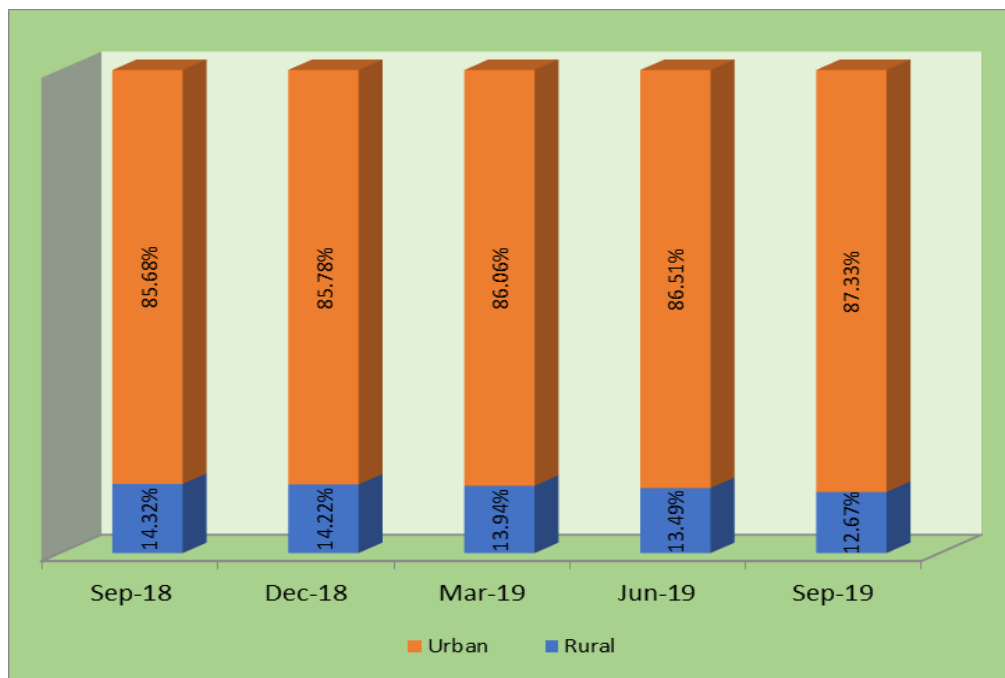
Quarter ending	Subscriber Base (million)		Teledensity (%)	
	Rural	Urban	Rural	Urban
Sep-18	3.17	18.95	0.36	4.57
Dec-18	3.11	18.76	0.35	4.50
Mar-19	3.02	18.67	0.34	4.46
Jun-19	2.85	18.31	0.32	4.36
Sep-19	2.72	18.77	0.30	4.45

**Table 1.20 : Service Provider wise Subscriber base (Rural - Urban)
- As on 30.09.2019**

Service Provider	Subscriber Base (million)			Share of Rural subscription (%)
	Rural	Urban	Total	
BSNL	2.63	7.50	10.13	25.97
Bharti	--	4.31	4.31	--
MTNL	--	3.18	3.18	--
Tata Tele.	0.05	1.77	1.82	2.60
Reliance Com.	0.001	0.61	0.61	0.20
Quadrant	0.04	0.17	0.21	19.75
Vodafone Idea	--	0.37	0.37	--
Reliance Jio	0.002	0.86	0.86	0.24
Total	2.72	17.91	21.49	12.67

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



1.30 Market Share of Rural wireline subscription declined from 13.49% in QE Jun-19 to 12.67% in QE Sep-19.

Table 1.21 : Service Provider wise growth in Wireline Subscriber base

Service Provider	Subscriber Base (million)			Rate of change (%)	Market share-Jun-19(%)	Market share-Sep-19(%)
	Jun-19	Sep-19	Net Addition			
BSNL	10.59	10.13	-0.47	-4.39	50.05	47.13
Bharti	4.29	4.31	0.02	0.42	20.28	20.06
MTNL	3.21	3.18	-0.03	-1.06	15.18	14.80
Tata Tele.	1.82	1.82	-0.002	-0.13	8.59	8.46
Reliance Com	0.67	0.61	-0.05	-8.10	3.14	2.85
Quadrant	0.22	0.21	-0.01	-4.56	1.03	0.97
Vodafone	0.36	0.37	0.01	3.14	1.72	1.74
Reliance Jio	-	0.86	0.86	-	-	3.99
Total	21.17	21.49	0.32	1.52	100	100

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

Service Area	Jun-19	Sep-19	Net Additions	Rate of Change (%)
Andhra Pradesh	1.37	1.38	0.005	0.38
Assam	0.11	0.11	0.004	3.34
Bihar	0.22	0.18	-0.034	-15.69
Delhi	3.28	3.35	0.066	2.01
Gujarat	1.10	1.21	0.108	9.79
Haryana	0.26	0.26	-0.003	-1.25
Himachal Pradesh	0.11	0.11	-0.004	-3.89
Jammu & Kashmir	0.10	0.12	0.016	15.54
Karnataka	2.12	2.15	0.028	1.31
Kerala	1.85	1.83	-0.024	-1.30
Madhya Pradesh	0.91	0.94	0.022	2.45
Maharashtra	1.47	1.44	-0.026	-1.76
Mumbai	2.91	3.08	0.164	5.62
North East	0.10	0.10	0.000	-0.31
Orissa	0.23	0.23	-0.001	-0.53
Punjab	0.76	0.75	-0.002	-0.29
Rajasthan	0.52	0.53	0.007	1.33
T.N. (incl. Chennai)	2.14	2.14	-0.001	-0.05
U.P.(E)	0.42	0.43	0.011	2.60
U.P.(W)	0.29	0.29	-0.002	-0.67
Kolkata	0.69	0.70	0.004	0.52
West Bengal	0.20	0.19	-0.014	-7.05
All India	21.17	21.49	0.321	1.52

1.31 J&K service area showed maximum growth of 15.54% and Bihar service area showed maximum decline of 15.69% in their wireline subscriber base during the quarter ending Sep-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	1.38	0.17	1.21	12.32
Assam	0.11	0.02	0.10	14.88
Bihar	0.18	0.02	0.16	12.76
Delhi	3.35	-	3.35	-
Gujarat	1.21	0.15	1.06	12.04
Haryana	0.26	0.05	0.21	18.13
Himachal Pradesh	0.11	0.06	0.05	54.39
Jammu & Kashmir	0.12	0.01	0.10	10.87
Karnataka	2.15	0.13	2.02	5.83
Kerala	1.83	1.08	0.74	59.32
Madhya Pradesh	0.94	0.10	0.84	10.60
Maharashtra	1.44	0.22	1.22	15.25
Mumbai	3.08	-	3.08	-
North East	0.10	0.02	0.08	16.41
Orissa	0.23	0.05	0.18	20.48
Punjab	0.75	0.15	0.61	19.40
Rajasthan	0.53	0.06	0.47	12.01
T.N. (incl. Chennai)	2.14	0.29	1.85	13.62
U.P.(E)	0.43	0.06	0.37	13.85
U.P.(W)	0.29	0.03	0.26	9.12
Kolkata	0.70	-	0.70	-
West Bengal	0.19	0.07	0.12	38.29
All India	21.49	2.72	18.77	12.67

1.32 Kerala service area has the maximum share (59.32%) of rural wireline subscriber in its total wireline subscriber base at the end of Sep-19.

Table 1.24: Service Area wise Wireline Teledensity

Service Area	As on 30 th June, 2019			As on 30 th September, 2019		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	0.29	4.66	1.52	0.26	4.74	1.52
Assam	0.06	1.62	0.33	0.06	1.69	0.34
Bihar	0.02	0.96	0.15	0.02	0.80	0.13
Delhi	-	-	14.05	-	-	14.23
Gujarat	0.40	3.36	1.67	0.39	3.73	1.83
Haryana	0.28	1.97	0.92	0.26	1.95	0.90
Himachal Pradesh	0.94	5.59	1.51	0.90	5.40	1.45
Jammu & Kashmir	0.11	2.49	0.79	0.14	2.85	0.91
Karnataka	0.35	7.76	3.31	0.33	7.87	3.35
Kerala	4.07	8.10	5.08	3.97	8.10	5.01
Madhya Pradesh	0.13	2.67	0.84	0.13	2.74	0.86
Maharashtra (incl. Mumbai)*	0.37	6.56	3.45	0.34	6.77	3.55
North East	0.16	2.25	0.70	0.15	2.24	0.69
Orissa	0.13	2.24	0.52	0.13	2.24	0.52
Punjab	0.90	4.10	2.36	0.84	4.13	2.35
Rajasthan	0.12	2.45	0.69	0.11	2.51	0.70
Tamil Nadu (incl. Chennai)	1.14	4.02	2.96	1.10	4.03	2.95
Uttar Pradesh (incl. UPE & UPW)	0.05	1.10	0.29	0.05	1.12	0.30
West Bengal (incl. Kolkata)*	0.12	2.89	0.92	0.11	2.88	0.91
All India	0.32	4.36	1.61	0.30	4.45	1.63

* 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	0.13	0.41
2	Arunachal Pradesh	0.02	0.01	0.02
3	Assam	0.11	0.02	0.10
4	Bihar	0.10	0.02	0.09
5	Chhattisgarh	0.18	0.02	0.16
6	Goa	0.09	0.03	0.07
7	Gujarat	1.20	0.14	1.06
8	Haryana	0.31	0.05	0.26
9	Himachal Pradesh	0.11	0.06	0.05
10	Jammu & Kashmir	0.12	0.01	0.10
11	Jharkhand	0.08	0.01	0.07
12	Karnataka	2.15	0.13	2.02
13	Kerala	1.82	1.08	0.74
14	Madhya Pradesh	0.76	0.08	0.67
15	Maharashtra Incl. Mumbai	4.42	0.19	4.23
16	Manipur	0.02	0.00	0.02
17	Meghalaya	0.02	0.002	0.02
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	0.59	0.15	0.45
22	Rajasthan	0.53	0.06	0.47
23	Sikkim	0.01	0.00	0.01
24	Tamil Nadu (incl. Chennai)	2.09	0.28	1.80
25	Telangana	0.84	0.04	0.80
26	Tripura	0.02	0.00	0.02
27	Uttar Pradesh (UPE +UPW)	0.68	0.08	0.60
28	Uttarakhand	0.09	0.01	0.08
29	West Bengal Incl. Kolkata	0.86	0.07	0.80
	Union Territories			
1	Andaman & Nicobar Islands	0.02	0.01	0.01
2	Chandigarh	0.16	0.001	0.16
3	Dadar & Nagar Haweli	0.002	0.0003	0.002
4	Daman & Diu	0.01	0.003	0.004
5	Delhi	3.25	-	3.25
6	Lakshdweep	0.004	0.002	0.003
7	Puduchery	0.05	0.01	0.04
	Total	21.49	2.72	18.77

Table 1.26: State/UT wise Wireline Teledensity

Sl.No.	State/UT	Wireline Teledensity		
		Total	Rural	Urban
1	Andhra Pradesh	1.52	0.26	4.74
2	Arunachal Pradesh	1.75	0.87	2.88
3	Assam	0.34	0.06	1.69
4	Bihar	0.09	0.02	0.76
5	Chhattisgarh	0.67	0.09	2.32
6	Goa	4.39	3.87	4.66
7	Gujarat	1.84	0.38	3.77
8	Haryana	1.07	0.27	2.37
9	Himachal Pradesh	1.45	0.90	5.40
10	Jammu & Kashmir	0.91	0.14	2.85
11	Jharkhand	0.23	0.03	0.86
12	Karnataka	3.35	0.33	7.87
13	Kerala	5.01	3.98	8.09
14	Madhya Pradesh	0.92	0.14	2.87
15	Maharashtra Incl. Mumbai	3.53	0.30	6.82
16	Manipur	0.77	0.24	2.35
17	Meghalaya	0.59	0.08	2.43
18	Mizoram	1.11	0.17	1.84
19	Nagaland	0.28	0.02	1.52
20	Odisha	0.52	0.13	2.24
21	Punjab	1.98	0.85	3.49
22	Rajasthan	0.70	0.11	2.51
23	Sikkim	0.85	0.05	5.15
24	Tamil Nadu (incl. Chennai)	2.96	1.09	4.05
25	Tripura	0.50	0.06	2.20
26	Uttar Pradesh (UPE + UPW)	0.29	0.04	1.13
27	Uttarakhand	0.82	0.11	2.41
28	West Bengal incl. Kolkata	0.90	0.10	2.86
	Union Territories			
1	Andaman & Nicobar Islands	2.81	1.96	3.85
2	Chandigarh	7.69	0.48	8.50
3	Dadar & Nagar Haweli	0.42	0.22	0.49
4	Daman & Diu	1.80	1.03	4.93
5	Delhi	13.81	-	14.27
6	Lakshdweep	5.24	2.82	12.55
7	Puduchery	2.67	1.34	3.21
	Total	1.63	0.30	4.45

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

Public Call Offices (PCO)

1.33 Total number of PCOs in the country declined from 2,28,371 at the end of Jun-19 to 2,07,243 at the end of Sep-19. Detailed table of service provider wise PCOs is available at Annexure -1.3.

Chart 1.12: Trend of Number of PCOs



1.34 Number of PCOs continued shows declining trend over the year. It has recorded a overall quarterly decline rate of 9.25% and the year-on-year (Y-O-Y) decline rate of 32.54% at the QE Sep-19.

Table 1.27 : Rate of change & Market share of PCOs

Service Provider	Jun-19	Sep-19	Rate of change (%)	Market share (%) (Sep-19)
BSNL	1,49,332	1,29,129	-13.53	62.31
MTNL	68,064	67,428	-0.93	32.54
Bharti	10,121	9,884	-2.34	4.77
Quadrant	854	802	-6.09	0.39
Total	2,28,371	2,07,243	-9.25	100

Village Public Telephones (VPTs)

- 1.35 There are 5,93,731 inhabited villages in India as per census 2001. During the Q.E. Sep-19, there are 70,834 villages having Village Public Telephones (VPTs).
- 1.36 Number of VPTs declined from 1,04,466 at the end of Jun-19 to 70,834 at the end of Sep-19 with quarterly decline rate of 32.19%. It shows yearly decline of 42.75% in QE Sep-19 over same quarter in previous year.
- 1.37 As per the information received in TRAI, at the end of Sep-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

1.38 This section summarizes information submitted by internet service providers for the quarter ending Sep-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)

1.39 As per reports received from 353 operators as compared to 341 operators in last quarter, total number of internet subscribers increased from 665.31 million at the end of Jun-19 to 687.62 million at the end of Sep-19 with quarterly growth rate of 3.35%. Out of total 687.62 million internet subscribers, 625.42 million were broadband subscribers and 62.20 million were narrowband subscribers.

1.40 Wired Internet subscribers increased from 21.67 million at the end of Jun-19 to 22.26 million at the end of Sep-19 with quarterly growth rate of 2.73%. Wireless Internet subscribers increased from 643.64 million at the end of Jun-19 to 665.37 million at the end of Sep-19 with quarterly growth rate of 3.37%.

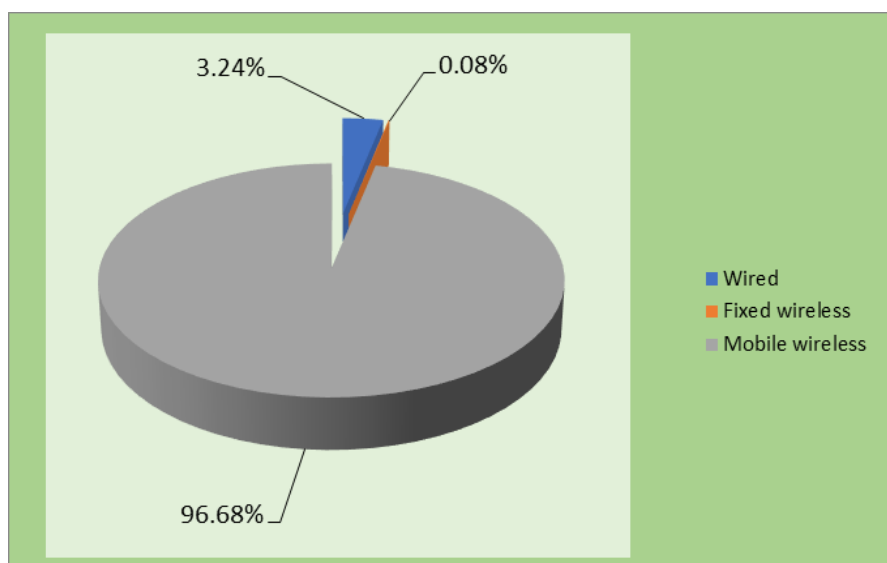
1.41 The number of Broadband subscribers increased from 594.58 million at the end of Jun-19 to 625.42 million at the end of Sep-19 with quarterly growth rate of 5.19%. However, the number of Narrowband subscribers declined from 70.72 million at the end of Jun-19 to 62.20 million at the end of Sep-19 with quarterly decline rate of 12.05%.

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			
	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19
Broadband	18.42	19.01	0.54	0.57	575.62	605.84	576.16	606.41	594.58	625.42
Narrowband	3.25	3.25	0.01	0.01	67.47	58.95	67.48	58.96	70.72	62.20
Total	21.67	22.26	0.55	0.58	643.09	664.79	643.64	665.37	665.31	687.62

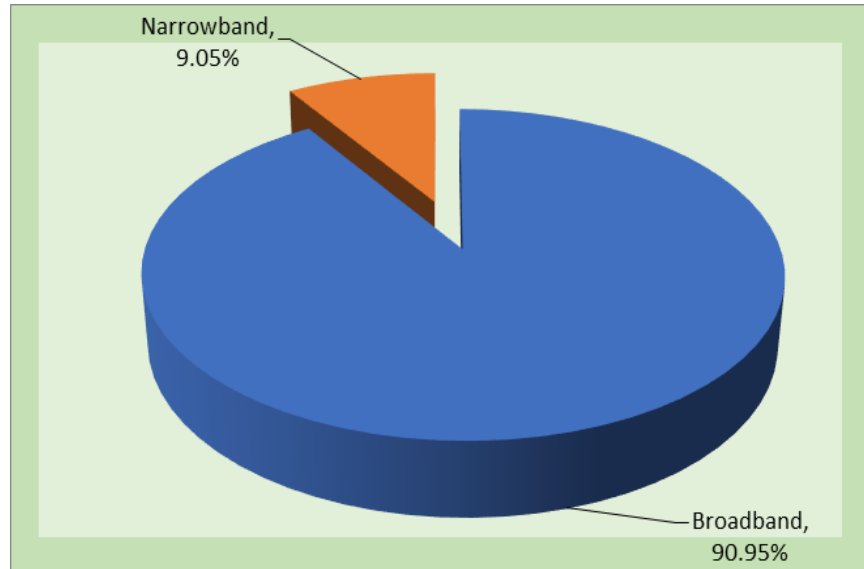
1.42 The following charts present the composition of Internet Subscribers by mode of access and composition of Broadband & Narrowband subscription as on 30th September, 2019.

Chart 1.9: Composition of Internet subscription



1.43 Out of total internet subscribers, 96.68% subscribers are using Mobile devices for access of internet service. Wired internet subscribers are only 3.24% in total internet subscribers at the end of Sep-19.

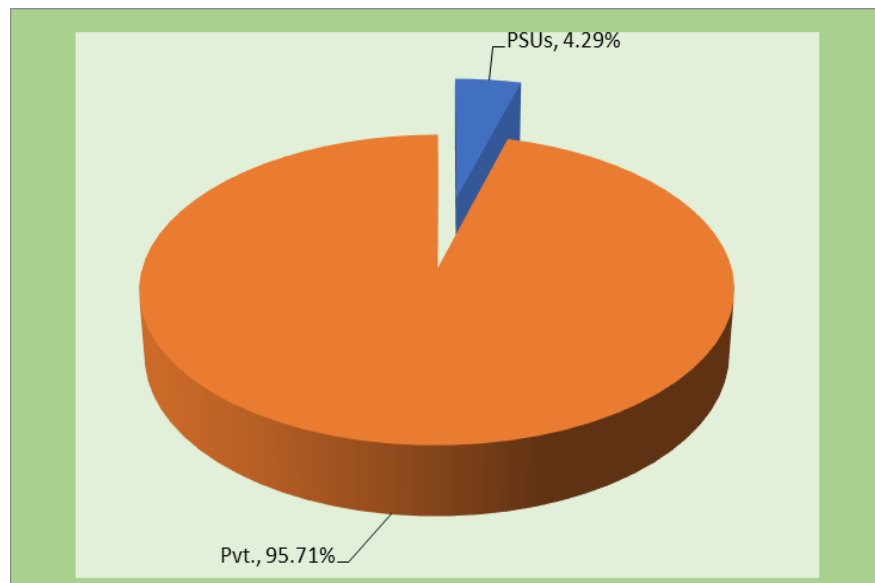
Chart 1.10 : Composition of Broadband & Narrowband subscription



1.44 Out of total internet subscribers, 90.95% subscribers are using broadband for access of internet.

1.45 Share of private internet service providers in total internet subscriber base, increased from 95.32% at QE Jun-19 to 95.71% at QE Sep-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



1.46 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	2.33	2.25	19.21	30.01	21.54	32.26
Assam	0.67	0.61	5.90	5.85	6.57	6.46
Bihar	3.69	1.56	21.68	16.96	25.37	18.52
Delhi	0.20	2.61	0.54	35.18	0.74	37.79
Gujarat	1.18	1.43	10.86	29.13	12.05	30.56
Haryana	0.55	0.61	5.61	9.26	6.16	9.87
Himachal Pradesh	0.26	0.19	3.16	2.00	3.41	2.19
Jammu & Kashmir	0.01	0.03	1.69	3.14	1.70	3.17
Karnataka	1.45	1.86	12.87	27.50	14.32	29.36
Kerala	0.79	1.00	9.48	14.70	10.27	15.70
Kolkata	0.18	1.38	1.34	13.94	1.52	15.32
Madhya Pradesh	2.48	2.15	14.58	25.23	17.06	27.38
Maharashtra	2.51	2.62	19.65	32.82	22.16	35.44
Mumbai	0.10	2.39	1.27	25.21	1.37	27.60
North East	0.30	0.34	2.66	4.06	2.96	4.40
Orissa	1.42	0.47	9.09	6.63	10.51	7.10
Punjab	0.70	0.97	6.68	16.34	7.38	17.31
Rajasthan	2.07	1.56	15.16	20.42	17.23	21.98
Tamil Nadu	1.54	2.54	11.94	32.44	13.49	34.97
Uttar Pradesh(East)	3.77	2.19	20.14	23.40	23.91	25.60
Uttar Pradesh(West)	1.96	1.64	11.27	19.75	13.23	21.39
West Bengal	2.46	1.18	12.23	14.44	14.70	15.62
Total	30.63	31.57	217.01	408.42	247.63	439.99

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

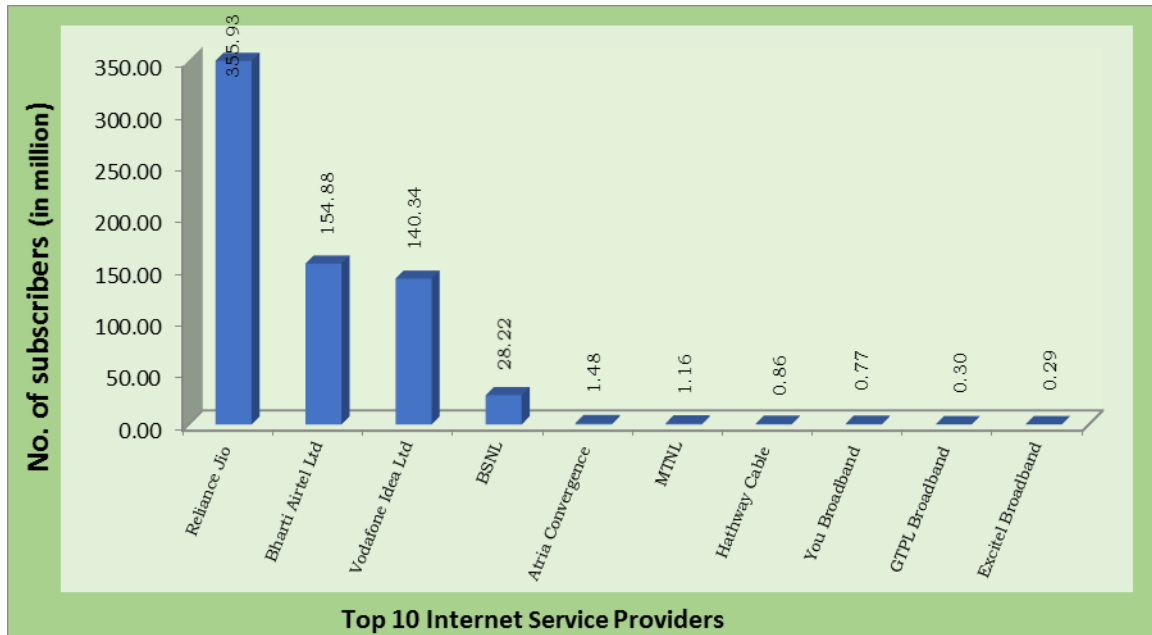
S.No	ISP	No. of Subscribers	Share (%)
1	Reliance Jio Infocomm Ltd	355926487	51.76
2	Bharti Airtel Ltd.	154880425	22.52
3	Vodafone Idea Limited	140342199	20.41
4	Bharat Sanchar Nigam Ltd.	28216649	4.10
5	Atria Convergence Technologies Pvt. Ltd.	1479233	0.22
6	Mahanagar Telephone Nigam Ltd.	1164440	0.17
7	Hathway Cable & Datacom Pvt. Ltd.	861946	0.13
8	You Broadband India Pvt. Ltd.	773597	0.11
9	GTPL Broadband Pvt. Ltd.	301750	0.04
10	Excitel Broadband Private Limited	294000	0.04
	Total of Top 10 ISPs	684240726	99.51
	Others	3382700	0.49
	Grand Total	687623426	100

1.47 Reliance Jio holds the top position with 51.76% of market share of internet subscribers followed by Bharti Airtel Ltd with 22.52% at the QE Sep-19. M/s Vodafone Idea Ltd held the third position in respect of internet subscriber base with market share of 20.41%.

1.48 Out of total 353 internet service providers, top 10 Service Providers together hold 99.51% of total internet subscriber base at the QE Sep-19. Detailed table of number of internet subscriber base (broadband and narrowband) of all the service providers is available at **Annexure-1.5**.

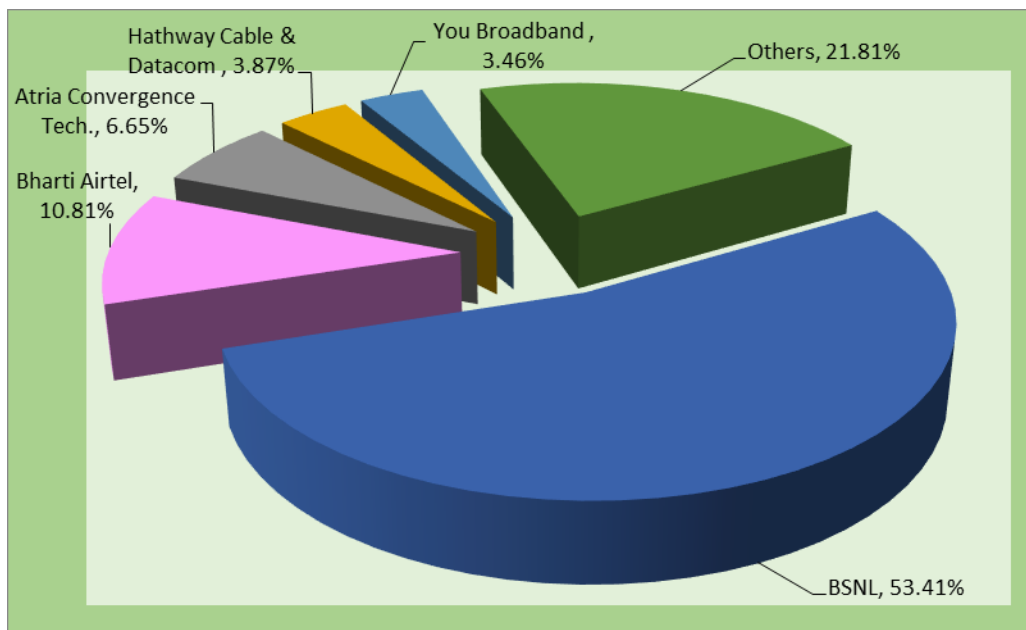
1.49 The following chart depicts the internet subscriber base of top ten Internet Service Providers (ISPs) in the QE Sep-19.

Chart 1.17 : Subscriber base of top ten ISPs



1.50 Out of total 22.26 million wired internet subscribers, BSNL holds 53.41% market share with 11.89 million subscribers, followed by Bharti with 2.41 million subscribers.

Chart 1.18 : Composition of Wired Internet subscribers



1.51 In wireless internet segment, Reliance Jio holds 53.39% market share with 355.22 million subscribers followed by Bharti Airtel Ltd with 22.92% of wireless internet subscribers at the QE Sep-19.

Chart 1.19 : Composition of Wireless Internet subscription

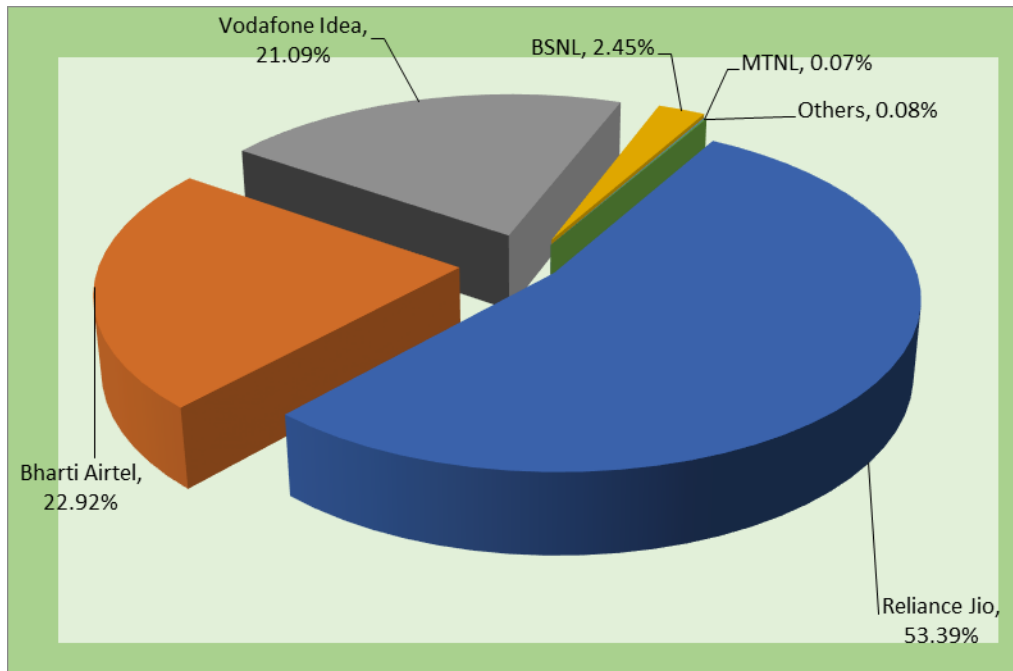


Chart 1.20 : Technology trend for Wireless Internet Access

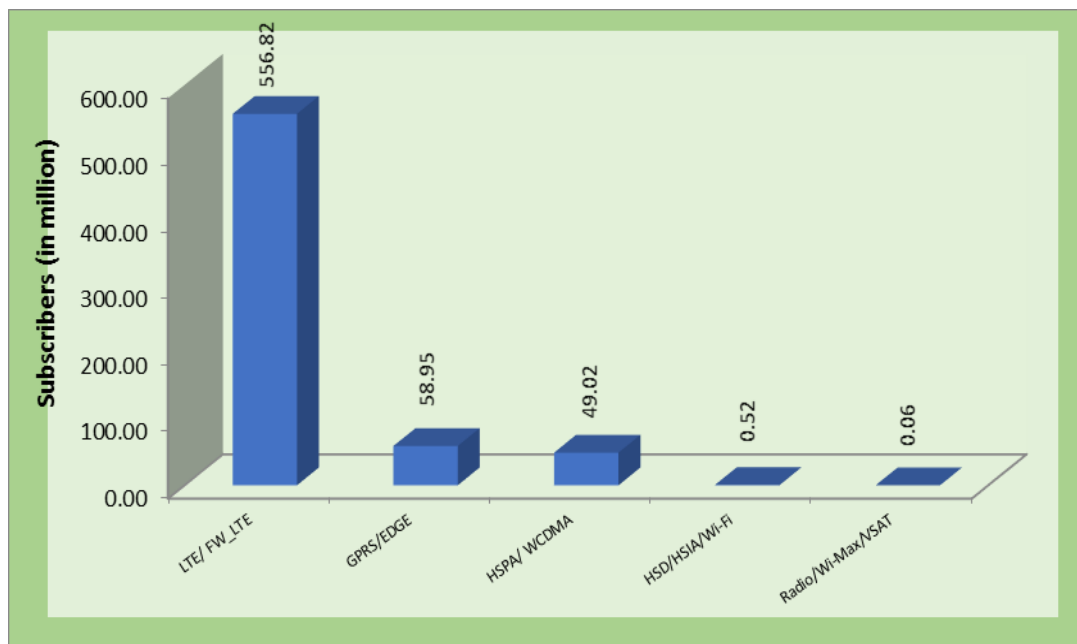
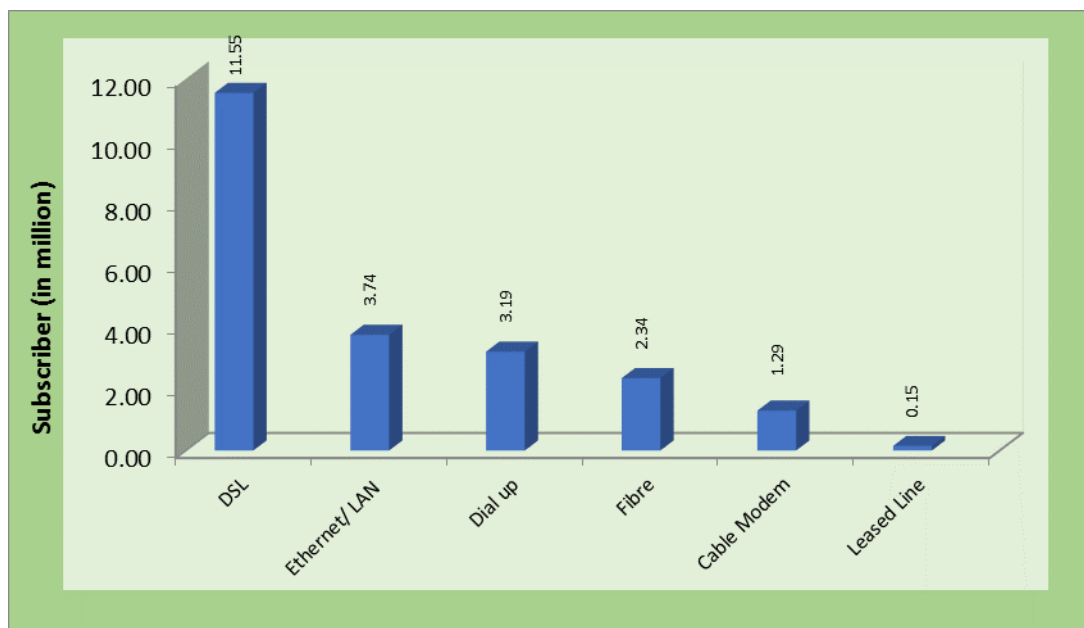


Chart 1.21 : Technology trend for Wired Internet Access



1.52 Top five service areas in terms of internet subscriptions (wired+ wireless) are Maharashtra (57.59 million), Andhra Pradesh including Telengana (53.80 million), U.P.(East) (49.51 million) Tamil Nadu including Chennai (48.46 million) and Madhya Pradesh including Chhatishgarh (44.44 million).

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

Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	21.54	32.26	53.80	33.02	126.70	59.33
Assam	6.57	6.46	13.03	23.45	113.28	38.66
Bihar	25.37	18.52	43.88	20.60	92.99	30.68
Delhi	0.74	37.79	38.53	98.35	165.82	163.65
Gujarat	12.05	30.56	42.61	31.97	107.44	64.43
Haryana	6.16	9.87	16.02	34.41	90.09	55.55
Himachal Pradesh	3.41	2.19	5.60	53.34	245.68	76.85
Jammu & Kashmir	1.70	3.17	4.88	18.59	86.24	37.96
Karnataka	14.32	29.36	43.68	37.18	114.22	68.02

Service Area	Internet Subscribers (in million)			No. of Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Kerala	10.27	15.70	25.97	37.69	171.21	71.30
Madhya Pradesh	17.06	27.38	44.44	21.82	89.85	40.90
Maharashtra	22.16	35.44	57.59	36.84	99.38	68.01
Mumbai	1.37	27.60	28.97			
North East	2.96	4.40	7.36	27.65	117.09	50.87
Orissa	10.51	7.10	17.62	29.54	88.37	40.37
Punjab	7.38	17.31	24.69	42.46	117.73	76.96
Rajasthan	17.23	21.98	39.21	29.82	118.15	51.34
Tamil Nadu	13.49	34.97	48.46	50.74	76.31	66.92
UP (East)	23.91	25.60	49.51	20.09	83.47	34.89
UP (West)	13.23	21.39	34.62			
Kolkata	1.52	15.32	16.84	23.38	109.60	48.32
West Bengal	14.70	15.62	30.31			
Total	247.63	439.99	687.62	27.57	104.25	52.08

* 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.

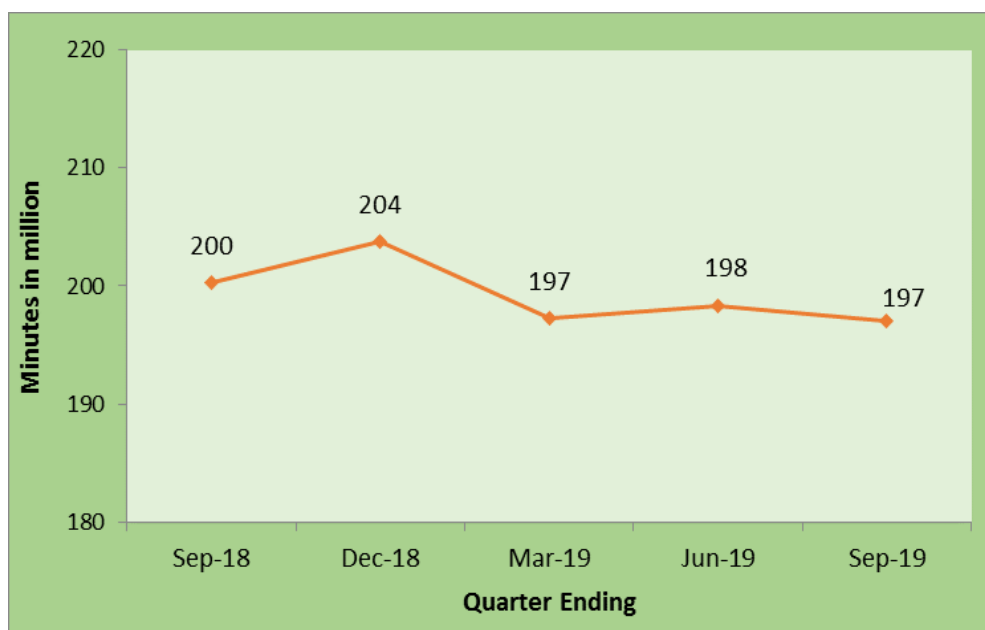
ISP Connectivity

1.53 The International Internet bandwidth owned by various service providers is reported to be 12,328 Gbps during the quarter ending Sep-19 as compare to 12,394 Gbps during the previous quarter.

Internet Telephony

1.54 As per the reports received from 15 service providers, providing Internet Telephony services, the total outgoing minutes of usage for internet telephony is 197.09 million during the Q.E. Sep-19 as compare to 198.34 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)

1.55 The total number of broadband subscribers increased from 594.58 million at the end of Jun-19 to 625.42 million at the end of Sep-19. Out of which number of wired broadband subscribers are 19.01 million and wireless broadband subscribers are 606.41 million.

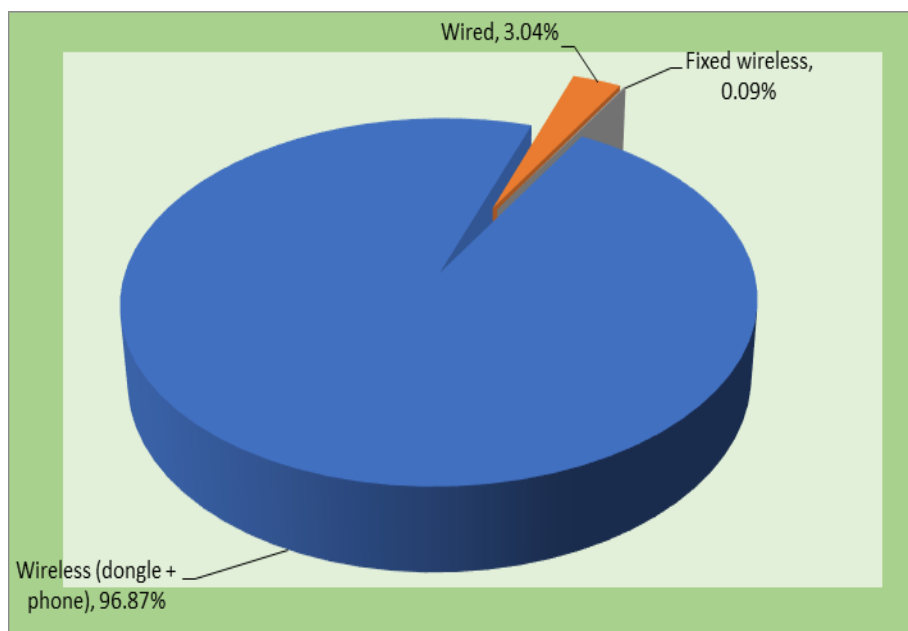
1.56 Top five broadband (wired+wireless) service providers in term of subscribers are Reliance Jio (355.93 million), Bharti Airtel (127.83 million), Vodafone Idea Ltd (112.19 million), BSNL (21.52 million) and Atria Convergence (1.48 million).

1.57 In wired broadband segment, BSNL holds 45.73% market share with 8.69 million subscribers followed by Bharti with 2.41 million subscribers in QE Sep-19.

1.58 In wireless broadband segment, Reliance Jio holds 58.63% market share with 355.93 million subscribers followed by Bharti Airtel Ltd (20.66%) with 125.42 million subscribers in QE Sep-19.

1.59 Top five service areas in respect of broadband subscriptions at Q.E. Sep-19 are Maharashtra (52.47 million), Andhra Pradesh including Telengana (49.22 million), Tamil Nadu including Chennai (44.38 million), U.P.-East (43.54 million) and Karnataka (40.37 million).

Chart 1.23 : Composition of Broadband subscription – Technology wise

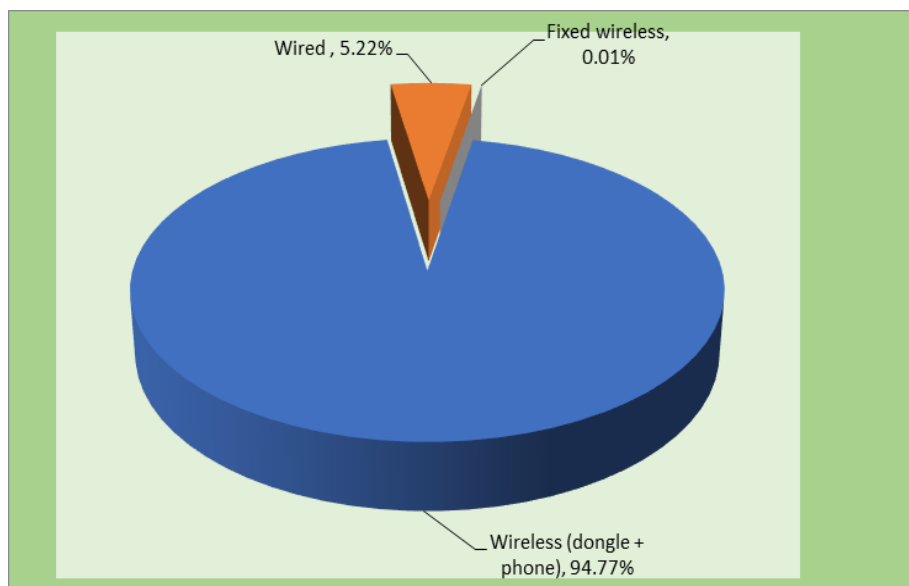


1.60 Mobile Device Users (dongle+phone) constitute 96.87% of total broadband subscribers at the end of Sep-19.

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

- 1.61 Total number of narrowband subscribers declined from 70.72 million at the end of Jun-19 to 62.20 million at the end of Sep-19 with the quarterly decline rate of 12.05%. Out of 62.20 million narrowband subscribers, Wired Narrowband subscribers are 3.25 million and Wireless Narrowband subscribers are 58.95 million.
- 1.62 The top five narrowband (wired+wireless) service providers in term of subscriber base are Vodafone Idea Ltd (28.15 million), Bharti Airtel (27.05 million), BSNL (6.69 million), MTNL (0.24 million) and You Broadband (0.01 million) at the end of Sep-19.
- 1.63 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.
- 1.64 In wireless narrowband segment, Vodafone Idea Ltd holds 47.76% market share with 28.15 million subscribers followed by Bharti Airtel with 27.05 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)

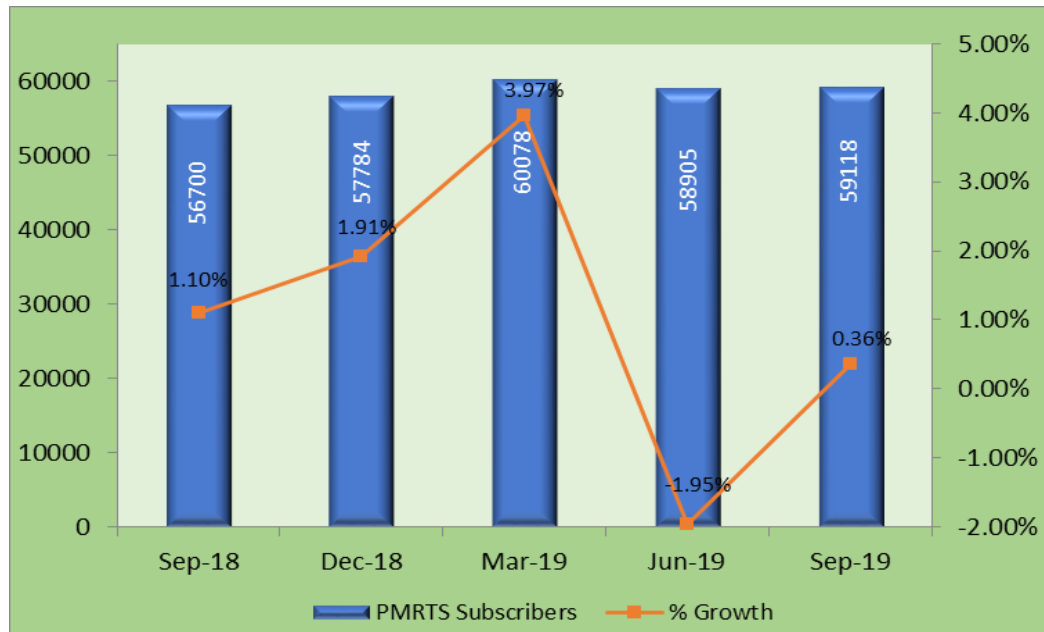
1.65 The subscriber base of PMRTS increased from 58,905 at the end of Jun-19 to 59,118 at the end of Sep-19 with quarterly growth rate of 0.36%.

Table 1.32 : PMRTS Subscriber base - Service Provider wise

Sl. No	Name of the Service Provider	Subscriber Base as on 30.06.2019	Subscriber Base as on 30.09.2019	Growth in Subscribers	% Growth in subscribers in QE Sep-19
1	Arya Omnitalk Radio Trunking Services Pvt. Ltd.	48796	48961	165	0.34
4	Procall Ltd.	3261	3277	16	0.49
2	Quick Call	2146	2159	13	0.61
3	Inative Networks Pvt Ltd	1820	1820	0	0.00
5	Smartlink Pvt Ltd	1071	1072	1	0.09
6	Bhilwara Telenet Services Pvt Ltd	894	891	-3	-0.34
7	Wiwonet Solutions Pvt Ltd	406	457	51	12.56
8	Airtalk Solutions & Services Pvt Ltd	511	481	-30	-5.87
	Total	58905	59118	213	0.36

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

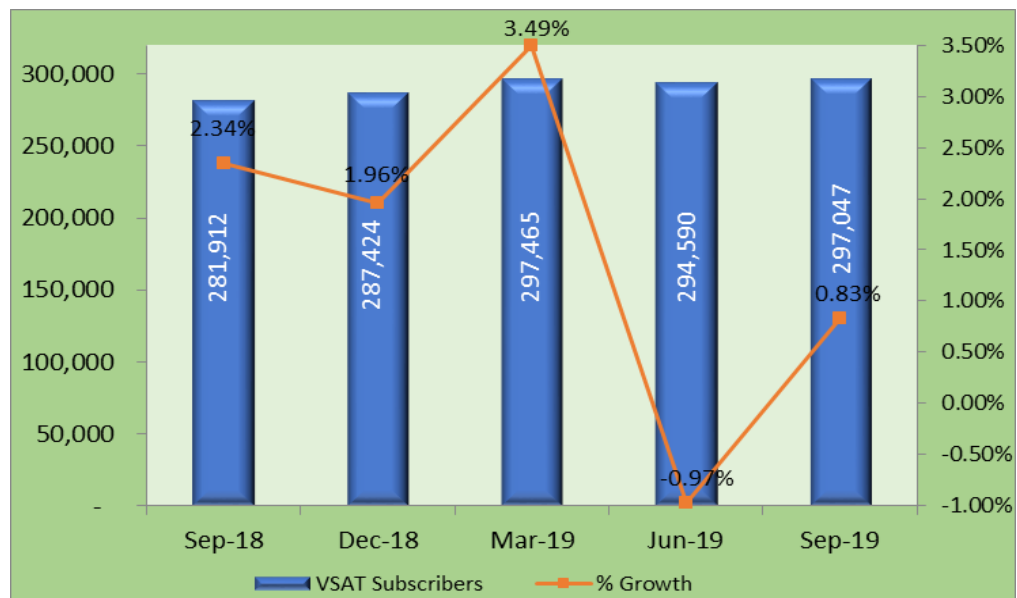
Chart 1.25 : Number of PMRTS subscribers & Rate of Growth (%)



Very Small Aperture Terminal (VSAT)

1.67 The total number of VSAT subscribers declined from 2,94,590 at the end of Jun-19 to 2,97,047 at the end of Sep-19. Net addition during the quarter has been 2,457 at the growth rate of 0.83%.

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 (%) Sep-19
		Jun-19	Sep-19			
1	Hughes Communications Ltd.	110,176	115,738	5,562	5.05	38.96
2	Bharti Airtel Limited	80,886	81,454	568	0.70	27.42
3	Tatanet Services	68,843	66,847	-1,996	-2.90	22.50
4	HCL Comnet	17,353	17,004	-349	-2.01	5.72
5	BSNL	14,777	13,357	-1,420	-9.61	4.50
6	Infotel Satcom	2,505	2,597	92	3.67	0.87
7	Cloudcast Digital Ltd (earthwhile Planetcast Media Services Ltd)	50	50	0	0.00	0.02
	Total	294,590	297,047	2,457	0.83	100

1.68 Hughes Communication Limited continues to be the market leader with 38.96% share in VSAT with subscriber base of 1,15,738 followed by Bharti Airtel Ltd (81,454) at the end of Sep-19.

1.69 In term of net addition, M/s Huges Communications Ltd added maximum number of VSAT subscribers (5,562 subscribers) during the QE Sep-19. Tatanet Services, BSNL and HCL Comnet 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 July, 2019 to 30th September, 2019 in the various service areas.

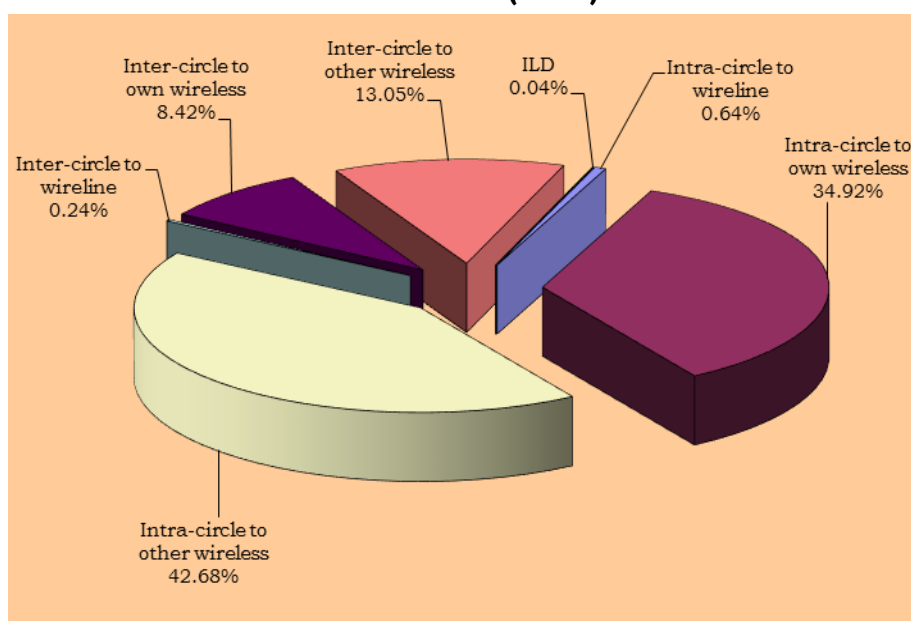
Table 2.1: Key Indicators – Wireless Services (GSM including LTE)

Parameter	Sep-19	Jun-19	Sep-18	QoQ %age change	YoY %age change
Subscriber Base* (million)	1174.39	1166.59	1169.40	0.67	0.43
Share of Prepaid (%)	95.74%	95.65%	95.76%	0.10	-0.02
Incoming MOU per subscriber per month	344.85	348.88	318.19	-1.28	8.38
Outgoing MOU per subscriber per month	345.67	352.12	308.79	-1.83	11.94
No. of Outgoing SMS per subscriber per month	17.67	17.07	17.30	3.51	2.15
Average Revenue Per User (ARPU) per month (₹)	74.38	74.30	67.39	0.11	10.37

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

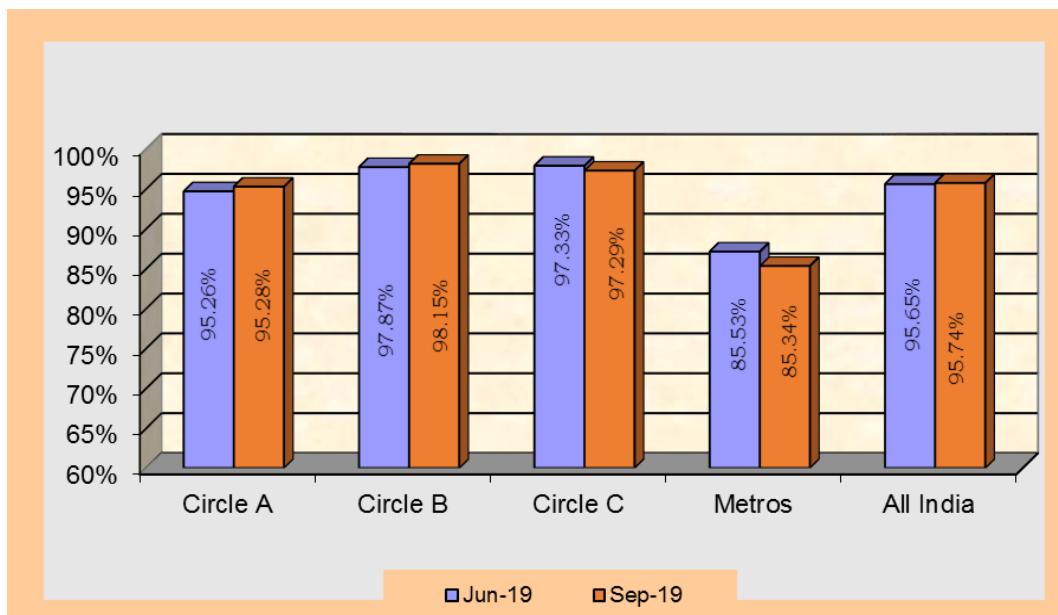
2.1 The following chart presents % break-up of outgoing minutes from Home Service Area (HSA) in the QE Sep-19.

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 95.65% at the end of Jun-19 to 95.74% at the end of Sep-19.

2.4 The Average Revenue Per User (ARPU) per month (all India, blended) increased from ₹74.30 in Q.E. Jun-19 to ₹74.38 in Q.E. Sep-19 with quarterly growth rate of 0.11%. Year-on-year basis, ARPU per month increased by 10.37% in this quarter.

2.5 The ARPU per month for pre-paid segment is ₹67 and ARPU per month for postpaid segment is ₹247 in QE Sep-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 Sep-19

Circle Category	ARPU per month (in ₹)		
	Post-paid	Pre-paid	Blended
Circle A	283	77	87
Circle B	239	63	67
Circle C	189	64	68
Metros	227	46	73
All India	247	67	74
All private SPs	249	70	78
BSNL/MTNL	209	35	40

2.7 The following table presents the composition of ARPU per month for QE Sep-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	35.24	40.3%
1.2.	Revenue from calls	4.72	5.4%
1.3.	Revenue from SMS	0.85	1.0%
1.4.	Revenue from data usage	40.48	46.3%
1.5.	Revenue from other VAS	3.11	3.6%
1.6.	Other revenue	1.50	1.7%
2	Usage outside Home Service Area		
2.1.	Revenue from outroamers	1.45	1.7%
3	Total revenue from subscribers (1+2)	87.35	100%
4	Net inter-operator settlement charges receivable *	-12.97	
5	Net Revenue (ARPU) per month (3+4)	74.38	

* 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 (₹12.97) accounts for 14.85% of the total revenue from subscribers.

2.9 On an all India average, the overall minutes of usage (MOU) per subscriber per month declined from 701 in QE Jun-19 to 691 in QE Sep-19 with quarterly decline rate of 1.44%.

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 Sep-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	331	307	638	312	297	609	313	298	611
Circle B	337	326	663	342	355	698	342	355	697
Circle C	429	344	772	399	439	838	400	437	836
Metro	283	244	527	408	340	748	390	326	716
All India	325	292	617	347	347	694	346	345	691

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 Sep-19 is 50.1 : 49.9.

2.12 Number of outgoing SMS per subscriber per month increased from 17 in QE Jun-19 to 18 in QE Sep-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 Sep-19

Circle category	Outgoing SMS per subscriber month		
	Postpaid	Prepaid	Blended
Circle A	48	19	21
Circle B	36	14	15
Circle C	31	19	19
Metro	36	15	18
All India	40	17	18

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

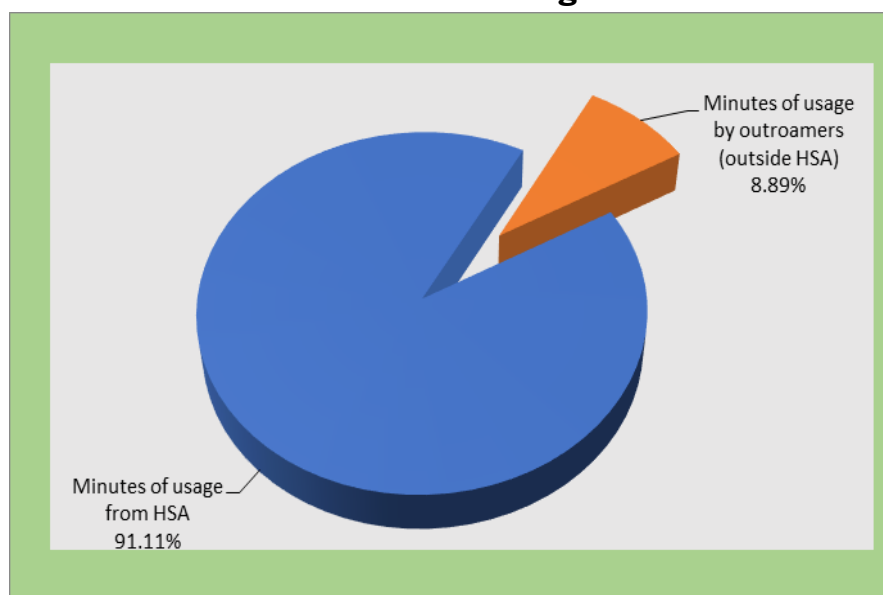
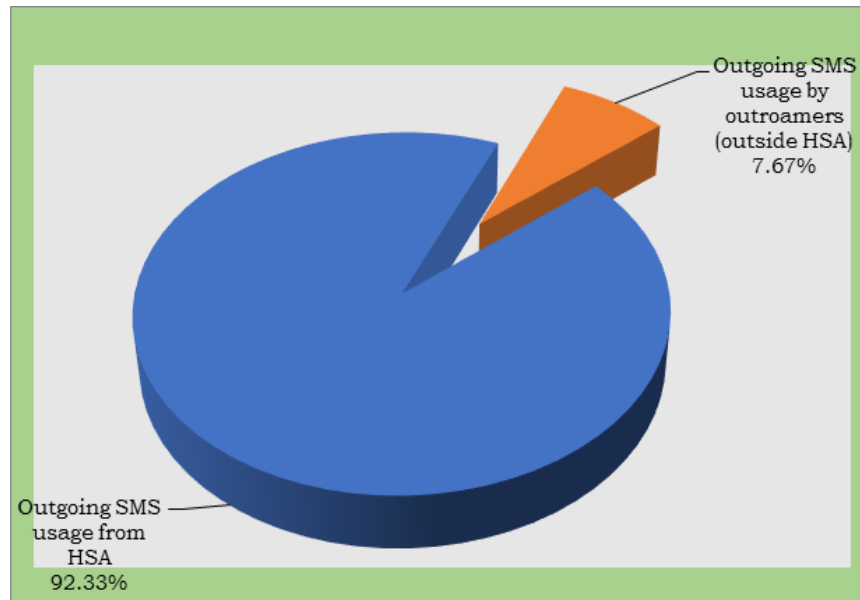


Chart 2.4: Outgoing SMS Usage by Out-roamers as a % of Total No. of Outgoing SMS Usage



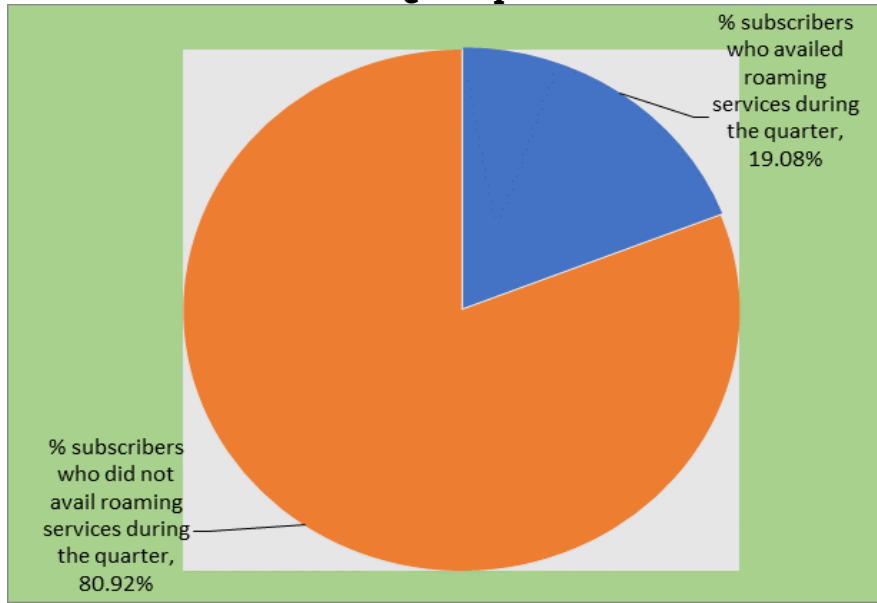
2.13 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks.

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	0.77	36.66	46.73	0.25	6.09	9.47	0.03
Circle B	0.51	35.45	43.42	0.20	7.83	12.52	0.05
Circle C	0.26	37.14	39.01	0.20	9.85	13.53	0.01
Metros	1.34	24.35	33.81	0.40	15.19	24.81	0.09
All India	0.64	34.92	42.68	0.24	8.42	13.05	0.04

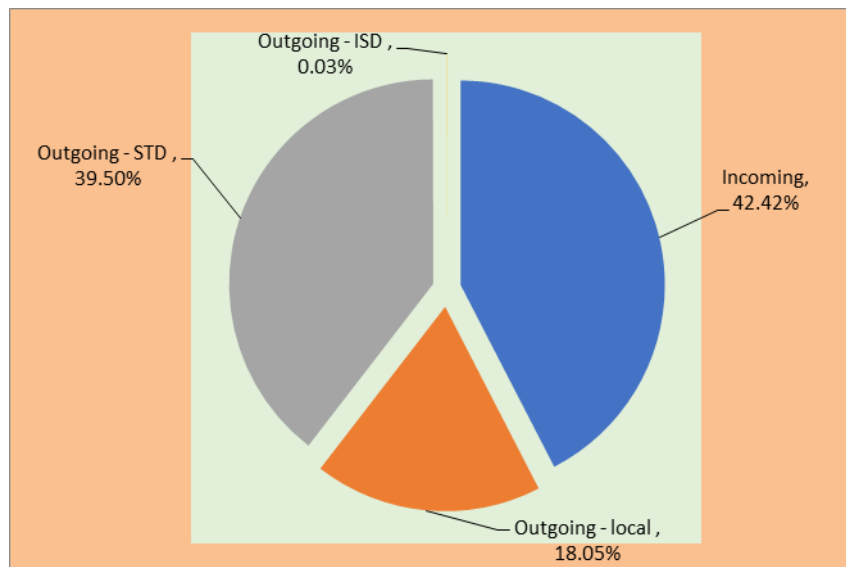
2.14 The following chart presents the percentage of subscribers who availed roaming services (out-roamers) during the quarter ending Sep-19.

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



2.15 The usage pattern of out-roamers i.e. usage from outside the home service area shows that incoming minutes accounts 42.42% of the total minutes of usage by out-roamers in QE Sep-19 as compare to 41.26% in the previous quarter. The chart given below presents the break-up of minutes of usage of out-roamers during the QE Sep-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.

*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 in QE Sep-19

Circle Category	(₹ per minute)		
	Postpaid	Prepaid	Blended
Circle A	0.59	0.12	0.15
Circle B	0.46	0.11	0.12
Circle C	0.26	0.10	0.10
Metros	0.59	0.11	0.16
All India	0.53	0.11	0.13

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

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

Parameter	Sep-18	Dec-18	Mar-19	Jun-19	Sep-19
1. ARPU (₹ Per month)	67	70	71	74	74
3. Average outgo (tariff) per GB wireless data (in ₹)	10.91	10.51	7.95	7.70	6.99
3. MOU per subscriber per month	627	667	692	701	691
4. Outgoing MOU per subscriber per month					
4.1 Local (Intra-circle)	224	248	248	261	254
4.2 NLD (inter-circle)	85	90	100	91	92
4.3 ILD	0.15	0.15	0.17	0.15	0.16
5. No. of Outgoing SMS per subscriber per month	17	16	16	17	18
6. Average Outgo (voice) per outgoing minute from HSA (in ₹)	0.12	0.11	0.13	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 Sep-18 (₹ in Crore)	QE Jun-19 (₹ in Crore)	QE Sep-19 (₹ in Crore)	Q-O-Q % Change	Y-O-Y % Change
Gross Revenue (GR)	57,827	61,535	59,992	-2.51	3.74
Adjusted Gross Revenue (AGR)	36,142	39,124	37,338	-4.56	3.31
Pass Through Charges (GR-AGR)	21,685	22,411	22,654	1.08	4.47
License Fee	2,889	3,133	2,989	-4.59	3.44
Spectrum Usage Charges	1,043	1,121	1,115	-0.60	6.82

3.1 Gross Revenue (GR) and Adjusted Gross Revenue (AGR) quarterly declined by 2.51% and 4.56% respectively in QE Sep-19. However, GR and AGR yearly increased by 3.74% and 3.31% respectively in QE Sep-19.

3.2 Pass through charges quarterly and yearly increased by 1.08% and 4.47% respectively in the QE Sep-19.

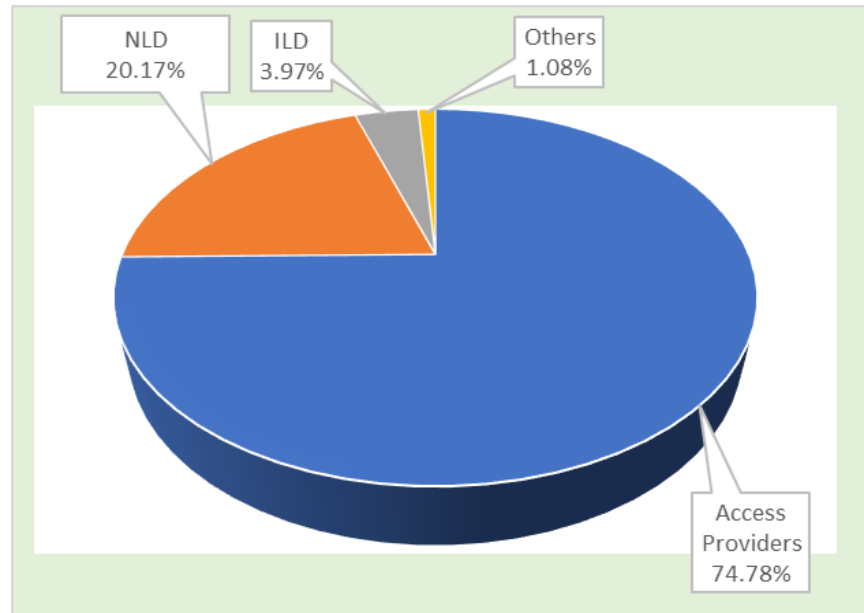
3.3 Pass-through charges as a percentage of Gross Revenue are 37.76% in QE Sep-19 as against 36.42% in the previous quarter.

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	43,417	27,921	2,238	1,110
NLD	9,655	7,531	603	-
ILD	3,160	1,483	119	-
Others	3,760	404	30	4.5
Total	59,992	37,338.49	2,988.76	1,114.5

Chart 3.1: Composition of Adjusted Gross Revenue



3.4 Access services contributed 74.78% 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)^{§§§} declined by 2.51%, 4.56%, 4.59% and 0.60% respectively in QE Sep-19. However, Pass Through Charges quarterly increased by 1.08% during the same period.

3.5 Monthly Average Revenue per User (ARPU) for Access Services based on AGR declined from ₹80.66 in QE Jun-19 to ₹78.17 in QE Sep-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

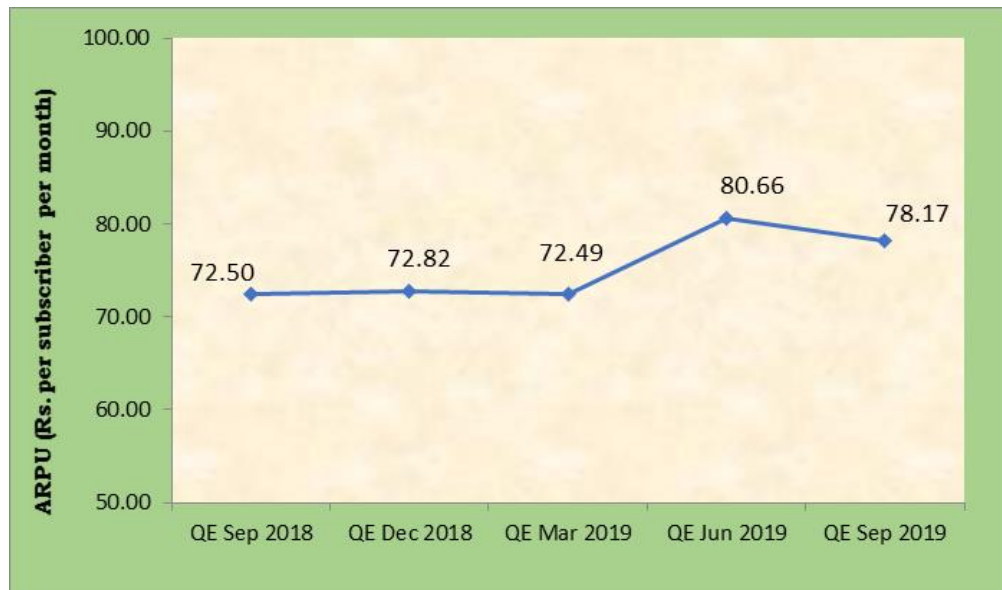


Table 3.3: Access Services - Service Provider wise Adjusted Gross Revenue

(in ₹ Crore)

Service Provider	QE Sep-19	QE Jun-19	% Change
Reliance Jio	11528.95	10800.44	6.75
Bharti Airtel	7295.03	7468.63	-2.32
Vodafone Idea	6260.22	6721.06	-6.86
BSNL	1811.96	2598.61	-30.27
Tata Tele.	540.49	566.20	-4.54
MTNL	387.86	407.19	-4.75
Reliance Com.	95.56	83.41	14.57
Quadrant	0.95	4.74	-79.95
Grand Total (Access)	27921.03	28650.28	-2.55

3.6 Public Sector Undertakings' share in the Access AGR of telecom services is 7.88% in the QE Sep-19.

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

Category	AGR of Access Services for QE Sep-19 (in ₹ crore)	%age share of AGR
Metro	3,417.71	12.24
A	11,048.50	39.57
B	9,827.43	35.20
C	3,627.39	12.99
Total	27,921.03	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	Bench mark	Performance in respect of UASL/CMTS Licensees for the Parameters and Benchmarks			
			For Q. E. June, 2019		For Q. E. September, 2019	
			Out Of 129 (Nos.)	Out Of 129 (%)	Out Of 110 (Nos.)	Out Of 110 (%)
I.	Network Related Parameters					
1	Network Availability					
(i)	BS Accumulated down-time (not available for service) (%age)	≤ 2%	0	0%	2	1.82%
(ii)	Worst affected BSs due to down-time (%age)	≤ 2%	0	0%	3	2.73%
2	Connection Establishment (Accessibility)					
(i)	Call Set-up Success Rate and Session Establishment Success Rate for Circuit Switched Voice or VoLTE as applicable(within licensee's own network)	≥ 95%	0	0%	0	0%
(ii)	SDCCH/ Paging Channel Congestion/ RRC Congestion (%age)	≤ 1%	0	0%	2	1.82%
(iii)	TCH, RAB and E-RAB Congestion (%age)	≤ 2%	3	2.33%	1	0.91%
3	Connection Maintenance (Retain ability)					
(i)	Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)]	≤ 2%	1	0.78%	1	0.91%
(ii)	Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)]	≤ 3%	1	0.78%	3	2.73%
4	Connections with good voice quality, Circuit Switched Voice Quality and VoLTE quality					
		≥ 95%	0	0%	0	0%
5	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)					
		≤ 0.5%	0	0%	0	0%
6*	Down Link (DL) Packet Drop Rate or DL-PDR					
		≤ 2%	0	0%	0	0%

Sl. No.	Parameters	Bench mark	Performance in respect of UASL/CMTS Licensees for the Parameters and Benchmarks			
			For Q. E. June, 2019		For Q. E. September, 2019	
			Out Of 129 (Nos.)	Out Of 129 (%)	Out Of 110 (Nos.)	Out Of 110 (%)
7*	Up Link (UL) Packet Drop Rate or UL-PDR	≤ 2%	0	0%	0	0%
II.	Customer Service Quality Parameters					
6	Metering and Billing					
(i)	Metering and billing credibility - post paid	≤ 0.1%	0	0%	1	0.91%
(ii)	Metering and billing credibility - pre paid	≤ 0.1%	0	0%	0	0%
(iii)	Resolution of billing/charging/ validity complaints	98% within 4 weeks	0	0%	0	0%
	Resolution of billing/charging/ validity complaints	100% within 6 weeks	0	0%	0	0%
(iv)	Period of applying credit/ waiver / adjustment to customer's account from the date of resolution of complaints	within 1 week of resolution of complaint	2	1.55%	2	1.82%
7	Response time to the customer for assistance					
(i)	Accessibility of call centre/ customer care	≥ 95%	5	3.88%	0	0%
(ii)	%age of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	27	20.93%	29	26.36%
8	Termination / closure of service					
(i)	%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	6	4.65%	1	0.91%
(ii)	Time taken for refund of deposits after closures	100% within 60 days	9	6.98%	2	1.82%

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. Accessibility of call centre/ customer care
- c. %age requests for Termination/Closure of service complied within 7 days
- d. 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. BS Accumulated down-time (not available for service)
- b. Worst affected BSs due to down-time
- c. SDCCH/ Paging Channel Congestion/ RRC Congestion
- d. Network QoS DCR Spatial Distribution Measure [Network_QSD (90,90)]
- e. Network QoS DCR Temporal Distribution Measure [Network_QTD (97,90)]
- f. Metering and billing credibility - post paid
- g. Period of applying credit/waiver/adjustment to customer's account from the date of resolution of complaints
- h. %age of calls answered by the operators (voice to voice) within 90 sec

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

Parameter	Bench mark	Service Provider	Service Area	Performance
BS Accumulated down-time (not available for service) (%age)	≤ 2%	VIL-Brand Idea	Jammu & Kashmir	8.66
		VIL-Brand Vodafone	Jammu & Kashmir	8.66
Worst affected BSs due to down-time (%age)	≤ 2%	BSNL	Kerala	3.44
		VIL-Brand Idea	Jammu & Kashmir	11.22
		VIL-Brand Vodafone	Jammu & Kashmir	11.22
SDCCH/ Paging Channel Congestion/ RRC Congestion (%age)	≤ 1%	VIL-Brand Idea	Jammu & Kashmir	7.73
		VIL-Brand Vodafone	Jammu & Kashmir	7.73
TCH, RAB and E-RAB Congestion (%age)	≤ 2%	VIL-Brand Idea	Uttar Pradesh-West	2.76
Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)]	≤ 2%	BSNL	West Bengal	8.86
Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)]	≤ 3%	BSNL	West Bengal	10.34
		VIL-Brand Idea	Jammu & Kashmir	4.23
		VIL-Brand Vodafone	Jammu & Kashmir	4.23
Metering and billing credibility - post paid	≤ 0.1%	BSNL	West Bengal	0.18
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	Gujarat	99.66
		VIL-Brand Vodafone	Gujarat	99.76
Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	Airtel	Andhra Pradesh	86.00
			Assam	93.00
			Bihar	91.00
			Delhi	93.00
			Gujarat	89.00
			Jammu & Kashmir	92.00
			Kerala	89.00

Parameter	Bench mark	Service Provider	Service Area	Performance
Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%		Kolkata	90.00
			Maharashtra	93.00
			Mumbai	92.00
			North East	89.00
			Odisha	90.00
			Punjab	89.00
			Tamil Nadu	82.00
			Uttar Pradesh-East	92.00
			West Bengal	89.00
		VIL-Brand Idea	Kerala	94.78
		VIL-Brand Vodafone	Delhi	92.56
			Gujarat	92.90
			Haryana	90.51
			Kolkata	83.73
			Kerala	79.84
			Karnataka	89.60
Mumbai	92.75			
Punjab	92.81			
VIL-Brand Vodafone	Rajasthan	93.73		
	Uttar Pradesh-East	89.84		
	Uttar Pradesh-West	93.30		
	West Bengal	94.11		
%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	VIL-Brand Vodafone	Uttar Pradesh-East	96.94
Time taken for refund of deposits after closures	100% within 60 days	VIL-Brand Idea	Gujarat	95.27
			Madhya Pradesh	96.19

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

Section B: Quality of Service Performance of Wireline Service Providers

Table 4.3: QoS Summary - Wireline Service

S. No.	Parameters	Bench mark	No. of license areas where operators not meeting the benchmarks			
			Q. E. June, 2019		Q. E. September, 2019	
			Out of 82 (in Nos.)	Out of 82 (in %age)	Out of 104 (in Nos.)	Out of 104 (in %age)
(i)	Fault incidences No. of faults per 100 subs/month)	≤ 7	2	2.44%	0	0.00%
(ii)	% Fault repaired by next working day (for urban areas)	$\geq 85\%$	2	2.44%	2	1.92%
	% Fault repaired within 5 days (for urban areas)	$\geq 100\%$	2	2.44%	2	1.92%
(iii)	% Fault repaired by next working day (for rural and hilly areas)	$\geq 75\%$	0	0.00%	0	0.00%
	% Fault repaired within 7 days (for rural and hilly areas)	$\geq 100\%$	0	0.00%	0	0.00%
(iv)	Mean time to Repair (MTTR)	$\leq 10\text{Hs}$	4	4.88%	3	2.88%
(v)	Point of Interconnection (POI) Congestion (No. of PoIs not meeting benchmark)	$\leq 0.5\%$	0	0.00%	0	0.00%
(vi)	Metering and Billing credibility - post-paid	$\leq 0.1\%$	0	0.00%	0	0.00%
	Metering and Billing credibility -pre-paid	$\leq 0.1\%$	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	$\geq 95\%$	1	1.22%	0	0.00%
	%age of calls answered by the operators (voice to voice) within 90 seconds	$\geq 95\%$	16	19.51%	15	14.42%

S. No.	Parameters	Bench mark	No. of license areas where operators not meeting the benchmarks			
			Q. E. June, 2019		Q. E. September, 2019	
			Out of 82 (in Nos.)	Out of 82 (in %age)	Out of 104 (in Nos.)	Out of 104 (in %age)
(x)	%age of request for Termination / closure of service complied within 7 days	100% within 7 days	9	10.98%	4	3.85%
(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 by next working day (for urban areas)
- b. Fault incidences No. of faults per 100 subs/month) - Mean time to Repair (MTTR)
- c. Response time to the customer for Assistance -Accessibility of call centre/ customer care
- d. Response time to the customer for Assistance - %age of calls answered by the operators (voice to voice) within 90 seconds
- e. Termination/Closure of service - %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 Repair” %age of fault repaired by next working day (for urban areas)	≥ 85%	TATA	GUJ	83%
			KL	79%
“Fault Repair” % Fault repaired within 5 days (for urban areas)	≥100%	MTNL	DEL	99.26%
			MUM	99.60%
Mean time to Repair (MTTR)	≤10 Hrs	TATA	GUJ	11.17
			KTK	10.29
			KL	13.72
Response time to the customer for assistance - Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	Bharti Airtel	AP	90%
			KTK	94%
			KL	94%
			TN	85%
			DL	89%
			HR	88%
			KOL	86%
			PB	86%
			UP(E)	90%
			UP(W)	87%
			GUJ	87%
			MP	87%
			MH	85%
			MUM	88%
RAJ	88%			
“Termination / closure of service” %age of request for Termination / closure of service complied within 7 days	100% within 7 days	MTNL	MUM	99.90%
		TATA	MUM	99%
			MH	76%
			PB	99%

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 290 Internet Service Providers (ISPs) providing broadband (wireline) service at the end of September, 2019. Out of these 290 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 52 broadband Service Providers vis-à-vis the QoS benchmarks prescribed by TRAI, for the QE September, 2019.

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

S. No.	Parameters	Benchmark	Quarter Ending June, 2019		Quarter Ending September, 2019	
			Out of 71 (Nos.)	Out of 71 (%)	Out of 101 (Nos.)	Out of 101 (%)
1	Service Provisioning	100% in =<15 working days				
1.2	%age of connections provided within 15 days of registration of demand	100%	1	1.41%	4	3.96%
2	Faults Repair					
2.2	% of faults repaired by next working day (>90%)	>90%	5	7.04%	4	3.96%
2.3	% of faults repaired within 3 working day	=>99%	6	8.45%	5	4.95%
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%	3	4.23%	1	0.99%

S. No.	Parameters	Benchmark	Quarter Ending June, 2019		Quarter Ending September, 2019	
			Out of 71 (Nos.)	Out of 71 (%)	Out of 101 (Nos.)	Out of 101 (%)
4.3	%age of calls answered by operator (Voice to voice) within 90 sec	>80%	8	11.27%	2	1.98%
5	Bandwidth utilisation/ throughput					
5.2	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	0	1	1.41%	0	0.00%
5.4	No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	0	0	0.00%	0	0.00%
5.7	% International bandwidth utilization during peak hours (TCBH) (Enclose MRTG) <90%	<90%	0	0.00%	0	0.00%
5.8	Broadband Connection Speed available (download) from ISP node to user	>80%	0	0.00%	0	0.00%
6	Service availability /uptime (for all users) in %age					
6.3	Service availability /uptime (for all users) in %age	>98%	1	1.41%	0	0.00%
7	Packet loss (for wired broadband access) in %age					
		<1%	0	0.00%	0	0.00%
8	Network latency (for wired broadband access)					
8.1	User reference point at POP/ISP Gateway node to IGSP/NIXI	<120 ms	0	0.00%	0	0.00%
8.2	User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	<350 ms	0	0.00%	0	0.00%
8.3	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)	<800 ms	0	0.00%	0	0.00%

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

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%	City Online Services Ltd. - AP (90.00%) Karantaka (90.00%) Microscan Computers Pvt. Ltd. - Mumbai (99.00%) You Broadband - All India (97.13%)
Faults Repair		
% of faults repaired by next working day (>90%)	>90%	Atria Convergence - All India (85.10%), TATA(TTSL) - All India (87.79%) TATA(TTML) - Mah. & Goa (82.00%) You Broadband - All India (80.91%)
% of faults repaired within 3 working day	=>99%	Atria Convergence - All India (96.42%), MTNL - Delhi & Mumbai (97.84%), TATA(TTSL) - All India (96.32%), TATA(TTML) - Mah. & Goa (94.00%) You Broadband - All India (91.15%)
Response Time to the Customer for assistance		
%age of calls answered by operator (Voice to voice) within 60 sec	>60%	Atria Convergence - All India (33.00%),
%age of calls answered by operator (Voice to voice) within 90 sec	>80%	Atria Convergence - All India (37.00%) You Broadband - All India (72.69%)

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 Jun-19	QE Sep-19
1	Number of Private satellite TV channels permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/ downlinking / uplinking	908	910
2	Number of Pay TV Channels as reported by broadcasters	331	330
3	Number of FM Radio Stations (excluding All India Radio)	366	367
4	Number of pay DTH Operators	4	4
5	Number of Operational Community Radio Stations	261	275

A. Satellite TV Channels

5.1 A total of 910 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 31st October, 2019. The quarter-wise figures in the total number of TV channels depicted in below chart.

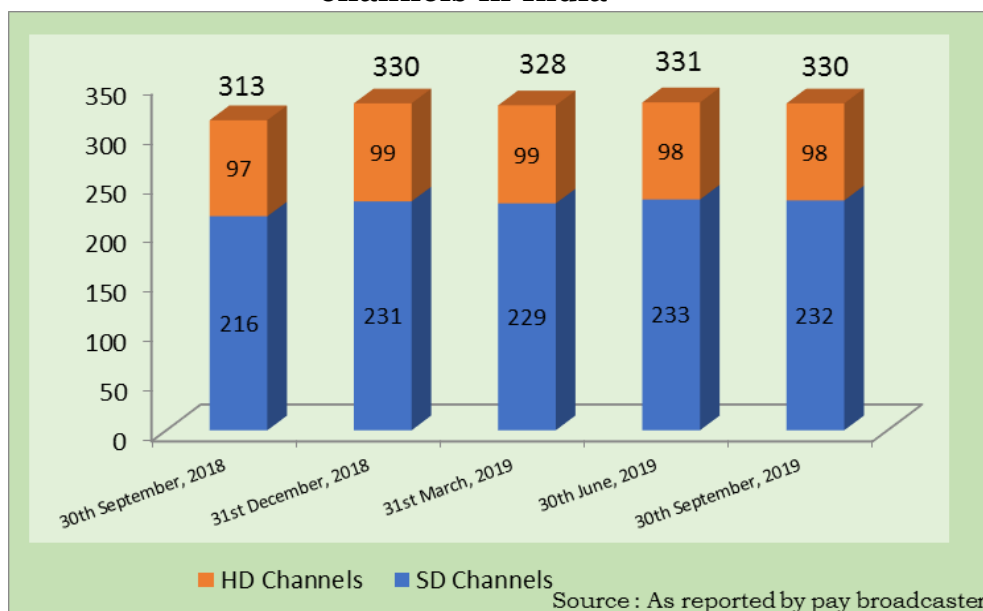
Chart 5.1: Quarterly growth in number of Satellite TV channels (FTA & Pay) registered with Ministry of I&B



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 330 pay channels, as on 30th September, 2019, which include 232 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 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.

5.6 As on 30th September, 2019, there are 1,606 Multi System Operators (MSOs) registered with Ministry of Information and Broadcasting (MIB). Out of these registered MSOs, 1,143 are operational. Further, as per the data reported by MSOs/HITS (Head in the Sky) operators, there are 12 MSOs & 1 HITS operator who have subscriber base greater than one million. Details of the active subscriber base of these 13 operators are given in following table 5.2.

**Table 5.2: Subscriber base of major MSOs/HITS as on 30th September, 2019
(Greater than one million subscribers)**

Sl. No.	Name of the MSO	Total Active Subscriber Base (includes subscribers who have been inactive or temporarily suspended for not more than last 90 days)
1.	Siti Networks	9,123,506
2.	GTPL Hathway	5,348,116
3.	Hathway Digital	5,317,812
4.	Den Networks	4,302,873
5.	Tamil Nadu Arasu Cable TV	2,773,246
6.	Kerala Communicators Cable Ltd (KCCL)	2,671,685
7.	Fastway Transmissions Pvt Ltd	2,472,239
8.	IndusInd Media And Communication Ltd (HITS)	2,049,086
9.	KAL Cables	1,845,802
10.	Asianet Digital Network	1,486,996
11.	VK Digital	1,429,049
12.	IndusInd Media And Communication Ltd (CATV)	1,576,135
13.	E-Infrastructure and Entertainment India Pvt Ltd	1,182,753

D. Direct-to-Home (DTH) Sector

5.7 Since its introduction in the year 2003, Indian DTH service has displayed a phenomenal growth. During the quarter ending 30th September, 2019, there were 4 pay DTH service providers in India.

5.8 Pay DTH has attained Total active subscriber base of around 69.30 million at the end of September, 2019. This is in addition to the subscribers of the DD Free Dish (free DTH services of Doordarshan). The total active subscriber base has increased from 68.92 million in QE June, 2019 to 69.30 million in QE September, 2019.

5.9 It is important to note that previously (upto March 2019) the subscription figure of total active subscribers included inactive and

temporarily suspended subscribers for not more than last 120 days. However as per new regulatory framework of Broadcasting and Cable TV Services, the total active subscribers are counted including only those subscribers which are inactive/temporarily suspended for not more than last 90 days. This point has been duly clarified by the Authority in the Press Release no. 86/2019 dated 8th October, 2019 (https://main.trai.gov.in/sites/default/files/PR_No.86of2019.pdf).

5.10 The marginal reduction in the subscriber base as compared to previous quarters (upto March, 2019) may be due to closure of DTH Services by M/s Independent TV Limited and also now the number of days for which inactive subscribers were taken into consideration is 90 days as compared to 120 days taken for previous quarters upto March, 2019.

5.11 Quarterly growth in the DTH sector in terms of the total active subscriber base and market share of DTH operators in terms of percentage of total active subscribers at the end of September, 2019 are depicted in the following charts.

Chart 5.3 : Quarterly growth in total Active subscribers (in million) of pay DTH Sector

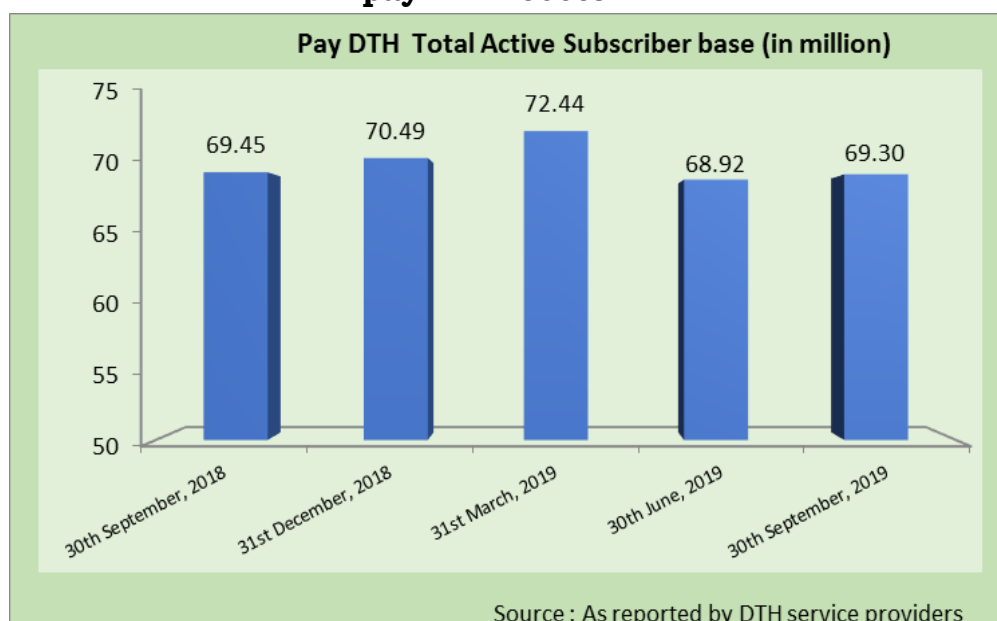
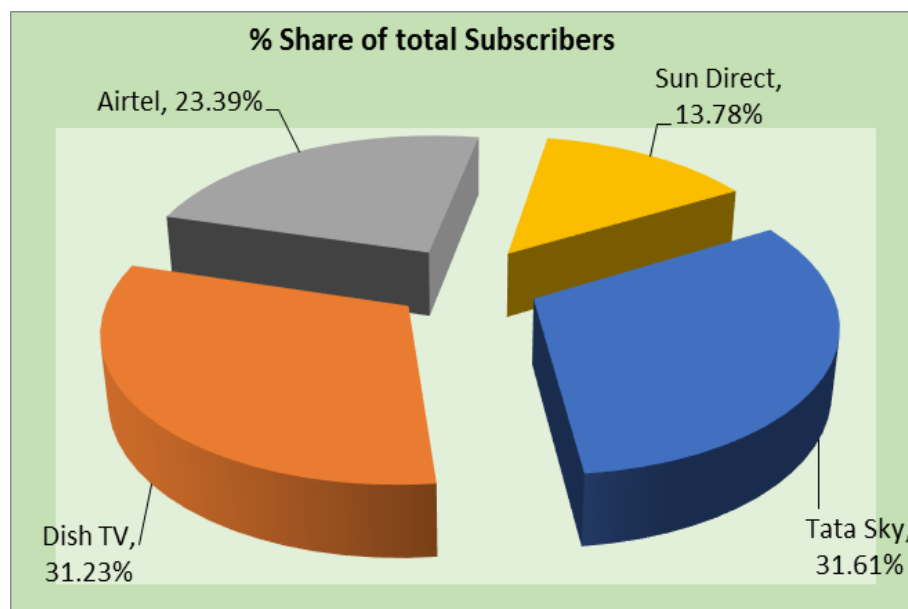


Chart 5.4 : Market share of DTH Operators



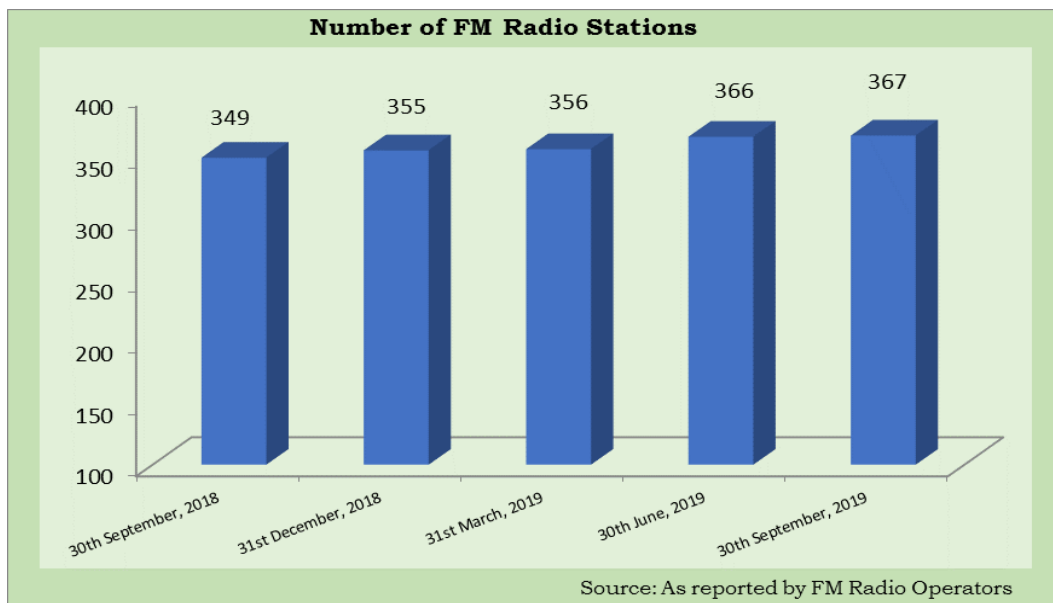
Source : As reported by DTH service providers

E. FM Radio Services

5.12 Apart from the radio stations operated by All India Radio- the public broadcaster, as on 30th September 2019, there are 367 operational private FM Radio stations in 104 cities with operational 33 Private FM Radio broadcasters as compare to 366 private FM Radio Stations in 104 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 September, 2019 is placed at **Annexure 5.3**.

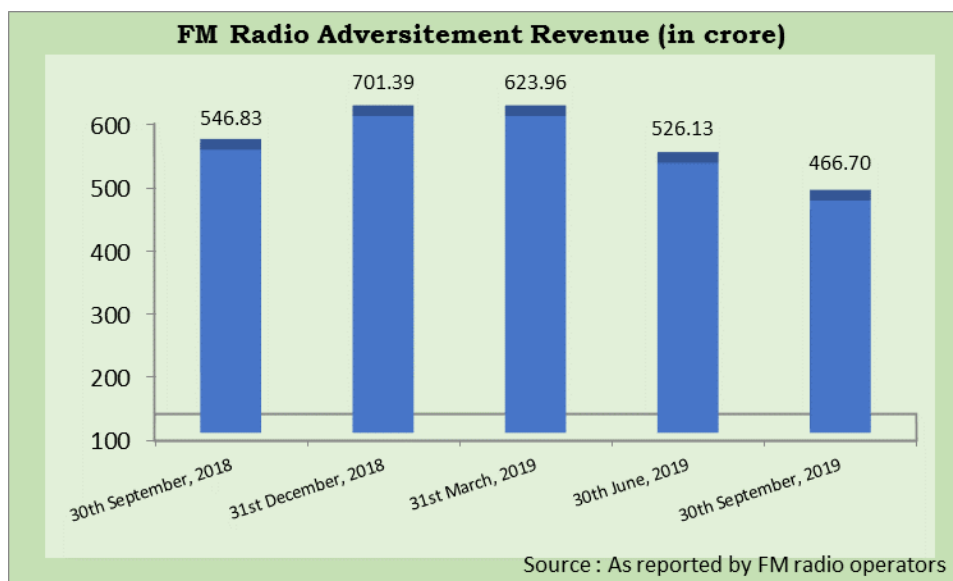
5.13 During the quarter ending 30th September, 2019, one new private FM Radio Station has become operational by South Asia FM Limited in Agartala. The following chart 5.5 depicts the quarterly growth in private FM Radio stations.

Chart 5.5 : Quarterly growth in private FM Radio stations



5.14 The reported advertisement revenue during the quarter ending 30th September, 2019 in respect of 366 private FM Radio stations is Rs 466.70 crore as against Rs 526.13 crore in respect of 365 private FM Radio stations for the previous quarter i.e 30th June, 2019. One FM Radio Broadcaster, M/s Gwalior Firm Private Limited, operating in the city of Guwahati, has not submitted the advertisement revenue.

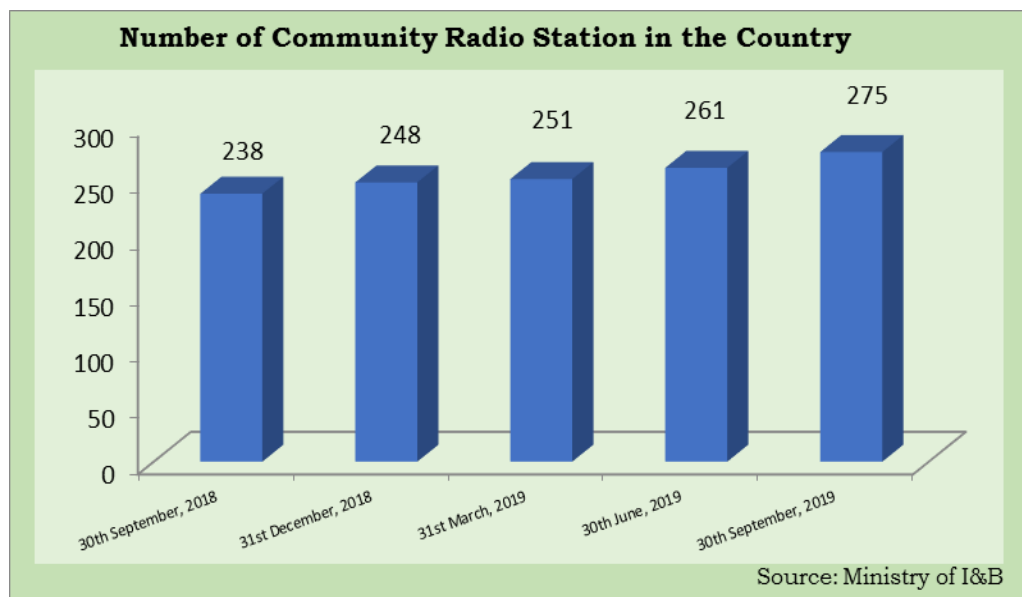
Chart 5.6: Quarterly growth in FM Radio Advertisement Revenue



F. Community Radio

5.15 As on 30th September, 2019, there are 275 Community Radio stations in operation as compared to 261 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 5.7.

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



Annexures

Annexure 1.1: Wireless Subscriber Base

Service Area	Vodafone Idea		Bharti Airtel (including Tata Teleservices)		Reliance Com.		BSNL		MTNL		Reliance Jio		Total		Net Additions
	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	
Andhra Pradesh	21,546,770	20,785,936	28,922,938	28,582,688	2,055	1,996	10,086,993	10,001,515			26,415,879	28,222,163	86,974,635	87,594,298	619,663
Assam	5,724,541	5,552,003	8,256,291	8,280,541			2,627,522	2,683,040			6,936,372	7,524,695	23,544,726	24,040,279	495,553
Bihar	19,836,397	18,001,497	36,731,684	35,817,828	221	228	4,759,554	4,972,729			24,241,071	26,444,863	85,568,927	85,237,145	(331,782)
Delhi	19,042,181	19,008,494	15,480,305	15,193,043	2,473	1,955	-	-	2,205,188	2,193,766	16,226,566	17,262,657	52,956,713	53,659,915	703,202
Gujarat	30,758,854	29,609,720	11,232,618	10,901,828	581	584	6,035,935	6,063,321			20,898,968	22,169,402	68,926,956	68,744,855	(182,101)
Haryana	10,387,003	10,140,755	4,391,688	4,345,929	182	181	4,982,715	4,991,794			8,136,927	8,777,374	27,898,515	28,256,033	357,518
Himachal Pradesh	1,290,579	1,176,326	3,338,046	3,396,705	72	72	2,866,605	2,916,101			3,068,725	3,277,717	10,564,027	10,766,921	202,894
Jammu & Kashmir	1,145,475	1,066,457	5,575,369	5,401,003	-		1,188,249	1,227,142			3,569,571	3,642,212	11,478,664	11,336,814	(141,850)
Karnataka	14,197,272	14,024,742	28,676,100	28,348,715	1,666	1,366	7,213,935	7,318,899			18,064,488	19,412,784	68,153,461	69,106,506	953,045
Kerala	20,199,999	20,080,491	5,371,037	5,468,854	498	513	10,917,598	10,922,639			7,777,070	8,415,339	44,266,202	44,887,836	621,634
Madhya Pradesh	28,465,545	27,381,561	15,329,290	14,873,699	839	911	6,400,394	6,376,813			25,204,518	26,789,375	75,400,586	75,422,359	21,773
Maharashtra	44,465,283	43,258,812	15,637,406	15,457,252	4,897	872	7,108,632	7,114,912			25,393,380	27,855,424	92,609,598	93,687,272	1,077,674
Mumbai	14,973,795	14,695,907	9,518,089	9,587,377	-	3,362	-	-	1,209,351	1,199,522	12,659,717	13,313,741	38,360,952	38,799,909	438,957
North East	2,287,414	2,299,987	5,211,537	5,204,449	-		1,456,548	1,470,027			3,079,691	3,321,927	12,035,190	12,296,390	261,200
Orissa	4,563,459	4,078,824	12,301,257	11,958,328	299	339	5,707,785	5,773,415			10,160,361	11,061,289	32,733,161	32,872,195	139,034
Punjab	10,994,036	11,255,026	10,464,104	10,244,140	294	297	5,464,880	5,580,919			12,397,295	12,985,842	39,320,609	40,066,224	745,615
Rajasthan	16,224,497	15,543,253	21,434,612	21,228,489	396	447	6,048,835	6,089,184			21,446,728	22,804,110	65,155,068	65,665,483	510,415
Tamil Nadu (incl. Chennai)	23,497,069	23,230,608	25,599,398	25,308,215	2,784	2,849	12,274,298	12,294,633			20,734,996	21,907,077	82,108,545	82,743,382	634,837
UP(E)	33,500,937	32,748,382	31,091,701	30,408,251	869	871	11,703,066	11,594,150			23,523,837	25,590,939	99,820,410	100,342,593	522,183
UP(W)	28,434,559	27,740,350	13,275,541	13,172,868	-	62	5,853,201	5,882,986			17,306,295	18,307,439	64,869,596	65,103,705	234,109
Kolkata	8,792,103	8,542,813	6,667,314	6,375,036		33	1,639,440	1,725,876			9,200,591	9,749,967	26,299,448	26,393,725	94,277
West Bengal	23,083,463	22,264,844	16,587,064	16,012,386	747	769	1,929,929	2,059,221			14,812,567	16,386,914	56,413,770	56,724,134	310,364
Total	383,411,231	372,486,788	331,093,389	325,567,624	18,873	17,707	116,266,114	117,059,316	3,414,539	3,393,288	331,255,613	355,223,250	1,165,459,759	1,173,747,973	8,288,214

Annexure 1.2: Wireline Subscriber Base

Service Area	Bharti Airtel		Reliance Com.		Quadrant		Tata Tele.		MTNL		BSNL		Vodafone Idea		Reliance Jio		Total		Net Additions
	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	Jun-19	Sep-19	
Andhra Pradesh	212,945	213,024	42,141	36,093			173,592	174,689			882,330	825,255	60,820	45,400		82,615	1,371,828	1,377,076	5,248
Assam											106,661	101,798	2,970	3,330		8,164	109,631	113,292	3,661
Bihar			2,957	2,455			8,428	8,316			204,211	159,224	1,950	1,920		11,492	217,546	183,407	-34,139
Delhi	1,496,226	1,503,158	107,370	88,482			155,335	152,806	1,466,619	1,449,474			59,040	66,535		90,098	3,284,590	3,350,553	65,963
Gujarat	97,329	97,626	16,648	14,983			88,408	87,974			866,711	853,515	30,940	31,386		122,230	1,100,036	1,207,714	107,678
Haryana	23,336	22,751	2,170	2,130			36,461	38,745			202,096	192,571	240	270		4,531	264,303	260,998	-3,305
Pradesh			1,710	1,684			1,772	1,902			106,212	101,583	60	60		259	109,754	105,488	-4,266
Kashmir											101,706	113,382				4,128	101,706	117,510	15,804
Karnataka	702,520	716,038	114,402	110,456			272,182	274,740			978,200	947,721	53,407	53,007		46,582	2,120,711	2,148,544	27,833
Kerala	62,207	62,538	14,491	13,402			18,923	19,714			1,750,579	1,716,430	3,750	4,500		9,380	1,849,950	1,825,964	-23,986
Madhya Pradesh	244,404	242,992	9,478	6,186			14,354	15,215			643,404	629,848	1,140	1,230		39,713	912,780	935,184	22,404
Maharashtra	101,564	104,364	43,420	42,071			269,841	266,368			1,026,765	969,251	23,777	25,753		31,824	1,465,367	1,439,631	-25,736
Mumbai	383,620	383,002	167,421	159,114			555,495	549,234	1,747,717	1,730,772			57,129	67,487		185,523	2,911,382	3,075,132	163,750
North East											100,547	97,145	270	240		3,115	100,817	100,500	-317
Orissa			2,195	1,944			8,304	8,221			214,462	205,227	2,310	5,430		5,244	227,271	226,066	-1,205
Punjab	137,834	137,774	10,651	10,515	219,089	209,109	12,084	12,214			374,052	349,295	1,680	1,860		32,417	755,390	753,184	-2,206
Rajasthan	57,651	58,353	18,901	16,928			11,617	11,598			423,266	397,932	12,600	12,990		33,213	524,035	531,014	6,979
Tamil Nadu (incl. Chennai)	551,464	547,608	64,152	60,323			124,018	125,959			1,375,905	1,308,841	23,060	23,940		70,900	2,138,599	2,137,571	-1,028
U.P.(E)	65,091	63,977	5,495	4,474			8,203	8,333			324,057	310,533	12,350	12,440		26,238	415,196	425,995	10,799
U.P.(W)	24,134	24,144	3,056	2,469			4,954	4,773			254,593	238,018	4,410	5,430		14,358	291,147	289,192	-1,955
Kolkata	132,527	133,472	37,334	36,288			53,053	53,862			459,691	432,700	11,380	11,470		29,775	693,985	697,567	3,582
West Bengal			1,562	1,654			2,453	2,511			199,373	179,223	120	120		5,662	203,508	189,170	-14,338
Total	4,292,852	4,310,821	665,554	611,651	219,089	209,109	1,819,477	1,817,174	3,214,336	3,180,246	10,594,821	10,129,492	363,403	374,798	0	857,461	21,169,532	21,490,752	321,220

Annexure 1.3: Service Area and Operator wise details of PCOs

Name of Telecom Service Area	Service Provider	Number of PCOs as on 30.06.2019	Number of PCOs as on 30.09.2019	Net PCO increase/ decrease during QE Sep-19
Andhra Pradesh (Excluding Telangana)	Bharat Sanchar Nigam Ltd.	5827	2226	-3601
	Bharti Airtel	181	182	1
Telangana	Bharat Sanchar Nigam Ltd.	4390	4218	-172
Assam	Bharat Sanchar Nigam Ltd.	4485	949	-3536
Bihar (Excluding Jharkhand)	Bharat Sanchar Nigam Ltd.	949	822	-127
Jharkhand	Bharat Sanchar Nigam Ltd.	2441	2441	0
Delhi	Bharti Airtel	330	330	0
	MTNL	46042	46042	0
Gujarat	Bharat Sanchar Nigam Ltd.	12482	9529	-2953
	Bharti Airtel	14	14	0
Haryana	Bharat Sanchar Nigam Ltd.	887	788	-99
	Bharti Airtel	141	139	-2
Himachal Pradesh	Bharat Sanchar Nigam Ltd.	800	772	-28
Jammu & Kashmir	Bharat Sanchar Nigam Ltd.	914	1004	90
Karnataka	Bharat Sanchar Nigam Ltd.	15443	14305	-1138
	Bharti Airtel	3153	3090	-63
Kerala	Bharat Sanchar Nigam Ltd.	14620	13425	-1195
	Bharti Airtel	416	402	-14
Kolkata	Bharat Sanchar Nigam Ltd.	3207	2555	-652
	Bharti Airtel	33	36	3
Madhya Pradesh (Excluding Chhatisgarh)	Bharat Sanchar Nigam Ltd.	14525	11649	-2876
	Bharti Airtel	1408	1377	-31
Chhatisgarh	Bharat Sanchar Nigam Ltd.	975	965	-10
Maharashtra (Excluding Mumbai & Goa)	Bharat Sanchar Nigam Ltd.	10444	16371	5927
Mumbai	Bharti Airtel	50	50	0
	MTNL	22022	21386	-636
Arunachal Pradesh	Bharat Sanchar Nigam Ltd.	1353	1352	-1
Manipur	Bharat Sanchar Nigam Ltd.	842	772	-70
Meghalaya	Bharat Sanchar Nigam Ltd.	431	258	-173

Annexure 1.3 (contd.)

Name of Telecom Service Area	Service Provider	Number of PCOs as on 30.06.2019	Number of PCOs as on 30.09.2019	Net PCO increase/ decrease during QE Sep-19
Mizoram	Bharat Sanchar Nigam Ltd.	122	118	-4
Nagaland	Bharat Sanchar Nigam Ltd.	10	10	0
Tripura	Bharat Sanchar Nigam Ltd.	499	483	-16
Orissa	Bharat Sanchar Nigam Ltd.	1410	1304	-106
Punjab	Bharat Sanchar Nigam Ltd.	1653	1554	-99
	Bharti Airtel	12	10	-2
	Quadrant	854	802	-52
Rajasthan	Bharat Sanchar Nigam Ltd.	2542	2246	-296
	Bharti Airtel	209	209	0
Tamil Nadu (Excluding Chennai)	Bharat Sanchar Nigam Ltd.	27582	20461	-7121
	Bharti Airtel	4099	3972	-127
Chennai	Bharat Sanchar Nigam Ltd.	7646	7344	-302
Uttar Pradesh East	Bharat Sanchar Nigam Ltd.	7669	6741	-928
	Bharti Airtel	75	73	-2
Uttar Pradesh West (Excluding Uttarakhand)	Bharat Sanchar Nigam Ltd.	1563	1509	-54
Uttarakhand	Bharat Sanchar Nigam Ltd.	594	557	-37
West Bengal (Excl. Andaman & Nicobar and Sikkim)	Bharat Sanchar Nigam Ltd.	2881	1735	-1146
Andaman & Nicobar	Bharat Sanchar Nigam Ltd.	134	39	-95
Sikkim	Bharat Sanchar Nigam Ltd.	12	0	-12
Total		2,28,371	2,07,243	-21,128

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

Sl. No	Name of Telecom Service Area	Service Provider	Number of VPTs as on 30.09.2019	Number of VPTs as on 30.09.2019	Net VPTs increase/ decrease during QE Sep-19
1	Andhra Pradesh (Excl.Telangana)	Bharat Sanchar Nigam Ltd	2298	2098	-200
2	Telangana	Bharat Sanchar Nigam Ltd	1048	1073	25
3	Assam	Bharat Sanchar Nigam Ltd	105	105	0
4	Bihar (Excl. Jharkhand)	Bharat Sanchar Nigam Ltd	6359	5893	-466
5	Jharkhand	Bharat Sanchar Nigam Ltd	475	472	-3
6	Gujarat	Bharat Sanchar Nigam Ltd	5297	5278	-19
7	Haryana	Bharat Sanchar Nigam Ltd	651	651	0
8	Himachal Pradesh	Bharat Sanchar Nigam Ltd	1926	1891	-35
9	Jammu & Kashmir	Bharat Sanchar Nigam Ltd	1048	810	-238
10	Karnataka	Bharat Sanchar Nigam Ltd	4052	3962	-90
11	Kerala	Bharat Sanchar Nigam Ltd	333	332	-1
12	Kolkata	Bharat Sanchar Nigam Ltd	130	130	0
13	Madhya Pradesh (Excl. Chhatisgarh)	Bharat Sanchar Nigam Ltd	39692	9907	-29785
14	Chhatisgarh	Bharat Sanchar Nigam Ltd	251	210	-41
15	Maharashtra (Excl. Mumbai & Goa)	Bharat Sanchar Nigam Ltd	7859	7739	-120
16	Goa	Bharat Sanchar Nigam Ltd	242	239	-3
17	Arunachal Pradesh	Bharat Sanchar Nigam Ltd	1054	93	-961
18	Manipur	Bharat Sanchar Nigam Ltd	418	207	-211
19	Meghalaya	Bharat Sanchar Nigam Ltd	270	12	-258
20	Mizoram	Bharat Sanchar Nigam Ltd	83	25	-58
21	Nagaland	Bharat Sanchar Nigam Ltd	25	222	197
22	Tripura	Bharat Sanchar Nigam Ltd	222	1554	1332
23	Orissa	Bharat Sanchar Nigam Ltd	1817	4915	3098
24	Punjab	Bharat Sanchar Nigam Ltd	4966	346	-4620

Annexure 1.4 (contd.)

Sl. No	Name of Telecom Service Area	Service Provider	Number of VPTs as on 30.09.2019	Number of VPTs as on 30.09.2019	Net VPTs increase/decrease during QE Sep-19
25	Rajasthan	Bharat Sanchar Nigam Ltd	792	5751	4959
26	Tamil Nadu (Excl. Chennai)	Bharat Sanchar Nigam Ltd	6009	568	-5441
27	Uttar Pradesh East	Bharat Sanchar Nigam Ltd	568	2121	1553
28	Uttar Pradesh West (Excl. Uttarakhand)	Bharat Sanchar Nigam Ltd	1826	11557	9731
29	Uttarakhand	Bharat Sanchar Nigam Ltd	2676	93	-2583
30	West Bengal (Excl. Andaman & Nicobar and Sikkim)	Bharat Sanchar Nigam Ltd	11557	320	-11237
31	Andaman & Nicobar	Bharat Sanchar Nigam Ltd	93		-93
32	Sikkim	Bharat Sanchar Nigam Ltd	324		-324
Total			1,04,466	70,834	-33,632

**Annexure 1.5 : Internet Service Provider(ISP) wise Internet Subscriber base
as on 30.09.2019**

S.No.	Name of Service Provider	Narrowband	Broadband	Total
1	Reliance Jio Infocomm Ltd	0	355926487	355926487
2	Bharti Airtel Ltd.	27054156	127826269	154880425
3	Vodafone Idea Limited	28152771	112189428	140342199
4	Bharat Sanchar Nigam Ltd.	6693536	21523113	28216649
5	Atria Convergence Technologies Pvt. Ltd.	0	1479233	1479233
6	Mahanagar Telephone Nigam Ltd.	239770	924670	1164440
7	Hathway Cable & Datacom Pvt. Ltd.	0	861946	861946
8	You Broadband India Pvt. Ltd.	14732	758865	773597
9	GTPL Broadband Pvt. Ltd.	0	301750	301750
10	Excitel Broadband Private Limited	0	294000	294000
11	Tikona Infinet Ltd.	0	251926	251926
12	D-Vois Broadband Private Limited	0	228329	228329
13	Planet E-Shop Holdings India Ltd.	0	227145	227145
14	Asianet Satellite Communications Ltd.	0	211606	211606
15	Alliance Broadband Services Pvt. Ltd.	0	207470	207470
16	Quadrant Televentures Ltd (HFCL Infotel Ltd)	111	195231	195342
17	INTECH ONLINE PVT LTD	0	166787	166787
18	Joister Infoserve Pvt. Ltd.	0	155384	155384
19	Indinet Service Pvt Ltd	0	122677	122677
20	DEN Broadband Private Limited	0	116654	116654
21	RailTel Corporation of India Ltd.	0	107960	107960
22	Airlink Communications Pvt. Ltd	0	58114	58114
23	Tata Teleservices (Maharashtra) Ltd.	475	57268	57743
24	Five Network Solution (India) Ltd.	0	57505	57505
25	Nextra Teleservices Pvt. Ltd.	0	50668	50668
26	Wish Net Pvt. Ltd.	0	49316	49316
27	Honesty Net Solutions (I) Pvt Ltd	98	43701	43799
28	Airnet Cable and Datacom Pvt Ltd	0	38559	38559
29	Tata Sky Broadband Private Limited	0	38473	38473
30	Citycom Networks Pvt. Ltd.	0	35218	35218
31	Fusionnet Web Services Pvt. Ltd.	0	34815	34815
32	ANI Network Pvt Ltd	0	34525	34525
33	Limras Eronet Broadband Service Pvt Ltd	5461	29043	34504
34	Tata Teleservices Limited	6	31301	31307
35	Wan and Lan Internet Pvt. Ltd.	0	30153	30153
36	K Net Solutions Pvt Ltd	0	27441	27441

Annexure 1.5 (contd.)

S.No.	Name of Service Provider	Narrowband	Broadband	Total
37	Ishan Netsol Pvt Ltd	0	27002	27002
38	Digital Satellite Connect Pvt. Ltd.	0	21475	21475
39	Vasai Cable Pvt. Ltd.	0	21337	21337
40	DNA Infotel Pvt Ltd	0	21120	21120
41	SITI Broadband Services Pvt. Ltd.	0	19787	19787
42	Microscan Computers Pvt Ltd	7292	12023	19315
43	City Online Services Ltd	0	19290	19290
44	Ortel Communication Ltd.	0	17579	17579
45	CSC e-Governance Services India Ltd.	0	16058	16058
46	Rajesh Digital Datacom Pvt Ltd	22	15949	15971
47	Tata Communications Limited	235	14651	14886
48	IKF Technologies Ltd	0	14798	14798
49	Digital Network associates Pvt. Ltd	0	14486	14486
50	Quest Consultancy Pvt. Ltd.	0	14202	14202
51	Sikka Broadband(P) Ltd.	0	14053	14053
52	Meghbela Cable & Broadband Servies (P) Ltd	0	13130	13130
53	Netplus Broadband Services Pvt. Ltd	0	12406	12406
54	Geocity Network Solutions Pvt. Ltd.	0	11722	11722
55	Sifi Online Pvt. Ltd.	0	11586	11586
56	World Phone Internet Services Pvt Ltd	0	10669	10669
57	Pioneerelabs	351	9643	9994
58	Sai Prasad Internet Pvt Ltd	0	9916	9916
59	RI Networks Pvt Ltd	0	9770	9770
60	United Telecoms Ltd.	189	9457	9646
61	North East Dataa Network Pvt Ltd.	0	9625	9625
62	Yashash Cable Network Pvt Ltd	0	9433	9433
63	Bittel Telecom Pvt.Ltd	0	8528	8528
64	Candor Infosolution Pvt Ltd	8496	0	8496
65	Shree Omkar Infocom Pvt. Ltd.	0	8363	8363
66	Ethernet Xpress India Pvt. Ltd	0	8047	8047
67	Jetway Broadband India Pvt.Ltd.	0	7897	7897
68	Net 9 Online Hathway Private Limited	0	7888	7888
69	Tachyon Communications Pvt. Ltd.	0	7344	7344
70	Foxtel Telecommunications Pvt Ltd	7325	0	7325
71	Cityzone Infonet Pvt. Ltd	0	7260	7260
72	Apna Telelink Ltd.	0	7227	7227
73	Wow Solutions & System Pvt Ltd	0	7113	7113

Annexure 1.5 (contd.)

S.No.	Name of Service Provider	Narrowband	Broadband	Total
74	Readylink Internet Services Pvt Ltd	28	6983	7011
75	Reliance Communications Limited	182	6722	6904
76	Swiftmail Communications Ltd.	206	6631	6837
77	DL GTPL Broadband Pvt Ltd	0	6793	6793
78	Kappa Internet Services Pvt Ltd.	0	6704	6704
79	Broadband Pacenet (I) Pvt. Ltd.	0	6668	6668
80	Shree Balaji Infoway Pvt Ltd	0	6305	6305
81	L S Fibernet Pvt. Ltd.	0	6127	6127
82	SSCN Pvt Ltd	0	5955	5955
83	GBPS Networks Pvt. Ltd.	0	5938	5938
84	Intermedia Cable Communication Pvt Ltd	0	5394	5394
85	Swiftnet Broadband Pvt Ltd	0	5101	5101
86	Narmada Cyberzone Pvt Ltd	1858	3097	4955
87	IAXN Telecom Pvt. Ltd.	0	4766	4766
88	Multicraft Digital Technologies Pvt Ltd	0	4612	4612
89	Siliguri Internet & Cable TV Pvt. Ltd.	0	4446	4446
90	Spiderlink Networks Pvt. Ltd.	0	4255	4255
91	Powernet Communication Pvt Ltd	2086	2086	4172
92	Mukand Infotel Pvt. Ltd.	4109	0	4109
93	Blazenet Ltd.	0	4017	4017
94	Multinet (Udaipur) Pvt. Ltd.	0	3884	3884
95	Aerocast Networks Pvt Ltd.	0	3793	3793
96	Sonali Internet Services Pvt Ltd	0	3703	3703
97	Gigatel Networks Pvt Ltd	0	3688	3688
98	Zoram Business Enterprise Private Limited	0	3624	3624
99	Getway Broadband Pvt Ltd	0	3434	3434
100	Vision Smartlink Networking Pvt. Ltd.	0	3351	3351
101	SUPER SONIC BROADBAND PVT LTD	0	3332	3332
102	Pink Broadband Services Pvt. Ltd.	1662	1662	3324
103	Spacenet Internet Services Pvt Ltd	0	3243	3243
104	Rainbow Internet teleservices Pvt Ltd	16	3184	3200
105	Star Broadband Services (I) Pvt Ltd	0	3076	3076
106	Five Net Service Provider Pvt Ltd	0	2949	2949
107	Airgenie Communications Pvt. Ltd.	0	2877	2877
108	TGN Networks Pvt Ltd	0	2679	2679
109	Juweriyah Networks Pvt Ltd	0	2532	2532
110	Kaizen Infonet Pvt Ltd	0	2526	2526

Annexure 1.5 (contd.)

S.No.	Name of Service Provider	Narrowband	Broadband	Total
111	WSNS Pvt Ltd	0	2508	2508
112	Blu Ultraband Internet Services Private Ltd	0	2461	2461
113	F/X Wireless Technology Services Pvt. Ltd.	0	2452	2452
114	Chandra Net Pvt. Limited	0	2435	2435
115	S.S. Netcom Pvt Ltd	0	2432	2432
116	NISS Internet Services Pvt. Ltd.	0	2399	2399
117	Jetspot Networks Pvt. Ltd.	0	2212	2212
118	Transmedia Technologies (Ap) Pvt Ltd	0	2212	2212
119	LM ENERGY & SOFTWARE PVT LTD	0	2123	2123
120	Angel Air Network Solutions Private Limited	0	1993	1993
121	Smartlink Solutions Pvt. Ltd.	0	1965	1965
122	Speed Online.net Pvt. Ltd.	0	1962	1962
123	Symbois Creations Pvt. Ltd.	0	1817	1817
124	Capture Network Systems Pvt. Ltd.	288	1517	1805
125	Galaxynet Connections Pvt Ltd	0	1729	1729
126	Inet Fiber India Pvt Ltd	0	1726	1726
127	Assistive networks & technologie Pvt Ltd	0	1701	1701
128	Scud Communication Pvt Ltd	0	1650	1650
129	Southern Online Bio Technologies Ltd.	1	1649	1650
130	Ultranet Infotech Solution Private Limited	0	1600	1600
131	Nettlinx Ltd.	0	1591	1591
132	Touch Net India Pvt. Ltd.	0	1570	1570
133	Sphier Infotech Pvt. Ltd.	0	1515	1515
134	Rajesh Patel Net Services Pvt. Ltd.	16	1468	1484
135	Elyzium Technologies Pvt. Ltd.	0	1435	1435
136	Wnet Telecom Private Limited	0	1422	1422
137	Netfirre Communications Pvt Ltd	0	1408	1408
138	delDSL Internet Pvt Ltd	0	1388	1388
139	Prompt infracom Pvt Ltd	0	1387	1387
140	Imperium Digital Network Pvt. Ltd.	0	1322	1322
141	Fiberzone Communications Pvt. Ltd.	0	1310	1310
142	Skylink Fibernet Pvt. Ltd.	0	1307	1307
143	Hardwork Cable & Internet Services Pvt Ltd	0	1300	1300
144	Hughes Communications India Ltd.	414	837	1251
145	MAKS Communications Pvt.Ltd.	0	1248	1248
146	Craze IT Solutions Pvt Ltd	0	1200	1200
147	Click4Net Internet Services Private Limited	0	1127	1127

Annexure 1.5 (contd.)

S.No.	Name of Service Provider	Narrowband	Broadband	Total
148	Aeroway Networks Pvt Ltd.	0	1124	1124
149	CJ Online Pvt. Ltd.	0	1039	1039
150	DA Smartzone Pvt Ltd	0	1021	1021
151	Sanchit Infocomm Pvt Ltd	0	1017	1017
152	Smart Net India Pvt Ltd	0	1013	1013
153	Ficus Telecom Pvt. Ltd.	0	989	989
154	Touchnet Broadband Services Pvt. Ltd.	0	957	957
155	Gigacast Network Pvt Ltd	0	943	943
156	Grace Teleinfra Pvt Ltd	0	927	927
157	SS Fiber Net Optical Communication Pvt. Ltd	0	918	918
158	ACN Fiber Pvt. Ltd.	0	872	872
159	Varesha Air World Networks Pvt Ltd	433	433	866
160	NetMagic Solutions(P) Ltd.	0	863	863
161	Sky Online Technosystem Pvt Ltd	0	863	863
162	Correl It Services Pvt. Ltd.	0	856	856
163	Japra Tele Link Pvt. Ltd.	0	851	851
164	Dreamlink Technologies Pvt Ltd	0	848	848
165	NGC Broadband Pvt. Ltd.	833	0	833
166	Fastnet Communication Pvt Ltd	209	621	830
167	Esto Boradnad Pvt Ltd./Esto Internet Pvt Ltd	0	824	824
168	Antariksh Broadband & Wireless Solutions Pvt Ltd	800	0	800
169	Deenet Services Pvt Ltd	0	794	794
170	Daksh Broadband Services Pvt Ltd	0	790	790
171	Ani Broadband Service Pvt. Ltd.	0	763	763
172	Datawave IT solutions Pvt. Ltd.	0	761	761
173	Light Air Transmission Pvt. Ltd.	374	374	748
174	SVD DIGITAL NETWORKS PVT LTD	0	727	727
175	Cloudnet Communications Pvt Ltd	0	714	714
176	Spirenet Digital Communication Pvt Ltd	0	709	709
177	Unitel Media Pvt Ltd	0	694	694
178	HPS Digital Broadband Pvt Ltd	0	672	672
179	Hostaxis Networks Pvt Ltd	0	650	650
180	Primenet Global Ltd.	0	625	625
181	Wi-Link Network Pvt. Ltd	0	614	614
182	Netvision Awadh Networks Pvt Ltd	137	474	611
183	Sefaro Networks Private Ltd	0	605	605

Annexure 1.5 (contd.)

S.No.	Name of Service Provider	Narrowband	Broadband	Total
184	Laironet Communication Pvt Ltd	0	599	599
185	Speedmaxx Digital Networks Pvt Ltd	0	599	599
186	STN Communication & Advertising Pvt Ltd.	1	597	598
187	Webriders Internet Pvt Ltd	0	594	594
188	Smart Wi5 Pvt. Ltd.	0	590	590
189	Adri Infocom Pvt. Ltd.	0	578	578
190	Alphanet Broadband Pvt Ltd	0	571	571
191	Datamax Technology Pvt Ltd	58	502	560
192	Packnet Solutions Pvt Ltd	0	560	560
193	Sify Technologies Ltd.	295	262	557
194	Alegra Communication Pvt Ltd	0	552	552
195	Digital2Virtual ISP Pvt. Ltd.	0	549	549
196	Reticule Infotech Pvt. Ltd.	0	549	549
197	VIVA Communications Pvt Ltd	0	545	545
198	Packenet Solutions Pvt. Ltd.	0	540	540
199	Karunay Internet Private Limited	0	526	526
200	Rida Communication Pvt. Ltd.	0	513	513
201	Amar Broadband Private Limited	0	493	493
202	Data Ingenious Global Ltd	0	488	488
203	Power Grid Corporation of India Ltd.	0	486	486
204	Helm Consultants Pvt Ltd	193	274	467
205	Shree Manoranjan Broadband Pvt Ltd	0	456	456
206	Elecon Infotmation Technology Ltd	0	445	445
207	Oasis Cable Pvt Ltd.	0	445	445
208	Oistel Telecom Pvt. Ltd.	212	212	424
209	Tamana Winet Pvt. Ltd.	0	414	414
210	Gleam Worldwide Services Pvt. Ltd.	0	412	412
211	SmartLink Broadband Services	0	400	400
212	CNS Infotel Services Pvt Ltd	0	392	392
213	Pulse Telesystems Pvt. Ltd.	0	386	386
214	Bass Networks Pvt Ltd	0	380	380
215	Spider Broadband and Cable Pvt Ltd	0	379	379
216	Revolution Broadband Pvt Ltd	0	378	378
217	Windsor Internet Pvt Ltd	0	374	374
218	Gorakhpur Net Services Pvt. Ltd.	0	370	370
219	Panav Network and Communications Pvt Ltd	0	368	368
220	Harisree CableNet Pvt. Ltd.	0	361	361

Annexure 1.5 (contd.)

S.No.	Name of Service Provider	Narrowband	Broadband	Total
221	Quick Link Broadband and Services Pvt. Ltd	0	340	340
222	Development Logics Solutions Pvt Ltd	0	337	337
223	Moradabad Internet Dervices Pvt Ltd	0	336	336
224	Sai Akshay Internet Services Pvt Ltd.	0	332	332
225	CATLA IT & ENGG. CO. PVT LTD.	0	327	327
226	Twincity Communication Private Limited	0	325	325
227	Bhiwani Communications Pvt. Ltd.	73	233	306
228	BASS JOKERNET PRIVATE LIMITED	0	305	305
229	Dhanam Internet Services India Pvt. Ltd.	0	305	305
230	NR Data Service Pvt Ltd	0	302	302
231	Panchsheel Broadband Services's Pvt Ltd.	0	301	301
232	Kartik Network Pvt. Ltd.	0	289	289
233	Auspice Infratal Pvt Ltd	164	116	280
234	Sheen Telecom Consultants Pvt Ltd	278	0	278
235	Citylink Broadband Services Pvt. Ltd.	0	277	277
236	Nextgen Compusoft Pvt Ltd	0	260	260
237	Singh Internet Services Pvt. Ltd.	0	260	260
238	Lotus Broadband Pvt Ltd	0	254	254
239	Goodwill Smartlink Pvt. Ltd.	0	252	252
240	Cityline Networks Pvt Ltd	0	251	251
241	Alwar Online Pvt Ltd	250	0	250
242	Faiconet Internet Pvt Ltd	0	245	245
243	Wavetree Networks Pvt Ltd	0	241	241
244	Barani Data Solutions Private Limited	229	0	229
245	Anushree Digital Network Pvt Ltd	0	228	228
246	Khetan Cable Network (P) Ltd	0	228	228
247	Vmo Broadband Pvt Ltd	225	0	225
248	Southnet Broadband Pvt Ltd	0	221	221
249	Acebrowse Pvt Ltd	0	219	219
250	CIT Solutions Pvt. Ltd.	0	217	217
251	Visputes Internet Private Limited	0	214	214
252	Srinagar Technology Consultants Ltd	213	0	213
253	Wi5 Internet Services P Limited	0	212	212
254	Saibaba Broadband Pvt. Ltd.	0	206	206
255	Airmesh Communications Limited	0	201	201
256	Ceralink Communication Pvt Ltd	0	196	196
257	Microsense Pvt. Ltd.	0	195	195

Annexure 1.5 (contd.)

S.No.	Name of Service Provider	Narrowband	Broadband	Total
258	Suncity Broadband Pvt Ltd.	0	195	195
259	Shineplus Networks Pvt Ltd	0	182	182
260	Gazillio Technologies Pvt. Ltd.	0	177	177
261	STN Infotech Pvt. Ltd	0	175	175
262	Airmax Internet Pvt Ltd	0	170	170
263	Optisky Fiber Pvt Ltd	0	168	168
264	Kataria Net Solutions Pvt. Ltd.	0	163	163
265	Nanjil Internet Services Pvt. Ltd.	0	158	158
266	Nettech Infovision Pvt Ltd	0	158	158
267	Verizon Communications India Pvt. Ltd.	0	147	147
268	Sense Connect It Pvt. Ltd.	0	146	146
269	Proline Datatech Sercivces Pvt Ltd	0	143	143
270	ERNET India	52	89	141
271	Global India Tele Infra Pvt. Ltd.	36	100	136
272	Texas Connect Private Limited	112	24	136
273	Achiever Communication and Services Pvt Ltd	0	131	131
274	MLC Internet Pvt Ltd	0	126	126
275	Airtechzone Services India Pvt Ltd	78	47	125
276	Mediatesh Communication Pvt. Ltd.	0	125	125
277	Micronova Network Solutions Ltd	123	0	123
278	Invensys Networks pvt ltd	3	117	120
279	Royal Wireless Services Pvt Ltd	0	120	120
280	Shri Vinayagaa Internet Pvt Ltd	0	119	119
281	V Net Networks Pvt. Ltd	0	118	118
282	AT&T Global Network Services India Pvt Ltd	0	117	117
283	PMG Networkd Pvt Ltd	0	117	117
284	Satpar Infotech Pvt Ltd	0	112	112
285	Shri Ram Braoadband Services Pvt Ltd	0	112	112
286	White Stallion Networks Pvt. Ltd.	0	108	108
287	Pronoc Technologies Pvt. Ltd.	0	107	107
288	Telstra Telecommunications Pvt. Ltd.	0	107	107
289	AirFiber IT Solutions Pvt. Ltd	0	105	105
290	Shreepad Communication Pvt. Ltd.	0	104	104
291	Netwire Internet Solutions Pvt. Ltd.	0	103	103
292	Sath Technologies Pvt Ltd	0	97	97
293	Cheetah Networks Pvt Ltd	0	94	94
294	S A Internet Solution Pvt Ltd	0	92	92

Annexure 1.5 (contd.)

S.No.	Name of Service Provider	Narrowband	Broadband	Total
295	Infinity Wireless Services Pvt. Ltd.	0	89	89
296	ARP Infonet Pvt. Ltd.	0	84	84
297	Vidarbha Wi-Fi & Network Services Pvt. Ltd.	84	0	84
298	Dream Plus Multi Services Pvt. Ltd.	0	82	82
299	DigiStar Info Solutions Pvt Ltd	40	40	80
300	BSL Technologies Pvt. Ltd.	0	77	77
301	Triple Link Pvt Ltd	0	77	77
302	Dronagiri Infotech Pvt Ltd	0	75	75
303	Pimoonny Broadband Serives Pvt Ltd	0	72	72
304	Malang Solutions Pvt. Ltd.	0	70	70
305	M-TEL Networks (P) Ltd	0	65	65
306	Wireline Solution (India) Pvt. Ltd.	0	65	65
307	QBC Infotech Pvt. Ltd.	0	60	60
308	Airlink Broadband Pvt Ltd	0	59	59
309	Mtel Networks Pvt. Ltd.	0	58	58
310	Edge Telecommunications Pvt. Ltd.	0	57	57
311	Infiber Broadnet Pvt. Ltd.	0	56	56
312	Veer Point Pvt. Ltd.	0	54	54
313	City Broadband Pvt. Ltd.	0	52	52
314	Jai Mata Di Telectronix Pvt Ltd	0	48	48
315	Classic Internet and Cable Services Pvt Ltd	46	0	46
316	Guru Netcomm Pvt Ltd	0	41	41
317	Navariya Satellite Services Pvt.Ltd.	33	0	33
318	Mesh Infranet Pvt Ltd	0	31	31
319	Divine Broadband Services Pvt Ltd	0	30	30
320	Dreamnet Pvt.Ltd.	0	30	30
321	Sanyog Networks Pvt Ltd	0	29	29
322	Sun Boardband and Data Services Pvt Ltd	0	28	28
323	We Internet Limited	0	27	27
324	West Bengal Electronics Industry Development Corp. Ltd.	0	27	27
325	Orange Business Services India Network Pvt. Ltd.	0	24	24
326	Pacific Internet India Pvt. Ltd.	0	23	23
327	Trans Virtual Pvt. Ltd.	2	18	20
328	Adya Tech One Services Pvt Ltd	0	19	19
329	Angrow Netcomm Pvt. Ltd.	18	0	18

Annexure 1.5 (contd.)

S.No.	Name of Service Provider	Narrowband	Broadband	Total
330	Fasthook Networks Pvt Ltd	0	18	18
331	Rajdhani Telecom Pvt. Ltd.	2	16	18
332	Hienet Internet Services Pvt Ltd	0	17	17
333	Instanet Technologies Private Limited	0	17	17
334	Microtel Internet Network Pvt ltd	0	15	15
335	Novanet India Ltd.	0	14	14
336	Marutham Networks Pvt. Ltd.	0	13	13
337	Ubercore Data Labs Pvt Ltd	0	12	12
338	A To Z Infolink Pvt.Ltd.	0	11	11
339	Clear Beam Communication Pvt Ltd	9	0	9
340	Financial Technologies Communications Ltd.	9	0	9
341	Mastek Infosystems OPC Pvt. Ltd.	0	9	9
342	Essel Shyam Communications Limited	0	7	7
343	Nelco Ltd.	0	7	7
344	Skynetzone Wifi Services Pvt Ltd	0	5	5
345	KKM Broadband Internet Pvt Ltd	0	4	4
346	ABT Ltd.	3	0	3
347	Aristo Telenet Pvt Ltd	0	3	3
348	Tatanet Services Ltd	0	3	3
349	Critel Technologies Pvt. Ltd.	0	2	2
350	KIIRUS Infonet Pvt. Ltd.	0	2	2
351	Sabse Internet Services Provider Pvt Ltd	0	2	2
352	Cloudcast Digital Ltd	0	1	1
353	Telosy Telecom Pvt. Ltd.	0	1	1
	Total	62201519	625421907	687623426

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. Sep-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	
			31.06.2019	30.09.2019
1	Delhi(Faridabad/ Gurgaon)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	5934	5848
		Procall(Delhi)	2978	2989
		Procall (Faridabad)		
		Procall (Gurgaon)		
		Total	8912	8837
2	Mumbai (Navi Mumbai)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	8581	8455
		Smartalk (Mumbai)	627	626
		Bhilwara Telenet(Mumbai)	894	891
		Airtalk Solutions & Services Pvt. Ltd	511	481
		Total	10613	10453
3	Kolkata	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2397	2369
		Total	2397	2369
4	TN(Chennai)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7281	7330
		Quick Calls	581	566
		Total	7862	7896
5	Karnataka (Bangalore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7087	7097
		Quick Calls	716	744
		Total	7803	7841
6	Andhra Pradesh (Vishakhapatnam & Hyderabad)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	5803	6164
		Quick Calls (Hyderabad Urban)	849	849
		Total	6652	7013
7	Madhya Pradesh (Indore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1495	1553
8	Rajasthan (Jaipur)	Procall	283	288
		Arya Omnitalk Radio Trunking Services Pvt.Ltd.	525	542
		Total	808	830

Annexure- 1.7 (Contd.)

Sl. No.	Operative Area	Service Provider	Subscriber Base	
			31.06.2019	30.09.2019
9	Gujarat (Ahmedaba/Surat/ Vadodara/ Bharuch/Dahej/ Kutch/Amrela /Jamnagar)	Arya Omnitalk Radio Trunking Services Pvt.Ltd. (Ahmedabad/Surat/ Vadodara/ Bharuch/Dahej)	7130	7012
		Inative Network Pvt. Ltd. (Ahmedabad/Surat/ Vadodara/ Bharuch/ Kutch/Amrela /Jamnagar)	1820	1820
		Total	8950	8832
10	Maharashtra (Pune)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1663	1693
		Smartalk	444	446
		Total	2107	2139
11	Kerala (Cochin City & Quilon)	Wiwanet Solutions Pvt. Ltd.	406	457
		Arya Omnitalk Radio Trunking Services Pvt.Ltd.	900	898
		Total	1306	1355
Grand Total			58,905	59,118

Annexure 2.1: Wireless Revenue Service - Service Area wise Statistics for QE September, 2019

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	96.00	94	22	323	318	642
Gujarat	95.26	77	17	303	263	566
Karnataka	94.10	90	24	332	316	649
MH	95.79	80	20	293	278	571
TN (incl. Chennai)	94.92	94	20	316	313	629

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	97.96	54	12	332	312	644
Kerala	97.50	93	12	252	261	513
MP	98.31	69	19	329	328	657
Punjab	96.37	81	12	331	310	642
Rajasthan	97.86	76	14	354	350	704
UP(E)	98.42	53	14	380	430	809
UP(W)	98.36	55	14	352	363	715
WB	99.44	66	17	353	381	735

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	98.09	80	32	368	395	763
Bihar	99.26	59	13	440	502	942
HP	98.74	72	13	325	315	640
J&K	74.37	77	26	344	308	652
NE	98.54	78	38	316	325	640
Orissa	98.82	72	18	391	426	817

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	94.53	60	15	325	310	636
Delhi	84.83	69	21	421	349	770
Mumbai	79.79	87	15	391	304	695

Annexure 4.1: Performance of QoS Parameters for Cellular Mobile Service

Performance Monitoring Report for Quality of Service for Mobile Cellular Service for quarter ending September, 2019

	Name of Service Provider	Network Related Parameters										Customer Service Quality Parameters									
		Network Availability		Connection Establishment (Accessibility)			Connection Maintenance (Retainability)			POI		Metering and billing				Response time to the customer for assistance		Termination / closure of service			
		BS Accumulated down-time (not available for service) (%age)	Worst affected BSs due to down-time (%age)	Call Set-up Success Rate and Session Establishment Success Rate for Circuit-Switched Voice or VoLTE as applicable (within licensee's own network)	SDCCH/ Paging Channel Congestion/ RRC Congestion (%age)	TCH, RAB and E-RAB Congestion (%age)	Network QoS DCR Spatial Distribution Measure [Network_QSD(90,90)]	Network QoS DCR Temporal Distribution Measure [Network_QTD(97,90)]	Connections with good voice quality, Circuit-Switched Voice Quality and VoLTE quality	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)	Down Link (DL) Packet Drop Rate or DL-PDR	Up Link (UL) Packet Drop Rate or UL-PDR	Metering and billing credibility - post paid	Metering and billing credibility - pre paid	Resolution of billing/charging complaints		Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	Accessibility of call centre/ customer care	Percentage of calls answered by the operators (voice to voice) within 90 seconds	%age requests for Termination / Closure of service complied within 7 days	Time taken for refund of deposits after 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																					
Airtel	Andhra Pradesh	0.10	0.20	98.73	0.20	0.36	1.56	1.83	96.39	0.00	0.22	0.28	0.01	0.00	100.00	100.00	100.00	100.00	86.00	100.00	100.00
Airtel	Assam	0.45	1.11	97.79	0.41	0.33	1.91	2.27	97.95	0.00	0.19	0.36	0.01	0.00	100.00	100.00	100.00	99.99	93.00	100.00	100.00
Airtel	Bihar	0.26	1.00	97.60	0.43	0.91	1.76	1.83	97.84	0.00	0.10	0.38	0.01	0.00	99.00	100.00	100.00	99.35	91.00	100.00	100.00
Airtel	Delhi	0.10	0.00	99.08	0.20	0.37	1.69	2.38	95.57	0.00	1.07	0.35	0.01	0.00	100.00	100.00	100.00	100.00	93.00	100.00	100.00
Airtel	Gujarat	0.12	0.22	99.18	0.25	0.23	1.69	2.06	95.67	0.00	0.08	0.17	0.02	0.00	100.00	100.00	100.00	100.00	89.00	100.00	100.00
Airtel	Haryana	0.08	0.23	99.89	0.11	0.14	1.33	1.71	98.54	0.00	0.23	0.43	0.02	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00
Airtel	Himachal Pradesh	0.14	0.59	99.26	0.14	0.12	1.67	2.04	95.18	0.00	0.29	0.34	0.02	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00
Airtel	Jammu & Kashmir	0.16	0.21	97.63	0.84	0.14	1.37	2.56	97.98	0.00	0.19	0.34	0.01	0.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00
Airtel	Karnataka	0.03	0.64	99.36	0.21	0.14	1.59	2.08	95.19	0.00	0.20	0.23	0.02	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00
Airtel	Kerala	0.11	0.42	99.61	0.16	0.22	1.96	2.63	97.31	0.00	0.09	0.20	0.02	0.00	100.00	100.00	100.00	100.00	89.00	100.00	100.00
Airtel	Kolkata	0.10	0.00	99.60	0.20	0.24	1.55	2.25	95.61	0.00	0.23	1.17	0.01	0.00	100.00	100.00	100.00	99.91	90.00	100.00	100.00
Airtel	Madhya Pradesh	0.14	0.46	99.15	0.11	0.18	1.99	2.33	95.03	0.00	0.09	0.16	0.01	0.00	100.00	100.00	100.00	100.00	96.00	100.00	100.00
Airtel	Maharashtra	0.04	0.00	99.29	0.17	0.22	1.37	1.68	95.31	0.00	0.19	0.12	0.02	0.00	100.00	100.00	100.00	100.00	93.00	100.00	100.00
Airtel	Mumbai	0.29	0.88	99.42	0.22	0.26	1.85	1.96	95.86	0.00	0.19	0.29	0.01	0.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00
Airtel	North East	0.60	1.68	96.65	0.49	0.47	1.80	2.10	97.87	0.00	0.26	0.41	0.01	0.00	100.00	100.00	100.00	100.00	89.00	100.00	100.00
Airtel	Odisha	0.25	0.22	98.93	0.15	0.56	1.65	1.89	97.88	0.00	0.09	0.16	0.01	0.00	100.00	100.00	100.00	100.00	90.00	100.00	100.00
Airtel	Punjab	0.05	0.12	99.72	0.11	0.12	1.23	1.52	98.88	0.00	0.15	0.45	0.02	0.00	100.00	100.00	100.00	100.00	89.00	100.00	100.00
Airtel	Rajasthan	0.16	0.52	98.73	0.29	0.51	1.85	2.30	98.02	0.00	0.35	0.37	0.02	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00

Annexure 4.1 (Contd.)

Airtel	Tamil Nadu	0.04	0.19	99.46	0.15	0.19	1.22	1.61	95.69	0.00	0.19	0.21	0.01	0.00	100.00	100.00	100.00	100.00	82.00	100.00	100.00
Airtel	Uttar Pradesh (E)	0.55	1.18	96.85	0.45	1.07	1.67	2.15	96.81	0.00	0.20	0.55	0.01	0.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00
Airtel	Uttar Pradesh (W)	0.55	0.81	99.64	0.22	0.10	1.67	2.13	99.44	0.00	0.15	0.15	0.02	0.00	100.00	100.00	100.00	100.00	98.00	100.00	100.00
Airtel	West Bengal	0.32	0.06	98.91	0.32	0.54	1.86	2.94	97.41	0.00	0.18	0.40	0.01	0.00	100.00	100.00	100.00	100.00	89.00	100.00	100.00
BSNL	Andra Pradesh	1.20	1.60	98.51	0.72	0.53	1.74	1.89	98.48	0.00	0.71	0.95	0.00	0.00	100.00	100.00	100.00	97.00	96.00	100.00	100.00
BSNL	Assam	1.99	1.97	98.12	0.86	1.82	1.98	2.34	96.90	0.00	NA	NA	0.01	0.00	100.00	100.00	100.00	96.00	97.70	100.00	100.00
BSNL	Bihar	1.92	1.93	95.45	0.34	0.50	1.66	2.22	98.30	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	99.00	97.84	100.00	100.00
BSNL	Kolkata	1.62	1.80	99.50	0.49	0.30	1.91	2.17	97.98	0.00	NA	NA	0.01	0.01	99.57	100.00	100.00	95.00	95.38	100.00	100.00
BSNL	Gujarat	1.44	1.24	98.44	0.04	0.27	1.70	2.53	100.00	0.00	0.05	0.12	0.01	0.00	100.00	100.00	100.00	97.00	96.99	100.00	100.00
BSNL	Himachal Pradesh	1.54	1.86	98.84	0.49	0.98	1.93	2.20	96.15	0.00	0.00	0.00	0.01	0.00	100.00	100.00	100.00	100.00	99.90	100.00	100.00
BSNL	Haryana	0.56	0.21	98.89	0.11	0.23	1.80	2.42	97.60	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	99.94	100.00	100.00
BSNL	Jammu & Kashmir	1.38	1.69	97.62	0.62	1.44	1.98	2.86	96.50	0.00	0.00	0.01	0.00	0.00	100.00	100.00	100.00	100.00	99.92	100.00	100.00
BSNL	Kerala	0.75	3.44	98.87	0.28	1.05	1.99	2.44	98.36	0.00	0.00	0.00	0.01	0.00	98.00	100.00	100.00	97.00	99.00	100.00	100.00
BSNL	Karnataka	1.72	1.83	97.59	0.44	0.56	1.84	2.22	97.09	0.00	0.98	1.16	0.00	0.00	99.75	100.00	100.00	96.00	96.10	100.00	100.00
BSNL	Maharashtra	1.46	1.89	98.01	0.76	1.09	1.92	2.60	96.40	0.00	0.04	0.08	0.01	0.01	100.00	100.00	100.00	100.00	95.45	100.00	100.00
BSNL	Madhya Pradesh	1.19	1.49	98.70	0.35	1.09	1.88	2.14	98.02	0.00	NA	NA	0.00	0.00	100.00	100.00	100.00	99.00	99.59	100.00	100.00
BSNL	North East	1.84	1.95	98.14	0.96	1.88	1.90	2.58	98.00	0.00	0.00	0.00	0.05	0.05	100.00	100.00	100.00	95.00	96.30	100.00	100.00
BSNL	Orissa	0.74	1.98	98.32	0.54	0.89	1.91	2.85	96.45	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	98.00	97.96	100.00	100.00
BSNL	Punjab	0.34	1.53	98.81	0.19	0.06	1.80	2.17	98.02	0.00	0.00	0.01	0.00	0.00	100.00	100.00	100.00	100.00	99.90	100.00	100.00
BSNL	Rajasthan	1.25	1.54	98.72	0.67	1.28	1.70	2.33	98.52	0.00	0.00	0.00	0.03	0.01	99.15	100.00	100.00	96.00	98.00	100.00	100.00
BSNL	Tamil Nadu	0.69	1.54	99.04	0.19	0.59	1.97	2.86	97.38	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	95.01	100.00	100.00
BSNL	Uttar Pradesh (E)	1.95	1.98	97.06	0.93	1.40	1.82	2.22	95.89	0.00	NA	NA	0.09	0.08	98.90	100.00	100.00	97.00	95.81	100.00	100.00
BSNL	Uttar Pradesh (W)	1.73	1.80	97.06	0.75	1.03	1.79	2.01	96.64	0.00	NA	NA	0.00	0.00	100.00	100.00	100.00	100.00	97.35	100.00	100.00
BSNL	West Bengal	0.41	0.62	98.10	0.94	1.17	8.86	10.34	96.98	0.00	NA	NA	0.18	0.04	100.00	100.00	100.00	96.00	95.10	100.00	100.00
MTNL	Delhi	0.05	0.07	97.48	0.10	1.02	1.42	1.61	97.71	0.00	NA	NA	0.00	0.01	98.10	100.00	100.00	99.71	99.60	100.00	100.00
MTNL	Mumbai	0.73	1.16	97.51	0.45	0.53	1.80	2.84	98.16	0.00	NA	NA	0.02	0.01	100.00	100.00	100.00	100.00	99.69	100.00	100.00
RJio	Andhra Pradesh	0.07	0.08	99.65	0.00	0.00	0.30	0.39	99.92	0.00	0.01	0.16	0.00	0.00	100.00	100.00	100.00	97.21	99.94	100.00	100.00
RJio	Assam	0.48	1.75	99.58	0.00	0.00	0.50	0.60	99.88	0.00	0.01	0.25	0.00	0.00	100.00	100.00	100.00	97.55	99.91	100.00	100.00
RJio	Bihar	0.32	1.27	99.51	0.00	0.00	0.45	0.56	99.89	0.00	0.01	0.22	0.00	0.00	100.00	100.00	100.00	97.91	95.50	100.00	100.00
RJio	Delhi	0.11	0.37	99.62	0.00	0.00	0.19	0.28	99.91	0.00	0.01	0.18	0.00	0.00	100.00	100.00	100.00	97.51	99.99	100.00	100.00
RJio	Gujarat	0.26	1.09	99.61	0.01	0.00	0.32	0.45	99.92	0.00	0.01	0.15	0.00	0.00	100.00	100.00	100.00	98.41	99.99	100.00	100.00
RJio	Haryana	0.11	0.37	99.57	0.00	0.00	0.41	0.54	99.95	0.00	0.00	0.11	0.00	0.00	100.00	100.00	100.00	98.02	99.99	100.00	100.00
RJio	Himachal Pradesh	0.14	0.40	99.58	0.00	0.00	0.26	0.36	99.95	0.00	0.00	0.11	0.00	0.00	100.00	100.00	100.00	97.38	99.99	100.00	100.00
RJio	Jammu & Kashmir	0.12	0.54	99.61	0.00	0.00	0.46	0.58	99.94	0.00	0.00	0.12	0.00	0.00	100.00	100.00	100.00	95.86	99.87	100.00	100.00
RJio	Karnataka	0.16	0.33	99.62	0.00	0.00	0.31	0.45	99.92	0.00	0.01	0.15	0.00	0.00	100.00	100.00	100.00	97.56	99.81	100.00	100.00
RJio	Kerala	0.10	0.32	99.70	0.00	0.00	0.34	0.52	99.91	0.00	0.00	0.18	0.00	0.00	100.00	100.00	100.00	97.08	99.82	100.00	100.00
RJio	Kolkata	0.02	0.02	99.68	0.00	0.00	0.20	0.29	99.94	0.00	0.01	0.12	0.00	0.00	100.00	100.00	100.00	97.65	99.57	100.00	100.00

Annexure 4.1 (Contd.)

RJio	Madhya Pradesh	0.30	1.11	99.62	0.00	0.00	0.47	0.58	99.88	0.00	0.01	0.24	0.00	0.00	100.00	100.00	100.00	98.50	95.34	100.00	100.00
RJio	Maharashtra	0.38	1.53	99.61	0.01	0.00	0.37	0.48	99.89	0.00	0.01	0.23	0.00	0.00	100.00	100.00	100.00	98.33	99.77	100.00	100.00
RJio	Mumbai	0.20	0.63	99.58	0.02	0.00	0.19	0.28	99.90	0.00	0.01	0.20	0.00	0.00	100.00	100.00	100.00	97.56	99.81	100.00	100.00
RJio	North East	0.90	1.30	99.55	0.01	0.00	0.68	0.95	99.88	0.00	0.01	0.24	0.00	0.00	100.00	100.00	100.00	97.17	99.68	100.00	100.00
RJio	Odisha	0.16	0.25	99.59	0.01	0.00	0.34	0.43	99.91	0.00	0.01	0.18	0.00	0.00	100.00	100.00	100.00	97.73	99.61	100.00	100.00
RJio	Punjab	0.08	0.24	99.54	0.00	0.00	0.22	0.32	99.94	0.00	0.00	0.12	0.00	0.00	100.00	100.00	100.00	98.30	99.85	100.00	100.00
RJio	Rajasthan	0.20	0.88	99.54	0.00	0.00	0.50	0.54	99.95	0.00	0.00	0.11	0.00	0.00	100.00	100.00	100.00	98.04	98.03	100.00	100.00
RJio	Tamil Nadu	0.04	0.05	99.64	0.00	0.00	0.23	0.33	99.93	0.00	0.01	0.13	0.00	0.00	100.00	100.00	100.00	97.42	99.68	100.00	100.00
RJio	Uttar Pradesh (E)	0.38	1.49	99.46	0.00	0.00	0.51	0.62	99.87	0.00	0.01	0.26	0.00	0.00	100.00	100.00	100.00	97.83	95.50	100.00	100.00
RJio	Uttar Pradesh (W)	0.30	1.40	99.52	0.00	0.00	0.49	0.58	99.93	0.00	0.01	0.14	0.00	0.00	100.00	100.00	100.00	98.37	97.67	100.00	100.00
RJio	West Bengal	0.16	0.22	99.64	0.00	0.00	0.58	0.70	99.87	0.00	0.01	0.25	0.00	0.00	100.00	100.00	100.00	97.93	96.38	100.00	100.00
VIL-Brand Idea	Andra Pradesh	0.27	1.19	99.21	0.46	0.79	1.43	2.13	99.35	0.00	0.02	0.13	0.01	0.01	99.60	100.00	100.00	98.95	98.14	100.00	100.00
VIL-Brand Idea	Assam	0.13	1.12	98.32	0.62	1.63	1.97	2.78	98.41	0.00	0.26	0.26	0.01	0.00	100.00	100.00	100.00	95.89	100.00	100.00	100.00
VIL-Brand Idea	Bihar	1.63	0.02	98.79	0.35	1.04	1.61	2.38	99.64	0.00	0.01	0.02	0.00	0.00	100.00	100.00	100.00	96.66	99.94	100.00	100.00
VIL-Brand Idea	Delhi	0.32	1.50	99.23	0.07	0.36	1.95	2.35	98.68	0.00	NA	NA	0.07	0.01	99.62	100.00	100.00	98.64	98.73	100.00	100.00
VIL-Brand Idea	Gujarat	0.25	0.97	99.08	0.23	0.44	1.87	2.47	98.50	0.00	0.39	0.37	0.01	0.01	99.92	100.00	99.66	97.36	99.02	100.00	95.27
VIL-Brand Idea	Himachal Pradesh	0.18	0.47	98.85	0.22	0.79	1.75	2.70	98.02	0.00	0.35	0.35	0.08	0.00	100.00	100.00	100.00	98.70	98.56	100.00	100.00
VIL-Brand Idea	Haryana	0.54	0.12	99.40	0.52	0.50	1.83	2.78	99.12	0.00	0.11	0.20	0.07	0.00	100.00	100.00	100.00	98.67	98.71	100.00	100.00
VIL-Brand Idea	Jammu & Kashmir	8.66	11.22	98.85	7.73	0.80	1.96	4.23	99.36	0.00	0.28	0.40	0.01	0.00	100.00	100.00	100.00	97.58	98.57	100.00	100.00
VIL-Brand Idea	Kolkata	0.10	0.45	99.94	0.02	0.05	0.51	1.20	99.48	0.00	NA	NA	0.02	0.00	100.00	100.00	100.00	97.01	98.70	100.00	100.00
VIL-Brand Idea	Kerala	0.69	0.14	99.41	0.43	0.42	0.97	1.40	97.33	0.00	0.08	0.37	0.06	0.01	99.92	100.00	100.00	98.81	94.78	100.00	100.00
VIL-Brand Idea	Karnataka	0.27	1.67	99.89	0.54	0.09	0.95	1.28	97.46	0.00	0.16	0.43	0.04	0.00	100.00	100.00	100.00	97.40	98.62	100.00	100.00
VIL-Brand Idea	Maharashtra	0.38	1.62	98.91	0.49	0.61	1.96	2.92	98.37	0.00	0.46	0.48	0.04	0.01	99.91	100.00	100.00	99.30	99.78	100.00	100.00
VIL-Brand Idea	Madhya Pradesh	0.34	1.63	97.21	0.73	1.88	1.92	2.65	97.96	0.00	0.31	0.52	0.04	0.01	100.00	100.00	100.00	96.13	99.94	100.00	96.19
VIL-Brand Idea	Mumbai	0.09	0.17	99.33	0.35	0.23	1.59	2.36	95.83	0.00	0.13	0.47	0.00	0.00	100.00	100.00	100.00	97.03	98.30	100.00	100.00
VIL-Brand Idea	North East	0.17	0.60	98.09	0.55	1.72	1.89	2.33	97.95	0.00	0.31	0.31	0.00	0.00	100.00	100.00	100.00	97.38	100.00	100.00	100.00
VIL-Brand Idea	Odisha	0.29	0.84	99.16	0.34	0.82	1.89	2.78	98.45	0.00	0.21	0.41	0.03	0.01	100.00	100.00	100.00	97.00	99.86	100.00	100.00
VIL-Brand Idea	Punjab	0.11	0.67	99.66	0.20	0.04	1.25	1.92	99.40	0.00	0.11	0.41	0.06	0.01	100.00	100.00	100.00	99.84	96.63	100.00	100.00
VIL-Brand Idea	Rajasthan	0.73	1.66	99.09	0.29	0.67	1.32	1.82	99.58	0.00	0.18	0.51	0.07	0.01	100.00	100.00	100.00	98.32	99.52	100.00	100.00
VIL-Brand Idea	Tamil Nadu	0.10	0.29	99.95	0.06	0.05	0.81	1.43	99.26	0.00	0.10	0.15	0.01	0.00	100.00	100.00	100.00	98.23	99.35	100.00	100.00
VIL-Brand Idea	Uttar Pradesh (E)	0.48	1.60	99.25	0.88	0.70	1.86	2.94	98.72	0.00	0.06	0.21	0.02	0.01	100.00	100.00	100.00	99.62	99.19	100.00	100.00
VIL-Brand Idea	Uttar Pradesh (W)	0.35	1.50	97.06	0.95	2.76	1.72	2.92	96.99	0.00	0.13	0.33	0.05	0.00	100.00	100.00	100.00	99.45	97.95	100.00	100.00
VIL-Brand Idea	West Bengal	0.06	0.30	99.58	0.13	0.36	1.47	2.01	97.87	0.00	0.07	0.13	0.04	0.00	100.00	100.00	100.00	96.99	98.92	100.00	100.00

Annexure 4.1 (Contd.)

VIL-Brand Vodafone	Andra Pradesh	0.27	1.19	99.21	0.46	0.79	1.43	2.13	99.35	0.00	0.02	0.13	0.01	0.00	99.59	100.00	100.00	100.00	96.14	100.00	100.00
VIL-Brand Vodafone	Assam	0.13	1.12	98.32	0.62	1.63	1.97	2.78	98.41	0.00	0.26	0.26	0.01	0.09	100.00	100.00	100.00	100.00	100.00	100.00	100.00
VIL-Brand Vodafone	Bihar	1.63	0.02	98.79	0.35	1.04	1.61	2.38	99.64	0.00	0.01	0.02	0.00	0.01	100.00	100.00	100.00	100.00	99.49	100.00	100.00
VIL-Brand Vodafone	Delhi	0.13	0.25	99.49	0.20	0.35	1.74	2.31	99.39	0.00	0.63	0.32	0.09	0.02	100.00	100.00	100.00	100.00	92.56	100.00	100.00
VIL-Brand Vodafone	Gujarat	0.25	0.64	99.52	0.15	0.40	1.32	1.67	99.10	0.00	0.13	0.14	0.06	0.03	99.95	100.00	99.76	97.24	92.90	100.00	100.00
VIL-Brand Vodafone	Himachal Pradesh	0.18	0.47	98.85	0.22	0.79	1.75	2.70	98.02	0.00	0.35	0.35	0.02	0.01	100.00	100.00	100.00	100.00	97.76	100.00	100.00
VIL-Brand Vodafone	Haryana	0.54	0.12	99.40	0.52	0.50	1.83	2.78	99.12	0.00	0.11	0.20	0.04	0.01	100.00	100.00	100.00	100.00	90.51	100.00	100.00
VIL-Brand Vodafone	Jammu & Kashmir	8.66	11.22	98.85	7.73	0.80	1.96	4.23	99.36	0.00	0.28	0.40	0.03	0.00	100.00	100.00	100.00	100.00	95.15	100.00	100.00
VIL-Brand Vodafone	Kolkata	0.33	1.90	99.25	0.36	0.67	1.21	1.86	98.52	0.00	0.11	0.15	0.03	0.02	100.00	100.00	100.00	100.00	83.73	100.00	100.00
VIL-Brand Vodafone	Kerala	0.16	0.21	99.45	0.39	0.39	1.16	1.67	99.56	0.00	0.10	0.20	0.06	0.02	100.00	100.00	100.00	100.00	79.84	100.00	100.00
VIL-Brand Vodafone	Karnataka	0.42	0.56	99.65	0.66	0.15	0.97	1.39	99.74	0.00	0.29	0.43	0.07	0.01	99.73	100.00	100.00	100.00	89.60	100.00	100.00
VIL-Brand Vodafone	Maharashtra	0.28	0.45	99.10	0.65	0.79	1.93	2.86	98.91	0.00	0.15	0.28	0.08	0.02	100.00	100.00	100.00	100.00	96.21	100.00	100.00
VIL-Brand Vodafone	Madhya Pradesh	0.34	1.63	97.21	0.73	1.88	1.92	2.65	97.96	0.00	0.31	0.52	0.00	0.01	100.00	100.00	100.00	100.00	99.08	100.00	100.00
VIL-Brand Vodafone	Mumbai	0.23	1.04	98.81	0.52	0.92	1.90	2.86	98.64	0.00	0.47	0.25	0.10	0.03	100.00	100.00	100.00	100.00	92.75	100.00	100.00
VIL-Brand Vodafone	North East	0.17	0.60	98.09	0.55	1.72	1.89	2.33	97.95	0.00	0.31	0.31	0.00	0.02	100.00	100.00	100.00	100.00	100.00	100.00	100.00
VIL-Brand Vodafone	Orissa	0.29	0.84	99.16	0.34	0.82	1.89	2.78	98.45	0.00	0.21	0.41	0.03	0.04	100.00	100.00	100.00	98.71	97.60	100.00	100.00
VIL-Brand Vodafone	Punjab	0.11	0.67	99.66	0.20	0.04	1.25	1.92	99.40	0.00	0.11	0.41	0.02	0.01	100.00	100.00	100.00	100.00	92.81	100.00	100.00
VIL-Brand Vodafone	Rajasthan	0.20	1.06	98.41	0.35	1.56	1.88	2.84	97.33	0.00	0.24	0.25	0.03	0.06	100.00	100.00	100.00	100.00	93.73	100.00	100.00
VIL-Brand Vodafone	Tamil Nadu	0.16	0.57	98.98	0.71	0.94	1.20	1.74	98.89	0.00	0.09	0.13	0.08	0.02	100.00	100.00	100.00	100.00	98.40	100.00	100.00
VIL-Brand Vodafone	Uttar Pradesh (E)	1.09	0.47	95.94	0.98	1.95	1.96	2.94	98.21	0.00	0.13	0.19	0.06	0.01	100.00	100.00	100.00	100.00	89.84	96.94	100.00
VIL-Brand Vodafone	Uttar Pradesh (W)	0.41	1.91	97.65	0.96	1.95	1.97	2.74	96.58	0.00	0.47	0.36	0.05	0.02	100.00	100.00	100.00	100.00	93.30	100.00	100.00
VIL-Brand Vodafone	West Bengal	0.06	0.30	99.58	0.13	0.36	1.47	2.01	97.87	0.00	0.07	0.13	0.04	0.02	100.00	100.00	100.00	100.00	94.11	100.00	100.00

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 September, 2019																			
Sl. No.	Name of Service Area	Name of Service Provider	Faults incidences (No. of faults/ 100 Subs./ month)	Fault Repair				Rent Rebate	Mean Time to Repair (MTTR)	POI		Metering and Billing				Response time to the customer for Assistance		Termination / Closure of service	
				% of faults repaired by next working day	% of faults repaired within 5 days	% of faults repaired by next working day	% of faults repaired within 7 days			Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark	Metering and Billing - credibility - post paid	Metering and billing credibility - pre paid	Resolution of billing/ 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%	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	85.00%	100.00%	85.00%	100%	70	7.00	0.00	0.00%	0.00	98.00%	100.00%	100.00%	98.44%	99.00%	100.00%	100.00%
2	AP	Bharti	1.87	87.46%	100.00%	NA	NA	1798	5.62	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	90.00%	100.00%	100.00%
3		BSNL	5.00	99.00%	100.00%	96.50%	100%	186	6.00	0.00	2.00%	0.00	100.00%	100.00%	100.00%	97.47%	96.72%	100.00%	100.00%
4		RJIL	0.00	100.00%	100.00%	100.00%	100%	0	6.50	0.00	0.00%	0.00	NA	NA	NA	100.00%	100.00%	NA	NA
5		TTSL	0.18	96.00%	100.00%	NA	NA	13	5.18	0.00	0.00%	NA	100.00%	100.00%	100.00%	95.00%	100.00%	100.00%	100.00%
6		VIL	0.15	100.00%	100.00%	NA	NA	NA	3.27	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
7	Assam	BSNL	4.00	93.00%	100.00%	79.00%	100%	421	5.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	99.07%	99.67%	100.00%	100.00%
8		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA
9		VIL	1.55	100.00%	100.00%	NA	NA	NA	6.38	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
10	Bihar	BSNL	4.00	91.00%	100.00%	88.00%	100%	0	5.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	98.98%	99.67%	100.00%	100.00%
11		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA
12		TTSL	0.03	97.00%	100.00%	NA	NA	0	2.88	0.00	0.00%	NA	100.00%	100.00%	100.00%	96.00%	97.18%	NA	NA
13	VIL	3.21	100.00%	100.00%	NA	NA	NA	8.90	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA	
14	Chattisgarh	BSNL	3.00	98.00%	100.00%	97.00%	100%	455	6.00	0.00	0.01%	0.01	99.00%	100.00%	100.00%	97.66%	97.31%	100.00%	100.00%
15	Chennai	BSNL	4.00	91.00%	100.00%	91.00%	100%	368	7.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	98.24%	98.20%	100.00%	100.00%
16	Delhi	Bharti	2.37	92.29%	100.00%	NA	NA	1949	5.30	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	89.00%	100.00%	100.00%
17		MTNL	3.93	85.03%	99.26%	NA	NA	8061	5.13	0.00	0.01%	0.00%	99.81%	100.00%	100.00%	95.00%	95.00%	100.00%	100.00%
18		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	99.91%	NA	NA
19		TTSL	0.07	97.00%	100.00%	NA	NA	NA	3.71	0.00	NA	NA	NA	NA	NA	95.00%	97.24%	100.00%	100.00%
20		VIL	0.55	100.00%	100.00%	NA	NA	NA	3.11	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
21	Gujarat	Bharti	0.70	87.85%	100.00%	NA	NA	411	7.31	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	87.00%	100.00%	100.00%
22		BSNL	5.00	95.00%	100.00%	94.00%	100%	146	4.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	97.33%	97.26%	100.00%	100.00%
23		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	98.87%	NA	NA
24		TTSL	0.07	83.00%	100.00%	NA	NA	26	11.17	0.00	NA	NA	NA	NA	NA	96.00%	99.45%	100.00%	NA
25		VIL	0.22	100.00%	100.00%	NA	NA	NA	2.21	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
26	HP	BSNL	5.00	90.00%	100.00%	91.00%	100%	283	6.00	0.00	0.04%	0.00	98.13%	100.00%	100.00%	95.65%	100.00%	100.00%	100.00%
27		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA
28		VIL	0.56	100.00%	100.00%	NA	NA	NA	0.00	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA

Annexure 4.2 (Contd.)

29	HR	Bharti	3.54	96.23%	100.00%	NA	NA	15	3.42	0.00	0.06%	NA	100.00%	100.00%	100.00%	100.00%	88.00%	100.00%	100.00%
30		BSNL	4.00	86.00%	100.00%	87.00%	100%	261	6.00	0.00	0.06%	0.00	100.00%	100.00%	100.00%	96.46%	100.00%	100.00%	100.00%
31		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA
32		TTSL	0.00	NA	NA	NA	NA	2	NA	0.00	NA	NA	NA	NA	NA	95.00%	100.00%	100.00%	NA
33		VIL	4.20	100.00%	100.00%	NA	NA	NA	6.40	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA
34	J&K	BSNL	5.00	96.00%	100.00%	96.00%	100%	2	7.00	0.00	0.01%	0.00	98.00%	100.00%	100.00%	95.85%	100.00%	100.00%	100.00%
35		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA
36	JHAR	BSNL	4.00	100.00%	100.00%	99.00%	100%	53	5.00	0.00	0.09%	0.00	98.00%	100.00%	100.00%	99.03%	99.67%	100.00%	100.00%
37	KERALA	Bharti	3.17	89.55%	100.00%	NA	NA	623	9.35	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	94.00%	100.00%	100.00%
38		BSNL	4.00	92.00%	100.00%	91.00%	100%	584	7.00	0.00	0.01%	0.00	100.00%	100.00%	100.00%	96.46%	95.58%	100.00%	100.00%
39		RJIL	0.01	100.00%	100.00%	100.00%	100%	0	0.50	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA
40		TTSL	0.00	79.00%	100.00%	NA	NA	NA	13.72	0.00	NA	NA	NA	NA	NA	100.00%	98.63%	NA	NA
41		VIL	0.78	100.00%	100.00%	NA	NA	NA	7.00	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
42	KOL	Bharti	2.26	93.98%	100.00%	NA	NA	805	8.99	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	86.00%	100.00%	100.00%
43		BSNL	7.00	90.00%	100.00%	NA	NA	392	8.00	0.00	0.00%	0.00	98.17%	100.00%	100.00%	98.93%	99.33%	100.00%	100.00%
44		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA
45		VIL	0.64	100.00%	100.00%	NA	NA	NA	4.19	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
46	KTK	Bharti	2.35	85.00%	100.00%	NA	NA	2641	6.13	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	94.00%	100.00%	100.00%
47		BSNL	4.00	94.00%	100.00%	96.00%	100%	3287	7.00	0.00	0.09%	0.00	98.00%	100.00%	100.00%	96.59%	96.51%	100.00%	100.00%
48		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	99.43%	NA	NA
49		TTSL	0.01	86%	100.00%	NA	NA	4	10.29	0.00	NA	NA	NA	NA	NA	95.00%	100.00%	100.00%	NA
50		VIL	0.47	100.00%	100.00%	NA	NA	NA	5.46	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
51	MH	Bharti	0.54	91.35%	100.00%	NA	NA	250	6.48	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	85.00%	100.00%	100.00%
52		BSNL	7.00	86.00%	100.00%	86.00%	100%	515	5.00	0.00	0.01%	0.00	100.00%	100.00%	100.00%	96.52%	96.51%	100.00%	100.00%
53		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA
54		TTSL	0.06	93.00%	100.00%	NA	NA	26	5.69	0.00	0.00%	NA	100.00%	100.00%	100.00%	95.00%	97.24%	76.00%	100.00%
55		VIL	0.44	100.00%	100.00%	NA	NA	NA	4.80	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
56	MP	Bharti	5.36	85.81%	100.00%	NA	NA	17.26	5.97	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	87.00%	100.00%	100.00%
57		BSNL	4.00	88.00%	100.00%	84.00%	100%	289	4.00	0.00	0.03%	0.00	100.00%	100.00%	100.00%	97.63%	96.88%	100.00%	100.00%
58		RJIL	0.00	NA	NA	NA	NA	0.000	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	99.89%	NA	NA
59		TTSL	0.35	100.00%	100.00%	NA	NA	NA	1.59	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
60		VIL	2.03	100.00%	100.00%	NA	NA	NA	2.59	NA	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
61	MUM	Bharti	0.41	87.68%	100.00%	NA	NA	1346	7.42	0.00	0.00%	NA	100.00%	100.00%	100.00%	100.00%	88.00%	100.00%	100.00%
62		MTNL	5.09	89.20%	99.60%	NA	NA	40420	7.79	0.13	0.05%	NA	99.45%	100.00%	100.00%	99.09%	99.02%	99.90%	100.00%
63		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	99.96%	NA	NA
64		TTSL	0.16	88.00%	100.00%	NA	NA	65	9.20	0.00	0.00%	NA	100.00%	100.00%	100.00%	95.00%	97.18%	99.00%	100.00%
65		VIL	0.71	100.00%	100.00%	NA	NA	NA	4.48	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA
66	NE	RJIL	0.00	NA	NA	NA	NA	0.00%	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA
67		VIL	0.00	100.00%	100.00%	NA	NA	NA	0.00	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA
68	NE-I	BSNL	6.00	93.00%	100.00%	83.00%	100%	8	7.00	0.00	0.02%	0.00	98.00%	100.00%	100.00%	98.82%	99.33%	100.00%	100.00%
69	NE-II	BSNL	2.00	94.00%	100.00%	99.00%	100%	129	4.00	0.00	0.01%	0.00	100.00%	100.00%	100.00%	98.63%	100.00%	100.00%	100.00%

Annexure 4.2 (Contd.)

70	ORISA	BSNL	6.00	94.00%	100.00%	90.00%	100%	240	4.00	0.00	0.08%	0.00	99.00%	100.00%	100.00%	98.77%	99.00%	100.00%	100.00%	
71		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA	
72		TTSL	0.03	100.00%	100.00%	NA	NA	NA	3.39	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
73		VIL	0.56	100.00%	100.00%	NA	NA	NA	2.56	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA	
74	PUNJAB	Bharti	3.20	86.80%	100.00%	NA	NA	504	5.74	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	86.00%	100.00%	100.00%	
75		BSNL	5.00	91.00%	100.00%	89.00%	100%	146	6.00	0.00	0.01%	0.00	98.00%	100.00%	100.00%	96.33%	100.00%	100.00%	100.00%	
76		Quadrant	4.70	91.33%	100.00%	100.00%	100%	0	6.48	0.00	0.00%	0.00%	100.00%	100.00%	100.00%	96.24%	95.50%	100.00%	100.00%	
77		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA	
78		TTSL	0.04	100.00%	100.00%	NA	NA	NA	3.10	0.00	NA	NA	NA	NA	NA	97.00%	100.00%	99.00%	NA	
79	VIL	0.79	100.00%	100.00%	NA	NA	NA	5.47	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA		
80	RAJASTHAN	Bharti	2.97	85.23%	100.00%	NA	NA	588	5.99	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	88.00%	100.00%	100.00%	
81		BSNL	6.00	95.00%	100.00%	95.00%	100%	267	6.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	96.30%	100.00%	100.00%	100.00%	
82		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA	
83		TTSL	0.13	100.00%	100.00%	NA	NA	NA	1.93	0.00	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA	
84	VIL	0.22	100.00%	100.00%	NA	NA	NA	4.18	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA		
85	TAMILNADU	Bharti	3.99	90.63%	100.00%	NA	NA	2371	9.32	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	85.00%	100.00%	100.00%	
86		BSNL	3.00	91.00%	100.00%	89.00%	100%	2090	8.00	0.00	0.09%	0.00	100.00%	100.00%	100.00%	97.91%	97.81%	100.00%	100.00%	
87		RJIL	0.00	100.00%	100.00%	100.00%	100%	0	8.00	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA	
88		TTSL	0.02	95.00%	100.00%	NA	NA	4	5.14	0.00	NA	NA	NA	NA	NA	96.00%	99.62%	100.00%	NA	
89	VIL	0.70	100.00%	100.00%	NA	NA	NA	2.45	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA		
90	UPE	Bharti	3.85	85.07%	100.00%	NA	NA	255	5.93	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	90.00%	100.00%	100.00%	
91		BSNL	3.00	88.00%	100.00%	88.00%	100%	112	6.00	0.00	0.10%	0.00	98.00%	100.00%	100.00%	95.71%	100.00%	100.00%	100.00%	
92		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA	
93		TTSL	0.06	100.00%	100.00%	NA	NA	NA	1.58	0.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
94	VIL	0.49	100.00%	100.00%	NA	NA	NA	6.20	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA		
95	UPW	Bharti	4.81	87.98%	100.00%	NA	NA	80	5.4	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	87.00%	100.00%	100.00%	
96		BSNL	6.00	94.00%	100.00%	95.00%	100%	414	5.00	0.00	0.05%	0.00	98.00%	100.00%	100.00%	96.07%	100.00%	100.00%	100.00%	
97		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	100.00%	NA	NA	
98		TTSL	0.03	100.00%	100.00%	NA	NA	NA	1.85	0.00	NA	NA	NA	NA	NA	96.00%	NA	NA	NA	
99	VIL	1.09	100.00%	100.00%	NA	NA	NA	8.42	NA	NA	NA	NA	NA	NA	99.00%	100.00%	100.00%	NA		
100	Uttaranchal	BSNL	5.00	98.00%	100.00%	93.00%	100%	112	5.00	0.00	0.00%	0.00	98.00%	100.00%	100.00%	96.19%	100.00%	100.00%	100.00%	
101	WB	BSNL	5.00	92.00%	100.00%	92.00%	100%	1366	4.00	0.00	0.05%	0.00	100.00%	100.00%	100.00%	98.97%	99.00%	100.00%	100.00%	
102		RJIL	0.00	NA	NA	NA	NA	0	NA	0.00	0.00	0.00	NA	NA	NA	100.00%	99.41%	NA	NA	
103		TTSL	0.05	98.00%	100.00%	NA	NA	NA	2.86	0.00	NA	NA	NA	NA	NA	98.00%	99.62%	100.00%	NA	
104		VIL	1.94	100.00%	100.00%	NA	NA	NA	0.58	NA	NA	NA	NA	NA	NA	99.00%	100.00%	NA	NA	

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

Performance Monitoring Report on Quality of Service of Service Providers providing broadband (wireline) service for Quarter Ending September 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 bandwidth utilization during peak hours (TCBH) (Enclose MRTG) <90%	Broadband Connection Speed available (download) from ISP node to user		Packet loss (for wired broadband access) in %age	User reference point at POP/ISP Gateway node to International gateway (IGSP/NIXI)	User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)
			100%	>90%	=>99%	in nos.	<2%	100% within 4 weeks	100% within 60 days	>60%	>80%	0	0	<90%	>80%		>98%	<1%	<120 ms	<350 ms
1	Bharat Sanchar Nigam Ltd.(BSNL)	All India (except Delhi &	100.00%	93.87%	99.64%	30271	0.06%	100.00%	100.00%	97.05%	97.91%	NA	0	68.50%	91.84%	99.65%	0.60%	18	142	NA
2	Mahanagar Telephone Nigam Ltd.	Delhi & Mumbai	100.00%	90.27%	97.84%	12923	0.08%	100.00%	100.00%	98.41%	98.82%	Nil	0	84.67%	89.89%	99.82%	0.52%	46	297	NA
3	Airlink Communications Pvt. Ltd.	All India	100.00%	90.60%	99.39%	0	NA	100.00%	NA	73.61%	100.00%	0	0	86.37%	98.33%	99.86%	0.50%	120	350	NA
4	Airnet Cable and Datacom Pvt.Ltd.	Maharashtra	100.00%	90.07%	100.00%	0	0	0.00%	0.00%	100.00%	100.00%	0	0	9.17%	100.00%	100.00%	0.12%	3	251	NA
		Mumbai	100.00%	92.23%	99.68%	0	0	100.00%	0.00%	100.00%	100.00%	0	0	80.32%	100.00%	100.00%	0.52%	3	251	NA
5	Alliance Broadband Services Pvt.	All India	100.00%	93.23%	100.00%	Nil	0.00%	100.00%	Nil	86.33%	100.00%	0	0	76.28%	99.05%	99.59%	0.14%	67	208	200
6	ANI network Pvt. Ltd.	Delhi	100.00%	98.00%	100.00%	0	0.00%	0.00%	0.00%	93.30%	99.00%	0	0	83.60%	100.00%	99.90%	0.40%	20	288	NA
7	Asianet Satellite Communications	All India	100.00%	90.41%	99.40%	Nil	1.84%	100.00%	100.00%	60.31%	80.51%	Nil	0	68.65%	90.00%	99.50%	1.00%	50	270	NA
8	Atria Convergence Technologies	All India	100.00%	85.10%	96.42%	66867	1.22%	100.00%	Nil	33.00%	37.00%	0	0	41.07%	90.00%	99.93%	1.00%	26	180	NA
9	Bharti Airtel Ltd.	Andhra Pradesh	100.00%	90.71%	99.00%	1677	0.12%	100.00%	100.00%	89.00%	92.00%	0	0	52.00%	100.00%	99.93%	0	38	20	NA
		Delhi	100.00%	92.50%	99.10%	1886	0.04%	100.00%	100.00%	86.00%	90.00%	0	0	55.00%	100.00%	99.98%	0	40	72	NA
		Gujarat	100.00%	95.15%	99.48%	585	0.04%	100.00%	100.00%	80.00%	87.00%	0	NA	NA	100.00%	99.95%	0	20	NA	NA
		Haryana	100.00%	94.18%	99.39%	14	0.03%	100.00%	100.00%	79.00%	86.00%	0	NA	NA	100.00%	99.98%	0	59	NA	NA
		Karnataka	100.00%	90.10%	100.00%	2443	0.13%	100.00%	100.00%	93.00%	95.00%	0	0	52.00%	100.00%	99.87%	0	29	40	NA
		Kerala	100.00%	91.62%	99.83%	562	0.08%	100.00%	100.00%	91.00%	93.00%	0	NA	NA	100.00%	99.97%	0	23	NA	NA
		Koikata	100.00%	93.00%	100.00%	755	0.03%	100.00%	100.00%	84.00%	88.00%	0	0	48.00%	100.00%	99.99%	0	30	70	NA
		Madhya Pradesh	100.00%	90.47%	99.11%	1341	0.03%	100.00%	100.00%	80.00%	86.00%	0	0	51.00%	100.00%	99.93%	0	52	63	NA
		Maharashtra	100.00%	95.72%	99.47%	233	0.10%	100.00%	100.00%	78.00%	85.00%	0	NA	NA	100.00%	99.91%	0	17	NA	NA
		Mumbai	100.00%	94.72%	99.22%	1016	0.02%	100.00%	100.00%	81.00%	87.00%	0	0	61.00%	100.00%	99.94%	0	34	53	NA
		Punjab	100.00%	90.42%	99.08%	442	0.01%	100.00%	100.00%	85.00%	91.00%	0	0	55.00%	100.00%	99.98%	0	64	81	NA
		Rajasthan	100.00%	90.25%	99.88%	453	0.03%	100.00%	100.00%	81.00%	87.00%	0	NA	NA	100.00%	99.98%	0	37	NA	NA
		Tamilnadu	100.00%	90.24%	99.93%	2203	0.06%	100.00%	100.00%	85.00%	89.00%	0	0	36.00%	100.00%	99.91%	0	6	35	NA
Uttar Pradesh - East	100.00%	90.05%	99.44%	247	0.02%	100.00%	100.00%	79.00%	85.00%	0	0	36.00%	100.00%	99.98%	0	51	86	NA		
Uttar Pradesh - West	100.00%	90.76%	99.19%	120	0.03%	100.00%	100.00%	81.00%	87.00%	0	NA	NA	100.00%	99.97%	0	35	NA	NA		

Annexure 4.3 (Contd.)

10	City Online Services Ltd.	AP	90.00%	98.00%	99.00%	NA	0.00%	100.00%	100.00%	95.00%	97.60%	0%	0%	69.00%	98.00%	98.00%	0.50%	25	280	NA
		Karnataka	90.00%	98.00%	99.00%	NA	0.00%	100.00%	100.00%	95.00%	97.60%	0%	0%	69.00%	98.00%	98.00%	0.50%	25	280	NA
11	DEN Broadband Pvt. Ltd.	All India	100.00%	96.30%	99.20%	0	Nil	Nil	Nil	82.00%	86.00%	0	0	78.42%	100.00%	98.91%	0.00%	NA	244	NA
12	Digital Network Associates Pvt. Ltd	Maharashtra & Goa	100.00%	90.40%	99.18%	None	0.09%	100.00%	Nil	61.57%	80.95%	Nil	0	80.00%	80.00%	99.59%	1.00%	4	255	600
		Mumbai	100.00%	97.79%	99.68%	None	0.00%	100.00%	Nil	68.27%	84.38%	Nil	0	80.00%	80.00%	99.59%	1.00%	4	255	600
13	DNA Infotel Pvt. Ltd.	Maharashtra	100.00%	90.43%	99.19%	None	0.04%	100.00%	Nil	60.58%	82.00%	Nil	0	80.00%	80.00%	99.59%	1.00%	4	255	600
14	D-Vois Communications Pvt.Ltd.	All India	100.00%	93.50%	99.00%	0	1.40%	Nil	Nil	79.00%	87.25%	0	Nil	Nil	90.00%	100.00%	0.10%	28	30	62
15	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
16	Five Networks Solution (India) Ltd.	All India	100.00%	99.50%	100.00%	NA	0.00%	100.00%	100.00%	NA	NA	NA	0	NA	90.00%	99.00%	1.00%	NA	NA	NA
17	Fusionnet Web Services Pvt. Ltd.	All India	100.00%	92.20%	99.70%	31	0.00%	100.00%	100.00%	81.40%	86.50%	0	0	74.00%	100.00%	100.00%	1.00%	120	350	NA
18	Geocity Network Solutions Pvt.Ltd.	Delhi	100.00%	93.33%	99.60%	0	0.00%	100.00%	100.00%	66.67%	86.67%	0	0	89.80%	86.00%	99.90%	0.40%	30	100	400
19	GTPL Broadband Pvt.Ltd.	All India	100.00%	96.00%	99.00%	1003	0.13%	100.00%	NA	95.00%	99.00%	NA	0	60.04%	91.00%	99.78%	0.00%	11	300	NA
20	Hathway Cable & Datacom Ltd.	All India	100.00%	92.53%	99.12%	3669	0.13%	100.00%	100.00%	68.31%	90.82%	0	0	74.63%	90.00%	99.72%	0.28%	76	263	NA
21	Honesty Net Solutions (I) Pvt. Ltd.	Mumbai	100.00%	93.00%	100.00%	0	Nil	100.00%	0.00%	68.00%	100.00%	0	NA	NA	95.00%	100.00%	1.00%	NA	66	NA
22	IKF Technologies Ltd	All India	100.00%	92.30%	99.20%	0	0.00%	100.00%	100.00%	63.60%	84.70%	0	0	86.00%	87.00%	98.50%	0.62%	92	306	NA
23	Indinet Service Pvt Ltd	All India	100.00%	91.67%	100.00%	0	0.00%	100.00%	100.00%	78.00%	86.00%	0	0	82.00%	90.00%	99.64%	1.00%	45	246	0
24	Intech Online Pvt.Ltd.	Maharashtra	100.00%	91.23%	99.69%	25	0.92%	100.00%	0.00%	74.54%	93.49%	0	0	31.27%	82.33%	98.93%	1.00%	15	90	455
		Mumbai	100.00%	90.81%	99.56%	29	1.77%	100.00%	0.00%	82.21%	90.60%	0	0	30.23%	82.33%	99.63%	1.00%	1	75	455
25	Ishan Netsol Pvt Ltd	Gujarat	100.00%	92.06%	100.00%	0	0.00%	100.00%	100.00%	67.38%	82.70%	0	0	54.00%	91.00%	98.68%	1.00%	100	250	NA
26	Joister Inforserve Pvt. Ltd. (Formerly Syscon Infoway Pvt. Ltd.)	Mumbai	100.00%	93.00%	100.00%	Nil	0.00%	100.00%	0.00%	92.00%	91.00%	0	0	74.00%	99.00%	100.00%	0.00%	1	47	265
		Maharashtra	100.00%	96.00%	100.00%	Nil	0.00%	100.00%	NA	76.00%	85.00%	0	0	78.00%	99.00%	100.00%	1.00%	1	225	265
27	K NET SOLUTIONS PVT. LTD.	Chennai	100.00%	90.52%	99.30%	129	NA	100.00%	100.00%	93.43%	94.07%	0	0	NA	100.00%	99.99%	0.00%	11	214	NA
		Tamilnadu	100.00%	96.04%	99.67%	3	NA	100.00%	100.00%	93.43%	94.07%	0	0	NA	100.00%	99.96%	0.01%	21	225	NA
28	Limras Eronet Broadband Service	All India	100.00%	99.00%	100.00%	0	1.00%	100.00%	0.00%	90.00%	100.00%	0	0	0.00%	95.00%	99.00%	1.00%	32	260	0
29	Meghbela Cable & Broadband	All India	100.00%	95.00%	100.00%	0	0.00%	100.00%	100.00%	95.00%	100.00%	Nil	Nil	74.00%	95.00%	99.90%	0.00%	60	150	0
30	Microscan Computers Pvt. Ltd.	Mumbai	99.00%	90.00%	99.75%	0	0.00%	0.00%	0.00%	100.00%	100.00%	0	0	23.36%	100.00%	100.00%	0.52%	3	251	NA
31	Netplus Broadband Services Pvt. Ltd.	Delhi	100.00%	92.86%	100.00%	0	0.00%	100.00%	100.00%	81.00%	89.00%	0	0	34.21%	95.37%	100.00%	0.10%	85	129	NA
		Haryana	100.00%	93.62%	100.00%	0	0.35%	100.00%	100.00%	81.00%	89.00%	0	0	79.00%	95.53%	100.00%	0.10%	84	139	NA
		Himachal Pradesh	100.00%	92.00%	100.00%	0	0.17%	100.00%	100.00%	81.00%	89.00%	0	0	71.00%	96.29%	100.00%	0.10%	87	94	NA
		Jammu & Kashmir	100.00%	100.00%	100.00%	0	0.00%	100.00%	100.00%	78.00%	85.00%	0	0	0.80%	95.30%	100.00%	0.10%	94	140	NA
		Punjab	100.00%	92.94%	100.00%	0	1.61%	100.00%	100.00%	81.00%	89.00%	0	0	54.00%	95.29%	100.00%	0.10%	53	87	NA
		Rajasthan	100.00%	100.00%	100.00%	0	0.00%	100.00%	100.00%	81.00%	89.00%	0	0	66.00%	95.35%	100.00%	0.10%	84	140	NA
		UP-West	100.00%	100.00%	100.00%	0	0.13%	100.00%	100.00%	81.00%	89.00%	0	0	71.07%	95.00%	100.00%	0.10%	88	135	NA
32	Nextra Teleservices Pvt. Ltd.	Delhi	100.00%	91.67%	99.23%	2210	1.00%	100.00%	100.00%	72.00%	87.00%	0	0	85.00%	100.00%	100.00%	1.00%	120	350	NA
33	Ortel Communications Ltd.	All India	100.00%	95.18%	99.43%	NA	NA	NA	NA	100.00%	100.00%	0	0	36.66%	93.00%	99.18%	0.00%	81	233	NA
34	ONEOTT Intertainment Limited (formerly Planet E-shop Holdings India Ltd.)	All India	100.00%	97.00%	99.00%	82	0.00%	100.00%	100.00%	100.00%	100.00%	0	0	84.67%	80.00%	99.00%	0.50%	44	131	NA

Annexure 4.3 (Contd.)

35	Quadrant Televentures Ltd.	Punjab	100.00%	93.00%	100.00%	0	0.00%	100.00%	100.00%	72.00%	81.00%	0	0	76.80%	100.00%	99.97%	0.00%	80	280	NA	
36	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	
37	RailTel Corporation of India Ltd.	All India (Pan India)	100.00%	97.60%	100.00%	Nil	0.00%	Nil	Nil	87.33%	93.00%	0	0	51.97%	100.00%	99.95%	1.00%	120	350	NA	
38	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	
39	Reliance Jio Infocomm Ltd.	Andhra Pradesh	100.00%	93.40%	99.20%	Nil	Nil	Nil	Nil	99.90%	100.00%	Nil	NA	NA	100.00%	99.99%	NA	NA	NA	NA	
		Assam	100.00%	90.30%	99.60%	Nil	Nil	Nil	Nil	100.00%	100.00%	NA	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA
		Bihar	100.00%	94.70%	99.10%	Nil	Nil	Nil	Nil	99.90%	100.00%	NA	NA	NA	NA	100.00%	99.95%	NA	NA	NA	NA
		Delhi	100.00%	94.70%	99.50%	Nil	Nil	Nil	Nil	99.90%	100.00%	Nil	Nil	55.43%	100.00%	99.95%	NA	1	NA	NA	NA
		Gujarat	100.00%	90.90%	99.10%	Nil	Nil	Nil	Nil	98.80%	99.40%	Nil	NA	NA	100.00%	99.98%	NA	NA	NA	NA	NA
		Haryana	100.00%	99.40%	99.40%	Nil	Nil	Nil	Nil	100.00%	100.00%	NA	NA	NA	100.00%	99.94%	NA	NA	NA	NA	NA
		Himachal Pradesh	100.00%	Nil	Nil	Nil	Nil	Nil	Nil	100.00%	100.00%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA	NA
		Jammu & Kashmir	100.00%	92.00%	99.30%	Nil	Nil	Nil	Nil	100.00%	100.00%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA	NA
		Karnataka	100.00%	96.60%	99.50%	Nil	Nil	Nil	Nil	99.80%	100.00%	Nil	Nil	37.51%	100.00%	99.81%	NA	NA	NA	NA	NA
		Kerala	100.00%	97.20%	100.00%	Nil	Nil	Nil	Nil	100.00%	100.00%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA	NA
		Kolkata	100.00%	93.30%	99.10%	Nil	Nil	Nil	Nil	99.50%	99.80%	Nil	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA
		Madhya Pradesh	100.00%	97.00%	99.60%	Nil	Nil	Nil	Nil	99.70%	99.90%	NA	NA	NA	100.00%	99.99%	NA	NA	NA	NA	NA
		Maharashtra	100.00%	92.10%	99.40%	Nil	Nil	Nil	Nil	99.70%	99.80%	Nil	NA	NA	NA	100.00%	99.97%	NA	NA	NA	NA
		Mumbai	100.00%	91.90%	99.00%	Nil	Nil	Nil	Nil	99.70%	99.90%	Nil	Nil	46.52%	100.00%	99.89%	0	2	102	NA	NA
		North East	100.00%	94.10%	100.00%	Nil	Nil	Nil	Nil	100.00%	100.00%	NA	NA	NA	100.00%	99.81%	NA	NA	NA	NA	NA
		Orissa	100.00%	100.00%	100.00%	Nil	Nil	Nil	Nil	99.70%	100.00%	NA	NA	NA	100.00%	99.99%	NA	NA	NA	NA	NA
		Punjab	100.00%	92.60%	99.10%	Nil	Nil	Nil	Nil	99.80%	100.00%	NA	NA	NA	100.00%	99.95%	NA	NA	NA	NA	NA
Rajasthan	100.00%	90.25%	99.88%	Nil	Nil	Nil	Nil	81.00%	87.00%	NA	NA	NA	100.00%	99.98%	NA	NA	NA	NA	NA		
Tamilnadu	100.00%	91.40%	99.10%	Nil	Nil	Nil	Nil	99.90%	100.00%	Nil	Nil	NA	100.00%	99.97%	0	2	29	NA	NA		
Uttar Pradesh - East	100.00%	91.10%	99.40%	Nil	Nil	Nil	Nil	99.90%	99.90%	Nil	NA	NA	100.00%	100.00%	NA	NA	NA	NA	NA		
Uttar Pradesh - West	100.00%	93.20%	99.10%	Nil	Nil	Nil	Nil	99.70%	99.90%	NA	NA	NA	100.00%	99.94%	NA	NA	NA	NA	NA		
West Bengal	100.00%	92.50%	99.00%	Nil	Nil	Nil	Nil	99.50%	99.60%	NA	NA	NA	100.00%	100.00%	NA	NA	NA	NA	NA		
40	Sifi Online Pvt. Ltd.	Delhi	100.00%	100.00%	100.00%	NA	0.00%	100.00%	100.00%	70.00%	90.00%	NA	NA	85.00%	90.00%	99.00%	0.00%	1	209	NA	
41	Sikka Broadband(P) Ltd.	UP (East)	100.00%	90.33%	99.35%	0	0.00%	0.00%	0.00%	88.00%	98.70%	0%	0%	90.00%	85.00%	99.50%	1.00%	10	290	400	
42	Siti Broadband Services Pvt.Ltd.	All India (Pan India)	100.00%	93.25%	99.22%	24	Nil	Nil	100.00%	97.53%	98.32%	0	0	66.20%	94.00%	99.25%	0.00%	71	260	NA	
43	(formerly Citycom Networks Pvt.	All India	100.00%	96.03%	99.10%	3268	1.07%	100.00%	100.00%	93.50%	95.30%	0	0	20.30%	85.80%	99.30%	0.00%	5	146	NA	
44	Tata Communications Ltd. (Ceased broadband services, hence NIL report)	All India	NA	Nil	Nil	0	0.00%	0.00%	0.00	Nil	Nil	0	0	0.00%	0.00%	Nil	0.00%	0	0	0	
45	Tata Sky Broadband Pvt. Ltd.	All India	100.00%	96.07%	99.08%	NA	NA	NA	NA	85.41%	87.99%	0	0	84.33%	100.00%	99.67%	0.00%	1	NA	NA	
46	Tata Tele.Ltd. (TTSL)	All India (except MH)	100.00%	87.79%	96.32%	0	0.02%	100.00%	100.00%	96.23%	97.31%	0	0	7.40%	93.42%	99.63%	0.00%	66	66.33	Nil	
47	Tata Tele.(Mah) Ltd. (TTML)	Maharashtra & Goa	100.00%	82.00%	94.00%	94	0.02%	100.00%	100.00%	95.28%	96.75%	0	0	19.20%	83.42%	99.68%	0.00%	76	213	Nil	
48	Vasai Cable Pvt. Ltd.	Mumbai	100.00%	93.93%	100.00%	None	0.29%	100.00%	Nil	75.55%	86.38%	Nil	0	63.00%	90.00%	100.00%	1.00%	4	255	NA	
49	Wan and Lan Internet Pvt. Ltd.	Mumbai	100.00%	100.00%	100.00%	0	0.00%	100.00%	0.00%	90.00%	90.00%	0	0	90.00%	90.00%	99.90%	0.00%	20	40	80	
50	Wish Net Pvt. Ltd.	Kolkata	100.00%	98.87%	100.00%	0	0.00%	100.00%	NA	81.03%	99.00%	0	0	45.00%	100.00%	99.96%	1.00%	20	NA	NA	
		West Bengal	100.00%	99.00%	100.00%	0	0.00%	100.00%	NA	88.06%	99.15%	0	0	45.00%	100.00%	99.94%	1.00%	20	NA	NA	
51	World Phone Internet Services Pvt	Gujarat	100.00%	91.33%	100.00%	0	0.00%	0.00%	0.00%	93.00%	100.00%	0	NA	NA	85.00%	99.83%	1.00%	25	NA	NA	
52	You Broadband India Pvt. Ltd.	All India	97.13%	80.91%	91.15%	4267	0.00%	0.00%	0.00%	68.20%	72.69%	0	0	75.24%	87.22%	99.12%	0.00%	8	272	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	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding 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 Communication s Private Limited	5	Vijay TV	GEC	Tamil	12.00	SD
		6	Vijay Super	GEC	Tamil	1.00	SD
		7	Vijay HD	GEC	Tamil	19.00	HD
		8	Asianet	GEC	Malayalam	12.00	SD
		9	Asianet Plus	GEC	Malayalam	5.00	SD
		10	Asianet Movies	Movies	Malayalam	12.00	SD
		11	Suvarna Plus	Movies	Kannada	1.00	SD
		12	Star Suvarna HD	GEC	Kannada	19.00	HD
		13	Asianet HD	GEC	Malayalam	19.00	HD
		14	Star Suvarna	GEC	Kannada	9.00	SD
3	Bangla Entertainment Private Limited	15	AATH	GEC	Bangla	4.00	SD
		16	SONY Marathi	GEC	Marathi	4.00	SD
4	BBC Global News India Pvt Ltd	17	BBC World News	News	English	1.00	SD
5	Bennett, Coleman & Company Limited	18	Zoom	GEC	Hindi	0.50	SD
		19	Romedy Now	Movies	English	6.00	SD
		20	MN +	Movies	English	10.00	HD
		21	Mirror Now	News	English/ Hindi	0.50	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

Annexure 5.1(Contd.)

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

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
		49	Hungama TV	Kids	English/ Hindi	1.00	SD
		50	The Disney Channel	Kids	English/ Hindi	8.00	SD
		51	UTV HD	Movies	Hindi	8.00	HD
		52	UTV Bindass	GEC	Hindi	0.10	SD
		53	UTV Action	Movies	Hindi	2.00	SD
10	Eenadu Televisoin Private Limited	54	ETV	GEC	Telugu	17.00	SD
		55	ETV Andhra Pradesh	News	Telugu	1.00	SD
		56	ETV-Telangana	News	Telugu	1.00	SD
		57	ETV Cinema	Movies	Telugu	6.00	SD
		58	ETV Life	GEC	Telugu	1.00	SD
		59	ETV Plus	GEC	Telugu	7.00	SD
		60	ETV Abhiruchi	GEC	Telugu	2.00	SD
		61	ETV HD	GEC	Telugu	19.00	HD
		62	ETV Plus HD	GEC	Telugu	9.00	HD
		63	ETV Cinema HD	Movies	Telugu	8.00	HD
		64	ETV Abhiruchi HD	GEC	Telugu	3.00	HD
		65	ETV Life HD	GEC	Telugu	2.00	HD
11	EPIC Television Networks Pvt Ltd	66	EPIC TV	Infotainment	English/ Hindi	2.00	SD
12	Fame Media Private Limited	67	4tv News	News	Urdu/ Hindi	1.00	SD
13	Greycells18 Media Limited	68	Topper TV	Miscellaneous	English	59.32	SD
14	IBN Lokmat News Private Ltd	69	News 18 Lokmat	News	Hindi	0.10	SD
15	Living Entertainment Enterprises Private Ltd	70	Living Foodz HD	Infotainment	Hindi	10.00	HD
		71	Living Travelz	Infotainment	Hindi	0.10	SD
16	Mavis Satcom Limited	72	J Movies	Movies	Tamil	2.25	SD
		73	Jaya Max	Music	Tamil	2.25	SD
		74	Jaya Plus	News	Tamil	0.50	SD
		75	Jaya TV HD	GEC	Tamil	6.00	HD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
17	MSM World Wide Factual Media Private Limited	76	SONY BBC EARTH	Infotainment	English/Hindi	4.00	SD
		77	SONY BBC EARTH HD	Infotainment	English/Hindi	10.00	HD
18	Media World Wide Limited	78	Travel XP	Miscellaneous	English	3.00	SD
19	Lifestyle & Media Broadcasting Ltd	79	Good Times	Miscellaneous	English	1.50	SD
20	New Delhi Television Limited	80	NDTV 24*7	News	English	3.00	SD
		81	NDTV India	News	Hindi	1.00	SD
		82	NDTV Profit	News	English	1.00	SD
21	NGC Network (India) Pvt Limited	83	Fox Life	Miscellaneous	English/Hindi	1.00	SD
		84	National Geographic Channel (NGC)	Infotainment	English/Hindi	1.00	SD
		85	Fox Life HD	Miscellaneous	English/Hindi	1.00	HD
		86	Nat Geo Wild	Infotainment	English/Hindi	0.10	SD
		87	National Geographic HD	Infotainment	English/Hindi	10.00	HD
		88	National Geographic Tamil	Infotainment	Tamil	1.00	SD
		89	Nat Geo Wild HD	Infotainment	English/Hindi	5.00	HD
		90	National Geographic Telugu	Infotainment	Telugu	1.00	SD
		91	Baby TV HD	Kids	English/Hindi	1.00	HD
22	NOIDA Software Technology Park Limited	92	NHK World Premium (HD Distribution)	Infotainment	Japanese	1800.00	HD
23	Odisha Television Limited	93	Prarthana	Devotional	Odia	2.00	SD
		94	Tarang	GEC	Odia	10.00	SD
		95	Tarang Music	Music	Odia	2.00	SD
		96	Alankar	Movies	Odia	4.00	SD
24	Raj Television Network Limited	97	Raj Digital Plus	Movies	Tamil	1.50	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
		98	Raj Musix	Music	Tamil	1.00	SD
		99	Raj News	News	Tamil	0.25	SD
		100	Raj TV	GEC	Tamil	3.00	SD
25	Sarthak Entertainment Pvt Limited	101	ZEE Sarthak	GEC	Odia	12.00	SD
26	Silverstar Communications Limited	102	Mega 24	GEC	Tamil	1.00	SD
		103	Mega Musiq	Music	Tamil	2.00	SD
		104	Mega TV	GEC	Tamil	3.00	SD
27	Sony Pictures Networks India Private Limited	105	Sony YAY!	Kids	English	2.00	SD
		106	AXN	GEC	English	5.00	SD
		107	SET MAX	Movies	Hindi	12.00	SD
		108	MIX	Music	Hindi	1.00	SD
		109	SAB	GEC	Hindi	12.00	SD
		110	SONY Entertainment Channel (SET)	GEC	Hindi	12.00	SD
		111	PIX	Movies	English	10.00	SD
		112	SIX	Sports	English/ Hindi	15.00	SD
		113	MAX 2	Movies	Hindi	1.00	SD
		114	PAL	GEC	Hindi	1.00	SD
		115	SET HD	GEC	Hindi	19.00	HD
		116	SIX HD	Sports	English/ Hindi	19.00	HD
		117	PIX HD	Movies	English	15.00	HD
		118	MAX HD	Movies	Hindi	17.00	HD
		119	SONY ESPN HD	Sports	English/ Hindi	7.00	HD
		120	Ten 2 HD	Sports	English/ Hindi	17.00	HD
		121	Ten 3 HD	Sports	English/ Hindi	17.00	HD
122	SONY ESPN	Sports	English/ Hindi	5.00	SD		
123	AXN HD	GEC	English	7.00	HD		
124	Ten 2	Sports	English/ Hindi	15.00	SD		

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
		125	Ten 1	Sports	English	19.00	SD
		126	Ten 3	Sports	English/ Hindi	17.00	SD
		127	Ten 1 HD	Sports	English	19.00	HD
		128	SONY Wah	Movies	Hindi	1.00	SD
		129	SAB HD	GEC	Hindi	19.00	HD
28	Star India Private Limited	130	Star Sports 3	Sports	English/ Hindi	1.00	SD
		131	Star Sports 1 Tamil	Sports	Tamil	17.00	SD
		132	Star Sports Select 2	Sports	English/ Hindi	7.00	SD
		133	Star Bharat	GEC	Hindi	10.00	SD
		134	Movies OK	Movies	Hindi	1.00	SD
		135	Star Sports 1 Hindi	Sports	Hindi	19.00	SD
		136	Star Gold	Movies	Hindi	8.00	SD
		137	Star Jalsha	GEC	Bangla	12.00	SD
		138	Star Movies	Movies	English	12.00	SD
		139	Star Gold Select	Movies	Hindi	7.00	SD
		140	Star Plus	GEC	Hindi	12.00	SD
		141	Star Pravah	GEC	Marathi	9.00	SD
		142	Star Sports 1	Sports	English/ Hindi	19.00	SD
		143	Star Sports 2	Sports	English/ Hindi	5.00	SD
		144	Star World	GEC	English	8.00	SD
		145	Jalsha Movies	Movies	Bangla	6.00	SD
		146	Star Sports HD 2	Sports	English/ Hindi	19.00	HD
		147	Star Sports HD 1	Sports	English/ Hindi	19.00	HD
		148	Star Bharat HD	GEC	Hindi	19.00	HD
		149	Star Gold HD	Movies	Hindi	10.00	HD
150	Star Movies HD	Movies	English	19.00	HD		
151	Star Plus HD	GEC	Hindi	19.00	HD		
152	Star World Prmiere HD	GEC	English	9.00	HD		

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
		153	Star Sports 1 HD Hindi	Sports	Hindi	19.00	HD
		154	Star Sports Select 1	Sports	English/Hindi	19.00	SD
		155	Star Movies Select HD	Movies	English	10.00	HD
		156	Star World HD	GEC	English	9.00	HD
		157	Star Sports First	Sports	English/Hindi	0.10	SD
		158	MAA Gold	Movies	Telugu	2.00	SD
		159	MAA Movies	Movies	Telugu	10.00	SD
		160	MAA Music	Music	Telugu	1.00	SD
		161	MAA TV	GEC	Telugu	12.00	SD
		162	Star PravahHD	GEC	Marathi	15.00	HD
		163	Star Jalsha HD	GEC	Bangla	19.00	HD
		164	Jalsha Movies HD	Movies	Bangla	19.00	HD
		165	Star Sports Select HD 1	Sports	English/Hindi	19.00	HD
		166	Star Sports Select HD 2	Sports	English/Hindi	10.00	HD
		167	MAA HD	GEC	Telugu	19.00	HD
		168	Star Gold Select HD	Movies	Hindi	8.00	HD
		169	MAA Movies HD	Movies	Telugu	19.00	HD
		170	Star Sport 1 Telugu	Sports	Telugu	19.00	SD
		171	Star Sport 1 Kannada	Sports	Kannada	19.00	SD
		172	Star Sports 1 Bangla	Sports	Bangla	19.00	SD
		173	Star Utsav	GEC	Hindi	1.00	SD
		174	Star Sports 1 Marathi	Sports	Marathi	8.00	SD
		175	Star Utsav Movies	Movies	Hindi	1.00	SD
29	SUN TV Network Limited	176	Adithya TV	GEC	Tamil	9.00	SD
		177	Chintu TV	Kids	Kannada	6.00	SD
		178	Chutti TV	Kids	Tamil	6.00	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
		179	Gemini Comedy	GEC	Telugu	5.00	SD
		180	Gemini Life	GEC	Telugu	5.00	SD
		181	Gemini Movies	GEC	Telugu	17.00	SD
		182	Gemini Music	Music	Telugu	4.00	SD
		183	Gemini News	News	Telugu	0.10	SD
		184	Gemini TV	GEC	Telugu	19.00	SD
		185	KTV	GEC	Tamil	19.00	SD
		186	Surya Movies	GEC	Malayalam	11.00	SD
		187	Kushi TV	Kids	Telugu	4.00	SD
		188	SUN Life	GEC	Tamil	9.00	SD
		189	Sun Music	Music	Tamil	6.00	SD
		190	Sun News	News	Tamil	1.00	SD
		191	Surya Music	Music	Malayalam	4.00	SD
		192	SUN TV	GEC	Tamil	19.00	SD
		193	Surya Comedy	GEC	Malayalam	4.00	SD
		194	Surya TV	GEC	Malayalam	12.00	SD
		195	Udaya Comedy	Movies	Kannada	6.00	SD
		196	Udaya Movies	GEC	Kannada	16.00	SD
		197	Udaya Music	Music	Kannada	6.00	SD
		198	Udaya News	News	Kannada	0.10	SD
		199	Udaya TV	GEC	Kannada	17.00	SD
		200	Kochu TV	Kids	Malayalam	5.00	SD
		201	Sun TV HD	GEC	Tamil	19.00	HD
		202	KTV HD	GEC	Tamil	19.00	HD
		203	Sun Music HD	Music	Tamil	19.00	HD
		204	Gemini TV HD	GEC	Telugu	19.00	HD
		205	Gemini Music HD	Music	Telugu	19.00	HD
		206	Gemini Movies HD	GEC	Telugu	19.00	HD
		207	Surya TV HD	GEC	Malayalam	19.00	HD
		208	Udaya TV HD	GEC	Kannada	19.00	HD
30	Suryansh Broadcasting Private Limited	209	Flowers	GEC	Malayalam	10.00	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
31	Turner International India Pvt Ltd	210	Cartoon Network	Kids	Hindi	4.25	SD
		211	CNN International	News	English	0.50	SD
		212	HBO	Movies	English	10.00	SD
		213	POGO	Kids	Hindi	4.25	SD
		214	Cartoon Network HD+	Kids	Hindi	5.00	HD
		215	WB	Movies	English	1.00	SD
		216	HBO HD	Movies	English	12.00	HD
32	TV 18 Broadcast Limited	217	CNN News 18	News	English	0.50	SD
		218	CNBC Bazaar	News	Gujarati	1.00	SD
		219	CNBC TV 18 Prime HD	News	English	1.00	HD
		220	CNBC Awaaz	News	Hindi	1.00	SD
		221	News 18 Tamil Nadu	News	Tamil	0.10	SD
		222	News 18 Kerala	News	Malayalam	0.10	SD
		223	News 18 Assam / North East	News	Assamese	0.10	SD
		224	News 18 India	News	Hindi	0.10	SD
		225	CNBC TV 18	News	English	4.00	SD
		226	News 18 Bihar Jharkhand	News	Hindi	0.10	SD
		227	News 18 Madhya Pradesh / Chattisgarh	News	Hindi	0.10	SD
		228	News 18 Rajasthan	News	Hindi	0.10	SD
		229	News 18 Uttar Pradesh/ Uttaranchal	News	Hindi	0.10	SD
		230	News 18 Urdu	News	Urdu	0.10	SD
		231	News 18 Kannada	News	Kannada	0.10	SD
		232	News 18 Bangla	News	Bangla	0.10	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
		233	News 18 Punjab / Haryana / Himanchal Pradesh	News	Punjabi	0.10	SD
		234	News 18 Gujarati	News	Gujarati	0.10	SD
		235	News 18 Odia	News	Odia	0.10	SD
33	TV Today Network Limited	236	Aaj Tak	News	Hindi	0.75	SD
		237	India Today	News	English	1.00	SD
		238	AAJ Tak HD	News	Hindi	1.50	HD
		239	Aaj Tak Tez	News	Hindi	0.25	SD
34	Viacom 18 Media Private Limited	240	Colors	GEC	Hindi	12.00	SD
		241	Comedy Central (HD)	GEC	English	9.00	HD
		242	MTV	Music	Hindi	3.00	SD
		243	NICK	Kids	Hindi	6.00	SD
		244	NICK JR	Kids	English	1.00	SD
		245	SONIC	Kids	Hindi	2.00	SD
		246	VH 1 (HD Distribution)	Music	English	2.00	HD
		247	Colors Infinity HD	GEC	English	9.00	HD
		248	Colors Infinity	GEC	English	5.00	SD
		249	Colors HD	GEC	Hindi	19.00	HD
		250	NICKS HD+	Kids	Hindi	10.00	HD
		251	Colors Cineplex	Movies	Hindi	3.00	SD
		252	MTV Beats	Music	Hindi	0.10	SD
		253	Colors Kannada HD	GEC	Kannada	19.00	HD
		254	Colors Marathi HD	GEC	Marathi	17.00	HD
		255	Colors Bangla HD	GEC	Bangla	14.00	HD
256	Colors Super	GEC	Kannada	3.00	SD		
257	Colors Bangla	GEC	Bangla	7.00	SD		
258	Colors Gujarati	GEC	Gujarati	5.00	SD		
259	Colors Kannada	GEC	Kannada	12.00	SD		

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
		260	Colors Marathi	GEC	Marathi	10.00	SD
		261	Colors Oriya	GEC	Oriya	6.00	SD
		262	MTV Beats HD	Music	Hindi	1.00	HD
		263	Colors Tamil	GEC	Tamil	3.00	SD
		264	Colors Cineplex HD	Movies	Hindi	5.00	HD
		265	VH 1	Music	English	1.00	SD
		266	Colors Tamil HD	GEC	Tamil	7.00	HD
		267	MTV HD+	Music	Hindi	5.00	HD
		268	Colors Rishtey	GEC	Hindi	1.00	SD
		269	Colors Kannada Cinema	Movies	Kannada	2.00	SD
		270	Colors Gujarati Cinema	Movies	Gujarati	1.00	SD
		271	Comedy Central	GEC	English	5.00	SD
		272	Colors Bangla Cinema	Movies	Bangla	1.00	SD
35	Zee Akaash News Pvt Ltd	273	Zee 24 Ghanta	News	Bangla	0.10	SD
36	Zee Entertainment Enterprises Limited	274	Zee Bollywood	Movies	Hindi	2.00	SD
		275	Zee Action	Movies	Hindi	1.00	SD
		276	Zee Bangla Cinema	Movies	Bangla	2.00	SD
		277	Zee Café HD	GEC	English	19.00	HD
		278	Zee Café	GEC	English	15.00	SD
		279	Zee Cinema	Movies	Hindi	15.00	SD
		280	Zee Talkies	Movies	Marathi	2.00	SD
		281	Zee TV	GEC	Hindi	12.00	SD
		282	Zing	Music	Hindi	0.10	SD
		283	& Picture	Movies	Hindi	6.00	SD
		284	Zee Bangla	GEC	Bangla	12.00	SD
		285	Zee Marathi	GEC	Marathi	12.00	SD
		286	Living Foodz	Infotainment	English/Hindi	1.00	SD
		287	Zee TV HD	GEC	Hindi	19.00	HD
		288	Zee Cinema HD	Movies	Hindi	19.00	HD
		289	& TV	GEC	Hindi	12.00	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
		290	& TV HD	GEC	Hindi	19.00	HD
		291	Zee Kannada	GEC	Kannada	12.00	SD
		292	Zee Telugu	GEC	Telugu	12.00	SD
		293	& Pictures HD	Movies	English/ Hindi	19.00	HD
		294	Zee Cinemalu	Movies	Telugu	10.00	SD
		295	Zee Yuva	GEC	Marathi	1.00	SD
		296	Zee Marathi HD	GEC	Marathi	19.00	HD
		297	& Prive HD	Movies	English	19.00	HD
		298	Zee Bangla HD	GEC	Bangla	19.00	HD
		299	Zee Tamil HD	GEC	Tamil	19.00	HD
		300	Zee Cinemalu HD	Movies	Telugu	16.00	HD
		301	Zee Telugu HD	GEC	Telugu	19.00	HD
		302	Zee Tamil	GEC	Tamil	10.00	SD
		303	Zee Kannada HD	GEC	Kannada	19.00	HD
		304	Zee Anmol Cinema	Movies	Hindi	0.10	SD
		305	& Flix HD	Movies	English	19.00	HD
		306	& Flix	Movies	English	15.00	SD
		307	Zee Keralam HD	GEC	Malayalam	8.00	HD
		308	Zee Keralam	GEC	Malayalam	0.10	SD
		309	Zee ETC	Music	Hindi	0.10	SD
		310	Zee Anmol	GEC	Hindi	0.10	SD
		311	Big Magic	GEC	Hindi	0.10	SD
		312	Big Ganga	GEC	Bhojpuri	0.50	SD
		313	Zee Classic	Movies	Hindi	0.50	SD
		314	&Xplore HD	Movies	Hindi	4.00	HD
		315	Zee Talkies HD	Movies	Marathi	19.00	HD
		316	Ganga Biskope	Movies	Bhojpuri	0.10	SD
37	Zee Media Corporation Limited	317	Zee 24 Taas	News	Marathi	0.10	SD
		318	Zee Odisha	News	Odia	0.10	SD
		319	Zee Business	News	Hindi	0.10	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No.	Name of the channel	Genre as per new Regulatory framework	Language	MRP as per New Regulatory Framework 2017(in Rs) (Excluding Taxes)	Declared as SD or HD
		320	Zee Punjab Haryana Himachal	News	Hindi	0.10	SD
		321	Zee Madhya Pradesh Chattisgarh	News	Hindi	0.10	SD
		322	Zee Salaam	News	Urdu	0.10	SD
		323	Zee 24 Kalak	News	Hindi	0.10	SD
		324	WION	News	Hindi	1.00	SD
		325	Zee Uttar Pradesh Uttrakhand	News	Hindi	0.10	SD
		326	Zee Hindustan	News	Hindi	0.10	SD
		327	Zee Bihar Jharkhand	News	Hindi	0.10	SD
		328	Zee News	News	Hindi	0.10	SD
		329	Zee Rajasthan News	News	Hindi	0.10	SD
38	Zoom Entertainment Network Limited	330	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, 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 September, 2019

Sl.No.	City	Category	Stations
1	Agartala	D	2
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
			367

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

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