



Telecom Regulatory Authority of India

The Indian Telecom Services Performance Indicators April - June, 2017

New Delhi, India
28th September, 2017

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Snapshot

(Data As on Q.E. 30th June, 2017)	
Telecom Subscribers (Wireless + Wireline)	
Total Subscribers	1,210.84 Million
% change over the previous quarter	1.36%
Urban Subscribers	700.96 Million
Rural Subscribers	509.88 Million
Market share of Private Operators	89.72%
Market share of PSU Operators	10.28%
Teledensity	93.98
Urban Teledensity	172.98
Rural Teledensity	57.73
Wireless Subscribers	
Total Wireless Subscribers	1,186.84 Million
% change over the previous quarter	1.42%
Urban Subscribers	680.66 Million
Rural Subscribers	506.18 Million
GSM Subscribers	1,176.31 Million
CDMA Subscribers	10.53 Million
Market share of Private Operators	90.92%
Market share of PSU Operators	9.08%
Teledensity	92.12
Urban Teledensity	167.97
Rural Teledensity	57.31
Total Wireless Data Usage during the quarter	4,206,415 TB
Wireline Subscribers	
Total Wireline Subscribers	24.00 Million
% change over the previous quarter	-1.65%
Urban Subscribers	20.31 Million
Rural Subscribers	3.69 Million
Market share of Private Operators	30.64%
Market share of PSU Operators	69.36%
Teledensity	1.86
Urban Teledensity	5.01
Rural Teledensity	0.42
No. of Village Public Telephones (VPT)	2,22,780
No. of Public Call Office (PCO)	4,29,139

Telecom Financial Data	
Gross Revenue (GR) during the quarter	₹ 64,889 Crore
% change in GR over the previous quarter	2.49%
Adjusted Gross Revenue (AGR) during the quarter	₹ 39,778 Crore
% change in AGR over the previous quarter	-2.58%
Share of Public sector undertakings in Access AGR	11.26%
Monthly Average Revenue Per User (ARPU) for Access Services	₹ 83.41
Internet/Broadband Subscribers	
Total Internet Subscribers	431.21 Million
% change over previous quarter	2.14%
Narrowband subscribers	130.38 Million
Broadband subscribers	300.84 Million
Wired Internet Subscribers	21.67 Million
Wireless Internet Subscribers	409.55 Million
Urban Internet Subscribers	293.82 Million
Rural Internet Subscribers	137.39 Million
Total Internet Subscribers per 100 population	33.47
Urban Internet Subscribers per 100 population	72.51
Rural Internet Subscribers per 100 population	15.56
Broadcasting & Cable Services	
Number of private satellite TV channels permitted by the Ministry of I&B for uplinking only/downlinking /uplinking	883
Number of Pay TV Channels	293
Number of private FM Radio Stations (excluding All India Radio)	310
Number of Pay Subscribers Active with Private DTH Operators	65.31 Million
Number of Community Radio Stations licenced (GOPA signed)	275
Number of Operational Community Radio Stations	207
Number of pay DTH Operators	6
Revenue & Usage Parameters	
Monthly ARPU GSM Full Mobility Service	₹ 80
Monthly ARPU CDMA Full Mobility Service	₹ 124
Minutes of Usage (MOU) per subscriber per month - GSM Full Mobility Service	428 Minutes
Minutes of Usage (MOU) per subscriber per month - CDMA Full Mobility Service	246 Minutes
Total Outgoing Minutes of Usage for Internet Telephony	260 Million
Data Usage of Mobile Users	
Average Data Usage per subscriber per month – GSM (2G+3G+4G)	1,256 MB
Average Data Usage per subscriber per month - CDMA	495 MB
Average Data Usage per subscriber per month – Total(GSM+CDMA)	1,248 MB
Average outgo per GB data for GSM including LTE	₹ 17.43
Average outgo per GB data for CDMA	₹ 115.35

Executive Summary

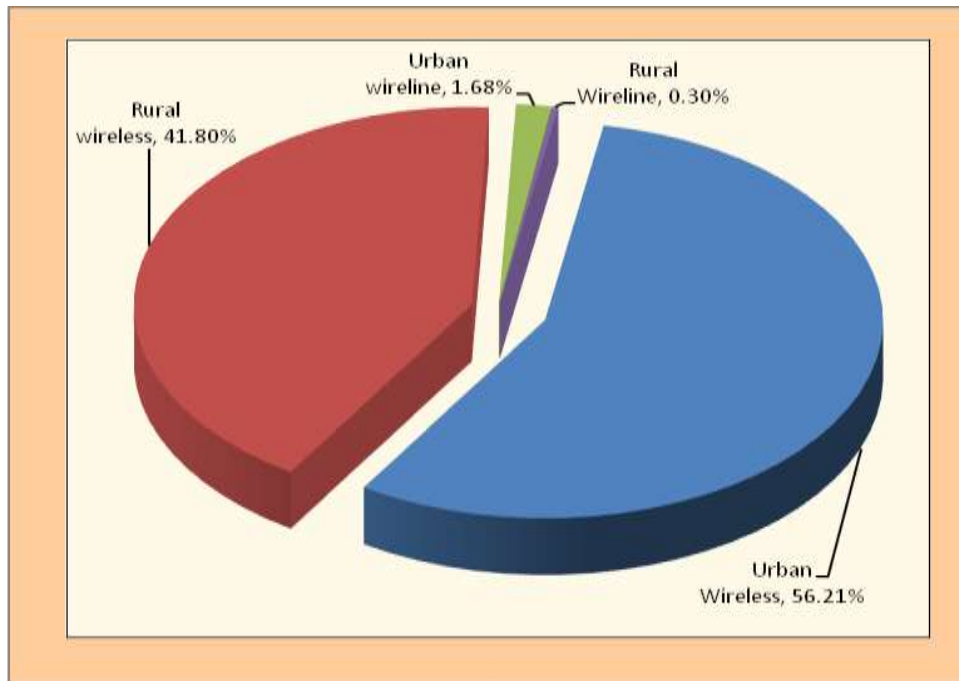
1. The number of telephone subscribers in India increased from 1,194.58 million at the end of Mar-17 to 1,210.84 million at the end of Jun-17, registering a growth of 1.36% over the previous quarter. This reflects year-on-year (Y-O-Y) growth of 14.25% over the same quarter of last year. The overall Teledensity in India increased from 92.98 as on QE Mar-17 to 93.98 as on QE Jun-17.

Trends in Telephone subscribers and Teledensity in India



2. Subscription in Urban Areas increased from 692.97 million at the end of Mar-17 to 700.96 million at the end of Jun-17, and Urban Teledensity also increased from 171.80 to 172.98 during the same period. Rural subscription increased from 501.61 million to 509.88 million and Rural Teledensity also increased from 56.91 to 57.73 during the same period.
3. Out of the total subscription, the share of Rural subscription increased from 41.99% at the end of Mar-17 to 42.11% at the end of Jun-17.

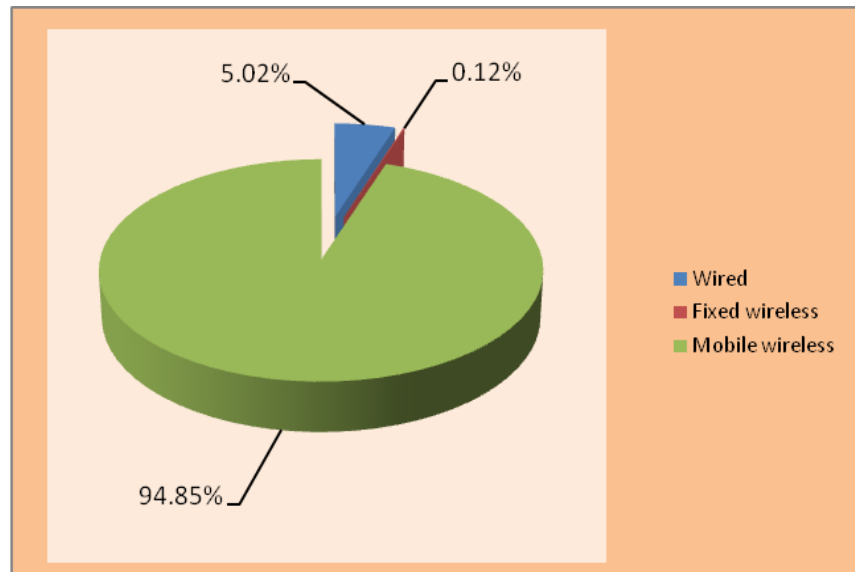
Composition of Telephone Subscribers



4. With a net addition of 16.66 million subscribers during the quarter, total wireless (GSM+CDMA) subscriber base increased from 1,170.18 million at the end of Mar-17 to 1,186.84 million at the end of Jun-17, registering a quarterly growth rate of 1.42% over the previous quarter. The year-on-year (Y-O-Y) growth rate of wireless subscribers for Jun-17 is 14.66%.
5. Wireless Tele-density increased from 91.08 at the end of Mar-17 to 92.12 at the end of Jun-17.
6. Wireline subscriber declined from 24.40 million at the end of Mar-17 to 24.00 million at the end of Jun-17 with quarterly decline rate of 1.65%. The year-on-year (Y-O-Y) decline rate in wireline subscribers for Jun-17 is 3.01%.
7. Wireline Teledensity declined from 1.90 at the end of Mar-17 to 1.86 at the end of Jun-17.

8. Total number of Internet subscribers has increased from 422.19 million at the end of Mar-17 to 431.21 million at the end of Jun-17, registering a quarterly growth rate of 2.14%. Out of 431.21 million, Wired Internet subscribers are 21.67 million and Wireless Internet subscribers are 409.55 million.

Composition of internet subscription

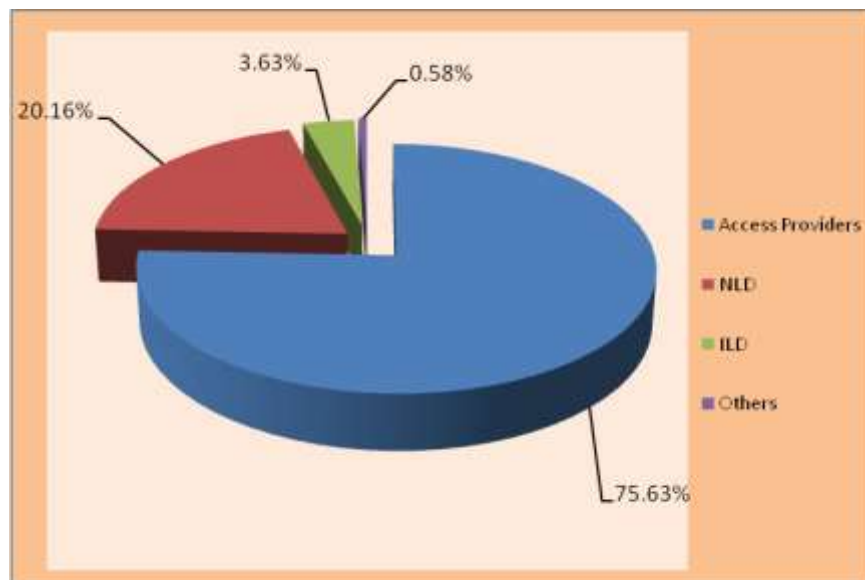


9. The Internet subscriber base is comprised of Broadband Internet subscriber base of 300.84 million and Narrowband Internet subscriber base of 130.38 million.
10. The broadband Internet subscriber base grew by 8.80% from 276.52 million at the end of Mar-17 to 300.84 million at the end of Jun-17. On the other hand, the narrowband Internet subscriber base declined by 10.50% from 145.68 million at the end of Mar-17 to 130.38 million at the end of Jun-17.
11. Monthly Average Revenue per User (ARPU) for GSM service (including LTE) declined by 3.75%, from ₹83 in QE Mar-17 to ₹80 in QE Jun-17. Monthly ARPU for GSM service (including LTE) declined by 36.87% on Y-O-Y in this quarter.

12. Prepaid ARPU for GSM service per month declined from ₹67 in QE Mar-17 to ₹65 in QE Jun-17, and Postpaid ARPU per month also declined from ₹412 in QE Mar-17 to ₹389 in QE Jun-17.
13. On an all India average, the overall MOU per subscriber per month for GSM service increased by 5.72% from 405 for QE Mar-17 to 428 in QE Jun-17.
14. Prepaid MOU per subscriber for GSM service increased from 385 in QE Mar-17 to 409 in QE Jun-17, and postpaid MOU also increased from 816 in QE Mar-17 to 832 in QE Jun-17.
15. Monthly ARPU for CDMA full mobility service declined by 5.22%, from ₹131 in QE Mar-17 to ₹124 in QE Jun-17. However, on Y-O-Y basis Monthly ARPU for CDMA full mobility service increased by 26.37% in this quarter.
16. The total MOU per subscriber per month for CDMA full mobility service declined by 1.37%, from 250 in QE Mar-17 to 246 in QE Jun-17. The outgoing MOUs declined from 112 in QE Mar-17 to 105 in QE Jun-17, however incoming MOUs increased from 137 in QE Mar-17 to 142 in QE Jun-17.
17. Gross Revenue (GR) and Adjusted Gross Revenue (AGR) of Telecom Service Sector for the QE Jun-17 has been ₹64,889 Crore and ₹39,778 Crore respectively. GR increased by 2.49% and AGR declined by 2.58% in QE Jun-17 as compared to previous quarter.
18. The year-on-year (Y-O-Y) growth in GR and AGR over the same quarter in last year has been -11.53% and -25.49% respectively.

19. Pass-through charges increased from ₹22,484 Crore in Q.E. Mar-17 to ₹25,112 in Q.E. Jun-17. The quarterly and the year-on-year (Y-O-Y) growth rates of pass-through charges for QE Jun-17 are 11.69% and 25.80% respectively.
20. The License Fee declined from ₹3,361 Crore for the QE Mar-17 to ₹3,261 Crore for the QE Jun-17. The quarterly and the year-on-year (Y-O-Y) growth rates of license fee are -2.99% and -24.42% respectively in this quarter.
21. Access services contributed 75.63% of the total Adjusted Gross Revenue of telecom services. In Access services, Adjusted Gross Revenue(AGR), License Fee and Spectrum Usage Charges(SUC) declined by 4.79%, 5.26% and 4.61% respectively however, Gross Revenue (GR) and Pass Through Charges increased by 0.79% and 13.48% respectively in QE Jun-17.
22. Monthly Average Revenue per User (ARPU) for Access Services based on AGR declined from ₹89.34 in QE Mar-17 to ₹83.41 in QE Jun-17.

Composition of Adjusted Gross Revenue



23. The performance of 2G wireless service providers in terms of 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"> • Call Set-up Success Rate (within licensee's own network) • Connection with good voice quality • Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) • Metering and billing credibility- post paid • Accessibility of call centre/ customer care • %age of calls answered by the operators (voice to voice) within 90 sec 	<ul style="list-style-type: none"> • Worst affected BTSs due to downtime • SDCCH/Paging Chl. Congestion • Metering and billing credibility- pre-paid • Resolution of billing/charging/ validity complaints (100% within 6 weeks) • Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints • %age requests for Termination/ Closure of service complied within 7 days • Time taken for refund of deposits after closures

24. The performance of 3G wireless service providers in terms of QoS during the quarter vis-à-vis that in the previous quarter is given below:

Parameters showing improvement in QoS	Parameters showing deterioration in QoS
<ul style="list-style-type: none"> • Point of Interconnection (POI) Congestion 	<ul style="list-style-type: none"> • BTS and Node-B's accumulated downtime (not available for service) (%age) • Worst affected BTSs and Node-B's due to downtime (%age) • Worst affected cells having more than 3% TCH drop (call drop) and Circuit Switched Voice Drop Rate:-CBBH

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

Parameters showing improvement in QoS	Parameters showing deterioration in QoS
<ul style="list-style-type: none"> • Fault repaired within 5 days for urban areas • Mean Time to Repaired (MTTR) ≤ 10Hs • Response time to the customer for Assistance- Accessibility of call centre/Customer care ($\geq 95\%$) 	<ul style="list-style-type: none"> • Fault repaired by next working day for urban areas ($\geq 85\%$) • %age requests for Termination/ Closure of service complied within 7 days (100% within 7 days)

26. A total number of 883 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/downlinking/uplinking, as on 30th June, 2017.
27. During the quarter ending Jun-17, there were 293 pay channels as reported by 48 broadcasters as compared to 295 pay channels reported in the previous quarter. 293 pay channels include 210 SD pay TV channels and 83 HD Pay TV channels. During the quarter ending Jun-17, as per the reporting, one pay channel namely “B4U Movies” was converted into FTA, one FTA channel namely “NHK World Premium” was converted into Pay channel & two pay channels namely “Zee Salaam” and “Zindagi” were reported to be discontinued.
28. Since its introduction in the year 2003, Indian DTH service has displayed a phenomenal growth. DTH has attained net pay active subscriber base of around 65.31 million. This is besides the viewership of the free DTH services of Doordarshan. As on QE Jun-17, there are 6 pay DTH service providers in the country.

29. Apart from the radio Stations operated by All India Radio, Prasar Bharati – a public broadcaster, as on 30th June, 2017, there are 310 operational private FM Radio stations and 86 existing cities with operational 33 FM Radio Operators as compared to 293 private FM Radio Stations 84 cities with operational 32 FM Radio Operators in the previous quarter.
30. According to the reporting of advertisement revenue done by the 32 FM Radio Service Providers, it has emerged that during the quarter ending Jun-17, 17 new private FM Radio Stations have become operational.
31. As per data received from MIB, as on 30th June, 2017, out of the 275 licenses issued so far, 207 community radio stations are already operational.

Trends at a Glance

A. Access Service (Wireline + Wireless)

	QE Jun 2016	QE Sep 2016	QE Dec 2016	QE Mar 2017	QE Jun 2017	%age change over Jun-2016	%age change over Sep-2016	%age change over Dec-2016	%age change over Mar-2017
						(12 months)	(9 months)	(6 months)	(3 months)
1) Subscriber Base (in million)									
Wireline	24.74	24.49	24.40	24.40	24.00	-3.01%	-2.02%	-1.66%	-1.65%
Wireless	1035.12	1049.74	1127.37	1170.18	1186.84	14.66%	13.06%	5.27%	1.42%
Total	1059.86	1074.24	1151.78	1194.58	1210.84	14.25%	12.72%	5.13%	1.36%
Rural	450.41	449.86	468.64	501.61	509.88	13.20%	13.34%	8.80%	1.65%
Urban	609.45	624.38	683.14	692.97	700.96	15.02%	12.27%	2.61%	1.15%
2) Teledensity									
Wireline	1.94	1.92	1.90	1.90	1.86	-4.11%	-2.85%	-2.22%	-1.92%
Wireless	81.26	82.17	88.00	91.08	92.12	13.36%	12.10%	4.68%	1.14%
Total	83.20	84.09	89.90	92.98	93.98	12.95%	11.76%	4.54%	1.08%
Rural	51.41	51.24	53.27	56.91	57.73	12.29%	12.66%	8.37%	1.45%
Urban	153.22	156.24	170.15	171.80	172.98	12.89%	10.71%	1.66%	0.69%
3) Service Provider wise Subscribers Base (in Million) (wireless+wireline)									
Bharti	259.47	263.74	269.68	277.51	284.53	9.66%	7.88%	5.50%	2.53%
Vodafone	199.49	200.84	204.82	209.20	212.09	6.32%	5.60%	3.55%	1.38%
Idea	176.23	178.82	190.52	195.37	196.28	11.37%	9.77%	3.02%	0.47%
Reliance Jio	-	15.98	72.16	108.68	123.36	-	672.00%	70.96%	13.51%
BSNL	103.74	107.66	110.53	114.68	117.37	13.13%	9.02%	6.19%	2.35%
Aircel	88.93	90.14	90.88	90.90	90.32	1.56%	0.20%	-0.61%	-0.63%
Reliance	99.88	88.34	87.72	84.68	82.50	-17.40%	-6.60%	-5.95%	-2.57%
Telenor	53.09	52.86	54.47	50.49	47.34	-10.84%	-10.44%	-13.09%	-6.25%
Tata	61.10	58.79	54.71	50.74	45.54	-25.47%	-22.54%	-16.76%	-10.26%
MTNL	7.07	7.07	7.10	7.09	7.06	-0.25%	-0.23%	-0.66%	-0.46%
Sistema	7.65	6.78	5.94	4.97	4.19	-45.26%	-38.23%	-29.48%	-15.74%
Quadrant	3.19	3.24	3.26	0.26	0.27	-91.64%	-91.76%	-91.83%	1.40%
Total	1059.86	1074.24	1151.78	1194.58	1210.84	14.25%	12.72%	5.13%	1.36%

B. Internet Services

	QE Jun 2016	QE Sep 2016	QE Dec 2016	QE Mar 2017	QE Jun 2017	%age change over Jun-2016 (12 months)	%age change over Sep-2016 (9 months)	%age change over Dec-2016 (6 months)	%age change over Mar-2017 (3 months)
	1) Subscriber's Base (in million)								
A. Wired Internet Subscribers	20.76	21.26	21.51	21.58	21.67	4.36%	1.92%	0.75%	0.42%
B. Wireless Internet Subscribers	329.72	346.22	370.00	400.62	409.55	24.21%	18.29%	10.69%	2.23%
i. Mobile Wireless (Mobile & Dongle)	329.14	345.60	369.39	400.04	409.01	24.27%	18.35%	10.73%	2.24%
ii. Fixed Wireless (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	0.58	0.62	0.61	0.58	0.54	-6.49%	-13.72%	-11.72%	-7.54%
Total Internet Subscribers	350.48	367.48	391.50	422.19	431.21	23.04%	17.34%	10.14%	2.14%
2) No. of Internet Subs per 100 Population	27.51	28.77	30.56	32.86	33.47	21.64%	16.35%	9.52%	1.85%

C. Usage and Revenue for Full Mobility Services

1. Traffic (MOU) (minutes of use/subscriber/month)									
i) GSM	377	366	360	405	428	13.75%	17.16%	19.05%	5.72%
ii) CDMA	228	269	255	250	246	8.21%	-8.36%	-3.54%	-1.37%
2) ARPU (₹/sub/ month)									
i) GSM	126.05	120.98	103.92	82.68	79.58	-36.87%	-34.22%	-23.42%	-3.75%
ii) CDMA	98.51	154.05	141.42	131.34	124.49	26.37%	-19.19%	-11.97%	-5.22%

D. Telecom Financial Data

	QE Jun 2016	QE Sep 2016	QE Dec 2016	QE Mar 2017	QE Jun 2017	%age change over Jun-2016 (12 months)	%age change over Sep-2016 (9 months)	%age change over Dec-2016 (6 months)	%age change over Mar-2017 (3 months)
	1. Telecom Sector								
i) Gross Revenue (₹ in Crores)	73344.66	71378.69	66532.37	63315.18	64889.47	-11.53%	-9.09%	-2.47%	2.49%
ii) Adjusted Gross Revenue (₹ in Crores)	53383.55	50539.20	45905.34	40831.33	39777.55	-25.49%	-21.29%	-13.35%	-2.58%
2. Access Services									
Adjusted Gross Revenue (₹ in Crores)	44754.11	41681.33	37283.71	31594.91	30082.33	-32.78%	-27.83%	-19.32%	-4.79%
ARPU per month (AGR/ Average subscribers/3)	140.88	131.10	111.63	89.34	83.41	-40.80%	-36.38%	-25.28%	-6.64%

Introduction

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending June, 2017. 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). Chapter-2 covers the key revenue and usage parameters. Chapter-3 gives the financial and accounting data. Chapter-4 covers performance of various telecom service providers in terms of QoS. The information relating to Cable TV, DTH & Radio Broadcast services is provided in Chapter-5.

2. The Report has been prepared based on the information furnished by the Service Providers. It is also available on TRAI's website (www.trai.gov.in under the link <http://www.trai.gov.in/release-publication/reports/performance-indicators-reports>). Any suggestion or any clarification pertaining to this report, Pr. Advisor (F&EA), TRAI may be contacted on Tel. +91-11-23221856, Fax. +91-11-23235249 and e-mail: skmishra.trai@nic.in .

Chapter 1 :

Subscription Data

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

Section A : Access Service - An Overview

- 1.1 The number of telephone subscribers in India increased from 1,194.58 million at the end of Mar-17 to 1,210.84 million at the end of Jun-17, registering a growth of 1.36% over the previous quarter. This reflects year-on-year (Y-O-Y) growth of 14.25% over the same quarter of last year. The overall Tele-density in India increased to 93.98 at the end of Jun-17 from 92.98 at the end of the previous quarter.

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



Table 1.1: Subscriber Base & Teledensity - Rural & Urban

Quarter ending	Subscriber Base (million)		Teledensity	
	Rural	Urban	Rural	Urban
Jun-16	450.41	609.45	51.40	153.22
Sep-16	449.86	624.38	51.24	156.24
Dec-16	468.64	683.14	53.27	170.15
Mar-17	501.61	692.97	56.91	171.80
Jun-17	509.88	700.96	57.73	172.98

- 1.2 Subscription in Urban Areas increased from 692.97 million at the end of Mar-17 to 700.96 million at the end of Jun-17, and the Urban Tele-density also increased from 171.80 to 172.98 during the quarter.
- 1.3 Rural subscription increased from 501.61 million to 509.88 million and the Rural Tele-density also increased from 56.91 to 57.73 during the quarter.
- 1.4 The year-on-year (Y-O-Y) growth rate of Rural and Urban Tele-density from Jun-16 to Jun-17 is 12.29% and 12.89% respectively.

Chart 1.2: Market Share - Rural & Urban Subscribers



- 1.5 Share of rural areas in total telephone subscription has increased from 41.99% at the end of Mar-17 to 42.11% at the end of Jun-17.

Chart 1.3: Composition of Access subscription - Wireline & Wireless

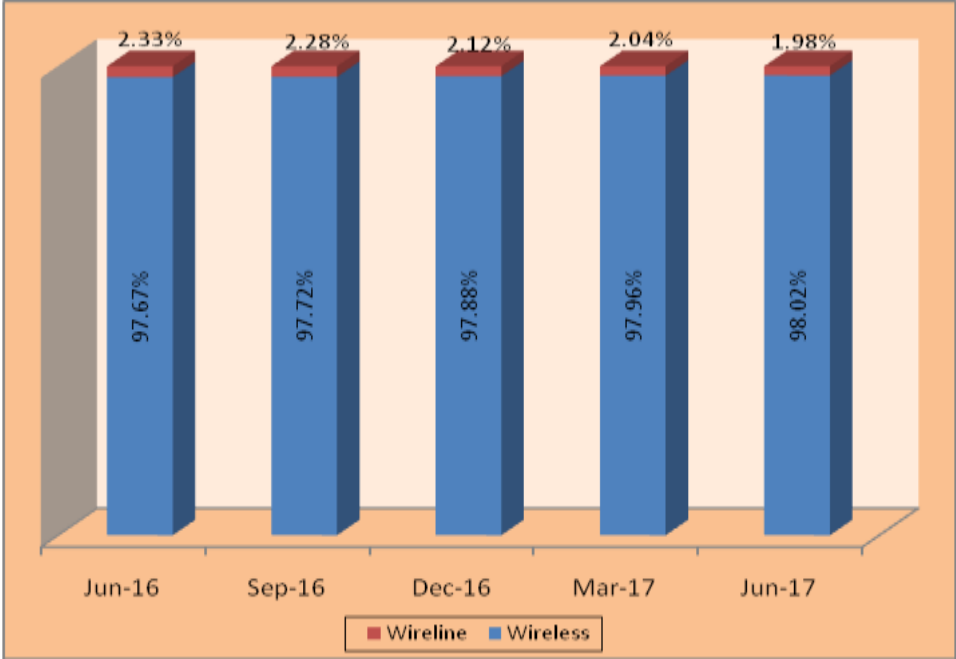


Chart 1.4: Composition of Rural-Urban Telephone Subscribers at the end of the quarter

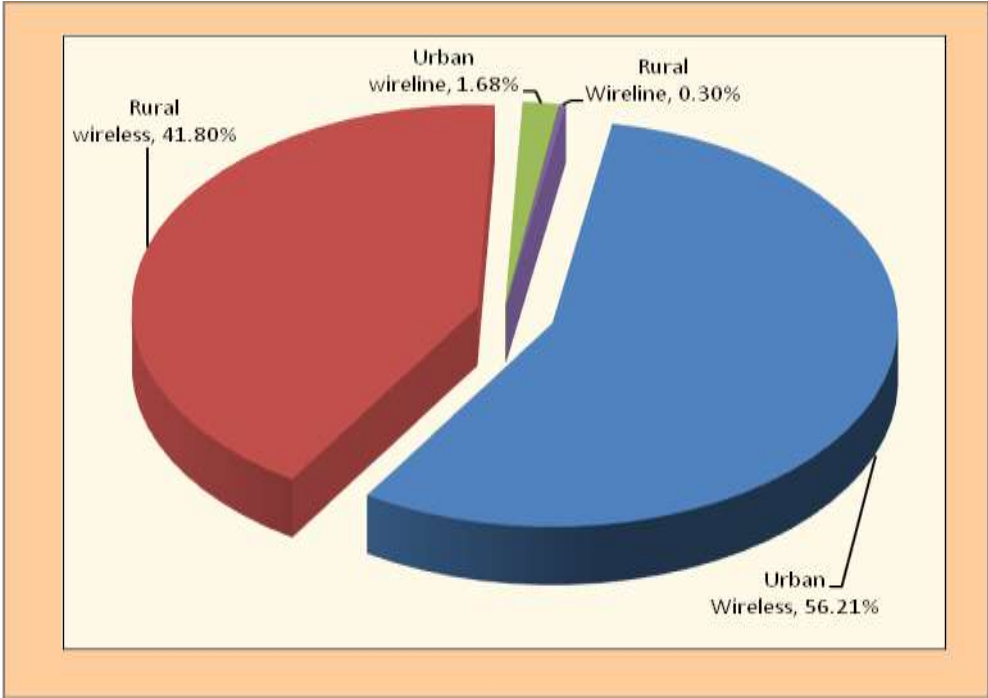


Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base

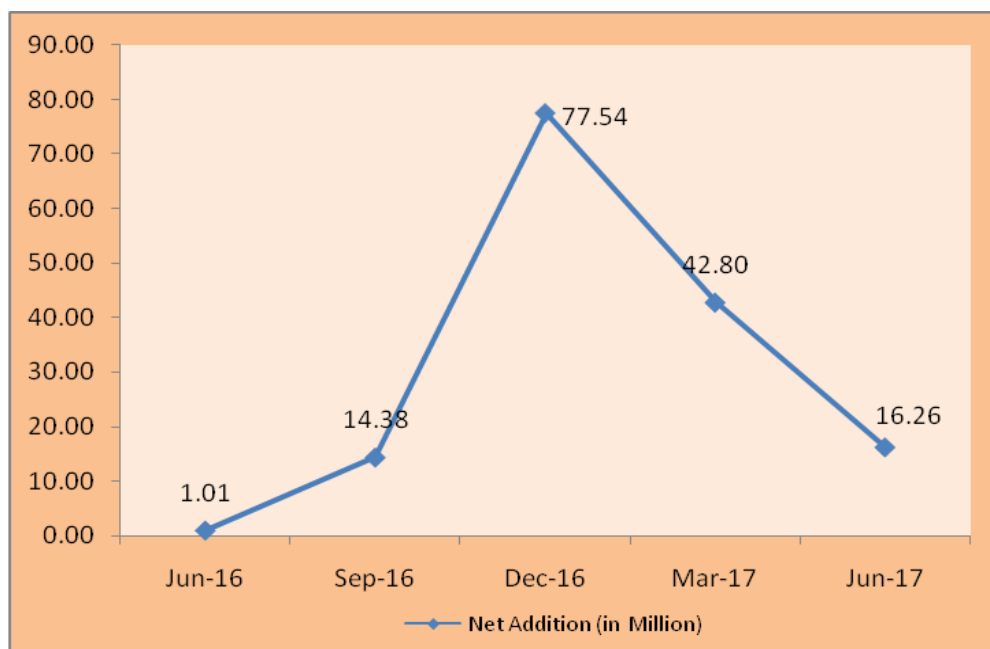
Service Area	Subscribers (million)			
	Mar-17	Jun-17	Net Additions	Rate of Growth (%)
Andhra Pradesh	86.58	87.34	0.77	0.88
Assam	21.97	22.29	0.32	1.48
Bihar	84.88	86.30	1.42	1.67
Delhi	56.57	57.77	1.19	2.11
Gujarat	73.19	73.62	0.42	0.58
Haryana	25.39	26.00	0.61	2.40
Himachal Pradesh	10.57	10.79	0.22	2.05
Jammu & Kashmir	12.04	12.48	0.44	3.64
Karnataka	71.38	71.89	0.51	0.71
Kerala	41.28	41.90	0.63	1.52
Madhya Pradesh	70.57	71.93	1.36	1.92
Maharashtra	95.78	96.94	1.16	1.21
Mumbai	39.62	39.81	0.19	0.47
North East	12.61	12.89	0.28	2.23
Orissa	34.58	35.00	0.42	1.21
Punjab	36.97	38.05	1.08	2.93
Rajasthan	68.06	68.69	0.63	0.92
T.N. (incl. Chennai)	91.80	92.74	0.93	1.02
U.P.(E)	105.05	106.94	1.89	1.80
U.P.(W)	67.07	67.95	0.87	1.30
Kolkata	30.18	30.33	0.15	0.49
West Bengal	58.44	59.21	0.77	1.31
All India	1,194.58	1,210.84	16.26	1.36

1.6 All service areas showed positive growth rate in subscriber base during the quarter ending Jun-17. J&K service area has recorded the highest growth rate of 3.64% followed by Punjab service area with growth rate of 2.93% during the quarter.

Table 1.3: Service Area wise Rural-Urban Subscribers – Jun-17

Service Area	Subscribers (million)			
	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	87.34	39.19	48.16	44.87
Assam	22.29	13.97	8.32	62.65
Bihar	86.30	50.33	35.97	58.32
Delhi	57.77	2.58	55.18	4.47
Gujarat	73.62	28.05	45.57	38.10
Haryana	26.00	11.48	14.52	44.16
Himachal Pradesh	10.79	7.28	3.51	67.47
Jammu & Kashmir	12.48	6.12	6.36	49.03
Karnataka	71.89	22.51	49.38	31.31
Kerala	41.90	18.99	22.91	45.33
Madhya Pradesh	71.93	33.83	38.10	47.03
Maharashtra	96.94	43.87	53.07	45.25
Mumbai	39.81	1.46	38.35	3.66
North East	12.89	6.61	6.29	51.25
Orissa	35.00	20.84	14.16	59.55
Punjab	38.05	14.22	23.84	37.36
Rajasthan	68.69	35.04	33.64	51.02
T.N. (incl. Chennai)	92.74	26.70	66.04	28.79
U.P.(E)	106.94	53.99	52.96	50.48
U.P.(W)	67.95	29.97	37.97	44.11
Kolkata	30.33	2.45	27.87	8.08
West Bengal	59.21	40.42	18.79	68.26
All India	1,210.84	509.88	700.96	42.11

Chart 1.5: Trend of Net Addition in Telephone Subscription



1.7 The net addition in telephone subscribers is 16.26 million in QE Jun-17 as against the net addition of 42.80 million in QE Mar-17.

Table 1.4 : Service Area wise Teledensity

Service Area/ States	As on 31 st March, 2017			As on 30 th June, 2017		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	60.35	192.02	97.18	60.96	192.81	97.86
Assam	50.06	153.09	66.89	50.73	154.22	67.69
Bihar	40.72	186.91	60.95	41.83	186.07	61.80
Delhi	-	-	257.76	-	-	261.33
Gujarat	75.54	165.92	113.70	75.30	166.88	114.04
Haryana	64.80	136.26	91.01	64.90	140.89	92.87
Himachal Pradesh	111.63	415.57	147.71	115.22	411.17	150.44
J&K	60.35	174.62	97.18	67.65	179.51	99.13

	As on 31st March, 2017			As on 30th June, 2017		
Service Area/ States	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Karnataka	65.12	198.04	95.88	58.77	199.25	113.95
Kerala	58.80	248.37	113.38	70.57	251.70	116.34
Madhya Pradesh	69.53	128.79	114.75	44.27	130.51	68.11
Maharashtra (incl. Mumbai)*	70.40	150.46	109.50	71.58	150.63	110.26
North East	60.97	172.96	89.40	62.66	174.63	91.16
Orissa	58.21	183.86	80.74	59.21	183.55	81.56
Punjab	80.51	165.52	118.28	81.84	170.64	121.41
Rajasthan	61.66	186.75	91.96	62.30	186.95	92.51
Tamil Nadu (incl. Chennai)	93.91	150.59	128.40	95.86	150.98	129.54
Uttar Pradesh (incl. UPE & UPW)	46.05	167.57	74.02	46.75	169.01	74.93
West Bengal (incl. Kolkata)*	61.92	168.79	92.68	62.83	169.12	93.44
All India	56.91	171.80	92.98	57.73	172.98	93.98

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

1.8 Himachal Pradesh service area has the highest Rural Tele-density of 115.22 followed by Tamil Nadu service area (95.86). Bihar service area continues to have the lowest Rural Tele-density of 41.83.

Table 1.5 : Growth/Decline in Subscriber base

Service Provider	Subscriber base (millions)			Rate of Growth (%)	Market Share in QE Mar-17 (%)	Market Share in QE Jun-17 (%)
	Mar-17	Jun-17	Net Additions			
Bharti	277.51	284.53	7.01	2.53	23.23	23.50
Vodafone	209.20	212.09	2.89	1.38	17.51	17.52
IDEA	195.37	196.28	0.91	0.47	16.35	16.21
Reliance Jio	108.68	123.36	14.68	13.51	9.10	10.19
BSNL	114.68	117.37	2.69	2.35	9.60	9.69
Aircel	90.90	90.32	-0.58	-0.63	7.61	7.46
Reliance Com.	84.68	82.50	-2.17	-2.57	7.09	6.81
Telenor	50.49	47.34	-3.16	-6.25	4.23	3.91
Tata	50.74	45.54	-5.21	-10.26	4.25	3.76
MTNL	7.09	7.06	-0.03	-0.46	0.59	0.58
Sistema	4.97	4.19	-0.78	-15.74	0.42	0.35
Quadrant	0.26	0.27	0.01	1.40	0.02	0.02
Total	1,194.58	1,210.84	16.26	1.36	100	100

1.9 Bharti Airtel is the leading service provider in access segment in terms of number of subscribers with 284.53 million subscribers. During the QE Jun-17, Reliance Jio Infocom Ltd. recorded the highest net addition of 14.68 million subscribers followed by Bharti Airtel (7.01 million).

1.10 Tata Teleservices recorded the highest decline of 5.21 million subscribers during the QE Jun-17.

Table 1.6 : Market Share of the service providers in total rural subscriber base – Q.E. Jun-17

Service Provider	No. of Total Subscribers (in millions)	No. of Rural Subscribers (in millions)	Percentage of Rural subscribers	Market share of Rural subscribers (%)
Bharti	284.53	141.50	49.73	27.75
Vodafone	212.09	116.17	54.77	22.78
IDEA	196.28	110.68	56.39	21.71
BSNL	117.37	37.19	31.69	7.29
Aircel	90.32	31.89	35.31	6.26
Reliance Jio	123.36	30.08	24.38	5.90
Reliance Com.	82.50	18.20	22.06	3.57
Telenor	47.34	13.68	28.90	2.68
Tata	45.54	9.45	20.75	1.85
Sistema	4.19	0.92	21.91	0.18
Quadrant	0.27	0.06	21.99	0.01
MTNL	7.06	0.05	0.69	0.01
Total	1,210.84	509.88	42.11	100

1.11 IDEA continues to remain the service provider with highest proportion of rural subscribers (56.39%), followed by Vodafone (54.77%) to their total subscribers.

Section B : Wireless Service

Table 1.7: List of Cellular Mobile (GSM, LTE & CDMA) Service Providers currently providing service [As on 30th June, 2017]

Sl.No.	Service Provider	Area of Operation
1	Bharti Airtel Ltd	All India
2	Aircel Group	All India*
3	Reliance Communications Ltd	All India (except Assam & NE)
4	Reliance Telecom Ltd	Kolkata, MP, WB, HP, Bihar, Odisha, Assam & NE
5	Vodafone (India) Ltd	All India
6	Tata Teleservices	All India except Assam, NE & J&K
7	IDEA Cellular Ltd	All India#
8	Sistema Shyam Telelink	Delhi, Kolkata, Gujarat, Karnataka, Tamil Nadu (incl. Chennai), Kerala, UP(W), Rajasthan & W.B.
9	BSNL	All India (except Delhi & Mumbai)
10	MTNL	Delhi & Mumbai
11	Telenor Communications (India) Pvt. Ltd.	Maharashtra, Gujarat, AP, UP(W), UP(E) & Bihar
12	Reliance Jio Infocom Ltd	All India

*TN & AP – CMTS

#Delhi, HP & UP(E) – CMTS.

In remaining LSAs the TSPs have either UASL, UL or UL(AS).

Surce : DoT website

1.12 Total Wireless (GSM+CDMA) subscriber base increased from 1,170.18 million at the end of Mar-17 to 1,186.84 million at the end of Jun-17, thereby showing a quarterly growth rate of 1.42%. During this quarter, net addition of 16.66 million wireless subscribers was recorded. The year-on-year (Y-O-Y) growth rate of wireless subscribers is 14.66% for Q.E. Jun-17.

1.13 Wireless Teledensity increased from 91.08 at the end of Mar-17 to 92.12 at the end of Jun-17.

Chart 1.6: Wireless Subscriber Base and Teledensity



Table 1.8: Wireless Subscriber Base & Teledensity - Rural & Urban

Quarter ending	Subscriber Base (million)		Tele-density	
	Rural	Urban	Rural	Urban
Jun-16	446.33	588.78	50.95	148.03
Sep-16	445.94	603.80	50.80	151.10
Dec-16	464.78	662.60	52.84	165.04
Mar-17	497.76	672.42	56.47	166.71
Jun-17	506.18	680.66	57.31	167.97

1.14 The Rural Wireless subscribers increased from 497.76 million at the end of Mar-17 to 506.18 million at the end of Jun-17, and the urban wireless subscribers also increased from 672.42 million to 680.66 million during the quarter.

1.15 Quarterly Growth rates of Rural and Urban wireless subscriptions are 1.69% and 1.23% respectively during the QE Jun-17.

1.16 The share of rural wireless subscription increased from 42.54% to 42.65% in total wireless subscription in this quarter.

Chart 1.7: Wireless Market Share - Rural & Urban

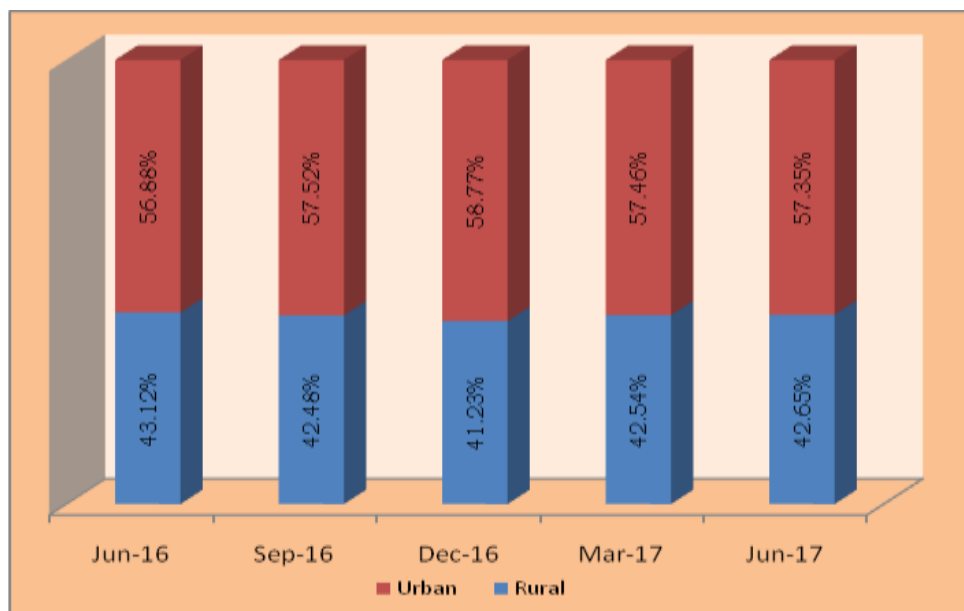


Table 1.9: Growth in Wireless Subscriber base

Service Provider	Subscriber Base (millions)			Rate of Growth (%)	Market Share □ Mar-17 (%)	Market Share □ Jun-17 (%)
	Mar-17	Jun-17	Net Additions			
Bharti	273.65	280.65	7.00	2.56	23.39	23.65
Vodafone	209.06	211.94	2.88	1.38	17.87	17.86
IDEA	195.37	196.28	0.91	0.47	16.70	16.54
Reliance Jio	108.68	123.36	14.68	13.51	9.29	10.39
BSNL	100.99	104.16	3.17	3.14	8.63	8.78
Aircel	90.90	90.32	-0.58	-0.63	7.77	7.61
Reliance Com.	83.50	81.34	-2.17	-2.59	7.14	6.85
Telenor	50.49	47.34	-3.16	-6.25	4.31	3.99
Tata	48.99	43.70	-5.29	-10.80	4.19	3.68
Sistema	4.91	4.13	-0.78	-15.89	0.42	0.35
MTNL	3.63	3.62	-0.01	-0.12	0.31	0.31
Total	1,170.18	1,186.84	16.66	1.42	100	100

1.17 Bharti remains the leading service provider with 280.65 million wireless subscribers at the end of Jun-17, followed by Vodafone (211.94 million).

1.18 In terms of net additions during the quarter ending Jun-17, Reliance Jio (14.68 million) has added the highest number of subscribers, followed by Bharti Airtel (7.00 million).

Table 1.10: Service Area wise Wireless Subscriber base

Service Area	Subscriber base (in million)			
	Mar-17	Jun-17	Net Additions	Rate of change (%)
Andhra Pradesh	84.94	85.75	0.81	0.95
Assam	21.81	22.14	0.33	1.51
Bihar	84.56	86.01	1.45	1.71
Delhi	53.35	54.55	1.20	2.24
Gujarat	71.84	72.30	0.46	0.64
Haryana	25.05	25.67	0.62	2.50
Himachal Pradesh	10.42	10.64	0.22	2.15
Jammu & Kashmir	11.90	12.35	0.45	3.74
Karnataka	69.14	69.63	0.50	0.72
Kerala	39.16	39.82	0.66	1.69
Madhya Pradesh	69.55	70.92	1.37	1.97
Maharashtra	93.90	95.09	1.19	1.27
Mumbai	36.58	36.77	0.19	0.52
North East	12.49	12.78	0.28	2.27
Orissa	34.29	34.72	0.43	1.26
Punjab	35.97	37.09	1.12	3.12
Rajasthan	67.32	67.98	0.66	0.97
T.N. (incl. Chennai)	89.25	90.24	0.99	1.11
U.P.(E)	104.55	106.46	1.90	1.82
U.P.(W)	66.68	67.56	0.89	1.33
Kolkata	29.32	29.48	0.17	0.57
West Bengal	58.11	58.89	0.78	1.34
All India	1,170.18	1,186.84	16.66	1.42

1.19 All service areas showed the positive growth rate in wireless subscriber base during the quarter ending Jun-17.

Table 1.11: Service Area wise Wireless Rural-Urban Subscriber base

Service Area	Subscriber base (in million) – Jun-17			
	Total	Rural	Urban	% of Rural Subscribers
Andhra Pradesh	85.75	38.89	46.85	45.36
Assam	22.14	13.94	8.20	62.96
Bihar	86.01	50.25	35.76	58.42
Delhi	54.55	2.58	51.96	4.74
Gujarat	72.30	27.86	44.44	38.53
Haryana	25.67	11.41	14.26	44.47
Himachal Pradesh	10.64	7.19	3.45	67.55
Jammu & Kashmir	12.35	6.10	6.25	49.41
Karnataka	69.63	22.33	47.30	32.07
Kerala	39.82	17.73	22.10	44.51
Madhya Pradesh	70.92	33.71	37.20	47.54
Maharashtra	95.09	43.53	51.56	45.78
Mumbai	36.77	1.46	35.31	3.96
North East	12.78	6.58	6.19	51.53
Orissa	34.72	20.78	13.94	59.85
Punjab	37.09	13.99	23.10	37.71
Rajasthan	67.98	34.92	33.05	51.38
T.N. (incl. Chennai)	90.24	26.34	63.90	29.19
U.P.(E)	106.46	53.89	52.56	50.63
U.P.(W)	67.56	29.96	37.61	44.34
Kolkata	29.48	2.45	27.03	8.31
West Bengal	58.89	40.28	18.61	68.40
All India	1,186.84	506.18	680.66	42.65

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

Table 1.12 : Service Area wise Wireless Tele-density

Service Area	As on 31 st March, 2017			As on 30 th June, 2017		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
A.P.	59.86	186.70	95.34	60.51	187.60	96.07
Assam	49.96	150.71	66.41	50.63	151.94	67.24
Bihar	40.66	185.71	60.72	41.76	184.99	61.59
Delhi	-	-	243.08	-	-	246.77
Gujarat	75.01	161.67	111.60	74.80	162.74	112.00
Haryana	64.39	133.58	89.77	64.52	138.35	91.69
H.P.	110.15	408.95	145.62	113.83	404.81	148.46
J&K	64.93	171.29	94.81	67.48	176.36	98.12
Karnataka	58.30	189.72	109.82	58.29	190.88	110.38
Kerala	64.68	239.46	108.88	65.85	242.77	110.56
M.P.	43.35	125.68	66.07	44.12	127.44	67.15
Maharashtra (incl. Mumbai)*	69.85	142.88	105.52	71.05	143.12	106.32
North East	60.73	170.28	88.55	62.44	172.03	90.33
Orissa	58.02	180.92	80.05	59.03	180.71	80.91
Punjab	79.08	160.06	115.06	80.50	165.38	118.33
Rajasthan	61.44	183.34	90.97	62.09	183.67	91.56
Tamil Nadu (incl. Chennai)	92.61	145.57	124.84	94.59	146.09	126.06
Uttar Pradesh (incl. UPE&UPW)*	45.99	166.11	73.64	46.69	167.59	74.56
West Bengal (incl. Kolkata)*	61.71	164.99	91.44	62.64	165.42	92.24
All India	56.47	166.71	91.08	57.31	167.97	92.12

* 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 1.13 : State/UT Area wise Wireless Subscriber Base

Sl.No.	States/UT	Wireless Subscribers (in million)		
		Total	Rural	Urban
1	Andhra Pradesh	44.74	22.91	21.83
2	Arunachal Pradesh	1.36	0.63	0.73
3	Assam	22.14	13.94	8.20
4	Bihar	64.27	39.98	24.28
5	Chhattisgarh	16.94	8.18	8.76
6	Goa	2.45	1.09	1.36
7	Gujarat	71.34	27.61	43.74
8	Haryana	32.90	11.91	20.99
9	Himachal Pradesh	10.64	7.19	3.45
10	Jammu & Kashmir	12.35	6.10	6.25
11	Jharkhand	21.74	10.26	11.48
12	Karnataka	69.63	22.33	47.30
13	Kerala	39.76	17.67	22.10
14	Madhya Pradesh	53.98	25.54	28.44
15	Maharashtra	129.41	43.90	85.51
16	Manipur	2.71	1.32	1.39
17	Meghalaya	2.27	1.43	0.83
18	Mizoram	1.21	0.46	0.75
19	Nagaland	1.81	0.88	0.93
20	Odisha	34.72	20.78	13.94
21	Punjab	34.87	13.87	21.00
22	Rajasthan	67.98	34.92	33.05
23	Sikkim	0.70	0.37	0.34
24	Tamil Nadu	89.06	26.01	63.05
25	Telangana	41.00	15.98	25.02
26	Tripura	3.42	1.87	1.55
27	Uttar Pradesh	170.69	78.92	91.77
28	Uttarakhand	12.22	5.55	6.68
29	West Bengal	87.06	42.08	44.98
	Union Territories			
1	Andaman & Nicobar Islands	0.61	0.28	0.33
2	Chandigarh	2.03	0.11	1.92
3	Dadar & Nagar Haweli	0.61	0.18	0.43
4	Daman & Diu	0.34	0.07	0.27
5	Delhi	38.61	1.47	37.13
6	Lakshdweep	0.06	0.06	0.00
7	Puduchery	1.19	0.34	0.85
	Total	1186.84	506.18	680.66

Table 1.14 : State/UT Area wise Wireless Tele-density

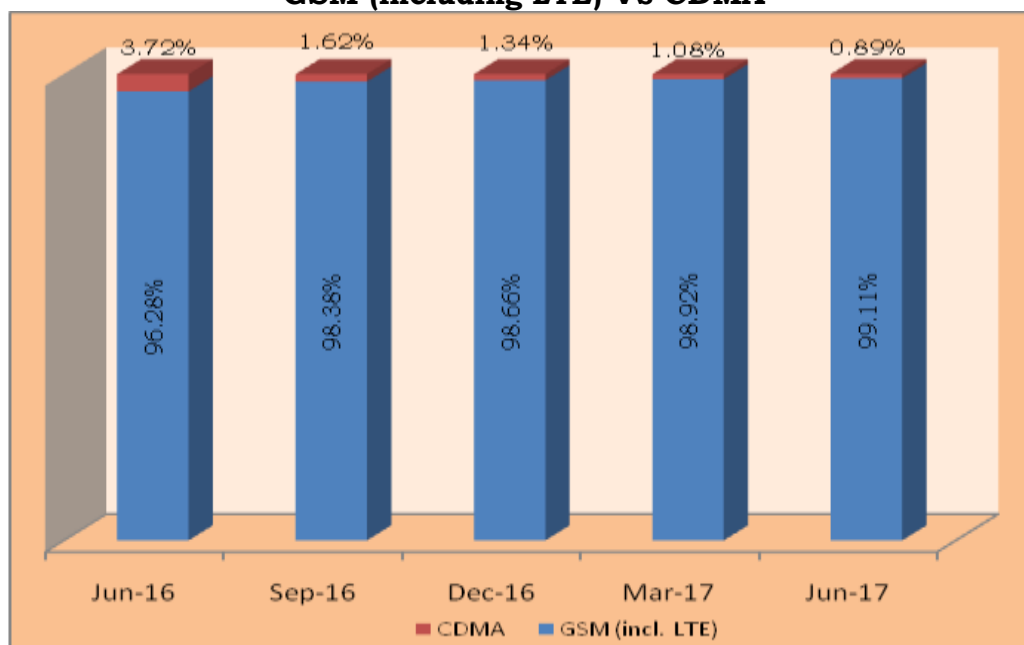
Sl.No.	State/UT	Wireless Teledensity		
		Total	Rural	Urban
1	Andhra Pradesh*	96.07	60.51	187.60
2	Arunachal Pradesh	102.32	79.20	136.39
3	Assam	67.24	50.63	151.94
4	Bihar	60.95	42.40	218.15
5	Chhattisgarh	64.43	41.55	132.58
6	Goa	120.12	148.33	104.17
7	Gujarat	111.89	74.97	162.35
8	Haryana	117.53	67.33	203.71
9	Himachal Pradesh	148.46	113.83	404.81
10	Jammu & Kashmir	98.12	67.48	176.36
11	Jharkhand	63.55	39.46	139.97
12	Karnataka	110.38	58.29	190.88
13	Kerala	110.65	65.78	243.36
14	Madhya Pradesh	68.05	45.01	125.94
15	Maharashtra	106.09	70.14	143.98
16	Manipur	103.13	66.83	211.53
17	Meghalaya	80.64	64.77	139.15
18	Mizoram	112.06	95.79	125.14
19	Nagaland	74.87	44.15	221.69
20	Odisha	80.91	59.03	180.71
21	Punjab	118.39	80.75	171.08
22	Rajasthan	91.56	62.09	183.67
23	Sikkim	107.53	65.83	341.91
24	Tamil Nadu	127.53	95.15	148.35
25	Tripura	88.14	60.29	197.64
26	Uttar Pradesh	76.68	45.87	181.56
27	Uttarakhand	113.14	73.52	204.94
28	West Bengal	92.04	62.49	165.07
	Union Territories			
1	Andaman & Nicobar Islands	107.19	87.64	132.52
2	Chandigarh	107.88	57.83	113.54
3	Dadar & Nagar Haweli	138.72	122.72	146.91
4	Daman & Diu	97.86	25.45	365.43
5	Delhi	174.64	188.88	174.12
6	Lakshdweep	72.70	99.21	0.00
7	Puduchery	67.54	65.25	68.50
	All India Teledensity	92.12	57.31	167.97

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

Table 1.15 : Rural Wireless Subscriber base and Market Share

Service Provider	Total number of wireless Subscribers (in millions)	Rural Subscribers (in millions)	% of Rural subscribers in total	Market Share of Rural Subscribers (%)
Bharti	280.65	141.50	50.42	27.96
Vodafone	211.94	116.17	54.81	22.95
IDEA	196.28	110.68	56.39	21.87
Reliance Com.	81.34	18.20	22.38	3.60
Tata	43.70	9.40	21.50	1.86
Aircel	90.32	31.89	35.31	6.30
Sistema	4.13	0.91	21.97	0.18
Telenor	47.34	13.68	28.90	2.70
BSNL	104.16	33.63	32.29	6.64
MTNL	3.62	0.05	1.34	0.01
Reliance Jio	123.36	30.08	24.38	5.94
Total	1,186.84	506.18	42.65	100

Chart 1.8: Share of Wireless Subscription: GSM (including LTE) Vs CDMA



1.21 At the end of Jun-17, GSM (including LTE) subscribers constituted 99.11% share of the wireless market as compare to 98.92% in previous quarter.

GSM Services (including LTE)

1.22 The GSM (including LTE) subscribers increased from 1,157.59 million at the end of Mar-17 to 1,176.31 million at the end of Jun-17, showing a quarterly growth of 1.62%. Bharti with 280.65 million subscribers continues to be the largest GSM mobile operator, followed by Vodafone (211.94 million).

Table 1.16 : Group-wise Market Share (in terms of subscription) within GSM Service

Service Provider	As on 31st March, 2017		As on 30th June, 2017		Net Additions during QE Jun-17 (in million)
	No of Subscribers (in millions)	Market Share (%)	No of Subscribers (in millions)	Market Share (%)	
Bharti	273.65	23.64	280.65	23.86	7.00
Vodafone	209.06	18.06	211.94	18.02	2.88
Idea	195.37	16.88	196.28	16.69	0.91
Reliance Jio	108.68	9.39	123.36	10.49	14.68
BSNL	100.21	8.66	103.43	8.79	3.22
Aircel	90.90	7.85	90.32	7.68	-0.58
Reliance Comm. Group	83.50	7.21	81.34	6.91	-2.17
Telenor	50.49	4.36	47.34	4.02	-3.16
Tata	42.09	3.64	38.03	3.23	-4.06
MTNL	3.63	0.31	3.62	0.31	-0.01
Total	1,157.59	100	1176.31	100	18.72

1.23 There has been a net increase of 18.72 million GSM subscribers during the quarter ending Jun-17. M/s Reliance Jio showed maximum net addition (14.68 million) in its GSM(LTE) subscriber base and Tata Teleservices showed maximum decline (4.06 million) in its GSM subscriber base during the same period.

CDMA Services

1.24 There were only three telecom service providers providing CDMA services during the quarter ending Jun-17. The CDMA subscriber base declined from 12.59 million at the end of Mar-17 to 10.53 million at the end of Jun-17, thereby showing a quarterly decline rate of 16.37%. Tata Teleservices with 5.67 million subscribers became the leading operator in CDMA service.

Table 1.17 : Market Share (in terms of subscription) within CDMA Service

Service Provider	As on 31 st March, 2017		As on 30 th June, 2017		Net Addition/ decline during the quarter (in million)
	No of Subscribers (in million)	Market Share (%)	No of Subscribers (in million)	Market Share (%)	
Tata	6.90	54.83	5.67	53.87	-1.23
Sistema	4.91	39.01	4.13	39.23	-0.78
BSNL	0.78	6.16	0.73	6.90	-0.05
Total	12.59	100	10.53	100	-2.06

1.25 There has been a net decline of 2.06 million CDMA subscribers during the quarter ending Jun-17.

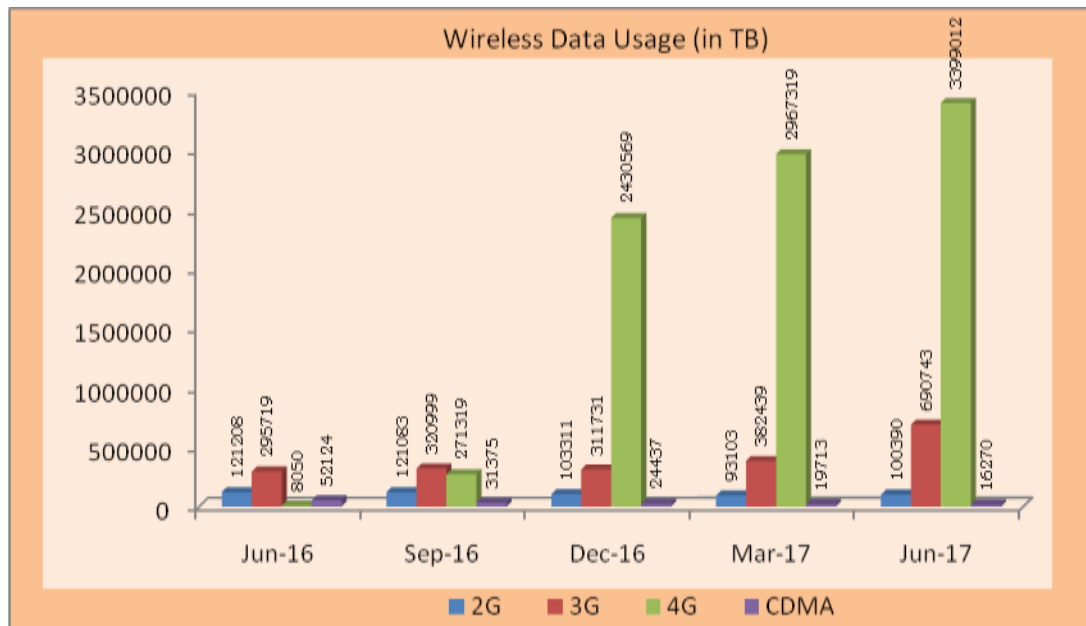
1.26 In terms of net additions during the quarter, all the three service providers recorded decline in their CDMA subscriber base.

Wireless Data Usage

1.27 As per the report furnished by the wireless service providers, total mobile data users as on 30th June, 2017 are 409 million. About 34.5% of the total mobile subscribers used data services in the Q.E. June, 2017.

1.28 During the Q.E. June, 2017, total wireless data usage was 4,206,415 terabytes. Out of which, 2G data usage was 100,390 terabytes, 3G data usage was 690,743 terabyte, 4G data usage was 3,999,012 terabytes and CDMA data usage was 16,270 terabytes.

Chart 1.9: Trend of wireless data usage (in Terabyte)



1.29 Wireless Data usage per subscriber per month over the total wireless subscribers is 1,248 MB during the quarter ending June, 2017.

Section C : Wireline Service

Table 1.18 : Service Providers providing Wireline Service

[As on 30th June, 2017]

Sl. No.	Name of the Service Provider	Area of Operation
1	BSNL	All India except Delhi & Mumbai
2	MTNL	Delhi & Mumbai
3	Bharti Airtel Ltd	Andhra Pradesh (including Telangana), Delhi, Gujarat, Haryana, Himachal Pradesh, Madhya Pradesh (including Chhatisgarh), Maharashtra, Mumbai, Punjab, Tamil Nadu (including Chennai), Karnataka, Kerala, Kolkata, Rajasthan, UP(East) and UP(West)
4	Tata Teleservices Ltd. & Tata Teleservices (Mah) Ltd.	All India except N.E., Assam and J&K
5	Quadrant Televentures Ltd. (HFCL)	Punjab
6	Sistema Shyam Telelink Ltd.	Rajasthan
7	Reliance Communications Ltd.	All India except J&K, Assam & North-East
8	Vodafone	All India except J&K

1.30 Total Wireline subscriber base declined from 24.40 million at the quarter ending Mar-17 to 24.00 at the end of Jun-17. Overall Wireline Teledensity also declined from 1.90 at the end of Mar-17 to 1.86 at the end of Jun-17.

1.31 Rural subscriber base has shown decline of 4.01%, from 3.85 Million at the end of Mar-17 to 3.69 Million at the end of Jun-17. Urban wireline subscription also recorded decline rate of 1.20%, from 20.56 million to 20.31 million during the same period.

Chart 1.10: Wireline Subscriber Base and Teledensity



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

Quarter ending	Subscriber Base (million)		Teledensity	
	Rural	Urban	Rural	Urban
Jun-16	4.08	20.66	0.47	5.20
Sep-16	3.92	20.57	0.45	5.15
Dec-16	3.86	20.55	0.44	5.12
Mar-17	3.85	20.56	0.44	5.10
Jun-17	3.69	20.31	0.42	5.01

Table 1.20 : Service Provider wise Subscriber base (Rural - Urban)

Service Provider	Subscriber Base (million) Jun-17			Share of Rural subscription (%)
	Rural	Urban	Total	
BSNL	3.57	9.64	13.21	26.99
Bharti	--	3.88	3.88	--
MTNL	--	3.43	3.43	--
Tata	0.05	1.78	1.83	2.99
Reliance	0.002	1.16	1.16	0.14
Quadrant	0.06	0.21	0.27	21.99
Vodafone	--	0.15	0.15	--
Sistema	0.01	0.05	0.06	17.84
Total	3.69	20.31	24.00	15.38

Chart 1.10: Composition of Wireline Subscriber base - Rural & Urban

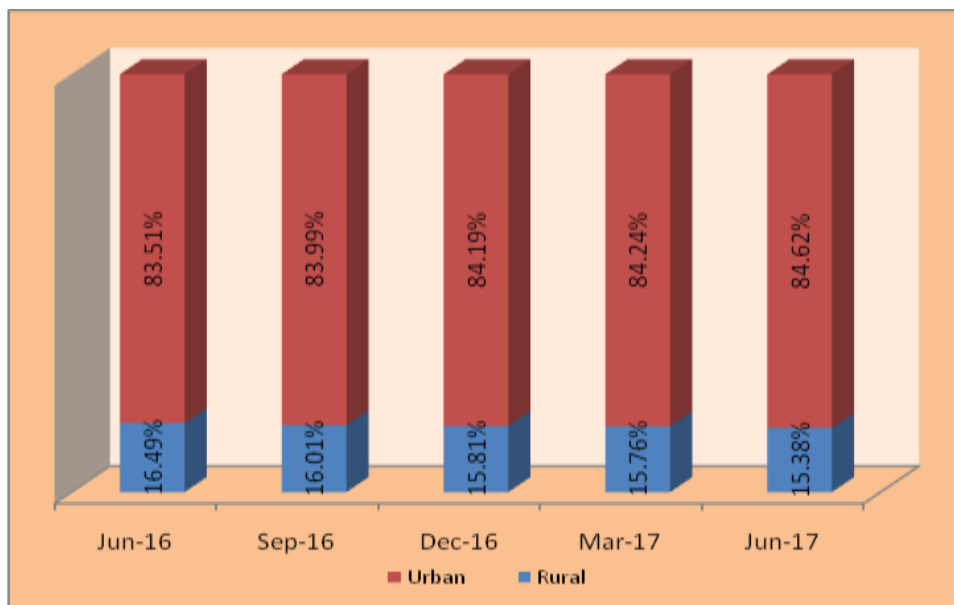


Table 1.21 : Service Provider wise growth in Wireline Subscriber base

Service Provider	Subscriber Base (million)			Rate of change (%)	Market share-Mar-17(%)	Market share-Jun-17(%)
	Mar-17	Jun-17	Net Addition			
BSNL	13.69	13.21	-0.478	-3.49	56.10	55.05
Bharti	3.87	3.88	0.014	0.36	15.84	16.17
MTNL	3.46	3.43	-0.028	-0.81	14.19	14.31
Tata	1.75	1.83	0.084	4.78	7.17	7.64
Reliance	1.17	1.16	-0.010	-0.83	4.81	4.85
Quadrant	0.26	0.27	0.004	1.40	1.08	1.11
Vodafone	0.14	0.15	0.015	10.60	0.57	0.64
Sistema	0.06	0.06	-0.002	-2.82	0.23	0.23
Total	24.40	24.00	-0.402	-1.65	100	100

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

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

Service Area	Mar-17	Jun-17	Net Additions	Rate of Change (%)
Andhra Pradesh	1.64	1.60	-0.040	-2.46
Assam	0.16	0.15	-0.005	-3.41
Bihar	0.31	0.29	-0.026	-8.32
Delhi	3.22	3.22	-0.003	-0.11
Gujarat	1.36	1.32	-0.038	-2.81
Haryana	0.35	0.33	-0.017	-4.83
Himachal Pradesh	0.15	0.14	-0.008	-5.06
Jammu & Kashmir	0.13	0.13	-0.007	-5.28
Karnataka	2.24	2.26	0.011	0.48
Kerala	2.11	2.08	-0.031	-1.48
Madhya Pradesh	1.02	1.01	-0.011	-1.12
Maharashtra	1.88	1.85	-0.028	-1.50
Mumbai	3.04	3.04	-0.005	-0.15
North East	0.12	0.12	-0.003	-2.77
Orissa	0.29	0.28	-0.011	-3.67
Punjab	1.01	0.97	-0.040	-3.96
Rajasthan	0.74	0.71	-0.028	-3.85
T.N. (incl. Chennai)	2.55	2.49	-0.057	-2.25
U.P.(E)	0.49	0.49	-0.009	-1.91
U.P.(W)	0.40	0.38	-0.014	-3.65
Kolkata	0.86	0.84	-0.018	-2.07
West Bengal	0.33	0.32	-0.011	-3.31
All India	24.40	24.00	-0.402	-1.65

1.33 Only Karnataka Service area showed positive growth rate of in wireline subscriber base during QE Jun-17. All other service areas showed decline in wireline subscriber base during the same period.

**Table 1.23: Service Area wise Wireline Rural-Urban Subscriber
Base– Jun-17 (in million)**

Service Area	Total Subscribers	Rural Subscribers	Urban Subscribers	% of Rural Subscribers
Andhra Pradesh	1.60	0.29	1.30	18.43
Assam	0.15	0.03	0.12	17.93
Bihar	0.29	0.08	0.21	27.45
Delhi	3.22	-	3.22	-
Gujarat	1.32	0.19	1.13	14.17
Haryana	0.33	0.07	0.26	20.41
Himachal Pradesh	0.14	0.09	0.05	61.71
Jammu & Kashmir	0.13	0.02	0.11	12.12
Karnataka	2.26	0.18	2.07	8.05
Kerala	2.08	1.27	0.81	60.95
Madhya Pradesh	1.01	0.12	0.90	11.42
Maharashtra	1.85	0.34	1.52	18.15
Mumbai	3.04	-	3.04	-
North East	0.12	0.02	0.09	20.51
Orissa	0.28	0.06	0.22	22.10
Punjab	0.97	0.23	0.73	24.02
Rajasthan	0.71	0.12	0.59	16.77
T.N. (incl. Chennai)	2.49	0.35	2.14	14.17
U.P.(E)	0.49	0.09	0.39	19.21
U.P.(W)	0.38	0.01	0.37	3.69
Kolkata	0.84	-	0.84	-
West Bengal	0.32	0.13	0.18	42.64
All India	24.00	3.69	20.31	15.38

Table 1.24: Service Area wise Wireline Teledensity

Service Area	As on 31 st March, 2017			As on 30 th June, 2017		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	0.49	5.32	1.84	0.46	5.22	1.79
Assam	0.10	2.38	0.47	0.10	2.28	0.46
Bihar	0.07	1.20	0.23	0.07	1.08	0.21
Delhi	-	-	14.68	-	-	14.56
Gujarat	0.54	4.25	2.11	0.50	4.14	2.04
Haryana	0.41	2.67	1.24	0.38	2.54	1.18
Himachal Pradesh	1.48	6.62	2.09	1.39	6.36	1.98
Jammu & Kashmir	0.19	3.33	1.07	0.17	3.16	1.01
Karnataka	0.50	8.32	3.57	0.47	8.37	3.57
Kerala	4.85	8.90	5.87	4.71	8.93	5.78
Madhya Pradesh	0.15	3.12	0.97	0.15	3.07	0.96
Maharashtra (incl. Mumbai)*	0.55	7.58	3.98	0.53	7.50	3.94
North East	0.24	2.68	0.86	0.23	2.60	0.83
Orissa	0.19	2.94	0.68	0.18	2.84	0.66
Punjab	1.44	5.45	3.22	1.34	5.26	3.08
Rajasthan	0.23	3.41	1.00	0.21	3.28	0.96
Tamil Nadu (incl. Chennai)	1.30	5.02	3.56	1.27	4.89	3.48
Uttar Pradesh (incl. UPE & UPW)	0.06	1.46	0.38	0.06	1.41	0.37
West Bengal (incl. Kolkata)*	0.20	3.80	1.24	0.20	3.70	1.21
All India	0.44	5.10	1.90	0.42	5.01	1.86

* 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.

Public Call Offices (PCO)

1.34 Total number of PCOs in the country declined from 4,52,036 at the end of Mar-17 to 4,29,139 at the end of Jun-17. Detailed table of service provider wise PCOs is available at Annexure -1.3.

Chart 1.11: Trend of Number of PCOs



Table 1.25 : Rate of change & Market share of PCOs

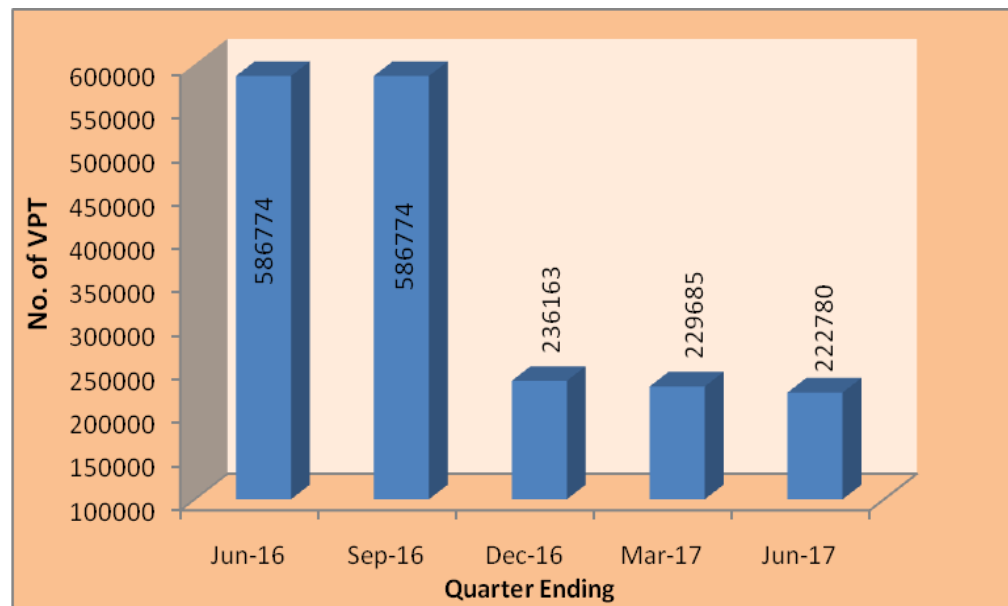
Service Provider	Mar-17 (in lakh)	Jun-17 (in lakh)	Rate of change (%)	Market share (%) (Jun-17)
BSNL	2.79	2.60	-6.60	60.66
MTNL	1.28	1.27	-0.78	29.61
Bharti	0.15	0.14	-8.39	3.27
Quadrant	0.02	0.02	-8.14	0.35
Sistema	0.10	0.10	-0.41	2.22
Tata	0.19	0.17	-10.94	3.89
Total	4.52	4.29	-5.07	100

1.35 Number of PCOs continued shows declining trend. At the Q.E. Jun-17, it has recorded a overall decline of 5.07%. The year-on-year (Y-O-Y) decline rate over the same quarter of the last year is 18.34%.

Village Public Telephones (VPTs)

- 1.36 There are 5,93,731 inhabited villages in India as per census 2001. At the end of the quarter, 37.52% of the total inhabited villages in India have been connected by VPTs.
- 1.37 Number of VPTs declined from 2,29,685 at the end of Mar-17 to 2,22,780 at the end of Jun-17.
- 1.38 At the end of Jun-17, only two service providers M/s BSNL and M/s Tata Teleservices were providing VPT in the country. BSNL (2,21,498) has 99.42% market share of total VPTs and Tata Teleservices has 0.58% market share with 1,282 VPTs. Detailed table of VPT is available at Annexure -1.4.

Chart 1.12: Growth/decline Trend in VPTs



Section D: Internet Service

1.39 This section summarizes information submitted by 157 internet service providers for the quarter ending Jun-17. **Part-I** consists of information of Internet service (both narrowband and broadband), **Part-II** consists of broadband service and **Part-III** covers narrowband service.

Part-I : Internet Service (broadband + narrowband)

1.40 As per reports received from operators, total number of internet subscribers increased from 422.19 million at the end of Mar-17 to 431.21 million at the end of Jun-17 with quarterly growth rate of 2.14%.

1.41 Wired Internet subscribers increased from 21.58 million at the end of Mar-17 to 21.67 million at the end of Jun-17 with quarterly growth of 0.42%, and Wireless Internet subscribers increased from 400.62 million at the end of Mar-17 to 409.55 million at the end of Jun-17 with quarterly growth rate of 2.23%.

1.42 Number of Broadband subscribers increased from 276.52 million at the end of Mar-17 to 300.84 million at the end of Jun-17 with quarterly growth rate of 8.80%. However, the number of Narrowband subscribers declined from 145.68 million at the end of Mar-17 to 130.38 million at the end of Jun-17 with quarterly decline rate of 10.50%.

Table 1.26: Trend of Internet subscriber base

Segment	Mode of Access								Total Subscribers (in million)	
	Wired Subscribers (in million)		Wireless Subscribers (in million)							
			Fixed Wireless (Wi-Fi, Wi-Max, Radio & VSAT)		Mobile Wireless (Phone + Dongle)		Total Wireless			
	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17
Broadband	18.24	18.33	0.560	0.519	257.71	281.99	258.27	282.51	276.52	300.84
Narrowband	3.33	3.33	0.022	0.019	142.32	127.02	142.34	127.04	145.68	130.38
Total	21.58	21.67	0.582	0.538	400.04	409.01	400.62	409.55	422.19	431.21

1.43 The following charts present the composition of Internet Subscribers by mode of access and composition of Broadband & Narrowband subscription.

Chart 1.13: Composition of Internet subscription

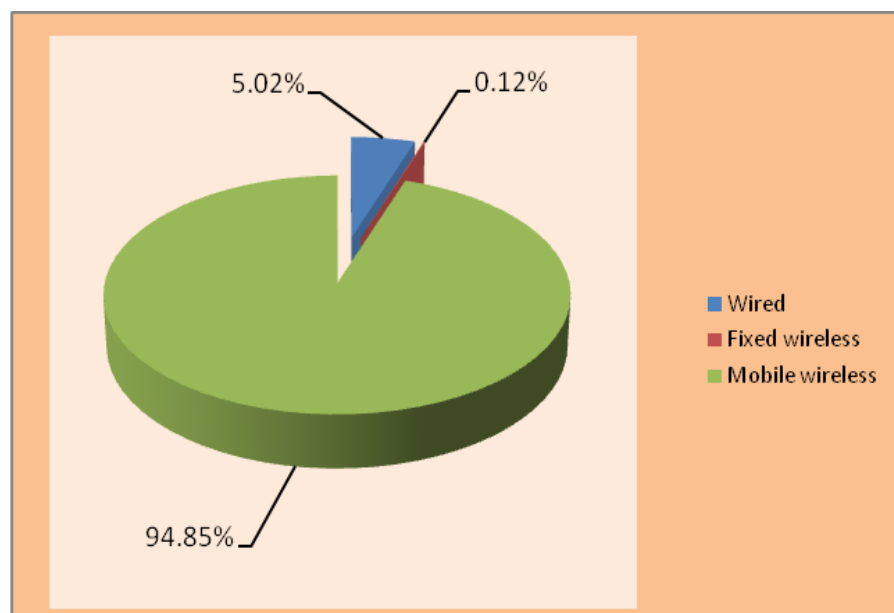
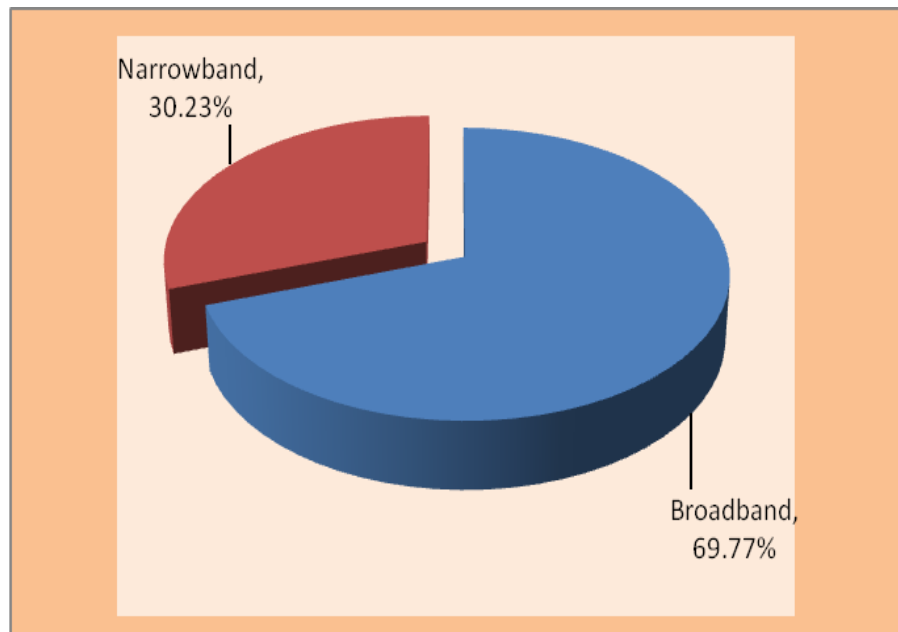
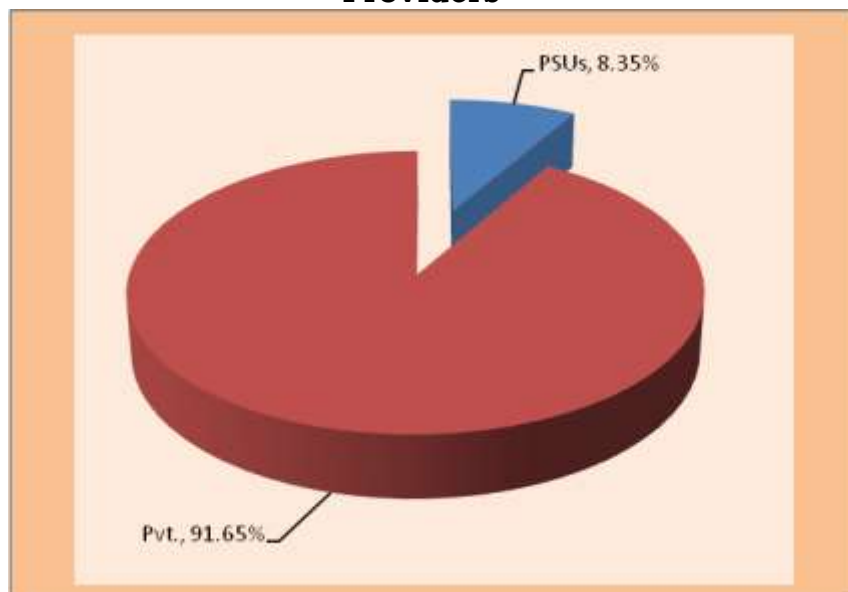


Chart 1.14 : Composition of Broadband & Narrowband subscription



1.44 Private internet service providers hold 91.65% market share of total internet subscribers at the Q.E. Jun-17. The following charts present the composition of market share of PSUs and Private Internet service providers.

Chart 1.15 : Market share of PSUs and Private Internet Service Providers



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

Table 1.27: Break up of Rural-Urban internet subscriber base

[Subscribers in Millions]

Telecom Service Area	Narrowband (Jun-17)		Broadband (Jun-17)		Total Internet (Jun-17)		Total Internet (Mar-17)	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
Andhra Pradesh	4.23	5.62	7.68	15.68	11.92	21.30	12.10	19.71
Assam	2.31	0.77	2.06	3.14	4.38	3.91	4.25	3.82
Bihar	6.64	3.75	4.87	8.53	11.51	12.28	11.91	12.19
Delhi	0.26	5.06	0.40	22.11	0.66	27.17	0.69	26.10
Gujarat	2.89	4.22	4.97	14.94	7.86	19.15	8.26	19.04
Haryana	1.36	1.15	2.59	4.86	3.95	6.01	3.65	5.99
Himachal Pradesh	0.64	0.55	1.36	1.18	2.01	1.74	2.10	1.66
Jammu & Kashmir	0.93	0.65	0.88	2.04	1.81	2.69	1.87	2.64
Karnataka	2.59	3.92	4.02	17.42	6.62	21.34	6.37	20.50
Kerala	1.58	1.99	5.25	8.48	6.83	10.48	6.72	9.83
Kolkata	0.16	2.99	0.63	8.06	0.79	11.05	0.76	10.90
Madhya Pradesh	4.07	3.92	3.08	12.74	7.15	16.66	7.70	17.07
Maharashtra	4.08	5.61	7.55	18.22	11.63	23.84	11.75	24.20
Mumbai	0.13	4.20	0.38	14.26	0.51	18.46	0.50	19.06
North East	1.14	0.70	1.25	3.21	2.39	3.91	2.22	2.53
Orissa	2.68	1.64	2.21	3.80	4.89	5.44	4.93	5.58
Punjab	1.94	2.44	2.75	9.37	4.69	11.82	4.67	11.97
Rajasthan	4.25	3.95	4.74	9.46	8.99	13.41	8.71	12.84
Tamil Nadu	3.22	6.14	5.80	18.73	9.02	24.86	8.08	24.24
Uttar Pradesh(East)	7.49	5.15	6.38	10.52	13.88	15.66	13.41	15.18
Uttar Pradesh(West)	4.25	3.96	2.92	11.15	7.17	15.10	7.10	12.83
West Bengal	3.85	1.28	4.88	6.26	8.74	7.54	8.80	7.78
Total	60.72	69.66	76.67	224.17	137.39	293.82	136.52	285.68

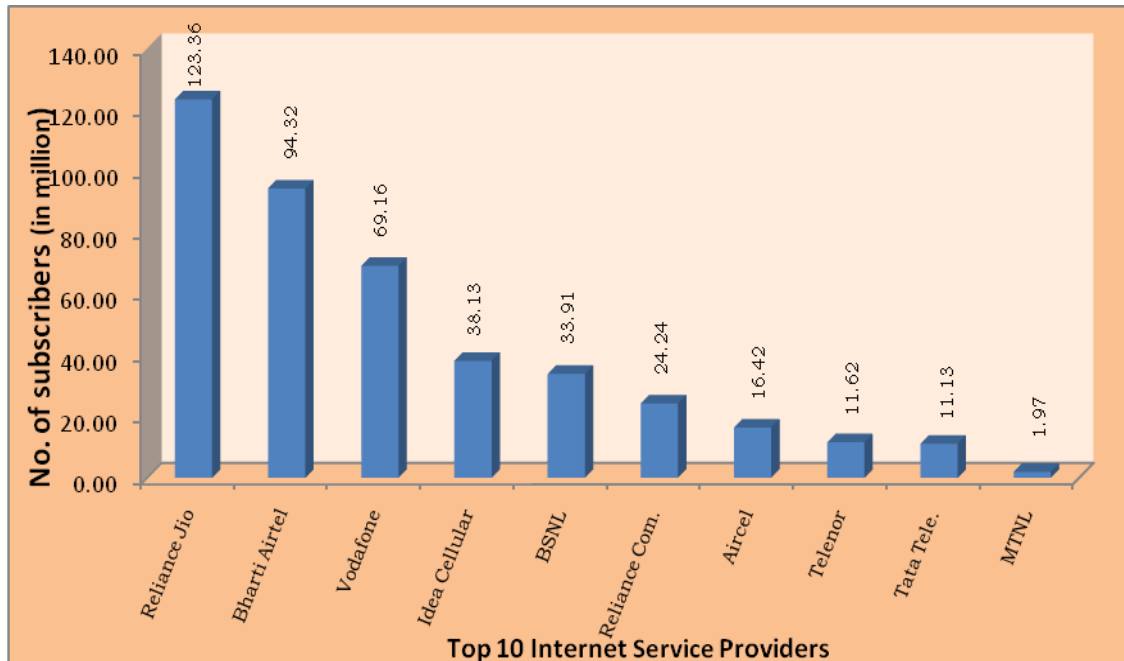
Table 1.28: Internet Subscriber Base and Market Share of top 10 Service Providers – Jun-17

S.No	ISP	No. of Subscribers	Share (%)
1	RJIL	123363870	28.61
2	Bharti Airtel	94323722	21.87
3	Vodafone	69163108	16.04
4	Idea Cellular	38133324	8.84
5	BSNL	33911297	7.86
6	Reliance Communications	24242107	5.62
7	Aircel Ltd	16421375	3.81
8	Telenor	11623379	2.70
9	Tata Teleservices	11132502	2.58
10	MTNL	1974983	0.46
	Total of Top 10 ISPs	424,289,667	98.39
	Others	6924226	1.61
	Grand Total	431,213,893	100

1.46 Reliance Jio holds the top position with 28.61% of market share of internet subscribers followed by Bharti Airtel with 21.87%. Top 10 Service Providers together hold 98.39% of total internet subscriber base at the QE Jun-17. Detailed table of number of internet subscriber base (broadband and narrowband) of all the service providers is available at Annexure-1.5.

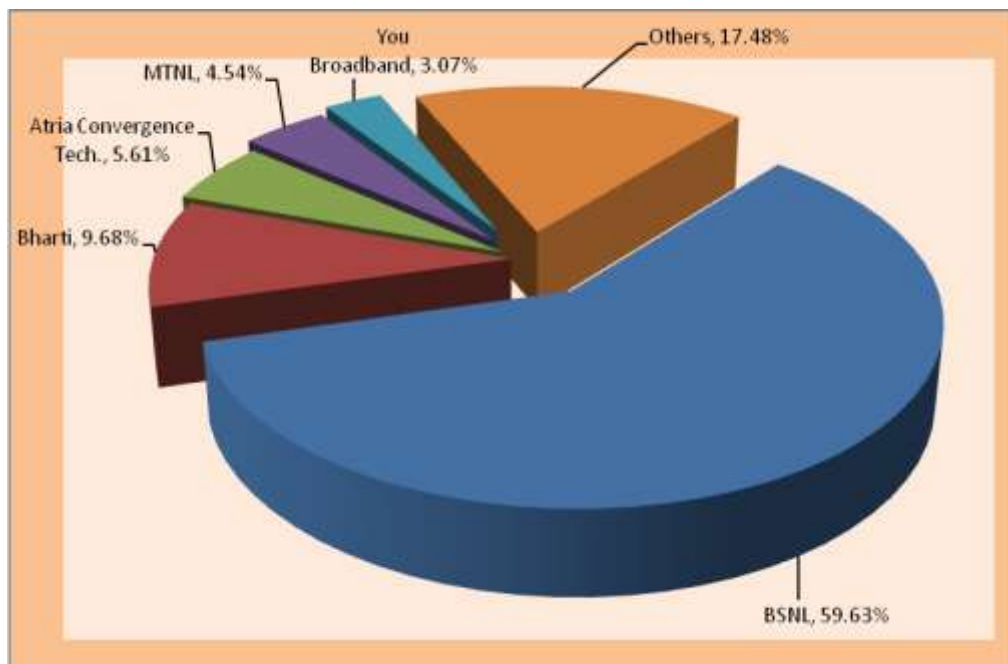
1.47 The following chart depicts the internet subscriber base of top ten ISPs in the QE Jun-17.

Chart 1.17 : Subscriber base of top ten ISPs



1.48 In wired internet segment, BSNL holds 59.63% market share with 12.92 million subscribers, followed by Bharti with 2.10 million subscribers. Total number of wired internet subscriber is 21.67 million at the end of Jun-17.

Chart 1.18 : Composition of Wired Internet subscribers



1.49 In wireless internet segment, Reliance Jio holds 30.12% market share with 123.36 million subscribers followed by Bharti Airtel with 92.23 million wireless internet subscribers at the QE Jun-17.

Chart 1.19 : Composition of Wireless Internet subscription

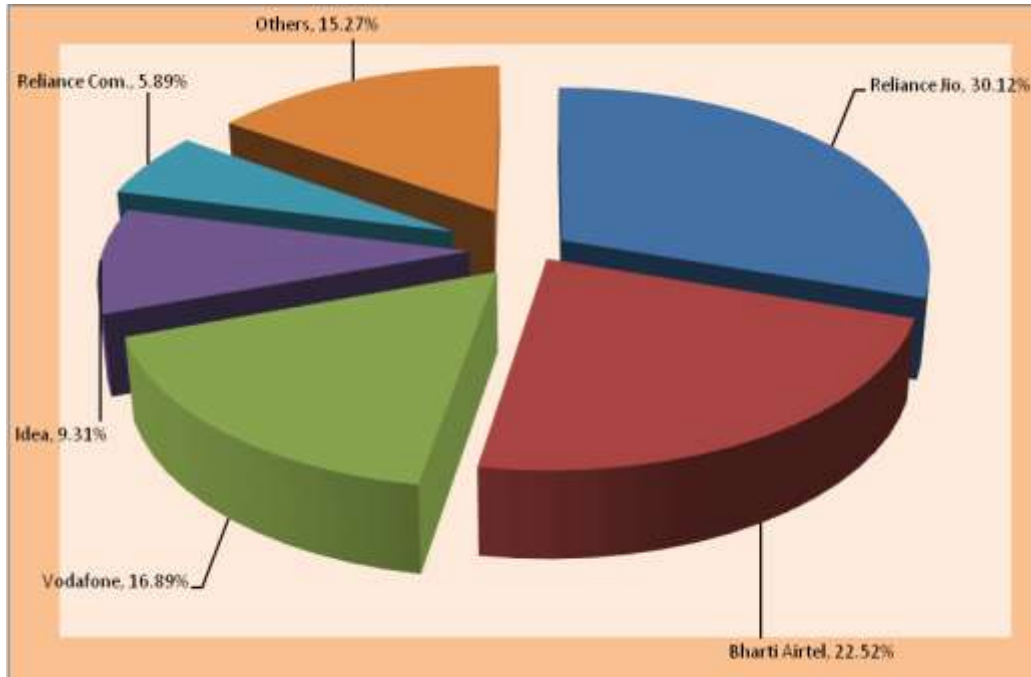


Chart 1.20 : Technology trend for Wireless Internet Access – Jun-17

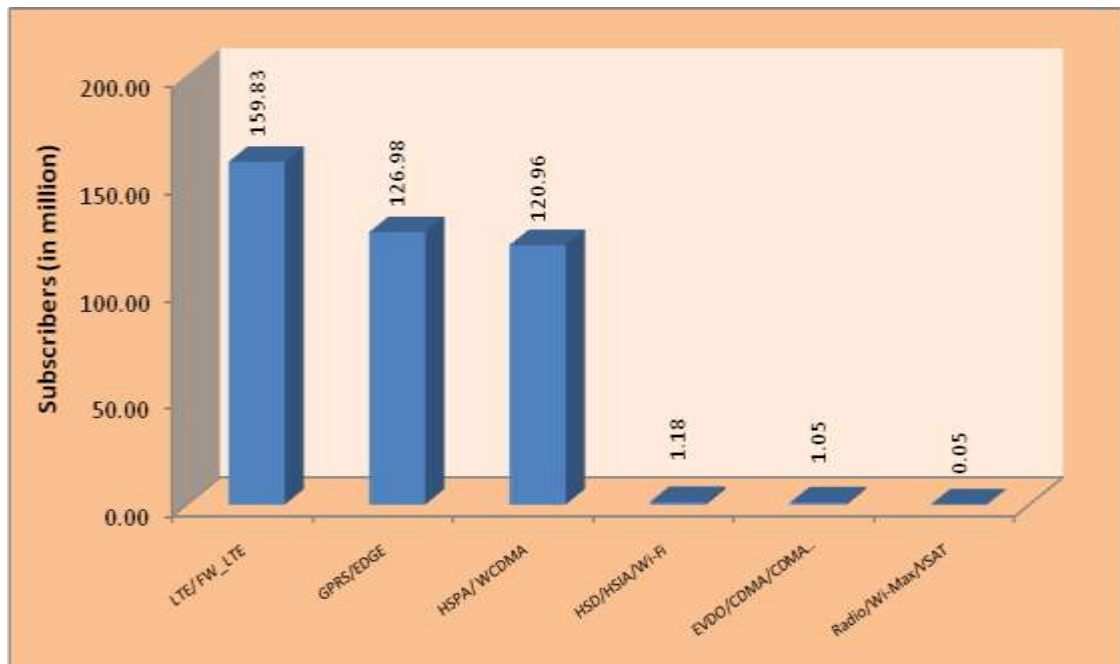
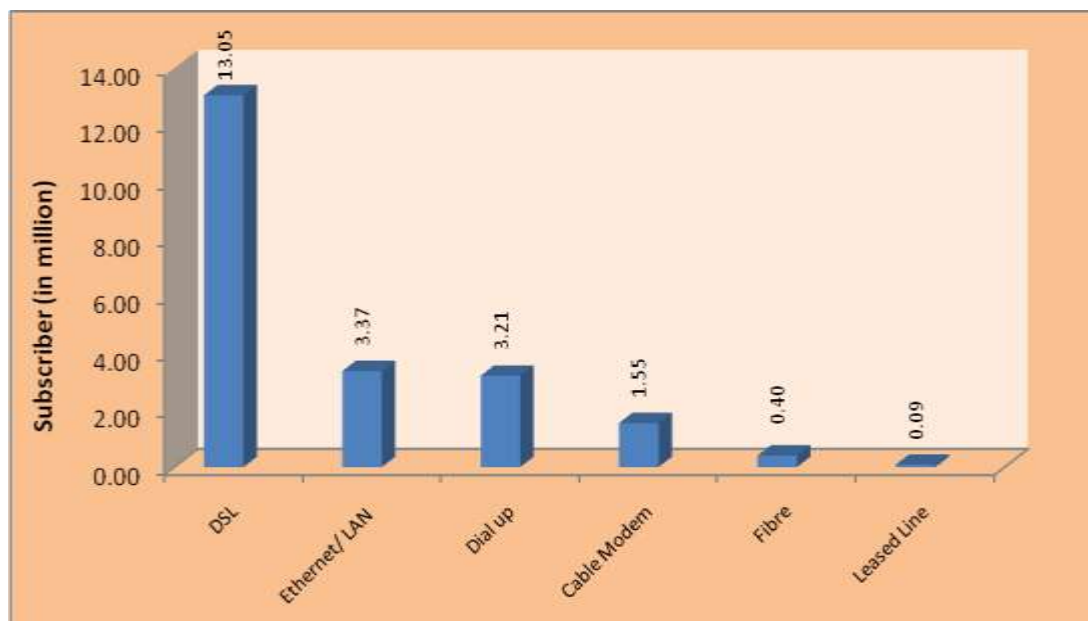


Chart 1.21 : Technology trend for Wired Internet Access – Jun-17



1.50 Top five service areas in terms of internet subscriptions (wired + wireless) are Maharashtra (35.46 million), Tamil Nadu including Chennai (33.89 million), Andhra Pradesh (33.21 million), U.P.(E) (29.54 million) and Karnataka (27.96 million).

Table 1.29 : Service Area wise number of Internet Subscribers per 100 population at the end of Jun-17

Service Area	Internet Subscribers (in million)			Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Andhra Pradesh	11.92	21.30	33.21	18.54	85.28	37.21
Assam	4.38	3.91	8.29	15.89	72.52	25.18
Bihar	11.51	12.28	23.78	9.56	63.51	17.03
Delhi	-	-	27.84	-	-	125.94
Gujarat	7.86	19.15	27.02	21.12	70.14	41.85
Haryana	3.95	6.01	9.96	22.33	58.30	35.57
Himachal Pradesh	2.01	1.74	3.74	31.78	203.58	52.23
Jammu & Kashmir	1.81	2.69	4.49	20.00	75.84	35.71
Karnataka	6.62	21.34	27.96	17.27	86.12	44.32
Kerala	6.83	10.48	17.30	25.37	115.08	48.04

Service Area	Internet Subscribers (in million)			Internet subscribers per 100 population		
	Rural	Urban	Total	Rural	Urban	Total
Madhya Pradesh	7.15	16.66	23.82	9.36	57.08	22.55
Maharashtra	11.63	23.84	35.46	19.17	69.68	43.89
Mumbai	0.51	18.46	18.97			
North East	2.39	3.91	6.30	22.66	108.73	44.57
Orissa	4.89	5.44	10.33	13.90	70.53	24.08
Punjab	4.69	11.82	16.51	27.00	84.60	52.67
Rajasthan	8.99	13.41	22.40	15.98	74.52	30.17
Tamil Nadu	9.02	24.86	33.89	32.40	56.84	47.34
UP (East)	13.88	15.66	29.54	11.72	57.19	22.20
UP (West)	7.17	15.10	22.27			
Kolkata	0.79	11.05	11.83	13.97	67.35	29.34
West Bengal	8.74	7.54	16.28			
Total	137.39	293.82	431.21	15.56	72.51	33.47

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

Notes:

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

ISP Connectivity

1.51 The International Internet bandwidth owned by various service providers is reported to be 2,933 Gbps during the quarter ending Jun-17 as compared to 2,600 Gbps during the previous quarter.

Internet Telephony

1.52 As per the reports received from 16 service providers, providing Internet Telephony services, the total outgoing minutes of usage for internet telephony is 260 million during the Q.E. Jun-17. 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)

1.53 The total number of broadband subscribers increased from 276.52 million at the end of Mar-17 to 300.84 million at the end of Jun-17. Out of which wired broadband subscribers are 18.33 million and wireless broadband subscribers are 282.51 million.

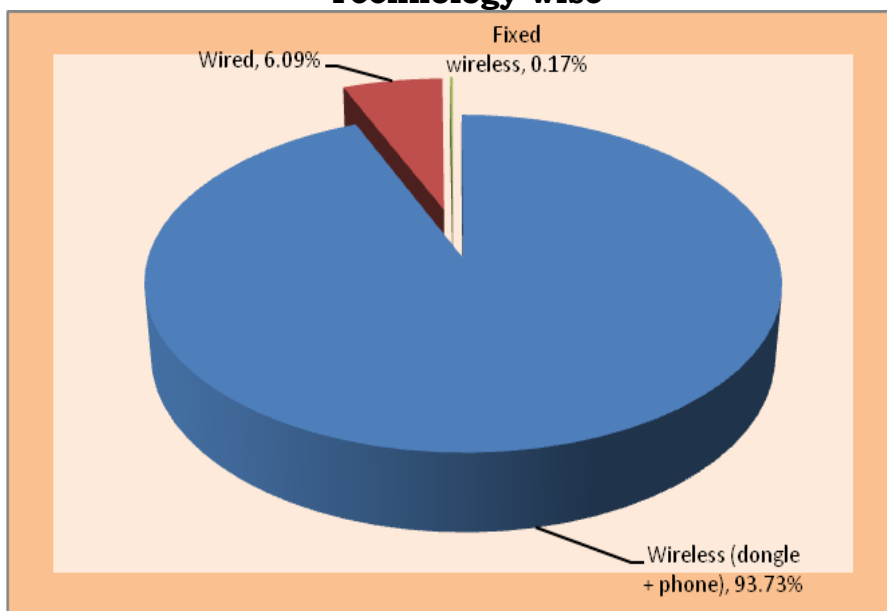
1.54 Top five broadband (wired+wireless) service providers in term of subscribers are Reliance Jio (123.36 million), Bharti (55.34 million), Vodafone (41.14 million), Idea (26.37 million) and BSNL (21.76 million).

1.55 In wired broadband segment, BSNL holds 53.05% market share with 9.73 million subscribers followed by Bharti with 2.10 million subscribers.

1.56 In wireless broadband segment, Reliance Jio holds 30.12% market share with 123.36 million subscribers followed by Bharti (13.00%) with 53.25 million subscribers.

1.57 Top five service areas in respect of broadband subscriptions are Maharashtra (25.77 million), Tamil Nadu including Chennai (24.52 million), Andhra Pradesh (23.37 million), Delhi (22.51 million) and Karnataka (21.44 million).

Chart 1.23 : Composition of Broadband subscription – Technology wise

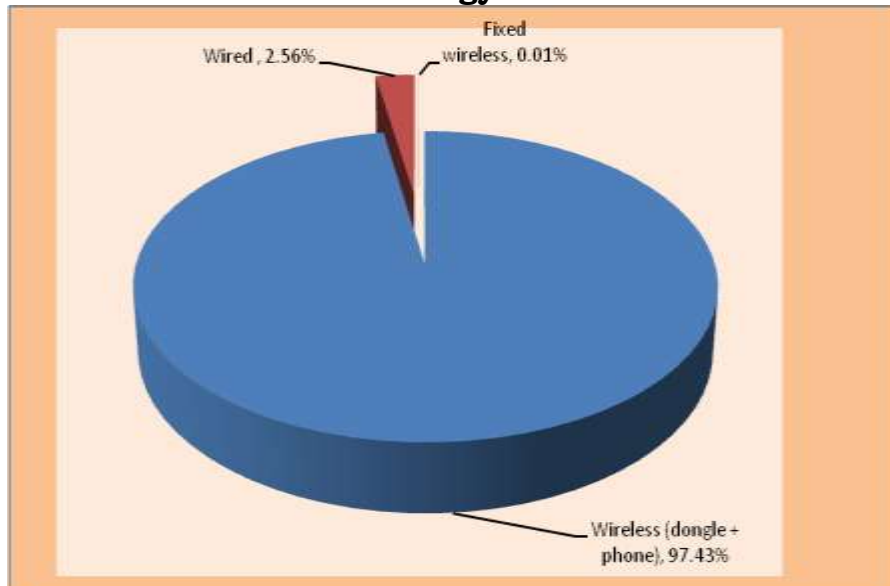


1.58 Mobile Device Users (dongle + phone) constitute 93.73% of total broadband subscribers at the end of Jun-17.

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

- 1.59 Total number of narrowband subscribers declined from 145.68 million at the end of Mar-17 to 130.38 million at the end of Jun-17 with the quarterly decline rate of 10.50%. Out of 130.38 million narrowband subscribers, Wired Narrowband subscribers are 3.33 million and Wireless Narrowband subscribers are 127.04 million.
- 1.60 The top five narrowband (wired + wireless) service providers in term of subscriber base are Bharti (38.98 million), Vodafone (28.03 million), BSNL (12.15 million), Idea Cellular (11.77 million) and Telenor (11.28 million).
- 1.61 In wired narrowband segment, BSNL holds 95.82% market share with 3.195 million subscribers followed by Joister Infoserve Pvt Ltd. (Syscon Infoway Pvt Ltd) with 0.041 million.
- 1.62 In wireless narrowband segment, Bharti holds 30.68% market share with 38.98 million subscribers followed by Vodafone (28.03 million).

Chart 1.24 : Composition of Narrowband subscription – Technology wise



Section E : Other Value Added Services - PMRTS & VSAT

Public Mobile Radio Trunk Services (PMRTS)

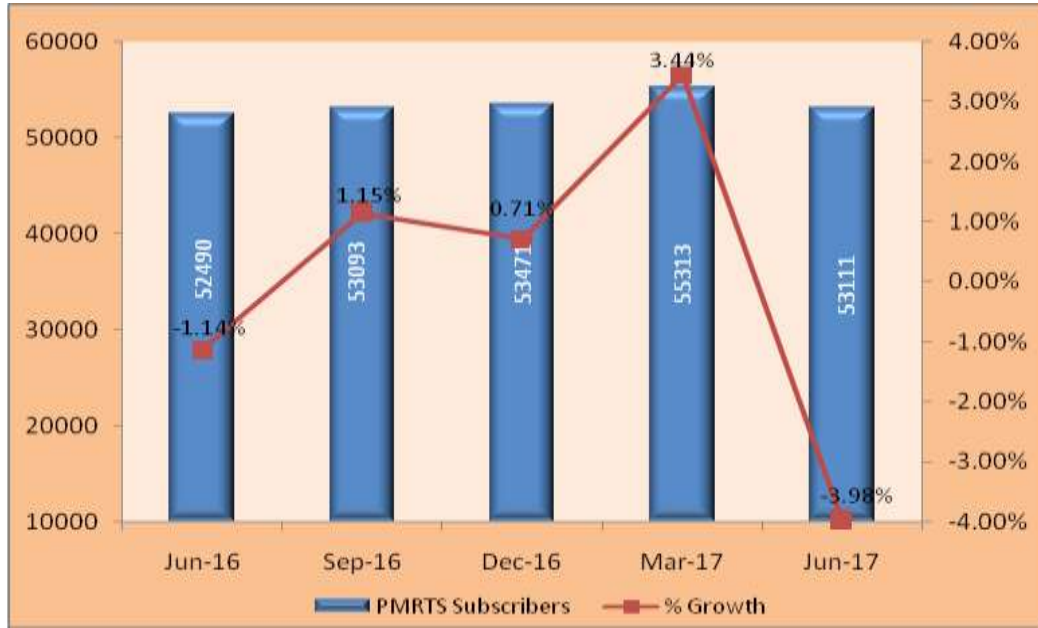
1.63 The subscriber base of PMRTS declined from 55,313 at the end of Mar-17 to 53,111 at the end of Jun-17 with quarterly growth rate of -3.98%.

Table 1.30 : PMRTS Subscriber base - Service Provider wise

Sr. No .	Name of the Service Provider	Subscriber Base as on 31.03.2017	Subscriber Base as on 30.06.2017	Growth in Subscribers	% Growth in subscribers as on 30.06.2017
1	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	46804	44391	-2413	-5.16
4	Procall Ltd.	3032	3022	-10	-0.33
2	Inative Networks Pvt Ltd	1820	1820	0	0.00
3	Quick Call	1457	1447	-10	-0.69
5	Smartlink Pvt Ltd	1072	1039	-33	-3.08
6	Bhilwara Telenet Services Pvt Ltd	581	805	224	38.55
7	Wiwonet Solutions Pvt Ltd	273	273	0	0.00
8	Airtalk Solutions & Services Pvt Ltd	274	314	40	14.60
	Total	55313	53111	-2202	-3.98

1.64 Detailed table on Service Area wise subscriber base of PMRTS is available at Annexure-1.7.

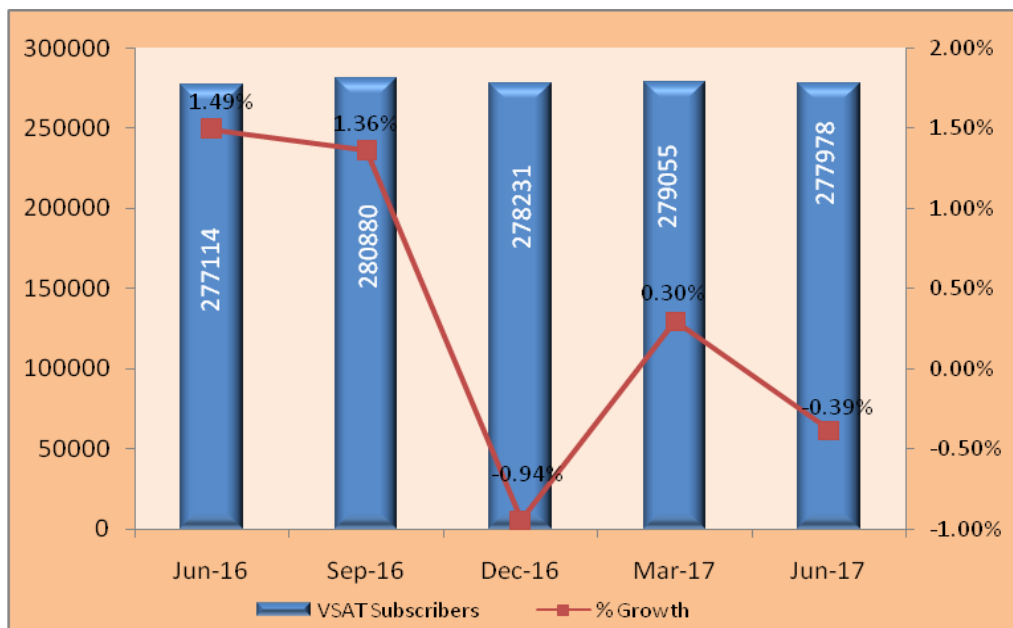
Chart 1.25 : Number of PMRTS subscribers & Rate of Growth (%)



Very Small Aperture Terminal (VSAT)

1.65 The total number of VSAT subscribers declined from 2,79,055 at the end of Mar-17 to 2,77,978 at the end of Jun-17. Net decline during the quarter has been 1,077 at the declining rate of 0.39%.

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



**Table 1.31 : VSAT Service Providers currently providing service
& their subscriber base**

Sr. No	Name of Service Providers	Subscriber base at the Quarter ending		Net Addition	%age Growth	Market Share (%) Jun-17
		Mar-17	Jun-17			
1	Hughes Communications Ltd.	101603	100482	-1121	-1.10	36.15
2	Bharti Airtel Limited,	70451	70935	484	0.69	25.52
3	Tatanet Services	53736	56733	2997	5.58	20.41
4	HCL Comnet	27556	27448	-108	-0.39	9.87
5	BSNL	20271	19699	-572	-2.82	7.09
6	National Informatics Centre Services Incorporated*	2864	0	-2864	-100	0.00
7	Infotel Satcom	2480	2587	107	4.31	0.93
8	Planetcast Media Services Ltd	94	94	0	0.00	0.03
	Total	279,055	277,978	-1,077	-0.39	100

*Note : M/s National Informatics Centre Services Incorporated discontinued its services

1.66 Hughes Communication Limited continues to be the market leader in VSAT with subscriber base of 1,00,482 followed by Bharti Airtel Ltd (70,935) at the end of Jun-17.

1.67 M/s Tatanet Services has recorded maximum growth rate of 5.58% followed by M/s Infotel Satcom with growth rate of 4.31% in number of VSAT subscribers during the quarter.

Chapter 2 :

Revenue and Usage

-
- For all the parameters, Metros indicate data for Delhi, Mumbai & Kolkata. Data for Chennai service area has been included in Circle A, as part of TN.
 - ARPU arrived after adjusting interconnect usage charges and roaming settlement charges.
 - The data contained in the section A & B covers the licensees, who have been providing service during the entire period from 1st April, 2017 to 30th June, 2017 in the various service areas.

Section A: GSM and LTE Services

Table 2.1: Key Indicators - GSM and LTE Services

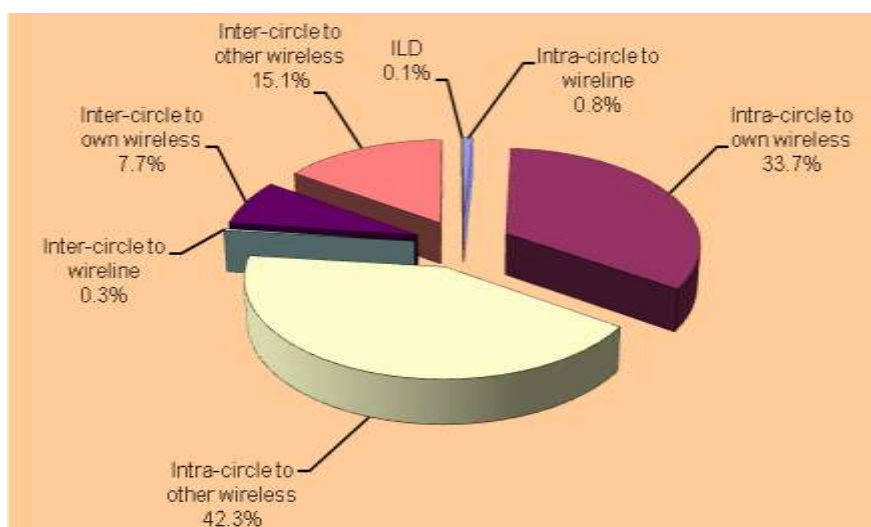
Parameter	Jun-17	Mar-17	Jun-16	QoQ %age change over Mar-17	YoY %age change over Jun-16
Subscriber Base* (million)	1176.37#	1156.37	996.63	1.73	18.03
Share of Prepaid (%)	95.52	95.41	95.23	0.12	0.30
Incoming MOU* per subscriber per month	215.51	208.06	196.60	3.58	9.62
Outgoing MOU* per subscriber per month	212.84	197.10	181.97	7.99	16.96
No. of Outgoing SMS per subscriber per month	16.01	16.82	19.52	-4.80	-17.99
Average Revenue Per User (ARPU) per month (₹)	79.58	82.68	126.05	-3.75	-36.87

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

Subscriber figures for 4G LTE is also included.

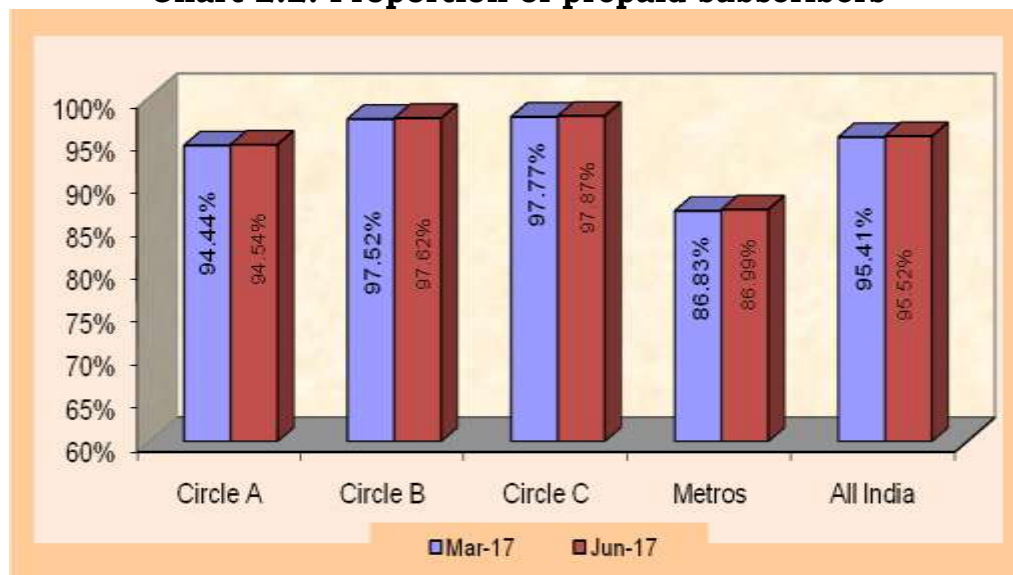
2.1 The following chart presents % break-up of outgoing minutes from Home Service Area (HSA) in the QE Jun-17.

Chart 2.1: Break-up of Outgoing minutes from Home Service Area (HSA) - GSM and LTE Services



2.2 The following chart depicts prepaid subscribers as a % of total subscribers as on the last day of the respective quarters for various categories of circles.

Chart 2.2: Proportion of prepaid subscribers



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

2.3 Market share of prepaid segment increased from 95.41% at the end of Mar-17 to 95.52% at the end of Jun-17.

2.4 The ARPU per month (all India, blended) declined from ₹83 in Q.E. Mar-17 to ₹80 in Q.E. Jun-17. 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 - GSM and LTE Services in QE Jun-17

Circle Category	ARPU per month (in ₹)		
	Post-paid	Pre-paid	Blended
Circle A	411	71	89
Circle B	393	66	74
Circle C	363	65	72
Metros	363	36	79
All India	389	65	80
All private SPs	381	64	79
BSNL/MTNL	518	70	84

2.5 The ARPU per month for pre-paid segment declined from ₹67 in QE Mar-17 to ₹65 in QE Jun-17, and ARPU per month for postpaid segment also declined from ₹412 in QE Mar-17 to ₹389 in QE Jun-17.

2.6 The following table presents the composition of ARPU per month in the QE Jun-17.

Table 2.3: Composition of ARPU per month - GSM and LTE Services in QE Jun-17

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	19.89	22.3
1.2.	Revenue from calls	35.69	40.1
1.3.	Revenue from SMS	2.16	2.4
1.4.	Revenue from data usage	20.86	23.4
1.5.	Revenue from other VAS	4.02	4.5
1.6.	Other revenue	2.07	2.3
2	Usage outside Home Service Area		
2.1.	Revenue from outroamers	4.33	4.9
3	Total revenue from subscribers (1+2)	89.02	100
4	Net inter-operator settlement charges receivable *	-9.45	
5	Net Revenue (ARPU) per month(3+4)	79.58	

* includes Interconnect Usages Charges and roaming settlement charges

2.7 From the above table, it may be seen that the net inter-operator settlement charges payable (₹9.45) accounts for 10.61% of the total revenue from subscribers.

2.8 On an all India average, the overall minutes of usage (MOU) per subscriber per month increased from 405 in QE Mar-17 to 432 in QE Jun-17.

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

Table 2.4: MOU per subscriber per month - GSM and LTE Services in QE Jun-17

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	461	399	860	189	176	365	204	188	392
Circle B	477	374	851	197	221	417	203	224	428
Circle C	499	310	808	214	266	480	220	267	487
Metro	441	344	785	246	175	421	271	197	468
All India	461	371	832	201	208	409	213	216	428

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

2.10 The overall ratio of incoming MOU and outgoing MOUs for the QE Jun-17 is 49.7 : 50.3.

2.11 Number of outgoing SMS per subscriber per month declined from 17 in Q.E. Mar-17 to 16 in Q.E. Jun-17. 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 - GSM and LTE Services in QE Jun-17

Circle category	Outgoing SMS per subscriber month		
	Postpaid	Prepaid	Blended
Circle A	102	19	24
Circle B	35	12	13
Circle C	25	9	10
Metro	25	10	12
All India	60	14	16

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 in QE Jun-17

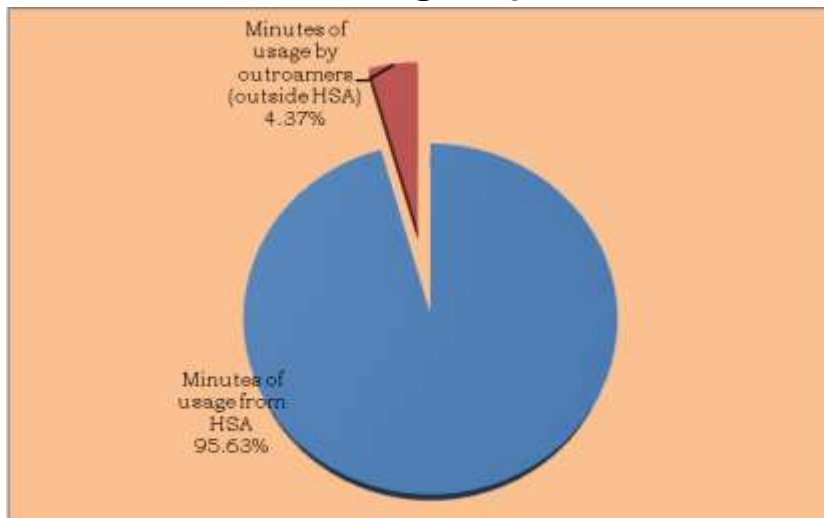
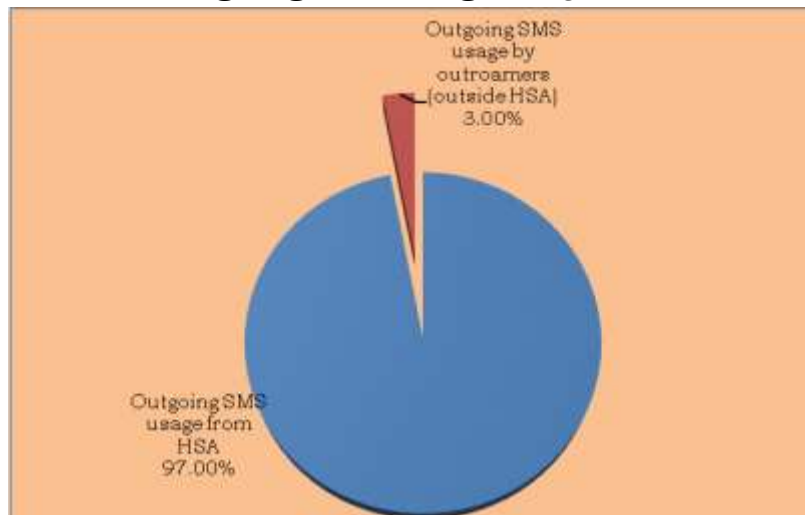


Chart 2.4: Outgoing SMS Usage by Out-roamers as a % of Total No. of Outgoing SMS Usage in QE Jun-17



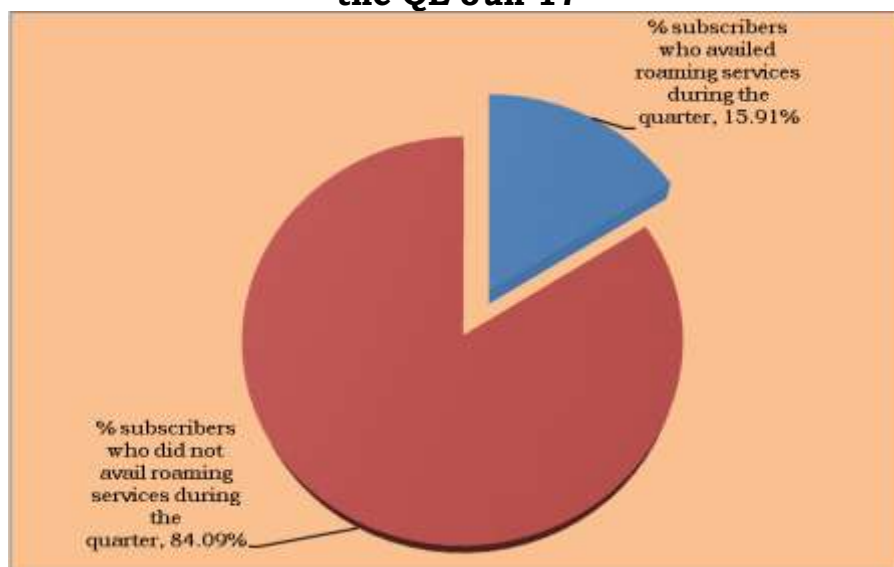
2.12 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks.

Table 2.6: %Break-up of Outgoing minutes from Home Service Area (HSA) in QE Jun-17

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	1.00	31.39	45.76	0.33	6.30	15.14	0.08
Circle B	0.60	38.14	41.72	0.23	6.75	12.51	0.05
Circle C	0.33	40.89	40.48	0.18	6.10	12.00	0.02
Metros	1.50	16.96	37.00	0.53	16.47	27.37	0.17
All India	0.80	33.69	42.30	0.29	7.69	15.14	0.07

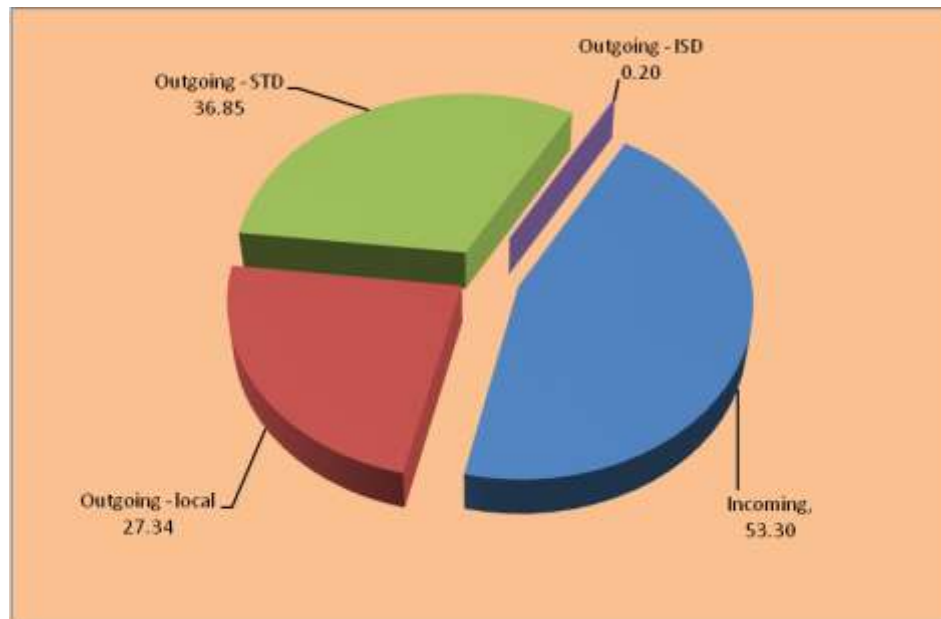
2.13 The chart given below presents the percentage of subscribers who availed roaming services (out-roamers) during the quarter ending Jun-17.

Chart 2.5: % subscribers who availed roaming services during the QE Jun-17



2.14 The usage pattern of out-roamers i.e. usage from outside the home service area shows that incoming minutes accounts for 45.28% of the total minutes of usage by out-roamers in QE Jun-17 as against 43.85% in the previous quarter. The chart given below presents the break-up of minutes of usage of out-roamers during the QE Jun-17.

Chart 2.6: % Break-up of minutes of usage of outroamers (usage from outside the Home Service Area) in QE Jun-17



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

*Average Subscriber 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 subscriber outgo per outgoing minute from HSA for GSM and LTE Services in QE Jun-17

Circle Category	(₹ per minute)		
	Postpaid	Prepaid	Blended
Circle A	0.45	0.30	0.31
Circle B	0.44	0.25	0.26
Circle C	0.42	0.22	0.23
Metros	0.45	0.21	0.26
All India	0.44	0.26	0.27

2.16 All India average subscriber outgo per outgoing minute declined from ₹0.31 in the QE Mar-17 to ₹0.27 in the QE Jun-17.

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

Parameter	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17
1. ARPU (₹ Per month)	126	121	104	83	80
3. Average Revenue from data usage per subscriber per month (in ₹)	29	29	24	19	21
3. MOU per subscriber per month	377	366	360	405	428
4. Outgoing MOU per subscriber per month					
4.1 Local (Intra-circle)	145	140	133	149	160
4.2 NLD (inter-circle)	36	37	36	48	53
4.3 ILD	0.20	0.30	0.20	0.20	0.20
5. No. of Outgoing SMS per subscriber per month	20	19	18	17	16
6. Average subscriber Outgo per outgoing minute from HSA (in ₹)	0.49	0.48	0.44	0.31	0.27

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

Section B: CDMA - Full Mobility Service

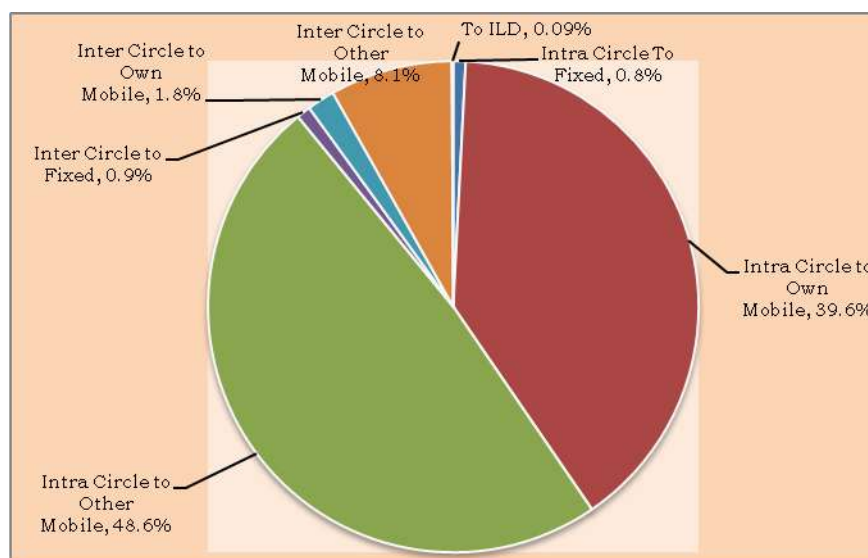
Table 2.9: Key Indicators - CDMA Full Mobility Service

Parameters	QE Jun-17	QE Mar-17	QE Jun-16	QoQ change (%)	YoY change (%)
Subscriber Base (in Millions*)	8.88	9.78	32.50	-9.21	-72.67
Share of Prepaid (%)	86.84	85.66	88.67	1.37	-2.07
Incoming MOUs per subscriber per month	141.67	137.40	97.77	3.11	44.91
Outgoing MOUs per subscriber per month	104.74	112.43	129.95	-6.84	-19.40
Outgoing SMS per subs per month	2.18	2.66	6.85	-18.11	-68.26
ARPU (₹ per month)	124.49	131.34	98.51	-5.22	26.37

* The subscriber figures are as on last day of the quarter.

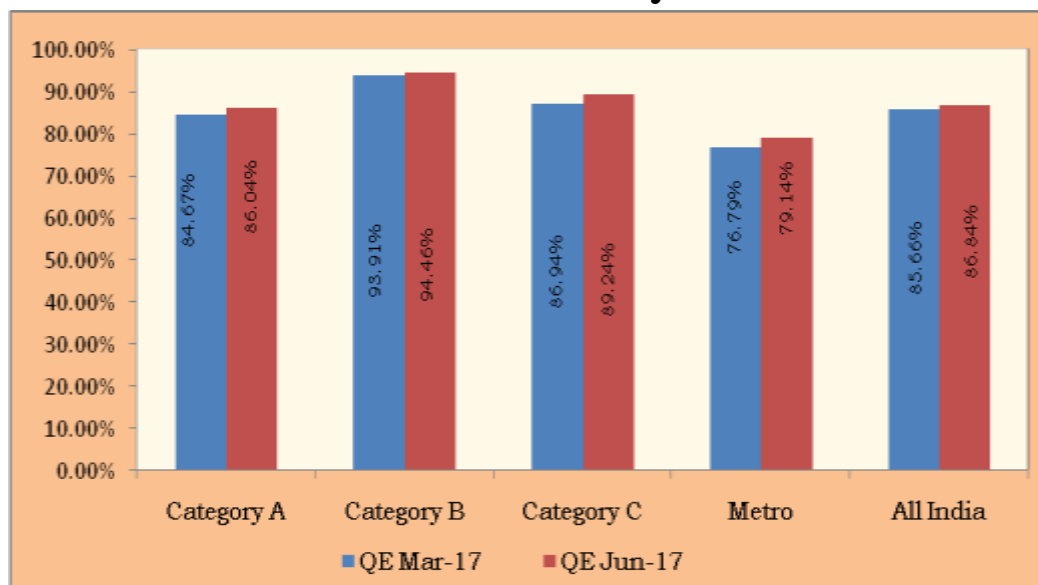
2.18 The following chart depicts % break-up of outgoing minutes from home service area (HSA).

Chart 2.7: % Break-up of Outgoing Minutes from Home Service Area (HSA) - CDMA Full Mobility Service in QE Jun-17



2.19 The following chart depicts prepaid subscribers as a % of total subscribers as on the last day of the respective quarters for various categories of circles.

Chart 2.8: Proportion of prepaid subscribers – CDMA Full Mobility Service



2.20 Market share of Prepaid segment increased from 85.66% in QE Mar-17 to 86.84% in QE Jun-17.

2.21 The following table presents the ARPU per month for various categories of circles and various platforms for payment viz. postpaid and prepaid.

Table 2.10: Monthly ARPU - CDMA Full Mobility Service in QE Jun-17

(₹ per month)

Circle category	Postpaid	Prepaid	Blended ARPU
Circle A	589	64	141
Circle B	474	55	79
Circle C	513	59	114
Metro	525	56	160
All India	537	58	124

2.22 The All India blended Average Revenue Per User (ARPU) per month has shown a decline of 5.22% from ₹131 in QE Mar-17 to ₹124 in QE Jun-17.

2.23 ARPU for Prepaid service declined from ₹62 in QE Mar-17 to ₹58 in QE Jun-17. However, ARPU for Postpaid service increased from ₹527 in QE Mar-17 to ₹537 in QE Jun-17.

Table 2.11: Composition of ARPU per month- CDMA Full Mobility Service

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	18.50	15.08
1.2	Revenue from Calls	27.14	22.12
1.3	Revenue from SMS#	0.40	0.33
1.4	Revenue from data usage	69.37	56.52
1.5	Revenue from other VAS	1.34	1.09
1.6	Other Revenue#	4.71	3.84
2	Usage Outside Home Service Area		
2.1	Revenue from Out-roamers	1.25	1.02
3	Total Revenue from Subscribers (1+2)	122.72	100
4	Net inter-operator settlement charges receivable*	1.76	
5	Net Revenue (ARPU) (3+4)	124.49	

* Includes Interconnect Usage Charges and roaming settlement charges

2.24 Revenue from data usage per subscriber per month (for usage from HSA) declined from ₹74.99 in QE Mar-17 to ₹69.37 in QE Jun-17.

2.25 The total MOUs per subscriber per month declined by 0.80%, from 249 in QE Mar-17 to 247 in QE Jun-17. Outgoing MOUs declined from 112 in QE Mar-17 to 105 in QE Jun-17, however incoming MOUs increased from 137 in QE Mar-17 to 142 in QE Jun-17.

2.26 Prepaid MOUs per subscriber per month declined from 257 in QE Mar-17 to 256 in QE Jun-17, and postpaid MOUs per subscriber per month also declined from 199 in QE Mar-17 to 193 in QE Jun-17.

Table 2.12 : MOU per subscriber per month – CDMA Full Mobility Service

MOU per subscriber per month									
Circle category	Postpaid			Prepaid			Blended		
	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU
Circle A	73	43	116	83	123	206	82	111	193
Circle B	166	101	267	117	167	285	120	163	284
Circle C	161	103	264	89	176	264	98	167	264
Metro	120	96	216	107	159	267	110	145	255
All India	113	80	193	103	152	256	105	142	247

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

Table 2.13 : Outgoing SMS per subscriber per month in QE Jun-17 – CDMA Full Mobility Service

Category	Outgoing SMS per subscriber month		
	Postpaid	Prepaid	Blended
Category A	1	3	2
Category B	2	2	2
Category C	6	3	3
Metro	2	2	2
All India	2	2	2

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

Chart 2.9: Minutes of usage by out-roamers as a percentage of total minutes of usage in QE Jun-17

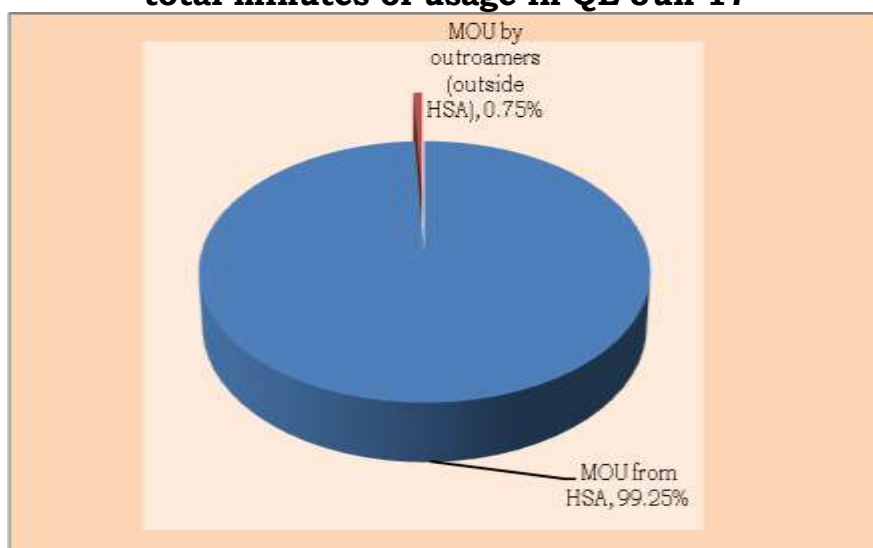


Table 2.14: %Break-up of Outgoing minutes from Home Service Area (HSA) - CDMA Full Mobility Service in QE Jun-17

Circle	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	1.02	45.83	48.72	1.50	0.26	2.66	0.02
Circle B	0.37	40.17	54.50	0.50	0.41	3.92	0.13
Circle C	0.40	33.70	55.17	1.00	0.93	8.79	0.02
Metro	1.24	35.22	40.70	1.03	4.75	16.96	0.09
All India	0.81	39.64	48.64	0.92	1.82	8.09	0.09

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

Chart 2.10: Percentage of subscribers who availed roaming service during the quarter in QE Jun-17

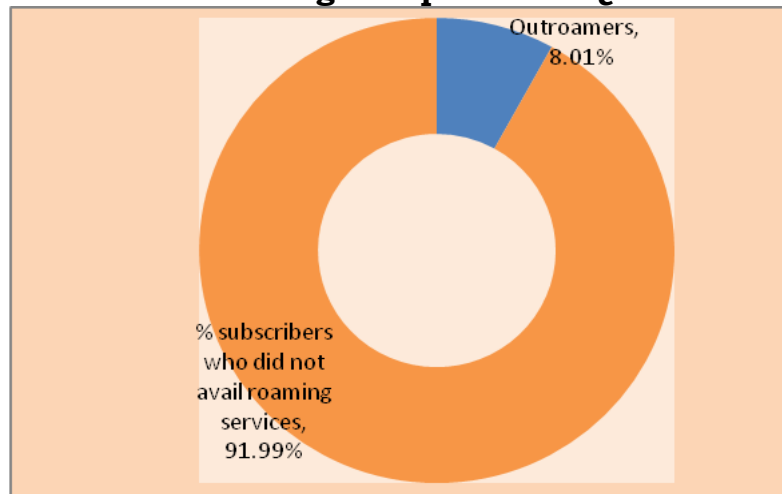


Chart 2.11: Percentage breakup of minutes of usage of Out-roamers (usage from outside the Home Service Area) in QE Jun-17

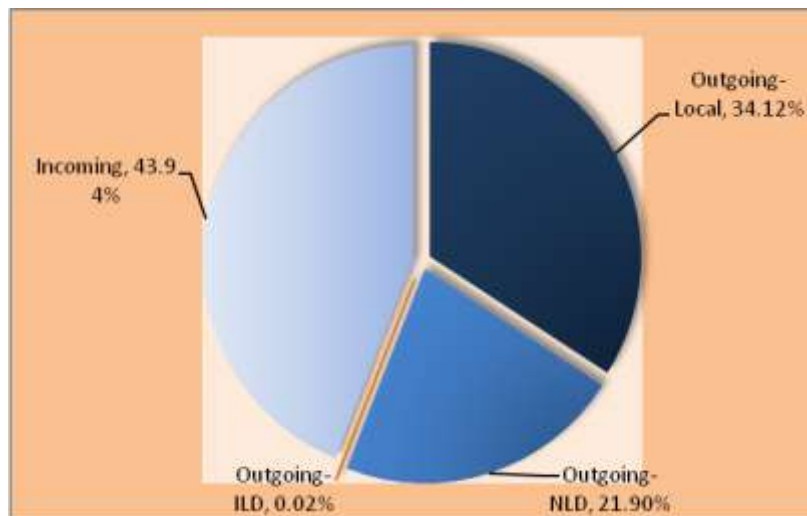


Table 2.15: Average subscriber outgo per outgoing minute from HSA* for CDMA Full Mobility Service in QE Jun-17

Circle Category	[₹ Per min]		
	Postpaid	Prepaid	Blended
Circle A	1.41	0.39	0.53
Circle B	0.67	0.27	0.30
Circle C	1.28	0.42	0.59
Metros	1.10	0.36	0.54
All India	1.08	0.33	0.44

*Average Subscriber 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 2.16: Trends of Key Parameters - CDMA Full Mobility Service

Parameter	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17
1. ARPU (₹ Per month)	99	154	141	131	124
2. Average revenue from data usage per subscriber per month (in ₹)	49	91	82	75	69
3. MOU per subscriber per month	228	269	255	249	247
4. Outgoing MOU per subscriber per month	130	145	129	112	105
5. No. of Outgoing SMS per subscriber per month	6.85	3.21	2.89	2.66	2.23
6. Average subscriber Outgo per outgoing minute from HSA (₹)	0.39	0.40	0.41	0.43	0.44

2.28 Service Area wise statistics are available at Annexure-2.2.

Chapter 3 :

Financial Data of

Telecom Service

Sector

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

Particulars	QE Jun-16 (₹ in Crore)	QE Mar-17 (₹ in Crore)	QE Jun-17 (₹ in Crore)	Q-O-Q % Change	Y-O-Y % Change
Gross Revenue (GR)	73,334	63,315	64,889	2.49	-11.53
Adjusted Gross Revenue (AGR)	53,383	40,831	39,778	-2.58	-25.49
Pass Through Charges (GR-AGR)	19,961	22,484	25,112	11.69	25.80
License Fee	4,314	3,361	3,261	-2.99	-24.42
Spectrum Usage Charges	2,148	1,372	1,309	-4.58	-39.08

3.1 Gross Revenue (GR) quarterly increased by 2.49% in QE Jun-17, and on annual basis, it has declined by 11.53%. Adjusted Gross Revenue (AGR) quarterly declined by 2.58% in the QE Jun-17.

3.2 Pass through charges increased by 11.69% in the QE Jun-17 and on annual basis it increased by 25.80%.

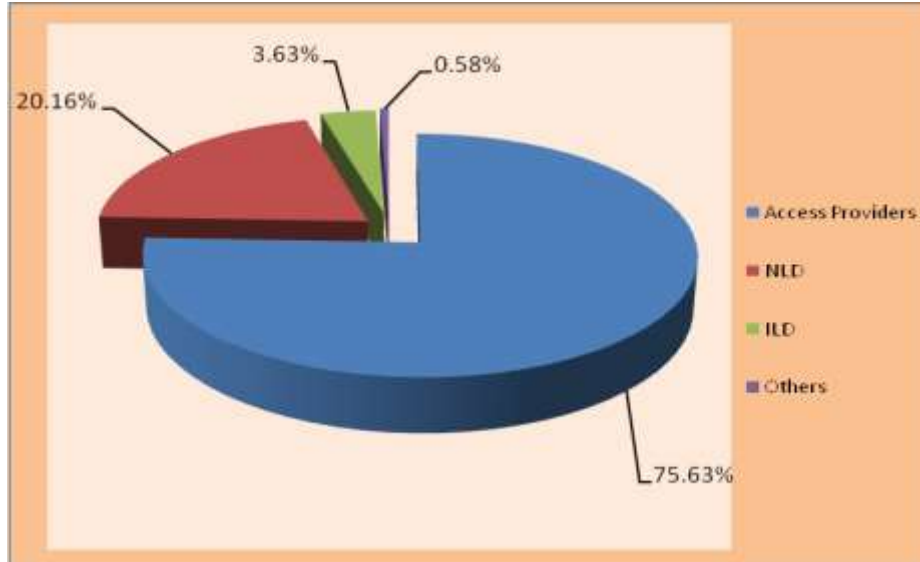
3.3 Pass-through charges as a percentage of Gross Revenue are 38.70% in QE Jun-17 as against 35.51% in the previous quarter.

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	45,849	30,082	2,487	1,305
NLD	10,743	8,020	641	-
ILD	3,831	1,443	115	-
Others	4,466	233	16	4
Total	64,889	39,778	3,261	1,309

Chart 3.1: Composition of Adjusted Gross Revenue



3.4 Access services contributed 75.63% of the total Adjusted Gross Revenue of telecom services. In Access services, Adjusted Gross Revenue(AGR), License Fee and Spectrum Usage Charges(SUC) declined by 4.79%, 5.26% and 4.61% respectively however, Gross Revenue (GR) and Pass Through Charges increased by 0.79% and 13.48% respectively in QE Jun-17.

3.5 Monthly Average Revenue per User (ARPU) for Access Services based on AGR declined from ₹89.34 in QE Mar-17 to ₹83.41 in QE Jun-17.

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	QE Jun-17	QE Mar-17	% Change
Bharti	9888.29	10361.88	-4.57
Vodafone	7089.42	7258.13	-2.32
Idea	6160.91	6401.13	-3.75
BSNL	3012.73	3318.71	-9.22
Tata	1732.26	1877.35	-7.73
Aircel	1423.58	1360.75	4.62
Reliance Com.	748.08	733.01	2.06
Telenor	585.87	650.77	-9.97
MTNL	375.16	650.09	-42.29
Sistema Shyam	119.11	157.53	-24.39
Quadrant	-16.52	4.19	-494.14
Reliance Jio	-1036.56	-1178.61	-12.05
Grand Total (Access)	30082.33	31594.91	-4.79

3.6 Public Sector Undertakings' share in the Access AGR of telecom services is 11.26% in the QE Jun-17.

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

Category	AGR of Access Services for QE Jun-17 (in ₹ crore)	%age share of AGR
Metro	3691.67	12.27
A	11890.92	39.53
B	10806.94	35.92
C	3692.79	12.28
Total	30082.33	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

Part-I : 2G Wireless Services

Table 4.1: QoS Summary - 2G Wireless Service

S. No.	Parameters	Benchmark	No. of CMTS Licensees not Meeting the Benchmarks			
			Quarter Ending, March, 2017		Quarter Ending, June, 2017	
			Out Of 163 for Network and Out of 168 for Customer (Nos.)	Out Of 163 for Network and Out of 168 for Customer (%)	Out Of 162 for Network and Out of 167 for Customer (Nos.)	Out Of 162 for Network and Out of 167 for Customer (%)
I.	Network Related Parameters					
1	Network Availability					
(i)	BTSs Accumulated downtime (not available for service)	≤ 2%	1	0.61%	1	0.62%
(ii)	Worst affected BTSs due to downtime	≤ 2%	3	1.84%	8	4.94%
2	Connection Establishment (Accessibility)					
(i)	Call Set-up Success Rate (within licensee's own network)	≥ 95%	2	1.23%	1	0.62%
(ii)	SDCCH/ Paging Chl. Congestion	≤ 1%	0	0	1	0.62%
(iii)	TCH Congestion	≤ 2%	3	1.84%	3	1.85%
3	Connection Maintenance (Retain ability)					
(i)	Call Drop Rate	≤ 2%	0	0	0	0
(ii)	Worst affected cells having more than 3% TCH drop (call drop) rate	≤ 3%	14	8.59%	14	8.64%
(iii)	Connection with good voice quality	≥ 95%	3	1.84%	2	1.23%
4	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)	≤ 0.5%	7	4.29%	2	1.23%

S. No.	Parameters	Benchmark	No. of CMTS Licensees not Meeting the Benchmarks			
			Quarter Ending, March, 2017		Quarter Ending, June, 2017	
			Out Of 163 for Network and Out of 168 for Customer (Nos.)	Out Of 163 for Network and Out of 168 for Customer (%)	Out Of 162 for Network and Out of 167 for Customer (Nos.)	Out Of 162 for Network and Out of 167 for Customer (%)
II.	Customer Service Quality Parameters					
5	Metering and Billing					
(i)	Metering and billing credibility - post paid	≤ 0.1%	2	1.19%	1	0.60%
(ii)	Metering and billing credibility - pre paid	≤ 0.1%	4	2.38%	10	5.99%
(iii)	Resolution of billing/charging/ validity complaints	98% within 4 weeks	0	0	0	0
		100% within 6 weeks	0	0	2	1.20%
(iv)	Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	within 1 week of resolution of complaint	0	0	2	1.20%
6	Response time to the customer for assistance					
(i)	Accessibility of call centre/ customer care	≥ 95%	4	2.38%	1	0.60%
(ii)	%age of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	29	17.26%	27	16.17%
7	Termination / closure of service					
(i)	%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	8	4.76%	9	5.39%
(ii)	Time taken for refund of deposits after closures	100% within 60 days	23	13.69%	24	14.37%

- 4.1 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters:-
- a. Call Set-up Success Rate (within licensee's own network)
 - b. Connection with good voice quality
 - c. Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark)
 - d. Metering and billing credibility - post paid
 - e. Accessibility of call centre/ customer care
 - f. %age of calls answered by the operators (voice to voice) within 90 sec
- 4.2 The performance has deteriorated in this quarter as compared to the previous quarter in respect of the following parameters:-
- a. Worst affected BTSs due to downtime
 - b. SDCCCH/ Paging Chl. Congestion
 - c. Metering and billing credibility - pre paid
 - d. Resolution of billing/charging/validity complaints (100% within 6 weeks)
 - e. Period of applying credit/waiver/adjustment to customer's account from the date of resolution of complaints
 - f. %age requests for Termination/Closure of service complied within 7 days
 - g. Time taken for refund of deposits after closures

Table 4.2: Parameter wise Analysis of Non-compliance of QoS Benchmarks for 2G Wireless Service Providers

Parameter	Benchmark	Service Provider	Service Area	Performance
BTSs Accumulated downtime (not available for service) (%age)	≤ 2%	Aircel	North East	5.75
Worst affected BTSs due to downtime (%age)	≤ 2%	Aircel	Assam	15.04
			Jammu & Kashmir	3.67
			North East	41.45
		AIRTEL	Punjab	3.96
		IDEA	Punjab	2.22
		RCOM GSM	Kerala	2.68
		VODAFONE	Haryana	2.13
			Punjab	6.22
Call Set-up Success Rate (within licensee's own network)	≥ 95%	Aircel	Assam	88.37
SDCCH/ Paging Chl. Congestion (%age)	≤ 1%	Aircel	Assam	1.51
TCH Congestion (%age)	≤ 2%	Aircel	Assam	8.95
			Bihar	4.10
			North East	2.02
Worst affected cells having more than 3% TCH drop (call drop) rate (%age)	≤ 3%	Aircel	Assam	16.47
			Bihar	6.63
			Delhi	4.19
			Himachal Pradesh	8.72
			Jammu & Kashmir	8.09
			Kerala	3.60
			Mumbai	3.94
			North East	17.82
			Orissa	3.71
			Tamil Nadu	4.01
		West Bengal	8.02	
		BSNL	WB	11.46
		TTSL CDMA	Punjab	3.04
TELENOR	UPE	3.46		
Connection with good voice quality	≥ 95%	Aircel	Assam	92.67
			North East	94.01
Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)	≤ 0.5%	VODAFONE	Jammu & Kashmir	1
			UP-East	2
Metering and billing credibility - post paid	≤ 0.1%	IDEA	Delhi	0.14

Parameter	Benchmark	Service Provider	Service Area	Performance
Metering and billing credibility - pre paid	≤ 0.1%	AIRTEL	Assam	0.12
			Chennai	0.13
			Delhi	0.15
			Jammu &Kashmir	0.26
		AIRTEL	Mumbai	0.11
			North East	0.12
			UPW	0.16
Metering and billing credibility - pre paid	≤ 0.1%	VODAFONE	Jammu&Kashmir	0.18
			North East	0.14
			Rajasthan	0.22
Resolution of billing/charging complaints	100% within 6 weeks	IDEA	Gujarat	99.99
			Mumbai	99.97
Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints	within 1 week of resolution of complaint	IDEA	Gujarat	99.94
			Maharashtra	99.98
Accessibility of call centre/ customer care	≥ 95%	Aircel	Assam	92.75
Percentage of calls answered by the operators (voice to voice) within 90 seconds	≥ 95%	Aircel	Jammu &Kashmir	88.08
		AIRTEL	Andhra Pradesh	88.40
			Assam	79.25
			Bihar	94.44
			Chennai	94.65
			Delhi	94.50
			Gujarat	91.20
			Jammu &Kashmir	93.93
			Kolkara	93.15
			Kerala	85.55
			Karnataka	92.14
			UPE	92.16
			UPW	94.92
			West Bengal	91.57
		IDEA	Mumbai	94.80
		RTL	Bihar	94.89
			Kolkata	93.67
			West Bengal	93.15
		TTSL GSM	Gujarat	93.64
			Kerala	94.75
Karnataka	92.55			
UPW	94.97			
TTML GSM		Maharashtra	94.94	

Parameter	Benchmark	Service Provider	Service Area	Performance
		VODAFONE	Delhi	73.87
			Karnataka	86.01
			Mumbai	88.03
			Orissa	92.89
%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	Aircel	Delhi	98.81
			Karnataka	96.57
			Mumbai	94.92
			Tamil Nadu	99.77
	100% within 7 days	IDEA	Delhi	99.64
			Gujarat	99.96
		IDEA	Madhya Pradesh	99.99
			Rajasthan	99.84
		VODAFONE	Delhi	98.94
Time taken for refund of deposits after closures	100% within 60 days	Aircel	Maharashtra	45.00
		IDEA	Gujarat	99.98
		RCOM GSM	Andhra Pradesh	68.38
			TamilNadu+ Chennai	72.43
			Delhi	67.97
			Gujarat	72.24
			Haryana	58.99
			Jammu &Kashmir	63.76
			Kerala	75.27
			Karnataka	69.27
			Maharashtra	70.45
			Mumbai	66.04
			Punjab	65.25
			Rajasthan	66.14
			UP E	74.65
		UP W	70.98	
		RTL	Assam	55.70
			Bihar	46.49
			Himachal Pradesh	36.60
			Kolkata	65.73
Madhya Pradesh	56.04			
North East	58.02			
Orissa	45.69			
West Bengal	81.06			

4.3 The detailed table on Service Provider wise performance of QoS parameters for Wireless 2G Services is available at Annexure-4.1.

Part-II : 3G Wireless Services

4.4 The summary of performance of 3G service providers who have not met the benchmarks in this quarter is given in below table.

Table 4.3: QoS Summary - 3G Wireless Service

S. No.	Parameters		Bench mark	No. of CMTS Licensees not Meeting the Benchmarks			
				Quarter Ending, March 2017		Quarter Ending, June 2017	
				Out Of 108 (Nos.)	Out of 108 (in %)	Out Of 111 (Nos.)	Out of 111 (in %)
1	Network Availability	BTSs and Node-B's Accumulated downtime (not available for service) (%age)	≤ 2%	1	0.93%	2	1.80%
		Worst affected BTSs and Node-B's due to downtime (%age)	≤ 2%	3	2.78%	5	4.50%
2	Connection Establishment (Accessibility)	Call Set-up Success Rate (within licensee's own network)	≥ 95%	0	0.00%	0	0.00%
		SDCCH/Paging Channel and RRC Congestion (%age)	≤ 1%	0	0.00%	0	0.00%
		TCH and Circuit Switched RAB Congestion (%age)	≤ 2%	0	0.00%	0	0.00%
3	Connection Maintenance (Retainability)	Call Drop and Circuit Switched Voice Drop Rate: (%age)	≤ 2%	0	0.00%	0	0.00%
		Worst affected cells having more than 3% TCH drop (call drop) and Circuit Switched Voice Drop Rate:-CBBH	≤ 3%	10	9.26%	11	9.91%
		Connections with good voice quality and Circuit Switch Voice Quality (CSV quality)	≥ 95%	0	0.00%	0	0.00%
4	Point of Interconnection	Point of Interconnection (POI) Congestion	≤ 0.5%	2	1.85%	0	0.00%

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

a. Point of Interconnection (POI) Congestion

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

a. BTS and Node-B's accumulated downtime (not available for service) (%age)

b. Worst affected BTSs and Node-B's due to downtime (%age)

c. Worst affected cells having more than 3% TCH drop (call drop) and Circuit Switched Voice Drop Rate:-CBBH

Table 4.4: Parameter wise Analysis of Non-compliance of QoS Benchmarks for 3G Wireless Service Providers

Parameter	Benchmark	Service Provider	Service Area	Performance
BTSs and Node-B's Accumulated downtime (not available for service) (downtime not available for service) (%age)	≤ 2%	Aircel	Assam	2.39
			North East	5.54
Worst affected Node B's due to downtime (%age)	≤ 2%	Aircel	Assam	18.89
			Jammu & Kashmir	5.51
			North East	37.52
		Airtel	Punjab	5.18
		Vodafone	Haryana	2.52
Worst affected cells having more than 3% Circuit Switched Voice Drop Rate	≤ 3%	Aircel	Assam	5.28
			Bihar	5.41
			Jammu & Kashmir	9.56
			Karnataka	3.32
			Kerala	3.07
			North East	12.36
			Orissa	7.14
			Punjab	3.05
			Tamil Nadu	5.80
		West Bengal	4.00	
	BSNL	West Bengal	6.27	

4.6 The details table on Service Area wise performance of QoS parameters for 3G Wireless Services is available at Annexure-4.2.

Section B: Quality of Service Performance of Wireline Service Providers

Table 4.5: QoS Summary - Wireline Service

S.No.	Parameters	Benchmark	No of license areas where operators not meeting the benchmarks			
			QE March, 2017		QE June, 2017	
			Out of 103 (In Nos.)	Out of 103 (In %age)	Out of 103 (In Nos.)	Out of 103 (In %age)
(i)	Fault incidences per 100 subs/ month	≤7	0	0%	0	0%
(ii)	Fault Repair					
	% Fault repaired by next working day for urban areas	≥85%	0	0%	1	1%
(iii)	% Fault repaired within 5 days (for urban areas)	≥100%	11	11%	2	2%
	% Fault repaired by next working day for rural and hilly areas	≥75%	0	0%	0	0%
(iv)	% Fault repaired within 7 days (for rural and hilly areas)	≥100%	0	0%	0	0%
	Mean Time to Repair (MTTR)	≤10Hs	8	8%	0	0%
(v)	Point of Interconnection					
	Point of Interconnection (POI) Congestion (No. of POIs not meeting benchmark)	≤0.5%	0	0%	0	0%
(vi)	Metering and Billing					
	Metering and Billing credibility - Post-paid	≤0.1%	1	1%	1	1%
	Metering and Billing credibility - Pre-paid	≤0.1%	0	0%	0	0%
	Period of applying credit/ waiver/ adjustment to customer's	1 week of resolution of complaint	0	0%	0	0%
	Resolution of billing/ charging/ credit & validity complaints	98% within 4 weeks	0	0%	0	0%
	Resolution of billing/ charging/ Credit & validity complaints	100% within 6 weeks	0	0%	0	0%

S.No.	Parameters	Benchmark	No of license areas where operators not meeting the benchmarks			
			QE March, 2017		QE June, 2017	
			Out of 103 (In Nos.)	Out of 103 (In %age)	Out of 103 (In Nos.)	Out of 103 (In %age)
	Response time to the customer for Assistance					
(vii)	Accessibility of call centre/ customer care	≥95%	1	1%	0	0%
	%age of calls answered by the operators (voice to voice) within 90 seconds	≥95%	3	3%	3	3%
	Termination / Closure of service					
(viii)	%age requests for Termination / closure of service complied within 7 days	100% within 7 days	3	3%	5	5%
	Time taken for refund of deposits after closures	100% within 60 days	0	0%	0	0%

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

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

- a. % Fault repaired within 5 days for urban areas (≥100%)
- b. Mean Time to Repaired (MTTR) ≤10Hs
- c. Response time to the customer for Assistance-
Accessibility of call centre/Customer care (≥95%)

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

- a. % Fault repaired by next working day for urban areas (≥85%)
- b. %age requests for Termination / closure of service complied within 7 days (100% within 7 days)

**Table 4.6: Parameter wise Analysis of Non-compliance of QoS
Benchmarks for Wireline Service Providers**

Parameters	Bench- marks	Service Provider	Service areas	Performance
% of faults repaired by next working day	≥85%	Tata Teleservices Ltd	KER	66.67%
% Fault repaired within 5 days <i>(for urban areas)</i>	100% within 5 days	MTNL	DEL	98.76%
			MUM	99.86%
Metering and billing credibility – Post paid	≤0.1%	Bharti Airtel Ltd.	TN	0.16%
Response time to the customer for assistance - Percentage of calls answered by the operators (voice to voice) within	≥ 95%	Tata Teleservices Ltd.	MH	94.61%
			MUM	94.78%
			UPE	93.81%
Termination/Closure of service	100% within 7 days	MTNL	MUM	99.97%
		Tata Teleservices Ltd.	AP	99.79%
			DL	99.94%
			PB	96.63%
			RJ	97.62%

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

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

4.10 There are 137 Internet Service Providers (ISPs) providing broadband (wireline) service at the end of June, 2017. Out of these 137 ISPs, 43 Service Providers are having broadband subscriber base >10,000 and market share of these 43 SPs is 98.72% of total subscriber base. This report covers performance of top 42 broadband Service Providers vis-à-vis the QoS benchmarks prescribed by TRAI, for the QE June, 2017.

**Table 4.7 : Summary of Performance of Broadband Service Providers
against identified parameters**

S.No.	Parameter	Benchmark	No. of Licensees not meeting the Benchmarks			
			Quarter Ending March, 2017		Quarter Ending June, 2017	
			Out of 69 (Nos.)	Out of 69 (%)	Out of 69 (Nos.)	Out of 69 (%)
1	Service Provisioning	100% in =<15 working days				
1.2	%age of connections provided within 15 days of registration of demand	100%	2	2.90%	0	0.00%
2	Faults Repair					
2.2	% of faults repaired by next working day (>90%)	>90%	4	5.80%	2	2.90%
2.3	% of faults repaired within 3 working day	=>99%	4	5.80%	3	4.35%
3	Billing Performance				0	
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%	0	0.00%	1	1.45%

S.No.	Parameter	Benchmark	No. of Licensees not meeting the Benchmarks			
			Quarter Ending March, 2017		Quarter Ending June, 2017	
			Out of 69 (Nos.)	Out of 69 (%)	Out of 69 (Nos.)	Out of 69 (%)
4.3	%age of calls answered by operator (Voice to voice) within 90 sec	>80%	1	1.45%	0	0.00%
5	Bandwidth utilisation/ throughput					
5.2	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	0	0	0.00%	1	1.45%
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%	1	1.45%
5.8	Broadband Connection Speed available (download) from ISP node to user	>80%	0	0.00%	0	0.00%
6	Service availability /uptime (for all users) in %age					
6.3	Service availability /uptime (for all users) in %age	>98%	0	0.00%	0	0.00%
7	Packet loss (for wired broadband access) in %age	<1%	0	0.00%	0	0.00%
8	Network latency (for wired broadband access)					
8.1	User reference point at POP/ISP Gateway node to IGSP/NIXI	<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%

Note: M/s Airlink Communications Pvt.Ltd. (New entrants) has not submitted PMR for the quarter ending June, 2017.

Table 4.8: Parameter-wise Analysis of non-compliance of QoS benchmarks for Broadband Service Providers

Parameters	Benchmark	Name of the Service Provider not meeting the Benchmark
Faults Repair		
% of faults repaired by next working day (>90%)	>90%	MTNL- Delhi & Mumbai (84.38%), TATA(TTML) - Maharashtra & Goa (87.50%)
% of faults repaired within 3 working day	=>99%	MTNL- Delhi & Mumbai (93.96%), TATA (TTML) -Maharashtra & Goa (97.20%) TATA (TTSL) -All India (Pan India) (97.31%)
Response Time to the Customer for assistance		
%age of calls answered by operator (Voice to voice) within 60 sec	>60%	Atria Convergence - All India (52.00%)
Bandwidth utilisation/ throughput		
No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	0	IKF Technologies Ltd - All India (19.00%)
% International bandwidth utilization during peak hours (TCBH) (Enclose MRTG) <90%	>90%	Nextra Teleservices Pvt. Ltd. - Delhi (91.00%)

4.11 Detailed table containing QoS parameters for all the Broadband Service Providers is given in Annexure-4.4.

Chapter 5 :

Performance of Cable TV, DTH and Radio Broadcasting Services

Table 5.1: Key Parameters - Broadcasting & Cable Services

S.No	Parameter	QE Mar-17	QE Jun-17
1	Number of Private satellite TV channels permitted by the Ministry of I&B for uplinking only/ downlinking / uplinking	888	883
2	Number of Pay TV Channels	295	293
3	Number of FM Radio Stations (excluding All India Radio)	293	310
4	Private DTH Operators	6	6
5	Number of Active DTH Subscribers	63.61 Million	65.31 Million
6	No. of community radio stations licenced (GOPA signed)	268	275
7	Operational community radio stations	206	207

A. Satellite TV Channels

5.1 A total of 883 private satellite TV channels have been permitted by the Ministry of Information and Broadcasting (MIB) for uplinking only/ downlinking / uplinking, as on 30th June, 2017.

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

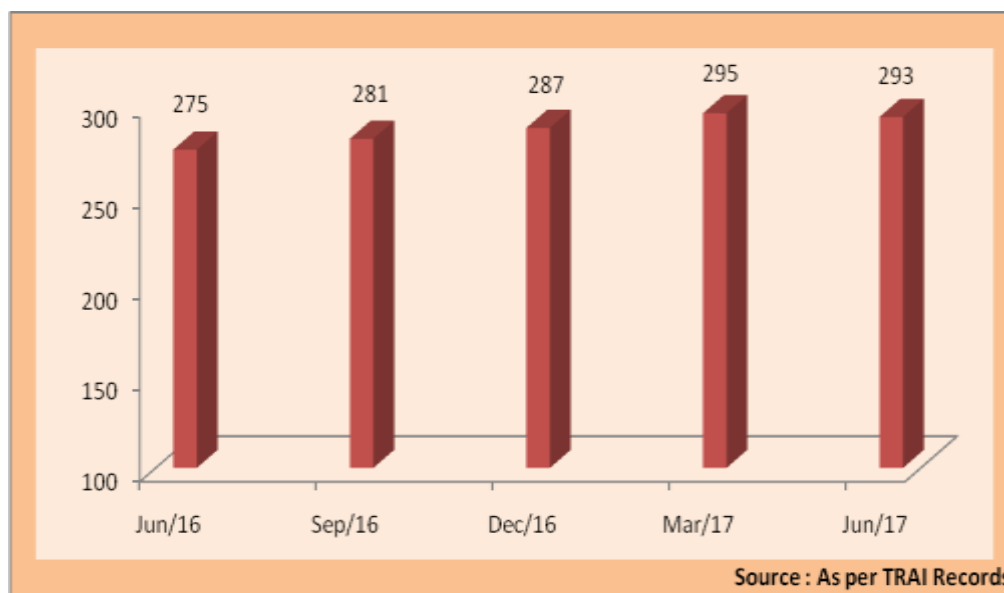


B. Pay TV Channels

5.2 During the quarter ending June, 2017, there were 293 pay channels as reported by 48 broadcasters as compared to 295 pay channels reported in the previous quarter. These 293 pay channels include 210 SD pay TV channels and 83 HD Pay TV channels. The list of Pay TV Channels is placed at **Annexure-5.1**.

5.3 During the quarter ending June 2017, as per the reporting, one pay channel namely “B4U Movies” was converted into FTA, one FTA channel namely “NHK World Premium” was converted into Pay Channel. Further, during the quarter, two pay channels namely “Zee Salaam” and “Zindagi” were reported to be discontinued.

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



C. Cable TV Sector

5.5 Digitization, with addressability, of cable TV sector has been executed. As reported by MSOs providing Cable TV services through Digital Addressable System (DAS), details about number of reported channels being carried by the MSOs in areas served by Digital addressable system as on 30.06.2017 are as under:-

Areas served by Digital Addressable Systems (DAS)

Particulars	MSO	Number
Maximum number of TV channels (FTA+Pay+Local) carried	Siti Cable Network Limited	420
Minimum of TV channels (FTA+Pay+Local) carried	GTPL, Hathway Pprivate Limited	200
Maximum number of FTA channels carried	Siti Cable Network Limited	184
Maximum number of Pay channels carried	M/s GTPL Kolkata Cable & Broadband Pariseva Limited	239
Maximum number of Local channels carried	M/s Fastway Transmission Pvt Limited and Hathway Sukhamrit Cable & Datacom Pvt Ltd	74

D. Direct-to-Home (DTH) Sector

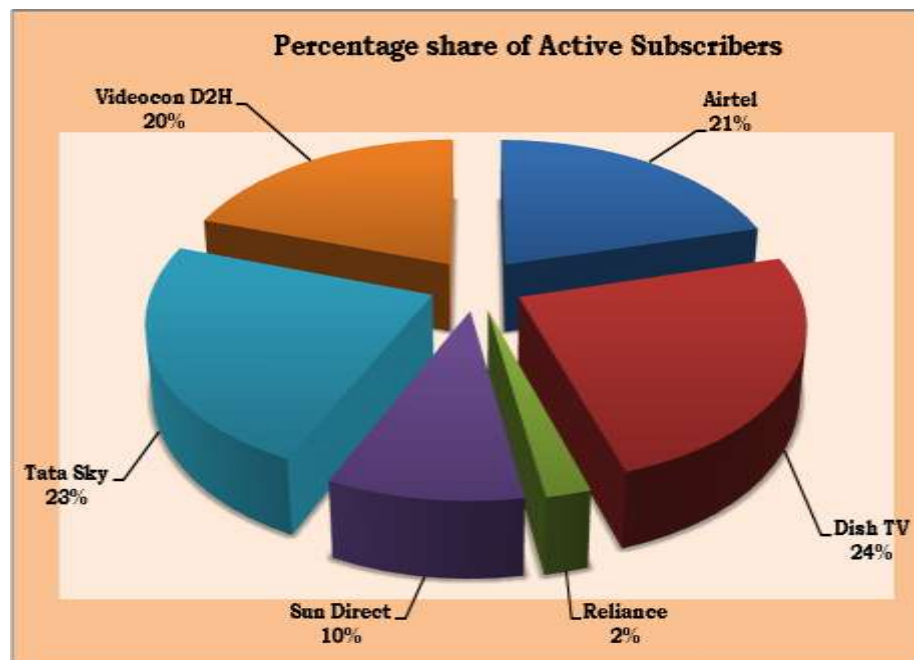
5.8 Since its introduction in the year 2003, Indian DTH service has displayed a phenomenal growth. DTH has attained net pay active subscriber base of around 65.31 million at the end of June, 2017. This is besides the viewership of the free DTH services of Doordarshan.

5.9 As on June 2017, there are 6 pay DTH service providers. Quarterly growth in the DTH sector in terms of the net active subscriber base and Market Share of DTH operator in terms of the percentage of net active subscribers during the quarter are depicted in the following charts.

Chart 5.3 : Quarterly growth in Net Active subscribers of pay DTH



Chart 5.4 : Market share of DTH Operators



5.10 As reported by Pay Direct to Home (DTH) operator, details about number of reported channels being carried by the DTH operators on their platforms as on 30.06.2017 are as under:-

Particulars	DTH Operator	Number
Maximum number of TV channels (FTA+Pay) carried	M/s Tata Sky Ltd	577
Minimum of TV channels (FTA+Pay) carried	M/s Sun Direct Pvt Ltd	263
Maximum number of FTA channels carried	M/s Tata Sky Ltd	261
Maximum number of Pay channels carried	M/s Tata Sky Ltd	316

E. FM Radio Services

5.11 Apart from the radio Stations operated by All India Radio, Prasar Bharati – a public broadcaster, as on 30th June 2017, there are 310 operational private FM Radio stations in 86 existing cities with operational 33 FM Radio Operators as compared to 293 private FM Radio Stations in 84 cities with operational 32 FM Radio Operators in the previous quarter.

5.12 According to the reporting of advertisement revenue done by the 32 FM Radio Service Providers, it has emerged that during the quarter ending 30th June 2017, 17 new private FM Radio Stations have become operational. The details are as under:-

S.No	Name of FM Radio Operator	No of stations	Name of the cities
1	Reliance Broadcast Network Limited	14	1) Pune 2) Patna 3) Varanasi 4) Lucknow 5) Kohlapur 6) Nagpur 7) Aurangabad 8) Shillong 9) Ahmadnagar 10) Gorakhpur 11) Agartala 12) Muzaffarpur 13) Itanagar 14) Aizwal

S.No	Name of FM Radio Operator	No of station	Name of the cities
2	Rajasthan Patrika Private Limited	2	1) Ajmer 2) Bilaspur
3	Sarthak Film Private Limited (New FM Radio Operator)	1	1) Bhubneshwar

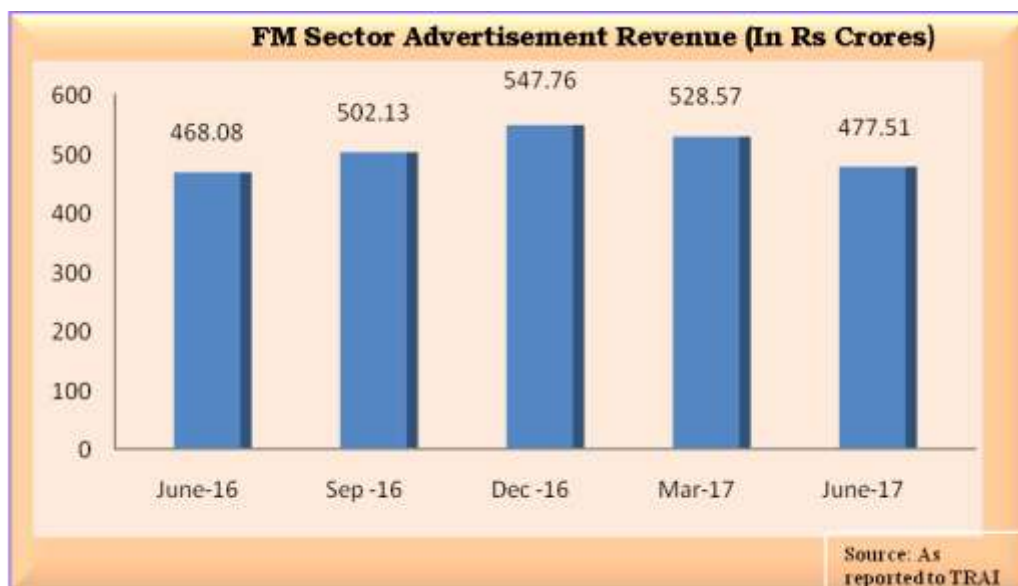
5.12 A list of 86 existing cities with operational FM radio channels is placed at Annexure 5.3.

Chart 5.5 : Quarterly growth in private FM Radio stations



5.13 The reported advertisement revenue during the quarter ending Jun-17 in respect of 310 private FM Radio stations is Rs 477.51 crores as against Rs 528.57 crores in respect of 293 private FM Radio stations for the previous quarter. The following chart shows the details of Advertisement Revenue submitted by the FM Radio service providers to TRAI.

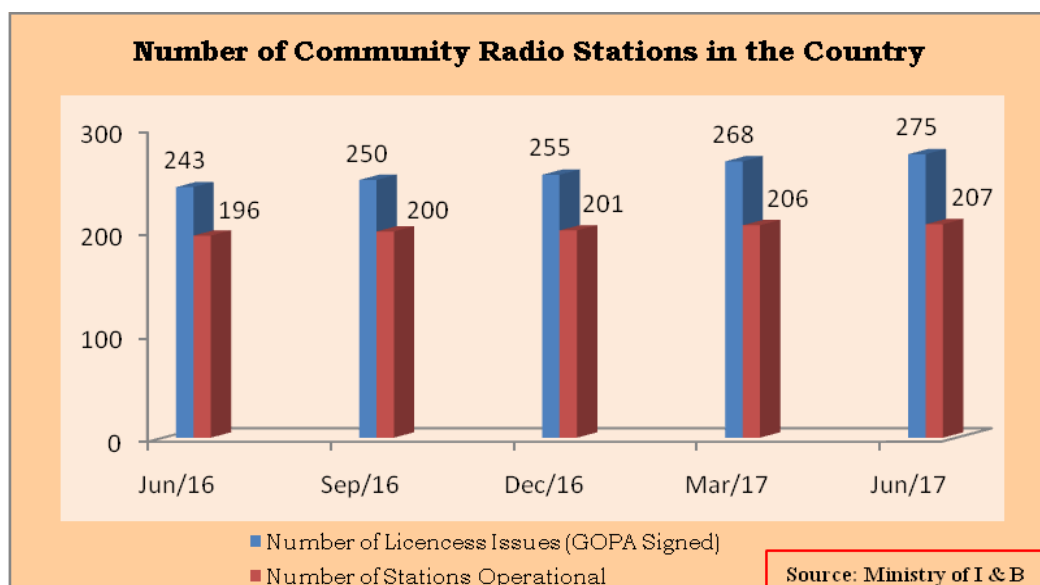
Chart 5.6 : Comparative position in FM Radio Advertisement Revenue



F. Community Radio

5.14 As on 30th June 2017, out of the 275 licenses issued (GOPA Signed) for setting up of Community Radio Stations (CRS), 207 stations are already operational. The quarterly growth in the number of community radio stations is depicted in the chart below.

Chart 5.6 : Quarterly Growth in number of Community Radio Stations



**Table 5.2 : Number of application received/Letters of Intent issued/
Licenses issued in respect of Community Radio Stations**

Sl. No.	Items	As on 30.06.2017
1	Total No. of Applications Received	2,084
2	No. of Letters of Intent (LOIs) issued	564
3	No. of Applications rejected	1,110
4	No. of Licenses issued (GOPA signed)	275
5	No. of Stations Operational	207

Source: Ministry of Information & Broadcasting (MIB)

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Annexures

Annexure 1.1: Wireless Subscriber Base

Service Area	Vodafone (GSM)		Bharti (GSM)		Idea (GSM)		Aircel (GSM)		Reliance (GSM)	
	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17
Andhra Pradesh	6,946,782	6,919,989	25,867,782	26,561,927	17,580,618	17,331,094	2,614,825	2,626,198	3,602,108	3,539,313
Assam	4,024,913	3,915,440	6,444,077	6,624,242	1,349,496	1,282,852	5,825,332	5,884,454	1,126,540	1,035,797
Bihar	9,734,549	9,923,602	30,973,054	31,421,128	12,668,538	12,810,393	7,558,894	7,613,870	3,189,799	3,066,040
Delhi	10,761,078	11,010,985	11,614,979	11,879,196	6,482,774	6,520,788	6,879,107	6,929,408	5,620,041	5,544,923
Gujarat	20,047,643	20,251,177	9,185,830	9,207,176	13,163,074	13,032,329	17,063	17,063	5,442,298	5,385,297
Haryana	6,044,807	6,144,554	3,509,696	3,626,781	5,124,252	5,178,273	3,092	3,092	1,478,879	1,445,274
Himachal Pradesh	726,409	712,266	2,976,955	3,068,332	812,687	822,480	1,122,264	1,084,516	1,539,244	1,476,448
Jammu & Kashmir	994,663	1,017,708	3,624,527	3,810,968	694,436	681,045	2,992,224	3,124,070	872,711	836,663
Karnataka	7,794,458	7,723,097	22,235,613	22,644,710	9,560,816	9,492,765	3,441,843	3,411,987	5,179,073	5,289,568
Kerala	7,673,404	7,698,705	4,552,674	4,609,417	11,011,621	11,098,812	370,538	360,447	1,359,520	1,221,801
Madhya Pradesh	6,814,499	6,745,400	13,991,614	14,335,261	24,031,263	24,418,067	20,694	20,694	9,217,734	9,019,052
Maharashtra	19,339,105	20,005,482	14,417,511	15,086,592	26,479,754	27,242,171	2,687,942	2,360,644	3,925,525	3,605,082
Mumbai	9,034,825	8,937,828	6,455,214	6,531,587	4,375,655	4,282,973	2,899,449	2,885,166	4,802,481	4,748,797
North East	1,617,039	1,602,656	4,236,796	4,382,519	638,078	564,185	3,280,364	3,415,817	258,238	238,183
Orissa	4,533,783	4,628,339	11,501,033	11,792,517	2,076,079	1,904,961	4,630,846	4,484,570	2,131,457	2,119,436
Punjab	5,457,177	5,461,780	8,910,989	9,278,084	7,062,015	7,193,939	1,134,365	1,112,325	1,680,520	1,699,414
Rajasthan	12,302,399	12,267,926	21,064,107	21,377,158	8,389,292	8,308,532	6,680,710	6,617,914	5,619,973	5,497,695
Tamil Nadu (incl. Chennai)	16,277,638	16,347,360	18,383,677	18,655,505	6,165,269	6,063,902	21,362,720	21,132,128	5,372,873	5,595,869
UP(E)	20,582,425	21,497,341	23,494,355	24,686,410	12,305,494	12,629,155	6,940,970	6,779,256	8,108,789	7,640,322
UP(W)	12,377,044	12,675,462	8,955,315	9,169,627	16,387,742	16,590,969	871,275	879,065	5,448,718	5,444,410
Kolkata	5,722,074	5,791,492	5,026,679	5,105,001	2,642,321	2,593,244	4,411,882	4,423,177	4,086,852	3,823,230
West Bengal	20,256,152	20,660,773	16,225,906	16,793,179	6,367,573	6,235,360	5,153,469	5,157,543	3,438,350	3,063,833
Total	209,062,866	211,939,362	273,648,383	280,647,317	195,368,847	196,278,289	90,899,868	90,323,404	83,501,723	81,336,447

Annexure 1.1 (contd.)

Service Area	Tata (GSM)		Tata (CDMA)		BSNL (GSM)		BSNL (CDMA)		MTNL (GSM)	
	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17
Andhra Pradesh	3,293,478	3,004,835	441,090	448,360	9,902,190	9,985,685	17,214	15,114		
Assam	-	-	-	-	1,443,451	1,470,169	63,788	63,552		
Bihar	1,016,577	908,724	320,369	271,317	4,003,810	4,042,618	-	-		
Delhi	-	-	1,437,392	1,470,447	-	-	-	-	2,327,203	2,320,627
Gujarat	2,257,898	2,005,903	214,905	202,173	4,811,203	4,940,057	37,705	34,589		
Haryana	2,207,133	1,997,568	200,740	120,743	3,711,636	3,991,617	3,749	3,281		
Himachal Pradesh	26,353	21,074	18,405	16,550	2,147,061	2,238,552	9,091	8,106		
Jammu & Kashmir	-	-	-	-	1,449,322	1,473,755	24,331	23,558		
Karnataka	6,030,974	5,435,343	207,608	163,919	6,976,379	7,022,136	44,997	44,050		
Kerala	1,202,090	1,081,959	76,175	74,736	9,017,410	9,441,992	89,156	82,633		
Madhya Pradesh	3,943,810	3,745,568	250,683	145,708	5,097,114	5,272,020	72,673	68,885		
Maharashtra	3,875,033	3,533,012	1,322,969	974,803	6,459,444	6,519,580	42,287	38,321		
Mumbai	2,017,498	1,845,627	637,436	589,996	-	-	-	-	1,300,117	1,302,170
North East	-	-	-	-	1,430,408	1,412,019	161,903	161,736		
Orissa	1,730,758	1,557,789	83,721	77,169	4,996,060	5,148,900	31,986	13,251		
Punjab	2,033,028	1,820,129	246,373	150,131	4,541,692	4,878,154	-	-		
Rajasthan	499,066	430,587	566,004	319,789	5,469,181	5,870,753	56,017	52,920		
Tamil Nadu (incl. Chennai)	3,777,986	3,348,417	121,993	106,422	9,192,867	9,554,303	35,919	33,426		
UP(E)	3,088,558	2,766,650	185,566	96,484	11,155,587	11,482,040	12,554	10,695		
UP(W)	2,580,657	2,293,545	297,481	187,165	5,754,216	5,899,821	-	-		
Kolkata	2,202,255	2,023,098	243,945	226,466	956,040	1,101,377	703	703		
West Bengal	307,479	211,982	31,067	29,717	1,698,668	1,685,059	71,741	71,874		
Total	42,090,631	38,031,810	6,903,922	5,672,095	100,213,739	103,430,607	775,814	726,694	3,627,320	3,622,797

Annexure 1.1 (contd.)

Service Area	Sistema (CDMA)		Reliance Jio (LTE)		Telenor (GSM)		Total		Net Additions
	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	
Andhra Pradesh			9,371,987	10,576,313	5,301,805	4,736,707	84,939,879	85,745,535	805,656
Assam			1,532,190	1,863,142			21,809,787	22,139,648	329,861
Bihar			6,005,685	7,149,271	9,091,905	8,801,239	84,563,180	86,008,202	1,445,022
Delhi	537,482	452,581	7,690,965	8,419,025			53,351,021	54,547,980	1,196,959
Gujarat	132,022	93,273	8,055,148	9,121,887	8,473,311	8,008,349	71,838,100	72,299,273	461,173
Haryana			2,761,991	3,159,776			25,045,975	25,670,959	624,984
Himachal Pradesh			1,041,359	1,195,557			10,419,828	10,643,881	224,053
Jammu & Kashmir			1,251,478	1,380,981			11,903,692	12,348,748	445,056
Karnataka	724,483	624,197	6,939,226	7,781,135			69,135,470	69,632,907	497,437
Kerala	234,410	197,812	3,576,308	3,955,304			39,163,306	39,823,618	660,312
Madhya Pradesh			6,106,473	7,145,626			69,546,557	70,916,281	1,369,724
Maharashtra			7,646,067	8,756,881	7,702,877	6,965,231	93,898,514	95,087,799	1,189,285
Mumbai			5,059,378	5,647,871			36,582,053	36,772,015	189,962
North East			868,295	998,167			12,491,121	12,775,282	284,161
Orissa			2,575,408	2,994,848			34,291,131	34,721,780	430,649
Punjab			4899283	5493385			35,965,442	37,087,341	1,121,899
Rajasthan	1,301,847	1,062,029	5,370,687	6,169,980			67,319,283	67,975,283	656,000
Tamil Nadu (incl. Chennai)	478,051	416,727	8,083,805	8,990,940			89,252,798	90,244,999	992,201
UP(E)			6,899,354	7,855,106	11,780,109	11,014,512	104,553,761	106,457,971	1,904,210
UP(W)	96,212	81,411	5,764,355	6,532,070	8,143,142	7,811,380	66,676,157	67,564,925	888,768
Kolkata	376,331	318,047	3,647,897	4,077,977			29,316,979	29,483,812	166,833
West Bengal	1,030,433	884,697	3,533,432	4,098,628			58,114,270	58,892,645	778,375
Total	4,911,271	4,130,774	108,680,771	123,363,870	50,493,149	47,337,418	1,170,178,304	1,186,840,884	16,662,580

Annexure 1.2: Wireline Subscriber Base

Service Area	Bharti		Reliance		Quadrant		Sistema		Tata		MTNL		BSNL		Vodafone		Total		Net Additions
	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	Mar-17	Jun-17	
Andhra Pradesh	161,781	162,352	75,535	75,219					172,162	175,383			1,216,162	1,171,208	12,150	13,260	1,637,790	1,597,422	-40,368
Assam													153,165	147,597	2,280	2,550	155,445	150,147	-5,298
Bihar			6,497	6,497					12,458	12,706			294,437	267,648	1,590	1,920	314,982	288,771	-26,211
Delhi	1,283,061	1,292,744	172,804	169,762					136,136	139,984	1,601,487	1,586,330			29,190	30,450	3,222,678	3,219,270	-3,408
Gujarat	76,409	77,421	72,642	72,364					88,529	90,250			1,110,425	1,069,105	8,149	8,931	1,356,154	1,318,071	-38,083
Haryana	22,967	22,735	4,014	4,014					36,462	38,599			282,293	263,687			345,736	329,035	-16,701
Himachal Pradesh			3,924	3,924					2,554	2,514			142,809	135,296	60	60	149,347	141,794	-7,553
Jammu & Kashmir													134,283	127,199			134,283	127,199	-7,084
Karnataka	621,424	623,250	157,088	158,808					212,737	251,887			1,229,813	1,196,976	23,370	24,180	2,244,432	2,255,101	10,669
Kerala	58,304	58,211	32,950	32,796					19,136	18,863			1,999,633	1,968,798	1,680	1,830	2,111,703	2,080,498	-31,205
Madhya Pradesh	273,061	272,754	19,658	19,622					16,330	15,354			714,319	704,002	420	570	1,023,788	1,012,302	-11,486
Maharashtra	79,319	79,363	81,744	80,691					285,516	309,047			1,419,352	1,368,082	13,934	14,505	1,879,865	1,851,688	-28,177
Mumbai	357,907	358,504	257,723	253,751					543,237	553,634	1,860,887	1,847,835			22,605	24,098	3,042,359	3,037,822	-4,537
North East													120,802	117,456	180	180	120,982	117,636	-3,346
Orissa			3,281	3,311					8,001	7,963			279,674	268,850	1,200	1,320	292,156	281,444	-10,712
Punjab	119,907	119,123	20,637	20,149	262,891	266,567			16,113	16,031			586,185	543,953	1,050	1,050	1,006,783	966,873	-39,910
Rajasthan	48,591	48,694	19,737	19,706			56,669	55,069	11,308	11,407			599,739	569,465	2,430	5,700	738,474	710,041	-28,433
Tamil Nadu (incl. Chennai)	554,994	556,447	133,567	132,050					111,249	112,831			1,737,302	1,677,493	10,680	11,520	2,547,792	2,490,341	-57,451
U.P.(E)	63,995	64,002	34,703	34,373					14,474	13,221			379,998	371,671	1,470	1,950	494,640	485,217	-9,423
U.P.(W)	23,187	22,974	7,102	7,102					9,545	9,630			355,420	338,096	1,140	4,110	396,394	381,912	-14,482
Kolkata	120,857	120,930	69,051	68,878					50,291	50,377			613,190	595,304	5,550	5,700	858,939	841,189	-17,750
West Bengal			2,018	1,938					3,864	4,149			319,963	308,967	60	60	325,905	315,114	-10,791
Total	3,865,764	3,879,504	1,174,675	1,164,955	262,891	266,567	56,669	55,069	1,750,102	1,833,830	3,462,374	3,434,165	13,688,964	13,210,853	139,188	153,944	24,400,627	23,998,887	-401,740

Annexure 1.3: Service Area and Operator wise details of PCOs

Name of the Circle/Service Area	Service Provider	Number of PCOs as on 31.03.2017	Number of PCOs as on 30.06.2017	Net PCO increase/ decrease as on 30.06.2017	Percentage Growth/ Decline as on 30.06.2017 (%)
Andhra Pradesh (Excluding Telangana)	Bharat Sanchar Nigam Ltd.	19,959	18,507	-1,452	-7.27
	Bharti Group	181	181	0	0
	Tata Group	2,390	2,464	74	3.10
Andhra Pradesh (Including Telangana)	Bharat Sanchar Nigam Ltd.	19,959	18,507	-1,452	-7.27
	Bharti Group	181	181	0	0
	Tata Group	2,390	2,464	74	3.10
Assam	Bharat Sanchar Nigam Ltd.	6,321	5,397	-924	-14.62
Bihar (excluding Jharkhand)	Bharat Sanchar Nigam Ltd.	1,641	1,641	0	0
	Tata Group	2	13	11	550.00
Jharkhand	Bharat Sanchar Nigam Ltd.	3,397	3,381	-16	-0.47
Bihar (including Jharkhand)	Bharat Sanchar Nigam Ltd.	5,038	5,022	-16	-0.32
	Tata Group	2	13	11	550.00
Delhi	Bharti Group	513	385	-128	-24.95
	Mahanagar Telephone Nigam Ltd./MTNL	52,918	51,920	-998	-1.89
	Tata Group	1,763	1,617	-146	-8.28
Gujarat	Bharat Sanchar Nigam Ltd.	21,987	21,492	-495	-2.25
	Bharti Group	14	14	0	0
	Tata Group	898	655	-243	-27.06
Haryana	Bharat Sanchar Nigam Ltd.	1,952	1,821	-131	-6.71
	Bharti Group	170	158	-12	-7.06
	Tata Group	38	41	3	7.89
Himachal Pradesh	Bharat Sanchar Nigam Ltd.	1,675	1,524	-151	-9.01
	Tata Group	5	5	0	0
Jammu & Kashmir	Bharat Sanchar Nigam Ltd.	2,223	2,098	-125	-5.62
Karnataka	Bharat Sanchar Nigam Ltd.	25,797	24,759	-1,038	-4.02
	Bharti Group	4,287	4,016	-271	-6.32
	Tata Group	787	659	-128	-16.26
Kerala	Bharat Sanchar Nigam Ltd.	19,679	18,683	-996	-5.06

Annexure 1.3 (Contd.)

Name of the Circle/Service Area	Service Provider	Number of PCOs as on 31.03.2017	Number of PCOs as on 30.06.2017	Net PCO increase/ decrease as on 30.06.2017	Percentage Growth/ Decline as on 30.06.2017 (%)
Kerala	Bharti Group	512	490	-22	-4.30
	Tata Group	37	50	13	35.14
Kolkata	Bharat Sanchar Nigam Ltd.	5,124	4,951	-173	-3.38
	Bharti Group	26	26	0	0
	Tata Group	238	194	-44	-18.49
Madhya Pradesh (excluding Chhattisgarh)	Bharat Sanchar Nigam Ltd.	22,525	20,412	-2,113	-9.38
	Bharti Group	2,309	2,090	-219	-9.48
	Tata Group	601	549	-52	-8.65
Chhattisgarh	Bharat Sanchar Nigam Ltd.	1,640	1,598	-42	-2.56
Madhya Pradesh (including Chhattisgarh)	Bharat Sanchar Nigam Ltd.	24,165	22,010	-2,155	-8.92
	Bharti Group	2,309	2,090	-219	-9.48
	Tata Group	601	549	-52	-8.65
Maharashtra & Goa	Bharat Sanchar Nigam Ltd.	51,979	47,688	-4,291	-8.26
	Tata Group	7,153	6,050	-1,103	-15.42
Mumbai	Bharti Group	40	40	0	0
	Mahanagar Telephone Nigam Ltd./MTNL	75,137	75,137	0	0
	Tata Group	4,066	3,701	-365	-8.98
Maharashtra (including Mumbai & Goa)	Bharat Sanchar Nigam Ltd.	51,979	47,688	-4,291	-8.26
	Bharti Group	40	40	0	0
	Mahanagar Telephone Nigam Ltd./MTNL	75,137	75,137	0	0
	Tata Group	11,219	9,751	-1,468	-13.08
Arunachal Pradesh	Bharat Sanchar Nigam Ltd.	1,149	1,132	-17	-1.48
Nagaland	Bharat Sanchar Nigam Ltd.	2,624	2,429	-195	-7.43
Orissa	Bharat Sanchar Nigam Ltd.	2,255	2,193	-62	-2.75
	Tata Group	66	42	-24	-36.36
Punjab	Bharat Sanchar Nigam Ltd.	4,215	3,302	-913	-21.66
	Bharti Group	70	55	-15	-21.43

Annexure 1.3 (Contd.)

Name of the Circle/Service Area	Service Provider	Number of PCOs as on 31.03.2017	Number of PCOs as on 30.06.2017	Net PCO increase/decrease as on 30.06.2017	Percentage Growth/Decline as on 30.06.2017 (%)
Punjab	Quadrant Televentures Ltd.	1,647	1,513	-134	-8.14
	Tata Group	143	168	25	17.48
Rajasthan	Bharat Sanchar Nigam Ltd.	7,844	7,237	-607	-7.74
	Bharti Group	210	209	-1	-0.48
	Sistema Shyam	9,570	9,531	-39	-0.41
	Tata Group	175	163	-12	-6.86
Tamilnadu (excluding chennai)	Bharat Sanchar Nigam Ltd.	42,511	40,818	-1,693	-3.98
	Bharti Group	6,809	6,223	-586	-8.61
	Tata Group	154	143	-11	-7.14
Chennai	Bharat Sanchar Nigam Ltd.	10,663	9,915	-748	-7.01
Tamil Nadu (including Chennai)	Bharat Sanchar Nigam Ltd.	53,174	50,733	-2,441	-4.59
	Bharti Group	6,809	6,223	-586	-8.61
	Tata Group	154	143	-11	-7.14
Uttar Pradesh-East	Bharat Sanchar Nigam Ltd.	11,840	11,300	-540	-4.56
	Bharti Group	111	97	-14	-12.61
	Tata Group	17	9	-8	-47.06
Uttarakhand	Bharat Sanchar Nigam Ltd.	1,382	1,268	-114	-8.25
Uttar Pradesh - West (excluding Uttarakhand)	Bharat Sanchar Nigam Ltd.	2,799	2,367	-432	-15.43
	Bharti Group	85	66	-19	-22.35
	Tata Group	142	108	-34	-23.94
Uttar Pradesh - West (including Uttarakhand)	Bharat Sanchar Nigam Ltd.	4,181	3,635	-546	-13.06
	Bharti Group	85	66	-19	-22.35
	Tata Group	142	108	-34	-23.94
West Bengal (excluding A & N)	Bharat Sanchar Nigam Ltd.	5,377	4,254	-1,123	-20.89
	Tata Group	52	48	-4	-7.69
Andaman and Nicobar (A & N)	Bharat Sanchar Nigam Ltd.	142	142	0	0
West Bengal (including A & N)	Bharat Sanchar Nigam Ltd.	5,519	4,396	-1,123	-20.35
	Tata Group	52	48	-4	-7.69
Total		452,036	429,139	-22,897	-5.07

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

Name of Circle/Service Area	Service Provider	Number of VPTs as on 31.03.2017	Number of VPTs as on 30.06.2017	Net VPTs increase/ decreased as on 30.06.2017	Percentage Growth/ Decline as on 30.06.2017
Andhra Pradesh (Excluding Telangana)	Bharat Sanchar Nigam Ltd.	10,113	10,113	0	0
Andhra Pradesh (Including Telangana)	Bharat Sanchar Nigam Ltd.	10,113	10,113	0	0
Assam	Bharat Sanchar Nigam Ltd.	2,900	2,900	0	0
Bihar (excluding Jharkhand)	Bharat Sanchar Nigam Ltd.	7,008	7,008	0	0
Jharkhand	Bharat Sanchar Nigam Ltd.	530	490	-40	-0.08
Bihar (including Jharkhand)	Bharat Sanchar Nigam Ltd.	7,538	7,498	-40	-0.01
Gujarat	Bharat Sanchar Nigam Ltd.	11,128	11,022	-106	-0.01
Haryana	Bharat Sanchar Nigam Ltd.	1,476	1,453	-23	-0.02
Himachal Pradesh	Bharat Sanchar Nigam Ltd.	9,144	7,553	-1,591	-0.17
Jammu & Kashmir	Bharat Sanchar Nigam Ltd.	4,401	4,401	0	0
Karnataka	Bharat Sanchar Nigam Ltd.	8,435	8,127	-308	-0.04
Kerala	Bharat Sanchar Nigam Ltd.	469	432	-37	-0.08
Kolkata	Bharat Sanchar Nigam Ltd.	135	135	0	0
Madhya Pradesh (excl. Chhattisgarh)	Bharat Sanchar Nigam Ltd.	39,715	39,715	0	0
Chhattisgarh	Bharat Sanchar Nigam Ltd.	7,531	8,394	863	0.11
Madhya Pradesh (incl. Chhattisgarh)	Bharat Sanchar Nigam Ltd.	47,246	48,109	863	0.02
Maharashtra & Goa	Bharat Sanchar Nigam Ltd.	25,507	24,173	-1,334	-0.05
	Tata Group	1,282	1,282	0	0
Maharashtra (including Mumbai & Goa)	Bharat Sanchar Nigam Ltd.	25,507	24,173	-1,334	-0.05
	Tata Group	1,282	1,282	0	0
Orissa	Bharat Sanchar Nigam Ltd.	6,205	6,205	0	0
Punjab	Bharat Sanchar Nigam Ltd.	10,385	10,385	0	0

Annexure 1.4 (contd.)

Name of Circle/Service Area	Service Provider	Number of VPTs as on 31.03.2017	Number of VPTs as on 30.06.2017	Net VPTs increase/decreased as on 30.06.2017	Percentage Growth/Decline as on 30.06.2017
Rajasthan	Bharat Sanchar Nigam Ltd.	16,879	12,832	-4,047	-0.24
Tamilnadu (excluding chennai)	Bharat Sanchar Nigam Ltd.	12,053	12,053	0	0
Chennai	Bharat Sanchar Nigam Ltd.	178	170	-8	-0.04
Tamil Nadu (including Chennai)	Bharat Sanchar Nigam Ltd.	12,231	12,223	-8	-0.00
Uttar Pradesh- East	Bharat Sanchar Nigam Ltd.	1,452	1,319	-133	-0.09
Uttarakhand	Bharat Sanchar Nigam Ltd.	2,462	3,462	1,000	0.41
Uttar Pradesh - West (excluding Uttarakhand)	Bharat Sanchar Nigam Ltd.	4,714	3,573	-1,141	-0.24
Uttar Pradesh - West (including Uttarakhand)	Bharat Sanchar Nigam Ltd.	7,176	7,035	-141	-0.02
West Bengal (excluding Andaman & Nicobar)	Bharat Sanchar Nigam Ltd.	36,958	36,958	0	0
Andaman and Nicobar	Bharat Sanchar Nigam Ltd.	340	340	0	0
West Bengal (including Andaman & Nicobar)	Bharat Sanchar Nigam Ltd.	37,298	37,298	0	0
Total		229,685	222,780	-6,905	-3.01

**Annexure 1.5 : Internet Service Provider(ISP) wise Internet Subscriber base
as on 30.06.2017**

S.No.	Name of Internet Service Provider	Narrowband Subscribers	Broadband Subscribers	Total Subscribers
1	Reliance Jio Infocomm Ltd	0	123363870	123363870
2	Bharti Airtel Limited	38981683	55342039	94323722
3	Vodafone India Ltd.	28026607	41136501	69163108
4	Idea Cellular Ltd.	11765184	26368140	38133324
5	Bharat Sanchar Nigam Ltd.	12149212	21762085	33911297
6	Reliance Communications	10601371	13640736	24242107
7	Aircel Ltd.	11022398	5398977	16421375
8	Telenor Ltd.	11277331	346048	11623379
9	Tata (Tata Teleservices Ltd. & Tata Teleservices (Maharashtra) Ltd.	5920523	5211979	11132502
10	Mahanagar Telephone Nigam Ltd.	502032	1472951	1974983
11	Atria Convergence Technologies Pvt. Ltd.	0	1215178	1215178
12	Sistema Shyam	13136	1015293	1028429
13	You Broadband India Pvt. Ltd.	16529	652563	669092
14	Hathway Cable & Datacom Pvt. Ltd.	14953	650394	665347
15	Tikona	2398	353374	355772
16	Joister Infoserve Pvt Ltd. (Syscon Infoway Pvt Ltd)	41332	253295	294627
17	GTPL Broadband Pvt. Ltd.	48	246920	246968
18	Quadrant Televentures Ltd.	280	229216	229496
19	D-Vois Broadband Private Limited	0	213793	213793
20	Asianet Satellite Communications Ltd.	0	186387	186387
21	Alliance Broadband Services Pvt. Ltd.	0	184404	184404
22	Excitel Broadband Private Limited	0	150114	150114
23	Indinet Service Pvt Ltd	0	144180	144180
24	DEN Networks Ltd	6	107927	107933
25	RailTel Corporation of India Ltd.	0	101168	101168
26	Five Network Solution (India) Ltd.	0	71838	71838
27	Ortel Communication Ltd.	0	70273	70273
28	Honesty Net Solutions (I) Pvt Ltd	169	65806	65975
29	Planet E-Shop Holdings India Ltd.	1203	60969	62172
30	Airlink Communications Pvt. Ltd	0	57921	57921
31	R.K. Infratel Limited	2	53606	53608
32	Nextra Teleservices Pvt. Ltd.	0	51856	51856
33	Meghbela Cable & Broadband Servies (P) Ltd	0	41512	41512
34	SITI Broadband Services Pvt. Ltd.	0	40654	40654

Annexure 1.5 (contd.)

S.No.	Name of Internet Service Provider	Narrowband Subscribers	Broadband Subscribers	Total Subscribers
35	Wan and Lan Internet Pvt. Ltd.	0	39392	39392
36	Citycom Networks Pvt. Ltd.	0	34702	34702
37	Wish Net Pvt. Ltd.	0	34350	34350
38	Limras Eronet Broadband Service Pvt Ltd	6777	25397	32174
39	Vasai Cable Pvt. Ltd.	0	26231	26231
40	DNA Infotel Pvt Ltd	0	24299	24299
41	Chandra Net Pvt. Limited	8	21445	21453
42	Ishan Netsol Pvt Ltd	16732	3328	20060
43	Broadband Pacenet (I) Pvt. Ltd.	0	19569	19569
44	Rajesh Multi Channel Pvt. Ltd.	116	18344	18460
45	IKF Technologies Ltd	629	14370	14999
46	Quest Consultancy Pvt. Ltd.	0	14072	14072
47	Apna Telelink Ltd.	0	13693	13693
48	GBPS Networks Pvt. Ltd.	0	13288	13288
49	Home Systems Pvt. Ltd.	0	13013	13013
50	Yashash Cable Network Pvt Ltd	0	12405	12405
51	City Online Services Ltd	0	12249	12249
52	Southern Online Bio Technologies Ltd.	115	11746	11861
53	World Phone Internet Services Pvt Ltd	0	10853	10853
54	Geocity Network Solutions Pvt. Ltd.	0	10702	10702
55	Pioneerelabs	289	9872	10161
56	Kappa Internet Services Pvt Ltd.	0	10034	10034
57	SmartLink Broadband Services	0	9719	9719
58	Fusionnet Web Services Pvt. Ltd.	0	9673	9673
59	Swiftnet Broadband Pvt Ltd	0	8658	8658
60	North East Dataa Network Pvt Ltd.	0	8609	8609
61	Netplus Broadband Services Pvt. Ltd	0	8088	8088
62	Blazenet Ltd.	4069	3874	7943
63	Lotus Broadband Pvt Ltd	0	7651	7651
64	Sikka Broadband(P) Ltd.	0	6456	6456
65	Readylink Internet Services Pvt Ltd	407	5205	5612
66	United Telecoms Ltd.	200	5238	5438
67	Intermedia Cable Communication Pvt Ltd	0	5346	5346
68	RI Networks Pvt Ltd	0	5211	5211
69	Spacenet Internet Services Pvt Ltd	0	5114	5114
70	Siliguri Internet & Cable TV Pvt. Ltd.	0	4965	4965

Annexure 1.5 (contd.)

S.No.	Name of Internet Service Provider	Narrowband Subscribers	Broadband Subscribers	Total Subscribers
71	Narmada Cyberzone Pvt Ltd	1858	3097	4955
72	CJM Consultancy Services Pvt. Ltd.	0	4942	4942
73	Tata Communications Limited	560	4229	4789
74	Swiftmail Communications Ltd.	1283	2839	4122
75	Shri Omkar Infocom Pvt. Ltd.	0	4104	4104
76	Airgenie Communications Pvt. Ltd.	0	3659	3659
77	VIVA Communications Pvt Ltd	83	3535	3618
78	Netlinx Ltd.	526	3042	3568
79	HCL Comnet Systems & Services Ltd.	3403	31	3434
80	CJ Online Pvt. Ltd.	0	3376	3376
81	Multinet (Udaipur) Pvt. Ltd.	0	3305	3305
82	Cityzone Infonet Pvt. Ltd	0	3210	3210
83	F/X Wireless Technology Services Pvt. Ltd.	0	2906	2906
84	Star Broadband Services (I) Pvt Ltd	0	2611	2611
85	Speed Online.net Pvt. Ltd.	0	2494	2494
86	Rajesh Patel Net Services Pvt. Ltd.	130	2223	2353
87	Sphier Infotech Pvt. Ltd.	0	2305	2305
88	Wnet Telecom Private Limited	0	2105	2105
89	Kaizen Infonet Pvt Ltd	6	2091	2097
90	WE INTERNET LIMITED	0	2088	2088
91	S.S.Netcom Pvt Ltd	0	1993	1993
92	Sampark Infotainment Pvt Ltd	0	1885	1885
93	Capture Network Systems Pvt. Ltd.	284	1530	1814
94	Sify Technologies Ltd.	896	769	1665
95	Hughes Communications India Ltd.	469	1085	1554
96	Correl IT Services Pvt. Ltd.	0	1510	1510
97	Touch Net India Pvt. Ltd.	0	1443	1443
98	Symbois Creations Pvt. Ltd.	14	1246	1260
99	Aeroway Networks Pvt Ltd.	0	1257	1257
100	Harisree CableNet Pvt. Ltd.	0	1150	1150
101	Aerocast Networks Pvt Ltd.	0	1147	1147
102	delDSL Internet Pvt Ltd	0	1051	1051
103	STN Communication & Advertising Pvt Ltd.	28	837	865
104	Elyzium Technologies Pvt. Ltd.	0	750	750
105	NetMagic Solutions(P) Ltd.	0	729	729
106	Data Infosys Ltd.	0	696	696
107	Primenet Global Ltd.	0	649	649

Annexure 1.5 (contd.)

S.No.	Name of Internet Service Provider	Narrowband Subscribers	Broadband Subscribers	Total Subscribers
108	Japra Tele Link Pvt. Ltd.	0	629	629
109	Barani Data Solutions Private Ltd	374	255	629
110	Daksh Broadband Services Pvt Ltd	0	577	577
111	Datawave IT solutions Pvt. Ltd.	0	575	575
112	Conjoinix Technologies Pvt Ltd	0	571	571
113	Rajdhani Telecom Pvt. Ltd.	47	507	554
114	Digital2Virtual ISP Pvt. Ltd.	0	549	549
115	Gorakhpur Net Services Pvt. Ltd.	0	502	502
116	Tata Sky Broadband Private Limited	0	451	451
117	Jetspot Networks Pvt. Ltd.	0	437	437
118	Oasis Cable Pvt Ltd.	420	6	426
119	Tamana Winet Pvt. Ltd.	0	410	410
120	Rida Communication Pvt. Ltd.	0	396	396
121	Singh Internet Services Pvt. Ltd.	0	368	368
122	Suncity Broadband Pvt Ltd.	0	367	367
123	Chetan Internet Services Pvt. Ltd.	0	328	328
124	Power Grid Corporation of India Ltd.	0	321	321
125	Gleam Worldwide Services Pvt. Ltd.	0	320	320
126	CSC e-Governance Services India Ltd.	0	266	266
127	Sab Infotech (Sab Industries)	0	260	260
128	Pulse Telesystems Pvt. Ltd.	0	243	243
129	Khetan Cable Network (P) Ltd	0	206	206
130	Reticule Infotech Pvt. Ltd.	0	204	204
131	Oistel Telecom Pvt. Ltd.	0	198	198
132	Microsense Pvt. Ltd.	0	183	183
133	Bhiwani Communications Pvt. Ltd.	87	77	164
134	Digital Network associates Pvt. Ltd	0	160	160
135	QBC Infotech Pvt. Ltd.	0	148	148
136	Shri Vinayagaa Internet Pvt Ltd	28	118	146
137	ERNET India	74	59	133
138	Angel Air Network Solutions Private Limited	0	92	92
139	Trans Virtual Pvt. Ltd.	16	73	89
140	Sanyog Networks Pvt Ltd	0	79	79
141	Telestra Telecommunications Pvt. Ltd.	0	76	76
142	Pacific Internet India Pvt. Ltd.	0	75	75
143	Edge Telecommunications Pvt. Ltd.	0	64	64

Annexure 1.5 (contd.)

S.No.	Name of Internet Service Provider	Narrowband Subscribers	Broadband Subscribers	Total Subscribers
144	AT&T Global Network Services India Private Limited	0	57	57
145	Airmesh Communications Limited	0	52	52
146	Verizon Communications India Pvt. Ltd.	0	51	51
147	Dream Plus Multi Services Pvt. Ltd.	2	48	50
148	West Bengal Electronics Industry Development Corp. Ltd.	0	44	44
149	Adya Tech One Services Pvt Ltd	0	30	30
150	Orange Business Services India Network Pvt. Ltd.	0	18	18
151	Novanet India Ltd.	0	16	16
152	Tatanet Services Ltd	0	12	12
153	Vcare Call Centres India Pvt. Ltd.	0	12	12
154	Financial Technologies Communications Ltd.	11	0	11
155	Essel Shyam Communications Limited	1	7	8
156	ABT Ltd.	3	2	5
157	Nelco Ltd.	0	5	5
Total		130376342	300837551	431213893

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

**Annexure 1.6: List of Service Providers which reported IP
Telephony Minutes for Q.E. Jun-17**

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	Data Infosys Ltd.
7	delDSL Internet Pvt Ltd
8	Novanet Ltd.
9	Pipetel Communications Pvt. Ltd.
10	Pulse Telesystems Pvt. Ltd.
11	Sify Technologies Ltd.
12	Tata Communications Limited
13	Trikon Electronics Pvt. Ltd.
14	VIVA Communications Pvt. Ltd.
15	World Phone Internet Services Pvt. Ltd.
16	You Broadband & Cable India Pvt. Ltd.

Annexure 1.7: Service Area wise PMRTS subscriber Base

S. No.	Operative Area	Service Provider	Subscriber Base	
			31.03.2017	30.06.2017
1	Delhi(Faridabad/ Gurgaon)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	5995	5238
		Procall(Delhi)	2721	2728
		Procall (Faridabad)		
		Procall (Gurgaon)		
		Total	8716	7966
2	Mumbai (Navi Mumbai)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	8545	7769
		Smartalk (Mumbai)	491	538
		Bhilwara Telenet(Mumbai)	581	805
		Airtalk Solutions & Services Pvt. Ltd	274	314
		Total	9891	9426
3	Kolkata	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2478	2469
		Total	2478	2469
4	TN(Chennai)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7181	6879
		Quick Calls	212	341
		Total	7393	7220
5	Karnataka (Bangalore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	7448	6952
		Quick Calls	268	398
		Total	7716	7350
6	Andhra Pradesh (Vishakhapatnam & Hyderabad)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	5133	4894
		Quick Calls (Hyderabad Urban)	977	708
		Total	6110	5602
7	Madhya Pradesh (Indore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1238	1282
		Total	1238	1282
8	Rajasthan (Jaipur)	Procall	311	294
		Arya Omnitalk Radio Trunking Services Pvt.Ltd.	516	506
		Total	827	800

Annexure- 1.7 (Contd.)

S. No.	Operative Area	Service Provider	Subscriber Base	
			31.03.2017	30.06.2017
9	Gujarat (Ahmedaba/Surat/ Vadodara/ Bharuch/Dahej/ Kutch/Amrela / Jamnagar)	Arya Omnitalk Radio Trunking Services Pvt.Ltd. (Ahmedaba/Surat/Vadodara/ Bharuch/Dahej)	6181	6216
		Inative Network Pvt. Ltd. (Ahmedaba/Surat/ Vadodara/ Bharuch/ Kutch/Amrela / Jamnagar)	1820	1820
		Total	8001	8036
10	Maharashtra (Pune)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1494	1542
		Smartalk	581	501
		Total	2075	2043
11	Kerala (Cochin City & Quilon)	Wiwonet Solutions Pvt. Ltd.	273	273
		Arya Omnitalk Radio Trunking Services Pvt.Ltd.	595	644
		Total	868	917
Grand Total			55313	53111

Annexure 2.1: GSM Service - Service Area wise Statistics for QE Jun-17

Key parameters for service areas of category-A

Service Area	% of pre-paid in total subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
AP	95.32	95	19	216	211	427
Gujarat	94.47	68	7	209	165	374
Karnataka	93.08	100	29	212	196	409
MH	94.95	87	29	189	169	358
TN (incl. Chennai)	94.55	96	31	196	200	396

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	96.71	64	28	263	218	481
Kerala	96.42	133	10	200	213	413
MP	97.48	73	10	189	190	380
Punjab	94.01	86	50	251	217	468
Rajasthan	97.25	68	6	204	209	413
UP(E)	98.68	69	6	200	269	469
UP(W)	98.14	64	7	195	214	409
WB	99.14	62	17	183	229	412

Key parameters for service areas of category-C

Service Area	% of pre-paid in total subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Assam	97.00	89	23	215	256	472
Bihar	99.18	68	5	215	300	515
HP	98.43	61	5	202	175	378
J&K	87.13	89	8	305	273	578
NE	98.06	91	36	201	192	393
Orissa	98.74	59	7	220	247	467

Key parameters for service areas of category-Metro

Service Area	% of pre-paid in total subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Kolkata	93.33	63	12	207	191	398
Delhi	86.70	73	11	288	203	491
Mumbai	82.34	98	13	299	193	492

**Annexure 2.2: CDMA Full Mobility Service - Service Area wise Statistics for
QE Jun-17**

Key parameters for service areas of Category A

Service Area	% of Prepaid in total subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
MH	88.87	122	5	83	75	158
Gujarat	79.60	178	1	68	58	126
TN (incl. Chennai)	84.17	172	1	65	59	124
Karnataka	86.80	134	2	100	88	187
AP	85.61	128	2	74	72	146

Key parameters for service areas of Category B

Service Area	% of Prepaid in total subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
WB	99.38	56	2	137	124	261
Rajasthan	96.46	68	3	139	121	260
UP(E)	78.83	180	1	45	35	80
MP	90.04	98	1	112	98	210
Kerala	87.37	141	1	37	32	70
UP(W)	84.97	113	2	70	52	121
Haryana	94.29	55	1	92	77	169
Punjab	76.73	174	0.7	110	83	194

Key parameters for service areas of Category C

Service Area	% of Prepaid in total subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Orissa	83.69	130	1	79	70	148
Bihar	92.45	101	4	105	92	197
HP	64.15	236	1	72	47	119
North East			NA			
Assam			NA			
J&K			NA			

Key parameters for service areas of Category Metro

Service Area	% of Prepaid in total subscribers	ARPU (₹ per month)	Total usage (from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Kolkata	85.04	130	2	97	87	184
Delhi	83.25	141	2	127	93	220
Mumbai	58.65	255	1	64	37	100

Annexure 4.1: Performance of QoS Parameters for Cellular Mobile 2G Service

Performance Monitoring Report on Quality of Service of Cellular Mobile Service Providers for quarter ending, June, 2017

Name of Service Area	Name of Service Provider	Network Related Parameters								Customer Service Quality Parameters										
		Network Availability		Connection Establishment (Accessibility)			Connection Maintenance (Retainability)			POI	Metering and billing					Response time to the customer for assistance		Termination / closure of service		
		BTSs Accumulated downtime (not available for service) (%)	Worst affected BTSs due to downtime (%)	Call Set-up Success Rate (within licensee's own network)	SDCCH/ Paging Chl. Congestion (%)	TCH Congestion (%)	Call Drop Rate (%)	Worst affected cells having more than 3% TCH drop (call drop) rate (%)	Connection with good voice quality	Point of interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)	Metering and billing credibility- postpaid	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%	≤ 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			
Andhra Pradesh	Aircel	0.09	0.02	99.50	0.05	0.14	0.39	1.98	97.79	0	0.00	0.00	100.00	100.00	100.00	96.82	98.04	100.00	100.00	
	AIRTEL	0.14	0.08	98.30	0.86	0.88	0.90	0.02	97.14	0	0.04	0.09	100.00	100.00	100.00	99.94	88.40	100.00	100.00	
	BSNL	1.54	1.70	97.95	0.60	1.03	0.60	2.44	98.00	0	0.00	0.00	100.00	100.00	100.00	97.00	98.00	100.00	100.00	
	IDEA	0.07	0.07	99.16	0.82	0.73	0.78	2.74	97.09	0	0.08	0.01	99.86	100.00	100.00	98.57	98.53	100.00	100.00	
	RCOM GSM	0.35	1.70	99.70	0.03	0.21	0.15	0.71	99.45	0	0.09	0.05	100.00	100.00	100.00	98.39	97.27	100.00	68.38	
	TELENOR	0.08	0.06	99.73	0.09	0.01	0.55	1.24	98.79	0	NA	0.00	100.00	100.00	NA	99.57	99.80	NA	NA	
	TTSL CDMA	0.07	0.19	99.31	0.00	0.14	0.10	0.86	98.25	0	0.00	0.00	100.00	100.00	100.00	100.00	98.82	100.00	100.00	
	TTSL GSM	0.05	0.05	99.41	0.03	0.02	0.40	2.93	98.21	0	0.00	0.00	100.00	100.00	100.00	97.81	97.50	100.00	100.00	
	VODAFONE	0.07	0.26	99.83	0.07	0.17	0.38	2.81	99.25	0	0.09	0.05	100.00	100.00	100.00	100.00	99.00	100.00	100.00	
Assam	BSNL	1.99	1.96	98.13	0.83	1.87	1.91	2.99	97.00	0	0.01	0.00	100.00	100.00	100.00	97.00	98.17	100.00	100.00	
	AIRTEL	0.70	1.15	95.29	0.65	1.27	1.21	1.36	99.46	0	0.01	0.12	100.00	100.00	100.00	99.23	79.25	100.00	100.00	
	IDEA	1.61	1.58	96.00	0.49	1.28	0.48	2.14	95.48	0	0.04	0.06	100.00	100.00	100.00	95.23	95.71	100.00	100.00	
	RTL	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.09	0.06	100.00	100.00	100.00	98.22	98.32	100.00	55.70	
	Aircel	1.92	15.04	88.37	1.51	8.95	1.91	16.47	92.67	0	0.00	0.00	100.00	100.00	100.00	92.75	97.03	100.00	100.00	
	VODAFONE	0.50	1.05	98.49	0.58	1.51	0.74	2.50	97.64	0	0.04	0.10	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
Bihar	AIRTEL	0.09	0.36	96.02	0.71	1.42	1.57	2.61	96.22	0	0.01	0.03	100.00	100.00	100.00	99.97	94.44	100.00	100.00	
	IDEA	0.98	1.73	96.23	0.81	1.74	1.04	2.67	96.36	0	0.02	0.01	100.00	100.00	100.00	97.67	95.82	100.00	100.00	
	TELENOR	0.05	0.00	98.70	0.46	0.98	0.92	2.99	97.64	0	NA	0.00	100.00	100.00	NA	99.71	99.60	NA	NA	
	Aircel	0.41	1.75	95.22	0.61	4.10	1.26	6.63	95.78	0	0.00	0.00	100.00	100.00	100.00	95.67	99.05	100.00	100.00	
	TTSL GSM	0.26	0.31	98.87	0.26	0.21	0.42	2.37	97.99	0	0.00	0.00	100.00	100.00	100.00	97.96	97.22	100.00	100.00	
	TTSL CDMA	0.23	0.00	98.16	0.00	0.30	0.18	1.04	98.26	0	0.01	0.00	100.00	100.00	100.00	100.00	98.63	100.00	100.00	
	VODAFONE	0.50	1.83	99.20	0.22	0.80	0.85	2.83	98.30	0	0.00	0.09	100.00	100.00	100.00	100.00	97.02	100.00	100.00	
	BSNL	1.93	1.93	96.67	0.41	0.36	1.45	2.50	97.13	0	0.00	0.00	100.00	100.00	100.00	99.00	98.45	100.00	100.00	
	RTL	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.09	0.09	100.00	100.00	100.00	97.89	94.89	100.00	46.49	
Chennai	BSNL	0.38	1.28	98.30	0.38	1.70	0.70	1.20	97.74	0	0.04	0.00	99.00	100.00	100.00	100.00	95.10	100.00	100.00	

Annexure 4.1 (Contd.)

Delhi	Aircel	0.24	0.95	98.36	0.09	0.34	0.65	4.19	97.36	0	0.00	0.00	100.00	100.00	100.00	98.36	98.66	98.81	100.00	
	MTNL	0.10	0.15	97.37	0.25	1.77	1.81	2.55	97.74	0	0.03	0.00	100.00	100.00	100.00	98.33	99.90	100.00	100.00	
	MTS	0.03	0.00	99.07	0.00	0.02	0.30	2.72	99.16	0	0.01	0.02	100.00	100.00	100.00	96.43	96.19	100.00	100.00	
	RCOM GSM	0.23	1.52	99.65	0.04	0.27	0.19	0.53	98.79	0	0.09	0.09	100.00	100.00	100.00	99.01	98.49	100.00	67.97	
	TTSL CDMA	0.08	0.61	99.43	0.00	0.07	0.29	1.84	99.19	0	0.00	0.00	100.00	100.00	100.00	98.72	95.18	100.00	100.00	
	VODAFONE	0.19	1.01	98.87	0.26	1.13	0.99	2.53	98.13	0	0.08	0.04	99.97	100.00	100.00	100.00	73.87	98.94	100.00	100.00
	AIRTEL	0.02	0.00	99.33	0.06	0.08	0.72	1.56	99.31	0	0.03	0.15	99.98	100.00	100.00	100.00	94.50	100.00	100.00	100.00
	IDEA	0.13	0.00	98.87	0.25	0.38	0.77	2.72	98.79	0	0.14	0.06	100.00	100.00	100.00	98.91	97.81	99.64	100.00	
Gujarat	BSNL	1.76	1.05	97.16	0.07	0.35	0.28	1.08	100.00	0	0.01	0.00	100.00	100.00	100.00	98.00	96.73	100.00	100.00	
	AIRTEL	0.16	0.39	98.82	0.16	0.90	0.75	2.40	97.34	0	0.01	0.04	100.00	100.00	100.00	100.00	91.20	100.00	100.00	
	IDEA	0.07	0.14	98.80	0.38	0.79	0.73	2.46	97.05	0	0.07	0.03	99.96	99.99	99.94	97.01	96.99	99.96	99.98	
	TELENOR	0.12	0.25	99.27	0.07	0.05	0.69	1.71	98.46	0	NA	0.00	100.00	100.00	NA	99.67	98.70	NA	NA	
	Aircel	0.05	0.00	99.45	0.03	0.00	0.30	2.28	97.56	0	0.00	0.00	100.00	100.00	100.00	96.97	98.96	100.00	100.00	
	MTS	0.02	0.00	99.79	0.00	0.00	0.14	1.54	99.22	0	0.02	0.01	100.00	100.00	100.00	98.19	96.38	100.00	100.00	
	RCOM GSM	0.19	1.62	99.98	0.01	0.08	0.10	0.42	99.07	0	0.09	0.09	100.00	100.00	100.00	98.86	98.52	100.00	72.24	
	TTSL GSM	0.05	0.00	99.30	0.03	0.07	0.24	1.19	99.05	0	0.00	0.00	100.00	100.00	100.00	97.96	93.64	100.00	100.00	
	TTSL CDMA	0.02	0.00	98.79	0.00	0.11	0.27	1.87	99.38	0	0.02	0.00	100.00	100.00	100.00	100.00	96.32	100.00	100.00	
Haryana	VODAFONE	0.04	0.20	99.46	0.16	0.54	0.70	1.71	97.65	0	0.09	0.01	100.00	100.00	100.00	100.00	95.43	100.00	100.00	
	Aircel	0.77	0.00	99.66	0.02	0.00	0.00	0.00	100.00	0	0.00	0.00	100.00	100.00	100.00	98.83	98.39	100.00	100.00	
	AIRTEL	0.23	0.64	99.57	0.21	0.18	0.68	0.21	99.11	0	0.04	0.08	100.00	100.00	100.00	100.00	95.83	100.00	100.00	
	BSNL	0.98	0.60	99.10	0.29	0.42	1.28	1.45	97.30	0	0.02	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
	IDEA	0.16	1.39	98.13	0.36	0.86	0.63	2.18	98.11	0	0.10	0.03	99.98	100.00	100.00	99.13	98.34	100.00	100.00	
	RCOM GSM	0.17	1.32	99.73	0.06	0.06	0.10	0.74	99.51	0	0.09	0.06	100.00	100.00	100.00	99.08	98.35	100.00	58.99	
	TTSL GSM	0.35	0.98	99.09	0.02	0.12	0.45	2.24	97.59	0	0.00	0.00	100.00	100.00	100.00	98.15	96.20	100.00	100.00	
	TTSL CDMA	0.40	0.00	97.38	0.00	0.07	0.29	2.73	95.91	0	0.00	0.00	100.00	100.00	100.00	100.00	98.10	100.00	100.00	
	VODAFONE	0.40	2.13	99.60	0.24	0.42	0.61	2.34	97.48	0	0.09	0.02	100.00	100.00	100.00	99.99	96.30	100.00	100.00	
Himachal Pradesh	Aircel	0.15	0.14	99.56	0.10	0.28	0.98	8.72	96.44	0	0.00	0.00	100.00	100.00	100.00	98.44	97.02	100.00	100.00	
	RTL	0.21	1.85	97.15	0.15	0.29	0.44	2.28	97.31	0	0.07	0.09	100.00	100.00	100.00	96.07	98.50	100.00	36.60	
	TTSL GSM	0.00	0.00	100.00	0.00	0.00	0.10	0.44	97.24	0	0.00	0.00	100.00	100.00	100.00	98.03	99.65	100.00	100.00	
	TTSL CDMA	0.04	0.00	96.98	0.00	0.29	0.03	0.69	97.60	0	0.00	0.00	100.00	100.00	100.00	100.00	99.79	100.00	100.00	
	VODAFONE	0.13	0.00	99.97	0.01	0.03	0.61	2.26	97.70	0	0.03	0.04	100.00	100.00	100.00	100.00	98.88	100.00	100.00	
	AIRTEL	0.04	0.16	99.48	0.12	0.05	0.45	0.27	98.81	0	0.02	0.05	100.00	100.00	100.00	100.00	95.87	100.00	100.00	
	BSNL	1.89	1.91	98.64	0.95	1.36	1.98	2.70	95.02	0	0.01	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
	IDEA	0.26	0.78	99.41	0.05	0.08	1.28	2.28	97.04	0	0.03	0.01	100.00	100.00	100.00	98.71	98.52	100.00	100.00	
Jammu & Kashmir	AIRTEL	0.20	0.28	98.37	0.19	1.00	0.73	0.56	98.26	0	0.02	0.26	100.00	100.00	100.00	99.78	93.93	100.00	100.00	
	IDEA	0.44	1.47	98.84	0.10	0.70	1.20	1.97	95.60	0	0.01	0.03	100.00	100.00	100.00	97.01	98.64	100.00	100.00	
	Aircel	0.70	3.67	97.33	0.47	1.92	1.10	8.09	95.14	0	0.00	0.00	100.00	100.00	100.00	97.64	88.08	100.00	100.00	
	RCOM GSM	0.11	0.86	99.42	0.12	0.07	0.13	0.60	99.22	0	0.09	0.09	100.00	100.00	100.00	98.82	95.64	100.00	63.76	
	VODAFONE	0.12	0.16	99.75	0.08	0.25	0.60	2.65	98.71	1	0.01	0.18	100.00	100.00	100.00	100.00	98.18	100.00	100.00	
	BSNL	1.63	0.82	98.91	0.50	1.09	0.70	2.04	96.78	0	0.02	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

Annexure 4.1 (Contd.)

Karnataka	Aircel	0.31	1.02	99.22	0.04	0.14	0.51	2.61	97.95	0	0.00	0.00	100.00	100.00	100.00	96.46	95.93	96.57	100.00
	AIRTEL	0.19	0.49	98.86	0.22	0.25	0.49	1.39	96.84	0	0.02	0.09	100.00	100.00	100.00	99.97	92.14	100.00	100.00
	BSNL	1.40	1.76	98.61	0.25	0.74	0.72	1.95	97.12	0	0.05	0.00	99.75	100.00	100.00	99.00	96.71	100.00	100.00
	IDEA	0.11	0.21	99.34	0.30	0.18	0.51	1.94	97.05	0	0.10	0.02	100.00	100.00	100.00	99.86	97.29	100.00	100.00
	MTS	0.33	0.00	99.49	0.00	0.03	0.43	2.84	99.20	0	0.01	0.00	100.00	100.00	100.00	99.60	95.61	100.00	100.00
	RCOM GSM	0.40	1.52	99.85	0.03	0.20	0.08	0.50	99.53	0	0.09	0.03	100.00	100.00	100.00	98.82	97.69	100.00	69.27
	TTSL GSM	0.10	0.11	98.99	0.03	0.03	0.40	2.06	98.01	0	0.00	0.00	100.00	100.00	100.00	98.23	92.55	100.00	100.00
	TTSL CDMA	0.16	0.73	98.20	0.00	0.04	0.18	1.40	98.83	0	0.01	0.00	100.00	100.00	100.00	100.00	98.91	100.00	100.00
VODAFONE	0.29	1.22	99.92	0.14	0.08	0.41	2.60	99.01	0	0.04	0.05	99.96	100.00	100.00	100.00	86.01	100.00	100.00	
Kerala	Aircel	0.14	0.36	99.79	0.02	0.04	0.44	3.60	98.11	0	0.00	0.00	100.00	100.00	100.00	97.46	98.23	100.00	100.00
	AIRTEL	0.07	0.06	99.16	0.12	0.50	0.74	2.96	97.84	0	0.01	0.08	100.00	100.00	100.00	99.99	85.55	100.00	100.00
	MTS	0.07	0.00	99.31	0.00	0.00	0.20	2.64	99.17	0	0.03	0.00	100.00	100.00	100.00	99.00	97.43	100.00	100.00
	RCOM GSM	0.45	2.68	98.59	0.02	0.31	0.07	0.91	99.57	0	0.09	0.03	100.00	100.00	100.00	98.86	97.56	100.00	75.27
	TTSL GSM	0.06	0.00	99.77	0.01	0.02	0.28	2.35	99.20	0	0.00	0.00	100.00	100.00	100.00	97.84	94.75	100.00	100.00
	TTSL CDMA	0.03	0.00	98.95	0.00	0.00	0.24	1.27	99.13	0	0.00	0.00	100.00	100.00	100.00	100.00	97.62	100.00	100.00
	VODAFONE	0.04	0.00	99.93	0.03	0.04	0.38	1.26	98.18	0	0.09	0.06	100.00	100.00	100.00	100.00	96.42	100.00	100.00
	BSNL	0.43	0.62	99.06	0.22	0.94	0.61	0.78	99.85	0	0.03	0.01	100.00	100.00	100.00	98.00	97.46	100.00	100.00
IDEA	0.14	0.52	99.62	0.13	0.35	0.57	1.61	96.80	0	0.09	0.06	99.84	100.00	100.00	97.68	98.20	100.00	100.00	
Kolkata	AIRTEL	0.01	0.00	99.70	0.05	0.04	0.67	2.38	97.94	0	0.02	0.06	100.00	100.00	100.00	99.88	93.15	100.00	100.00
	IDEA	0.29	0.52	99.74	0.06	0.06	0.32	0.13	97.99	0	0.06	0.03	100.00	100.00	100.00	98.25	95.58	100.00	100.00
	BSNL	1.85	1.87	98.68	0.79	1.63	1.85	2.75	98.93	0	0.02	0.01	100.00	100.00	100.00	96.00	95.97	100.00	100.00
	Aircel	0.17	0.53	98.37	0.16	0.10	0.61	2.38	98.11	0	0.00	0.00	100.00	100.00	100.00	97.79	97.27	100.00	100.00
	MTS	0.09	0.00	99.89	0.00	0.00	0.43	2.78	99.56	0	0.08	0.03	100.00	100.00	100.00	99.86	96.89	100.00	100.00
	RTL	0.58	1.80	96.98	0.25	0.65	0.12	0.52	99.08	0	0.09	0.09	100.00	100.00	100.00	99.50	93.67	100.00	65.73
	TTSL GSM	0.14	0.23	99.54	0.04	0.01	0.27	0.75	98.93	0	0.00	0.00	100.00	100.00	100.00	98.57	96.95	100.00	100.00
	TTSL CDMA	0.10	0.17	99.37	0.00	0.14	0.23	2.85	99.76	0	0.00	0.00	100.00	100.00	100.00	100.00	96.41	100.00	100.00
VODAFONE	0.09	0.41	99.53	0.06	0.47	0.75	2.76	98.01	0	0.07	0.07	100.00	100.00	100.00	100.00	97.79	100.00	100.00	
Madhya Pradesh	Aircel	0.51	0.00	97.79	0.08	0.00	0.93	0.81	99.22	0	0.00	0.00	100.00	100.00	100.00	95.34	99.67	100.00	100.00
	AIRTEL	0.16	0.19	98.70	0.17	1.66	0.81	1.61	97.21	0	0.02	0.04	100.00	100.00	100.00	99.99	98.01	100.00	100.00
	BSNL	1.76	1.80	97.33	0.51	1.05	1.18	1.79	97.85	0	0.01	0.03	100.00	100.00	100.00	98.50	99.73	100.00	100.00
	IDEA	0.14	0.33	96.02	0.57	1.09	0.69	1.84	98.04	0	0.08	0.01	100.00	100.00	100.00	98.35	98.85	99.99	100.00
	TTSL GSM	0.07	0.13	99.48	0.03	0.04	0.31	1.25	99.40	0	0.00	0.00	100.00	100.00	100.00	97.55	96.32	100.00	100.00
	TTSL CDMA	0.10	0.00	98.38	0.00	0.00	0.21	2.32	99.25	0	0.00	0.00	100.00	100.00	100.00	100.00	98.01	100.00	100.00
	VODAFONE	0.09	0.28	99.65	0.09	0.35	0.51	2.83	99.03	0	0.03	0.04	100.00	100.00	100.00	100.00	98.55	100.00	100.00
	RTL	0.38	1.55	97.64	0.07	0.54	0.16	0.49	99.02	0	0.09	0.09	100.00	100.00	100.00	98.73	99.37	100.00	56.04
Maharashtra	Aircel	0.12	0.30	99.31	0.02	0.06	0.47	2.61	97.05	0	0.00	0.00	100.00	100.00	100.00	98.24	98.38	100.00	45.00
	AIRTEL	0.03	0.00	98.39	0.14	0.86	0.77	1.61	96.95	0	0.01	0.04	99.98	100.00	100.00	99.96	97.07	100.00	100.00
	BSNL	1.88	1.91	95.66	0.37	1.69	1.05	2.77	96.28	0	0.00	0.01	100.00	100.00	100.00	100.00	99.46	100.00	100.00
	IDEA	0.09	0.12	97.91	0.60	1.23	0.68	2.33	98.65	0	0.07	0.03	100.00	100.00	99.98	99.80	95.07	100.00	100.00
	RCOM GSM	0.33	1.66	99.58	0.09	0.36	0.14	0.58	99.09	0	0.09	0.08	100.00	100.00	100.00	99.22	97.08	100.00	70.45
	TELENOR	0.20	0.93	99.19	0.09	0.10	0.71	2.78	98.28	0	NA	0.00	100.00	100.00	NA	99.51	98.79	NA	NA
	TTML CDMA	0.04	0.00	98.54	0.00	1.10	0.45	2.15	99.92	0	0.00	0.00	100.00	100.00	100.00	100.00	97.10	100.00	100.00
	TTML GSM	0.05	0.00	99.67	0.04	0.06	0.31	1.33	98.23	0	0.00	0.00	100.00	100.00	100.00	96.84	94.94	100.00	100.00
VODAFONE	0.15	0.53	99.09	0.30	0.91	0.69	2.34	97.56	0	0.06	0.07	100.00	100.00	100.00	99.93	97.35	100.00	100.00	

Annexure 4.1 (Contd.)

Mumbai	Aircel	0.12	0.25	98.24	0.05	0.24	0.77	3.94	97.67	0	0.00	0.00	100.00	100.00	100.00	98.85	96.96	94.92	100.00	
	AIRTEL	0.15	0.00	98.89	0.09	0.03	0.91	2.00	97.71	0	0.01	0.11	100.00	100.00	100.00	99.94	96.38	100.00	100.00	
	IDEA	0.10	0.03	98.81	0.43	0.87	1.00	1.71	96.89	0	0.04	0.02	99.97	99.97	100.00	97.07	94.80	100.00	100.00	
	MTNL	0.80	1.26	98.24	0.53	0.15	1.62	2.21	96.73	0	0.05	0.00	99.42	100.00	100.00	100.00	97.50	100.00	100.00	
	RCOM GSM	0.22	1.52	98.68	0.12	0.51	0.17	0.45	99.17	0	0.09	0.09	100.00	100.00	100.00	100.00	98.77	95.68	100.00	66.04
	TTML CDMA	0.04	0.00	99.24	0.00	0.02	0.32	2.03	99.15	0	0.00	0.00	100.00	100.00	100.00	100.00	98.91	100.00	100.00	100.00
	TTML GSM	0.21	0.00	99.67	0.01	0.01	0.31	1.12	98.57	0	0.00	0.00	100.00	100.00	100.00	98.35	95.49	100.00	100.00	
	VODAFONE	0.25	0.00	98.96	0.06	1.04	1.02	2.71	98.01	0	0.08	0.04	99.99	100.00	100.00	99.96	88.03	100.00	100.00	
North East	Aircel	5.75	41.45	96.58	0.62	2.02	1.92	17.82	94.01	0	0.00	0.00	100.00	100.00	100.00	95.94	97.80	100.00	100.00	
	AIRTEL	1.10	1.27	95.23	0.85	1.16	0.79	1.19	99.50	0	0.01	0.12	100.00	100.00	100.00	100.00	96.34	100.00	100.00	
	BSNL	1.76	1.79	97.61	0.79	1.66	1.63	2.36	97.15	0	0.03	0.03	100.00	100.00	100.00	97.50	97.84	100.00	100.00	
	IDEA	1.81	1.45	97.48	0.15	0.85	0.34	2.26	96.26	0	0.03	0.07	100.00	100.00	100.00	100.00	96.07	100.00	100.00	
	RTL	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.06	0.04	100.00	100.00	100.00	99.38	98.25	100.00	58.02	
	VODAFONE	1.01	1.81	98.05	0.94	1.95	1.30	2.75	97.78	0	0.04	0.14	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
Orissa	Aircel	0.38	1.56	97.54	0.44	1.95	1.01	3.71	96.43	0	0.00	0.00	100.00	100.00	100.00	96.33	99.76	100.00	100.00	
	AIRTEL	0.10	0.08	95.29	0.86	1.84	1.48	1.59	96.07	0	0.01	0.03	100.00	100.00	100.00	99.19	95.14	100.00	100.00	
	BSNL	1.24	1.91	98.81	0.84	1.19	1.91	2.79	97.73	0	0.03	0.01	100.00	100.00	100.00	97.00	97.67	100.00	100.00	
	IDEA	0.38	1.41	99.43	0.08	0.16	0.22	0.56	96.21	0	0.02	0.04	100.00	100.00	100.00	97.44	99.17	100.00	100.00	
	RTL	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.09	0.09	100.00	100.00	100.00	98.78	95.69	100.00	45.69	
	TTSL GSM	0.04	0.00	99.56	0.18	0.13	0.29	1.08	98.32	0	0.00	0.00	100.00	100.00	100.00	97.70	95.35	100.00	100.00	
	TTSL CDMA	0.11	0.00	98.66	0.00	0.02	0.29	1.13	98.24	0	0.00	0.00	100.00	100.00	100.00	100.00	96.42	100.00	100.00	
	VODAFONE	0.16	0.40	99.19	0.32	0.81	0.71	1.60	98.11	0	0.03	0.07	100.00	100.00	100.00	99.98	92.89	100.00	100.00	
Punjab	Aircel	0.20	0.20	98.54	0.02	0.09	0.51	2.16	98.23	0	0.00	0.00	100.00	100.00	100.00	97.54	97.76	100.00	100.00	
	AIRTEL	0.39	4.66	99.67	0.10	0.08	0.36	0.89	98.96	0	0.02	0.10	100.00	100.00	100.00	100.00	97.22	100.00	100.00	
	BSNL	0.79	1.79	97.84	0.59	0.59	1.33	1.12	97.00	0	0.01	0.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
	IDEA	0.28	2.22	99.18	0.17	0.10	0.28	0.49	98.69	0	0.07	0.04	100.00	100.00	100.00	99.90	97.53	100.00	100.00	
	RCOM GSM	0.14	1.10	99.60	0.05	0.04	0.09	0.74	99.41	0	0.09	0.09	100.00	100.00	100.00	99.11	98.15	100.00	65.25	
	TTSL CDMA	0.13	0.18	98.57	0.00	0.10	0.18	3.04	99.71	0	0.00	0.00	100.00	100.00	100.00	100.00	98.95	100.00	100.00	
	TTSL GSM	0.23	1.98	99.15	0.02	0.07	0.36	1.72	97.82	0	0.00	0.00	100.00	100.00	100.00	98.11	96.07	100.00	100.00	
	VODAFONE	0.51	6.22	99.67	0.49	0.33	0.57	2.84	98.09	0	0.04	0.03	100.00	100.00	100.00	100.00	95.73	100.00	100.00	
Rajasthan	AIRTEL	0.18	0.38	95.71	0.89	1.27	0.69	1.25	98.85	0	0.01	0.03	100.00	100.00	100.00	99.95	96.85	100.00	100.00	
	Aircel	0.08	0.10	98.04	0.11	0.41	0.59	2.27	97.28	0	0.00	0.00	100.00	100.00	100.00	98.40	97.48	100.00	100.00	
	BSNL	1.32	1.25	98.85	0.65	1.10	1.08	2.50	97.67	0	0.03	0.02	99.80	100.00	100.00	96.00	98.90	100.00	100.00	
	IDEA	0.11	0.12	99.40	0.29	0.39	0.40	1.06	97.57	0	0.05	0.03	100.00	100.00	100.00	98.98	96.50	99.84	100.00	
	MTS	0.41	0.00	99.06	0.00	0.04	0.45	2.47	99.19	0	0.02	0.01	100.00	100.00	100.00	99.91	96.07	100.00	100.00	
	RCOM GSM	0.29	1.60	98.73	0.16	0.24	0.19	1.45	99.24	0	0.09	0.09	100.00	100.00	100.00	98.38	99.05	100.00	66.14	
	TTSL CDMA	0.00	0.00	98.87	0.00	0.18	0.31	2.42	99.14	0	0.00	0.00	100.00	100.00	100.00	100.00	99.67	100.00	100.00	
	TTSL GSM	0.00	0.00	99.53	0.03	0.07	0.22	1.38	99.41	0	0.00	0.00	100.00	100.00	100.00	96.57	98.68	100.00	100.00	
VODAFONE	0.11	0.32	99.37	0.23	0.63	0.63	2.62	96.81	0	0.07	0.22	98.85	100.00	100.00	100.00	97.28	100.00	100.00		

Annexure 4.1 (Contd.)

Tamil Nadu	Aircel	0.19	0.81	98.70	0.51	1.00	0.81	4.01	95.64	0	0.00	0.00	100.00	100.00	100.00	97.38	98.63	99.77	100.00
	BSNL	0.83	1.87	98.73	0.29	0.65	1.01	2.25	96.38	0	0.03	0.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00
	IDEA	0.03	0.02	99.80	0.05	0.06	0.26	1.13	99.19	0	0.05	0.05	100.00	100.00	100.00	97.93	99.54	100.00	100.00
	MTS	0.02	0.00	99.56	0.00	0.01	0.28	2.86	99.18	0	0.03	0.00	100.00	100.00	100.00	97.19	95.34	100.00	100.00
	TTSL CDMA	0.15	1.00	99.07	0.00	0.08	0.09	0.72	98.92	0	0.01	0.00	100.00	100.00	100.00	100.00	98.69	100.00	100.00
	TTSL GSM	0.10	0.14	99.54	0.03	0.02	0.22	0.95	98.94	0	0.00	0.00	100.00	100.00	100.00	98.52	98.40	100.00	100.00
	VODAFONE	0.11	0.38	99.55	0.25	0.45	0.62	2.47	98.07	0	0.08	0.06	100.00	100.00	100.00	100.00	97.16	100.00	100.00
Tamil Nadu + Chennai	AIRTEL	0.09	0.07	99.58	0.20	0.19	0.58	1.88	98.34	0	0.02	0.13	100.00	100.00	100.00	100.00	94.65	100.00	100.00
	RCOM GSM	0.44	1.68	99.17	0.08	0.09	0.15	0.54	99.50	0	0.07	0.03	100.00	100.00	100.00	96.59	96.05	100.00	72.43
UP-East	Aircel	0.11	0.25	99.17	0.32	0.31	0.51	2.60	98.03	0	0.00	0.00	100.00	100.00	100.00	97.82	98.46	100.00	100.00
	AIRTEL	0.43	1.73	95.24	0.77	1.47	1.02	2.78	97.54	0	0.01	0.05	100.00	100.00	100.00	100.00	92.16	100.00	100.00
	BSNL	1.75	1.91	98.37	0.61	1.92	1.58	2.39	96.50	0	0.09	0.09	98.60	100.00	100.00	99.00	97.72	100.00	100.00
	IDEA	0.30	1.03	98.70	0.59	1.04	0.70	2.71	97.11	0	0.06	0.06	100.00	100.00	100.00	99.56	97.43	100.00	100.00
	RCOM GSM	0.32	1.60	98.84	0.17	0.67	0.15	0.73	99.11	0	0.09	0.04	100.00	100.00	100.00	98.91	99.07	100.00	74.65
	TELENOR	0.10	0.04	99.08	0.24	0.37	0.78	3.46	96.76	0	NA	0.00	100.00	100.00	NA	99.69	99.61	NA	NA
	TTSL CDMA	0.28	0.29	97.54	0.00	0.26	0.16	2.86	99.09	0	0.00	0.00	100.00	100.00	100.00	100.00	95.26	100.00	100.00
	TTSL GSM	0.17	0.26	96.69	0.73	1.07	0.43	2.55	97.58	0	0.00	0.00	100.00	100.00	100.00	98.23	95.59	100.00	100.00
VODAFONE	0.23	0.83	98.19	0.44	1.81	0.83	2.81	96.03	2	0.08	0.02	100.00	100.00	100.00	100.00	95.58	100.00	100.00	
UP-West	Aircel	0.10	0.45	99.70	0.16	0.35	0.45	2.13	97.55	0	0.00	0.00	100.00	100.00	100.00	98.06	99.40	100.00	100.00
	AIRTEL	1.40	1.40	98.68	0.69	0.88	1.10	1.71	97.80	0	0.02	0.16	100.00	100.00	100.00	100.00	94.92	100.00	100.00
	BSNL	1.61	1.70	98.58	0.52	1.04	1.37	2.22	96.28	0	0.01	0.00	100.00	100.00	100.00	100.00	99.17	100.00	100.00
	IDEA	0.08	0.10	96.29	0.82	1.50	0.68	2.34	95.94	0	0.06	0.00	99.83	100.00	100.00	99.22	97.35	100.00	100.00
	MTS	0.18	0.00	99.86	0.00	0.07	0.20	2.25	99.21	0	0.04	0.02	100.00	100.00	100.00	99.97	97.79	100.00	100.00
	RCOM GSM	0.29	1.66	99.11	0.28	0.46	0.12	0.49	98.99	0	0.09	0.04	100.00	100.00	100.00	98.96	98.10	100.00	70.98
	TELENOR	0.22	0.25	99.53	0.15	0.17	0.52	1.74	98.19	0	NA	0.00	100.00	100.00	NA	99.68	99.71	NA	NA
	TTSL CDMA	0.14	0.00	99.18	0.00	0.07	0.28	2.79	99.39	0	0.00	0.00	100.00	100.00	100.00	100.00	97.77	100.00	100.00
	TTSL GSM	0.08	0.00	98.67	0.11	0.29	0.43	2.23	97.83	0	0.00	0.00	100.00	100.00	100.00	97.76	94.97	100.00	100.00
VODAFONE	0.22	0.50	98.29	0.78	1.64	0.77	2.85	96.53	0	0.06	0.03	100.00	100.00	100.00	100.00	96.83	100.00	100.00	
West Bengal	Aircel	0.34	1.10	97.90	0.32	0.74	0.89	8.02	97.65	0	0.00	0.00	100.00	100.00	100.00	96.21	96.22	100.00	100.00
	AIRTEL	0.18	0.20	95.59	0.65	1.12	1.15	2.21	95.37	0	0.01	0.06	100.00	100.00	100.00	98.93	91.57	100.00	100.00
	BSNL	0.36	0.93	97.91	0.89	1.34	1.50	11.46	96.02	0	0.01	0.02	99.47	100.00	100.00	97.50	97.73	100.00	100.00
	IDEA	0.25	0.63	99.06	0.13	0.23	0.43	0.23	97.59	0	0.06	0.05	100.00	100.00	100.00	97.11	97.48	100.00	100.00
	MTS	0.29	0.00	99.46	0.00	0.40	0.51	2.54	98.91	0	0.08	0.02	100.00	100.00	100.00	99.50	98.05	100.00	100.00
	RTL	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.08	0.09	100.00	100.00	100.00	98.91	93.15	100.00	81.06
	TTSL CDMA	0.00	0.00	99.31	0.00	0.01	0.07	0.42	97.71	0	0.00	0.00	100.00	100.00	100.00	100.00	99.24	100.00	100.00
	TTSL GSM	0.29	0.00	99.54	0.18	0.01	0.41	2.47	98.22	0	0.00	0.00	100.00	100.00	100.00	97.54	95.46	100.00	100.00
VODAFONE	0.12	0.17	98.35	0.66	1.65	0.82	2.46	96.67	0	0.06	0.06	100.00	100.00	100.00	100.00	96.15	100.00	100.00	

Annexure 4.2: Performance of QoS Parameters for Cellular Mobile 3G Service

Performance Monitoring Report on Quality of Service of Cellular Mobile Service Providers for quarter ending June , 2017										
Service Provider	Name of the Service Area / City	Network Availability		Connection Establishment (Accessibility)			Connection Maintenance (Retainability)			POI
		BTS and Node-B's Accumulated downtime (not available for service) (%age)	Worst affected BTSs and Node-B's due to downtime (%age)	Call Set-up Success Rate (within licensee's own network)	SDCCH/Paging Channel and RRC Congestion (%age)	TCH and Circuit Switched RAB Congestion (%age)	Call Drop and Circuit Switched Voice Drop Rate: (%age)	Worst affected cells having more than 3% TCH drop (call drop) and Circuit Switched Voice Drop Rate:- CBBH	Connections with good voice quality and Circuit Switch Voice Quality (CSV quality)	Point of Interconnection (POI) Congestion
		1	2	3	4	5	6	7	8	9
Benchmark	≤ 2%	≤ 2%	≥ 95%	≤ 1%	≤ 2%	≤ 2%	≤ 3%	≥ 95%	≤ 0.5%	
Andhra Pradesh	Aircel	0.11	0.05	98.87	0.58	0.16	0.34	2.66	99.80	0
	Airtel	0.16	0.33	98.41	0.01	0.00	0.33	0.02	98.82	0
	BSNL	1.03	1.40	98.67	0.67	0.53	0.47	2.00	99.70	0
	IDEA	0.04	0.06	99.85	0.07	0.07	0.19	0.75	99.72	0
Assam	Aircel	2.39	18.89	98.34	0.79	0.00	0.52	5.28	98.92	0
	Airtel	1.12	1.11	98.38	0.11	0.01	0.89	1.06	98.61	0
	BSNL	1.70	1.70	95.33	0.57	0.90	1.77	2.17	97.00	0
	RTL	0.48	1.19	99.53	0.03	0.00	0.09	0.22	99.89	0
	Vodafone	0.60	1.04	99.75	0.09	0.06	0.57	2.44	98.83	-
Bihar	Aircel	0.62	1.81	99.19	0.13	0.03	0.45	5.41	99.26	0
	Airtel	0.07	0.50	98.39	0.09	0.27	1.08	2.46	98.95	0
	BSNL	1.88	1.82	95.83	0.47	0.87	1.23	2.88	95.78	0
	IDEA	1.00	1.29	99.81	0.00	0.00	0.41	2.28	99.78	0
	RTL	0.15	0.69	99.45	0.01	0.01	0.06	0.43	99.84	0
Chennai	BSNL	0.33	1.33	98.00	0.70	0.67	1.27	1.67	97.03	0
Delhi	Airtel	0.01	0.00	99.32	0.03	0.05	0.49	2.85	98.88	0
	IDEA	0.19	0.00	99.78	0.05	0.02	0.41	2.34	98.35	0
	MTNL	0.08	0.45	97.15	0.66	1.68	1.71	1.87	96.30	0
	RCom	0.26	1.80	99.90	0.01	0.00	0.41	2.57	99.68	0
	Vodafone	0.20	1.14	99.45	0.16	0.13	0.47	2.41	98.95	-
Gujarat	Airtel	0.16	0.45	99.87	0.00	0.22	0.22	1.94	99.40	0
	BSNL	1.17	1.57	99.00	0.30	0.13	1.03	1.20	99.43	0
	IDEA	0.07	0.18	99.81	0.06	0.02	0.34	1.63	98.77	0
	Tata	0.03	0.00	99.83	0.00	0.02	0.34	2.24	99.81	0
	Vodafone	0.09	0.17	99.74	0.08	0.03	0.18	1.20	99.23	-
Haryana	Airtel	0.23	0.67	99.49	0.00	0.00	0.14	0.69	99.76	0
	BSNL	1.23	0.70	99.00	0.73	0.60	0.47	1.43	97.23	0
	IDEA	0.21	1.13	99.50	0.55	0.26	0.31	2.50	98.85	0
	Tata	0.22	0.92	99.86	0.36	0.16	0.13	1.30	99.82	0
	Vodafone	0.45	2.52	99.78	0.01	0.00	0.32	2.09	98.32	-

Annexure 4.2 (Contd.)

Himachal Pradesh	Airtel	0.13	0.16	98.87	0.00	0.00	0.69	1.02	98.74	0
	BSNL	1.00	1.40	98.33	0.40	0.60	0.77	1.67	99.60	0
	IDEA	0.30	0.24	99.56	0.14	0.08	0.86	1.77	97.82	0
	RTL	0.27	1.26	99.70	0.03	0.00	0.06	0.42	99.39	0
Jammu & Kashmir	Aircel	0.77	5.51	98.89	0.07	0.02	0.99	9.56	98.98	0
	Airtel	0.23	0.34	98.75	0.03	0.07	0.99	1.34	98.92	0
	BSNL	0.33	0.47	98.00	0.53	1.47	1.27	1.97	98.43	0
	IDEA	0.45	1.14	99.00	0.54	0.55	1.33	2.12	97.41	0
	RCom	0.45	1.82	99.97	0.03	0.01	0.04	0.28	99.71	0
Karnataka	Aircel	0.36	0.78	99.09	0.29	0.10	0.38	3.32	99.81	0
	Airtel	0.13	0.37	99.51	0.06	0.05	0.22	1.53	99.69	0
	BSNL	1.13	1.63	97.33	0.77	0.97	0.73	2.27	99.67	0
	Tata	0.10	0.12	99.62	0.51	0.10	0.16	1.06	99.12	0
	Vodafone	0.25	1.48	99.85	0.02	0.02	0.13	0.57	99.70	-
Kerala	Aircel	0.15	0.42	99.21	0.34	0.06	0.74	3.07	99.84	0
	Airtel	0.08	0.10	99.61	0.01	0.04	0.48	2.81	98.25	0
	BSNL	0.40	0.50	95.33	0.13	0.47	0.40	2.30	99.87	0
	IDEA	0.08	0.09	99.36	0.44	0.26	0.24	0.99	98.44	0
	Tata	0.05	0.00	99.79	0.00	0.01	0.15	1.45	99.83	0
	Vodafone	0.03	0.00	99.86	0.00	0.00	0.15	0.32	99.79	-
Kolkata	Aircel	0.15	0.46	99.56	0.28	0.03	0.30	2.97	98.46	0
	Airtel	0.00	0.00	99.55	0.00	0.00	0.32	1.87	99.72	0
	BSNL	1.73	1.70	96.33	0.40	0.53	1.23	2.50	99.80	0
	IDEA	0.19	0.35	99.84	0.00	0.02	0.16	0.07	99.78	0
	RTL	0.37	1.63	99.36	0.76	0.05	0.12	0.69	99.89	0
	Vodafone	0.10	0.42	99.87	0.01	0.01	0.25	2.25	98.97	-
Madhya Pradesh	Airtel	0.22	0.27	99.69	0.01	0.03	0.26	1.43	99.36	0
	BSNL	1.78	1.68	97.33	0.60	0.43	0.73	2.10	97.48	0
	IDEA	0.14	0.20	99.62	0.06	0.05	0.56	2.09	98.54	0
	RTL	0.28	1.62	99.83	0.06	0.00	0.05	0.24	99.90	0
	Tata	0.06	0.12	99.81	0.01	0.02	0.20	1.52	99.85	0
Maharashtra	Airtel	0.03	0.00	99.66	0.06	0.33	0.51	0.71	98.98	0
	BSNL	1.67	1.50	96.00	0.63	1.33	1.03	2.47	96.27	0
	IDEA	0.10	0.10	99.67	0.23	0.07	0.38	1.53	98.12	0
	Tata	0.04	0.00	99.81	0.01	0.04	0.28	1.77	100.00	0
	Vodafone	0.20	0.51	99.75	0.18	0.11	0.25	1.75	99.01	-
Mumbai	Airtel	0.10	0.00	99.63	0.02	0.03	0.49	2.36	99.93	0
	MTNL	0.81	0.95	97.38	0.47	0.19	1.56	2.17	98.84	0
	RCom	0.32	1.22	99.97	0.00	0.00	0.09	0.32	99.71	0
	Vodafone	0.33	0.00	99.81	0.00	0.00	0.38	2.63	98.83	-

Annexure 4.2 (Contd.)

North East	Aircel	5.54	37.52	97.10	0.57	0.14	1.07	12.36	98.92	0
	Airtel	1.16	1.17	97.18	0.13	0.02	1.24	1.15	98.52	0
	BSNL	1.43	1.72	97.67	0.70	1.65	1.60	2.18	97.15	0
	RTL	0.70	0.91	99.96	0.02	0.08	0.04	0.38	99.84	0
	Vodafone	0.78	1.49	99.54	0.09	0.03	1.16	2.80	98.84	-
Orissa	Aircel	0.50	1.60	99.39	0.03	0.03	0.81	7.14	98.96	0
	Airtel	0.08	0.06	98.92	0.05	0.18	0.56	1.49	99.30	0
	BSNL	1.27	1.90	96.33	0.83	1.83	1.90	2.53	97.67	0
	RTL	0.13	0.91	99.89	0.03	0.00	0.09	1.13	99.89	0
	Vodafone	0.09	0.05	99.87	0.01	0.02	0.45	2.80	99.48	-
Punjab	Aircel	0.28	1.39	99.29	0.10	0.00	0.36	3.05	99.15	0
	Airtel	0.45	5.18	99.27	0.24	0.58	0.20	1.28	99.76	0
	BSNL	0.60	1.40	99.67	0.23	0.23	0.07	2.00	98.73	0
	IDEA	0.18	0.91	99.83	0.08	0.05	0.19	1.06	99.70	0
	RCom	0.31	1.56	99.98	0.00	0.00	0.03	0.27	99.77	0
	Tata	0.23	1.67	99.66	0.26	0.11	0.12	0.90	99.14	0
Rajasthan	Airtel	0.14	0.18	99.25	0.02	0.02	0.50	0.82	98.91	0
	BSNL	1.63	1.73	100.00	0.67	0.43	0.97	2.27	96.93	0
	IDEA	0.12	0.48	99.85	0.00	0.00	0.18	2.21	99.82	0
	RCom	0.39	1.69	99.79	0.01	0.01	0.07	0.40	99.57	0
	Tata	0.00	0.00	100.00	0.00	0.00	0.00	0.00	100.00	0
	Vodafone	0.24	0.88	99.87	0.01	0.01	0.31	2.67	98.88	-
Tamil Nadu	Aircel	0.21	0.80	98.73	0.30	0.05	0.49	5.80	98.80	0
	Airtel	0.09	0.17	99.81	0.03	0.05	0.21	1.75	99.58	0
	BSNL	0.53	1.90	98.67	0.00	0.53	0.27	1.00	99.67	0
	Vodafone	0.10	0.17	99.64	0.11	0.05	0.29	2.14	99.11	-
UP West	Airtel	1.65	1.76	99.27	0.04	0.00	0.58	1.21	98.87	0
	BSNL	1.47	1.02	98.67	0.77	0.73	0.55	2.50	96.53	0
	IDEA	0.32	0.71	98.52	0.95	0.83	0.25	1.91	98.84	0
	Tata	0.09	0.00	99.58	0.29	0.12	0.16	1.61	99.14	0
	Vodafone	0.30	0.79	99.83	0.06	0.07	0.38	2.93	98.85	-
UP-East	Aircel	0.11	0.39	99.65	0.00	0.00	0.29	2.70	99.58	0
	Airtel	0.51	1.74	99.73	0.23	0.27	0.34	2.51	99.66	0
	BSNL	1.47	1.10	97.67	0.80	0.60	1.43	2.67	96.50	0
	IDEA	0.33	1.22	99.85	0.69	0.06	0.63	2.51	98.75	0
	Vodafone	0.42	1.94	99.74	0.04	0.02	0.34	2.06	99.05	-
West Bengal	Aircel	0.39	1.46	98.83	0.18	0.31	0.29	4.00	98.43	0
	Airtel	0.71	0.12	98.97	0.05	0.13	0.58	1.87	99.05	0
	BSNL	0.23	0.48	97.17	0.57	0.93	0.78	6.27	95.50	0
	RTL	0.43	1.75	98.41	0.01	0.03	0.17	0.72	99.85	0
	Vodafone	0.12	0.14	99.50	0.13	0.06	0.35	2.33	98.57	-

Annexure 4.3: Performance of QoS Parameters for Basic (Wire-line) Service

Quarterly Performance Monitoring Report (PMR) on QoS of Basic Telephone Service (Wireline) for QE June, 2017																				
S. 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	
				≤7	For urban areas by next working day: 5%	For urban areas: ≥ 100%	For rural and hilly areas: ≥85% ≥ 75%				For rural and hilly areas: ≥ 100%	≤ 10 Hrs	≤0.5%	≤0.1%	≤0.1%	98% within 4 weeks	100% within 6 weeks	1 week of resolution of complaint	≥95%	≥95%
1	A&N	BSNL	5.00	86.00%	100.00%	86.00%	100%	17	7.00	0.00	0.10	0.00	98.00%	100.00%	100.00%	100.00%	97.67%	100.00%	100.00%	
2	AP	Reliance	1.79	100.00%	100.00%	NA	NA	NA	4.6	0.00	0.01%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%	
3		TTSL	6.46	91.66%	100.00%	NA	NA	401	8.11	0.00	0.00%	NA	100.00%	100.00%	100.00%	97.81%	95.35%	99.79%	100.00%	
4		Vodafone	0.51	100.00%	100.00%	NA	NA	NA	1.33	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA	
5		Bharti	4.54	91.54%	100.00%	NA	NA	0	4.48	0.00	0.04%	NA	100.00%	100.00%	100.00%	100.00%	96.00%	100.00%	100.00%	100.00%
6		BSNL	5.00	99.00%	100.00%	99.00%	100%	271	6.00	0.00	0.01%	0.00	100.00%	100.00%	100.00%	98.18%	98.11%	100.00%	100.00%	
7	ASM	Vodafone	2.01	100.00%	100.00%	NA	NA	NA	2.50	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA	
8		BSNL	4.00	95.00%	100.00%	94.00%	100%	126	3.00	0.00	0.03%	0.00	100.00%	100.00%	100.00%	99.02%	99.00%	100.00%	100.00%	
9	BH	Reliance	0.00	NA	NA	NA	NA	NA	0.0	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%	
10		TTSL	1.89	98.11%	100.00%	NA	NA	0	2.54	0.00	0.00%	NA	100.00%	100.00%	100.00%	97.96%	97.98%	100.00%	100.00%	
11		Vodafone	2.17	100.00%	100.00%	NA	NA	NA	1.21	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA	
12		BSNL	4.00	97.00%	100.00%	96.00%	100%	0	5.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	98.75%	99.00%	100.00%	100.00%	
13	Chattisgarh	BSNL	4.00	98.00%	100.00%	97.00%	100%	678	6.00	0.00	0.01%	0	99.00%	100.00%	100.00%	96.34%	96.71%	100.00%	100.00%	
14	CN	BSNL	4.00	96.00%	100.00%	96.00%	100%	1016	7.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	98.85%	98.86%	100.00%	100.00%	
15		Reliance	0.03	100.00%	100.00%	NA	NA	NA	5.90	0.00	0.02%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%	
16	DEL	Reliance	0.02	100.00%	100.00%	NA	NA	NA	5.0	0.00	0.02%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%	
17		TTSL	1.96	94.30%	100.00%	NA	NA	6	6.14	0.00	0.00%	NA	100.00%	100.00%	100.00%	98.72%	97.63%	99.94%	100.00%	
18		Vodafone	0.52	100.00%	100.00%	NA	NA	NA	1.37	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA	
19		Bharti	3.98	89.06%	100.00%	NA	NA	2287	4.85	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%	100.00%
20		MTNL	5.17	87.73	98.76	NA	NA	14194	4.70	0	0.013	0	99.71	100	100.00%	99.85	99.95	100	100	
21	GUJ	Reliance	0.38	100.00%	100.00%	NA	NA	NA	4.5	0.00	0.03%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%	
22		TTSL	1.26	94.33%	100.00%	NA	NA	30	6.34	0.00	0.00%	NA	100.00%	100.00%	100.00%	97.96%	97.72%	100.00%	100.00%	
23		Vodafone	0.28	100.00%	100.00%	NA	NA	NA	1.15	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA	
24		Bharti	1.43	91.85%	100.00%	NA	NA	55	6.46	0.00	0.04%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%	100.00%
25		BSNL	5.00	96.00%	100.00%	92.00%	100%	391	5.00	0.00	0.02%	0.00	100.00%	100.00%	100.00%	97.49%	97.62%	100.00%	100.00%	
26		HP	Reliance	0.00	NA	NA	NA	NA	NA	0.0	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
27	Vodafone		1.67	100.00%	100.00%	NA	NA	NA	0.3	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA	
28	BSNL		5.00	88.00%	100.00%	94.00%	100%	587	6.00	0.00	0.02%	0.00	98.00%	100.00%	100.00%	96.55%	100.00%	100.00%	100.00%	

Annexure 4.3 (Contd.)

29	HR	Vodafone	NA	100.00%	100.00%	NA	NA	NA	NA	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA
30		Reliance	0.00	NA	NA	NA	NA	NA	0.0	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
31		TTSL	0.58	97.50%	100.00%	NA	NA	0	4.67	0.00	0.00%	NA	100.00%	100.00%	100.00%	98.15%	97.11%	100.00%	100.00%
32		Bharti	6.64	96.18%	100.00%	NA	NA	23	3.77	0.00	0.05%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%
33		BSNL	5.00	97.00%	100.00%	96.00%	100%	356	6.00	0.00	0.09%	0.00	100.00%	100.00%	100.00%	96.82%	100.00%	100.00%	100.00%
34	J&K	BSNL	5	95%	100%	95	100%	48	7	0	0.01%	0.00	98.00%	100%	100	97.34%	100.00%	100%	100.00%
35	JHAR	BSNL	2.00	99.00%	100.00%	97.00%	100%	465	5.00	0.00	0.09%	0.00	98.00%	100.00%	100.00%	99.08%	99.00%	100.00%	100.00%
36	KER	Vodafone	0.42	100.00	100.00	NA	NA	NA	1.23	0	NA	NA	NA	NA	NA	96.00%	100%	NA	NA
37		Reliance	0.21	100.00%	100.00%	NA	NA	NA	4.6	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
38		TTSL	0.33	66.67%	100.00%	NA	NA	5	8.27	0.00	0.00%	NA	100.00%	100.00%	100.00%	97.84%	95.70%	100.00%	100.00%
39		Bharti	5.59	92.64%	100.00%	NA	NA	44	7.73	0.00	0.08%	NA	100.00%	100.00%	100.00%	100.00%	98.00%	100.00%	100.00%
40		BSNL	4.00	93.00%	100.00%	93.00%	100%	327	6.00	0.00	0.02%	0.00	100.00%	100.00%	100.00%	96.05%	96.05%	100.00%	100.00%
41	KOL	Vodafone	0.65	100.00%	100.00%	NA	NA	NA	1.54	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
42		Reliance	0.05	100.00%	100.00%	NA	NA	NA	5.0	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
43		Bharti	4.87	92.53%	100.00%	NA	NA	228	8.12	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%
44		BSNL	6.00	91.00%	100.00%	N/A	N/A	397	9.00	0.00	0.00%	0.00	99.00%	100.00%	100.00%	99.26%	97.33%	100.00%	100.00%
45	KTK	Vodafone	0.45	100.00%	100.00%	NA	NA	NA	1.01	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
46		Reliance	0.02	100.00%	100.00%	NA	NA	NA	4.9	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
47		TTSL	0.56	92.56%	100.00%	NA	NA	22	7.32	0.00	0.00%	NA	100.00%	100.00%	100.00%	98.23%	96.05%	100.00%	100.00%
48		Bharti	4.32	85.75%	100.00%	NA	NA	2770	4.98	0.00	0.07%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%
49		BSNL	4.00	95.00%	100.00%	96.00%	100%	4230	7.00	0.00	0.10%	0.00	98.00%	100.00%	100.00%	97.17%	97.14%	100.00%	100.00%
50	MH	Bharti	1.20	93.50%	100.00%	NA	NA	46	5.22	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	97.00%	100.00%	100.00%
51		BSNL	5.00	91.00%	100.00%	88.00%	100%	1621	7.00	0.00	0.01%	0.00	100.00%	100.00%	100.00%	96.26%	96.24%	100.00%	100.00%
52		Reliance	0.10	100.00%	100.00%	NA	NA	NA	5.0	0.00	0.01%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
53		Vodafone	0.43	100.00%	100.00%	NA	NA	NA	1.26	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
54		TTSL	1.59	91.85%	100.00%	NA	NA	211	6.78	0.00	0.00%	NA	100.00%	100.00%	100.00%	96.84%	94.61%	100.00%	100.00%
55	MP	Vodafone	1.70	100.00%	100.00%	NA	NA	NA	0.24	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA
56		Reliance	0.17	100.00%	100.00%	NA	NA	NA	4.9	0.00	0.01%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
57		TTSL	1.54	100.00%	100.00%	NA	NA	0	1.59	0.00	0.00%	NA	100.00%	100.00%	100.00%	97.55%	98.03%	100.00%	100.00%
58		Bharti	5.57	88.06%	100.00%	NA	NA	857	4.73	0.00	0.06%	NA	100.00%	100.00%	100.00%	100.00%	98.00%	100.00%	100.00%
59		BSNL	5.00	91.00%	100.00%	90.00%	100%	412	4.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	97.65%	97.73%	100.00%	100.00%
60	MUM	Vodafone	0.37	100.00%	100.00%	NA	NA	NA	1.39	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
61		Bharti	0.61	92.66%	100.00%	NA	NA	100	5.38	0.00	0.01%	NA	100.00%	100.00%	100.00%	100.00%	98.00%	100.00%	100.00%
62		MTNL	3.62	93.86%	99.86%	N/A	N/A	15881	6.52	0.00	0.04%	N/A	99.44%	100.00%	100.00%	96.15%	95.53%	99.97%	100.00%
63		Reliance	0.02	100.00%	100.00%	NA	NA	NA	4.6	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
64	TTSL	3.34	88.89%	100.00%	NA	NA	876	8.55	0.00	0.00%	NA	100.00%	100.00%	100.00%	98.35%	94.78%	100.00%	100.00%	
65	NE	Vodafone	0.00	NA	NA	NA	NA	NA	NA	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA
66	NE-I	BSNL	4.00	92.00%	100.00%	94.00%	100%	159	7.00	0.00	0.06%	0.00	98.00%	100.00%	100.00%	99.54%	97.67%	100.00%	100.00%
67	NE-II	BSNL	2.00	95.00%	100.00%	100.00%	100%	120	5.00	0.00	0.01%	0.00	100.00%	100.00%	100.00%	98.45%	99.00%	100.00%	100.00%
68	OR	Reliance	0.00	NA	NA	NA	NA	NA	0.0	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
69		TTSL	0.53	100.00%	100.00%	NA	NA	2	1.89	0.00	0.00%	NA	100.00%	100.00%	100.00%	97.70%	97.14%	100.00%	100.00%
70		BSNL	6.00	93.00%	100.00%	92.00%	100%	728	5.00	0.00	0.09%	0.00	99.00%	100.00%	100.00%	99.09%	98.33%	100.00%	100.00%
71		Vodafone	1.52	100.00%	100.00%	NA	NA	NA	0.52	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA

Annexure 4.3 (Contd.)

72	PB	Vodafone	1.46	100.00%	100.00%	NA	NA	NA	1.45	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA
73		Reliance	0.02	100.00%	100.00%	NA	NA	NA	4.9	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
74		TTSL	0.93	94.51%	100.00%	NA	NA	1	4.34	0.00	0.00%	NA	100.00%	100.00%	100.00%	98.11%	98.04%	96.63%	100.00%
75		Bharti	5.72	87.87%	100.00%	NA	NA	309	6.07	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%
76		Quadrant	4.13	96.09%	100.00%	100.00%	100.00%	0%	5.16	0	0.00	0.00%	100.00%	100.00%	100.00%	97.00%	96.00%	100.00%	100.00%
77		BSNL	5.00	93.00%	100.00%	93.00%	100%	767	6.00	0.00	0.05%	0.00	98.00%	100.00%	100.00%	95.00%	100.00%	100.00%	100.00%
78	RAJ	Reliance	0.10	100.00%	100.00%	NA	NA	NA	5.2	0.00	0.03%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
79		TTSL	3.64	98.77%	100.00%	NA	NA	0	2.59	0.00	0.00%	NA	100.00%	100.00%	100.00%	96.57%	97.30%	97.62%	100.00%
80		Vodafone	0.50	100.00%	100.00%	NA	NA	NA	2.03	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA
81		Bharti	4.24	86.65%	100.00%	NA	NA	121	5.21	0.00	0.02%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%
82		Sistema	2.12	92.80%	100.00%	93.64%	100%	0	7.39	0.00	0.03%	0.00%	100.00%	100.00%	100.00%	99.11%	96.12%	100.00%	100.00%
83		BSNL	6.00	97.00%	100.00%	97.00%	100%	439	6.00	0.00	0.00%	0.00	100.00%	100.00%	100.00%	97.34%	100.00%	100.00%	100.00%
84	TN	Reliance	0.05	100.00%	100.00%	NA	NA	NA	6.3	0.00	0.04%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
85		TTSL	0.75	98.82%	100.00%	NA	NA	8	4.19	0.00	0.00%	NA	100.00%	100.00%	100.00%	98.52%	97.45%	100.00%	100.00%
86		Vodafone	0.88	100.00%	100.00%	NA	NA	NA	1.07	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	100.00%	NA
87		Bharti	6.11	91.58%	100.00%	NA	NA	453	7.39	0.00	0.16%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%
88		BSNL	4.00	94.00%	100.00%	91.00%	100%	1926	8.00	0.00	0.08%	0.00	100.00%	100.00%	100.00%	98.63%	98.62%	100.00%	100.00%
89	UPE	Reliance	0.03	100.00%	100.00%	NA	NA	NA	5.9	0.00	0.01%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
90		TTSL	6.32	100.00%	100.00%	NA	NA	0	1.96	0.00	0.00%	NA	100.00%	100.00%	100.00%	98.23%	93.81%	100.00%	100.00%
91		Vodafone	1.15	100.00%	100.00%	NA	NA	NA	2.16	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA
92		Bharti	6.36	87.58%	100.00%	NA	NA	395	5.05	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%
93		BSNL	4.00	95.00%	100.00%	92.00%	100%	767	5.00	0.00	0.08%	0.00	100.00%	100%	100.00%	97.20%	100.00%	100.00%	100.00%
94	UPW	Reliance	0.00	NA	NA	NA	NA	NA	0.0	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
95		TTSL	0.31	100.00%	100.00%	NA	NA	0	1.45	0.00	0.00%	NA	100.00%	100.00%	100.00%	97.76%	100.00%	100.00%	100.00%
96		Vodafone	0.49	100.00%	100.00%	NA	NA	NA	0.54	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA
97		Bharti	6.90	91.89%	100.00%	NA	NA	85	4.07	0.00	0.03%	NA	100.00%	100.00%	100.00%	100.00%	99.00%	100.00%	100.00%
98		BSNL	5.00	97.00%	100.00%	96.00%	100%	710	5.00	0.00	0.04%	0.00	100.00%	100.00%	100.00%	96.36%	100.00%	100.00%	100.00%
99	Uttaranchal	BSNL	5.00	98.00%	100.00%	98.00%	100%	155	4.00	0.00	0.00%	0.00	98.00%	100.00%	100.00%	97.37%	100.00%	100.00%	100.00%
100	West Bengal	Reliance	0.00	NA	NA	NA	NA	NA	0.0	0.00	0.00%	NA	100.00%	100%	NA	96.91%	95.23%	100.00%	100.00%
101		BSNL	5.00	92.00%	100.00%	93.00%	100%	1400	5.00	0.00	0.01%	0.00	100.00%	100.00%	100.00%	98.83%	97.67%	100.00%	100.00%
102		TTSL	1.50	99.42%	100.00%	NA	NA	9	2.24	0.00	0.00%	NA	100.00%	100.00%	100.00%	98.57%	95.94%	100.00%	100.00%
103		Vodafone	2.78	100.00%	100.00%	NA	NA	NA	1.04	0.00	NA	NA	NA	NA	NA	96.00%	100.00%	NA	NA

Annexure 4.4: Quality of Service Performance of Broadband Service Providers

Performance Monitoring Report on Quality of Service of Service Providers providing broadband service (wireline) for Quarter Ending June 2017																				
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	BSNL	All India	100.00%	93.65%	99.70%	53723	0.06%	100.00%	100.00%	97.97%	98.52%	0	0	68.00%	90.70%	99.66%	0.20%	18	187	NA
2	Bharti Airtel	Andhra Pradesh	100.00%	93.68%	100.00%	0	0.03%	100.00%	100.00%	90.62%	94.79%	0	0	36.29%	99.30%	99.99%	0.00%	33	48	NA
		Delhi	100.00%	93.06%	99.34%	612	0.02%	100.00%	100.00%	96.28%	97.91%	0	0	70.32%	113.00%	99.98%	0.00%	32	77	NA
		Gujarat	100.00%	94.56%	99.44%	33	0.04%	100.00%	100.00%	94.73%	97.54%	0	NA	NA	100.00%	99.96%	0.04%	28	NA	NA
		Haryana	100.00%	95.31%	99.58%	8	0.02%	100.00%	100.00%	97.24%	98.67%	0	NA	NA	100.00%	99.98%	0.00%	29	NA	NA
		Karnataka	100.00%	90.77%	99.86%	1091	0.04%	100.00%	100.00%	95.58%	98.15%	0	0	65.76%	97.96%	99.96%	0.00%	34	40	NA
		Kerala	100.00%	91.91%	100.00%	20	0.06%	100.00%	100.00%	95.10%	97.33%	0	NA	NA	102.05%	99.98%	0.00%	33	35	NA
		Kolkata	100.00%	92.58%	100.00%	67	0.01%	100.00%	100.00%	96.31%	98.16%	0	0	38.99%	100.00%	99.99%	0.00%	63	76	NA
		Madhya Pradesh	100.00%	92.16%	99.16%	137	0.02%	100.00%	100.00%	95.00%	97.94%	0	0	56.30%	106.47%	99.87%	0.00%	76	72	NA
		Maharashtra	100.00%	95.15%	99.21%	32	0.02%	100.00%	100.00%	95.00%	97.00%	0	NA	NA	100.00%	99.97%	0.42%	49	NA	NA
		Mumbai	100.00%	95.41%	99.21%	72	0.02%	100.00%	100.00%	95.00%	98.00%	0	0	64.12%	100.00%	99.94%	0.13%	24	59	NA
		Punjab	100.00%	92.58%	99.30%	78	0.02%	100.00%	100.00%	96.73%	98.37%	0	0	46.40%	100.00%	99.96%	0.00%	34	84	NA
		Rajasthan	100.00%	90.11%	99.13%	25	0.00%	100.00%	100.00%	97.00%	98.00%	0	NA	NA	100.00%	99.99%	0.00%	34	NA	NA
Tamilnadu	100.00%	95.26%	99.97%	390	0.13%	100.00%	100.00%	96.88%	98.75%	0	0	61.54%	102.91%	99.97%	0.00%	45	35	NA		
Uttar Pradesh - East	100.00%	90.38%	99.09%	59	0.01%	100.00%	100.00%	96.82%	98.39%	0	0	52.00%	109.00%	99.97%	0.00%	31	86	NA		
Uttar Pradesh - West	100.00%	90.60%	99.13%	24	0.01%	100.00%	100.00%	96.67%	98.30%	0	NA	NA	106.00%	99.95%	0.00%	40	NA	NA		
3	MTNL	Delhi & Mumbai	100.00%	84.38%	93.96%	18789	0.095%	100.00%	100.00%	97.82%	98.15%	Nil	0	78.56%	89.41%	99.71%	0.57%	45	275	NA
4	Alliance Broadband	Kolkata	100.00%	93.00%	99.18%	Nil	1.10%	100.00%	Nil	79.67%	91.10%	0	0	66.18%	98.57%	99.23%	0.68%	100	289	593
5	Asianet Satellite	Kerala	100.00%	90.21%	99.41%	Nil	1.89%	100.00%	100.00%	60.49%	80.47%	Nil	0	64.73%	90.00%	99.40%	1.00%	50	270	NA
6	Atria Convergence	All India	100.00%	91.00%	99.00%	50764	0.52%	100.00%	Nil	52.00%	81.00%	0	0	83.52%	90.00%	99.97%	1.00%	50	300	NA
7	Broadband Pacenet India Pvt. Ltd.	All India	100.00%	90.40%	99.10%	25	1.00%	100.00%	0.00	82.00%	90.00%	0	0	58.00%	90.00%	99.30%	0.45%	75	260	0
8	Citycom Networks	All India	100.00%	91.40%	99.90%	977	0.30%	100.00%	100.00%	90.50%	92.80%	0	0	29.80%	91.00%	99.40%	0.00%	35	146	NA
9	DEN Networks Ltd.	All India	100.00%	96.66%	99.91%	Nil	NA	NA	NA	91.00%	94.00%	Nil	Nil	77.95%	99.00%	98.21%	0.00%	NA	270	NA
10	D-VoiS Broadband	All India	100.00%	94.00%	99.00%	-	0.02%	100.00%	0.00	83.66%	91.33%	0	Nil	Nil	90.00%	99.99%	0.10%	120	350	800
11	DNA Infotel Pvt. Ltd.	Maharashtra	100.00%	90.80%	99.36%	0	0.06%	100.00%	NA	60.57%	81.20%	0	0	80.00%	80.00%	99.73%	1.00%	4	255	600
12	Excitel Broadband Private Limited	Delhi	100.00%	93.42%	99.41%	627	NA	NA	NA	73.85%	82.76%	Nil	Nil	79.25%	97.60%	98.57%	0.00%	5	198.6	NA
13	Five Networks	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
14	GBPS Networks Pvt. Ltd.	Pune, Maharashtra	100.00%	91.05%	99.37%	Nil	0.00%	100.00%	Nil	61.51%	84.52%	0	0	80.00%	80.00%	99.82%	1.00%	4	255	600
15	Geocity Network Solutions	Delhi	100.00%	93.00%	100.00%	0	0.00%	100.00%	100.00%	82.00%	88.00%	0	0	88.00%	87.67%	99.30%	0.50%	60	300	400

Annexure 4.4 (Contd.)

16	GTPL Broadband Pvt.Ltd.	All India	100.00%	96.00%	99.00%	1629	0.05%	100.00%	NA	95.00%	99.00%	NA	0	77.32%	91.00%	99.67%	0.00%	11	300	NA
17	Hathway Cable & Datacom Ltd.	Andhra Pradesh	100.00%	97.47%	99.30%	186	1.42%	100.00%	100.00%	87.00%	92.00%	0	0	86.00%	90.00%	99.80%	0.32%	78	300	NA
		Delhi	100.00%	97.67%	99.00%	33	0.81%	100.00%	100.00%	84.67%	88.33%	0	0	88.33%	85.00%	99.60%	0.42%	115	325	NA
		Gujarat	100.00%	93.35%	99.19%	0	NA	NA	NA	87.20%	97.55%	0	0	85.56%	90.00%	99.41%	0.59%	79	265	NA
		Karnataka	100.00%	92.23%	99.23%	5	1.75%	100.00%	100.00%	84.33%	87.33%	0	0	87.00%	90.00%	99.90%	0.20%	86	275	NA
		Maharashtra & Goa	100.00%	98.04%	99.66%	2996	1.54%	100.00%	100.00%	96.77%	97.26%	0	0	85.33%	90.00%	99.87%	0.15%	76	258	NA
		Madhya Pradesh	100.00%	99.96%	99.99%	0	NA	NA	NA	79.33%	84.67%	0	0	83.00%	100.00%	99.90%	0.15%	100	295	NA
		Punjab	100.00%	98.00%	99.00%	0	NA	NA	NA	82.00%	90.00%	0	0	86.00%	85.00%	99.74%	0.16%	110	325	NA
		Uttar Pradesh - West	100.00%	97.67%	99.00%	0	0.65%	100.00%	100.00%	84.67%	88.33%	0	0	87.25%	85.00%	99.64%	0.30%	115	310	NA
		Kolkata	100.00%	95.02%	99.31%	0	NA	NA	NA	71.09%	89.93%	0	0	74.83%	100.00%	99.77%	0.28%	10	256	NA
		Chennai	100.00%	100.00%	100.00%	0	NA	NA	NA	83.33%	87.00%	0	0	69.67%	100.00%	99.77%	0.28%	80	287	NA
18	Home Systems	Mumbai	100.00%	96.00%	99.99%	NA	0.00%	100.00%	100.00%	70.00%	87.00%	0	0	72.00%	95.00%	99.00%	0.01%	50	295	NA
19	Honesty Net Solutions (I) Pvt. Ltd.	Mumbai	100.00%	94.00%	100.00%	0	Nil	100.00%	0.00	68.00%	100.00%	0	NA	NA	95.00%	98.00%	1.00%	7	66	NA
20	IKF Technologies Ltd	All India	100.00%	92.30%	100.00%	0	0.80%	100.00%	0.00	67.00%	90.60%	19	0	83.60%	85.60%	98.16%	0.50%	85	318	NA
21	Indinet Service Pvt Ltd	All India	100.00%	91.00%	100.00%		0.00%	100.00%	100.00%	81.00%	87.00%	0	0	74.00%	99.00%	98.49%	0.50%	45	271	0
22	Limras Eronet Broadband	All India	100.00%	99.00%	100.00%	0	1.00%	100.00%	0.00	90.00%	100.00%	0	0	85.00%	90.00%	99.00%	1.00%	45	230	0
23	Meghbela Cable & Broadband Services	Kolkata	100.00%	100.00%	100.00%	0	0.00%	100.00%	100.00%	94.00%	100.00%	0	0	0.00%	100.00%	99.90%	0.00%	60	150	0
		West Bengal	100.00%	100.00%	100.00%	0	0.00%	100.00%	100.00%	94.00%	100.00%	0	0	0.00%	100.00%	99.90%	0.00%	60	150	0
24	Nextra Teleservices Pvt.	Delhi	100.00%	91.70%	99.43%	3877	1.83%	100.00%	100.00%	85.00%	87.00%	0	0	91.00%	100.00%	100.00%	1.00%	120	350	NA
25	Ortel Communications	All India	100.00%	94.00%	99.53%	NA	NA	NA	NA	100.00%	100.00%	0	0	58.55%	92.50%	99.55%	0.00%	81	226	NA
26	Planet E-Shop Holdings India Ltd. (formerly IndusInd Media)	All India	100.00%	97.00%	99.00%	5	0.00%	100.00%	100.00%	100.00%	100.00%	0	0	47.66%	80.00%	98.00%	1.00%	45	260	NA
27	Quadrant Televentures	Punjab	100.00%	97.52%	100.00%	0	0.01%	100.00%	100.00%	77.67%	82.00%	Nil	Nil	79.00%	100.00%	99.93%	0.00%	80	280	NA
28	Quest Consultancy Pvt.Ltd.	Gujarat	100.00%	95.00%	100.00%	Nil	Nil	100.00%	Nil	99.00%	99.00%	0	Nil	82.00%	99.00%	99.00%	0.30%	13	267	NA
29	RailTel Corporation	All India (Pan India)	100.00%	97.30%	100.00%	Nil	0.00%	Nil	Nil	81.16%	93.28%	0	0	38.31%	100.00%	99.95%	1.00%	120	350	NA
30	Rajesh Multichannel	Mumbai	100.00%	98.00%	100.00%	0	0.00%	100.00%	100.00%	97.00%	98.00%	0	0	87.00%	86.00%	99.00%	0.00%	46	250	500
31	Reliance Com. (RCL)	All India	100.00%	100.00%	100.00%	Nil	0.15%	100.00%	100.00%	95.00%	95.00%	0	Nil	63.30%	93.00%	99.00%	0.57%	2	4.05	0
32	Siti Broadband	All India	100.00%	93.37%	99.10%	0	NA	NA	NA	91.00%	91.00%	0	0	81.00%	90.00%	99.61%	0.00%	88	285	NA
34	Syscon Infoway Pvt. Ltd.	Andhra Pradesh	100.00%	99.00%	100.00%	0	0.00%	100.00%	100.00%	95.00%	100.00%	0	0	83.00%	95.00%	99.90%	0.05%	100	300	500
		Maharashtra	100.00%	96.00%	100.00%	Nil	0.00%	100.00%	NA	74.00%	87.67%	0	0	65.00%	99.00%	100.00%	1.00%	1	47	80
		Mumbai	100.00%	93.67%	100.00%	Nil	0.00%	100.00%	0.00	82.33%	88.00%	0	0	73.00%	99.00%	100.00%	0.00%	1	47	80
35	TTML	Maharashtra & Goa	100.00%	87.50%	97.20%	674	0.13%	100.00%	100.00%	84.28%	90.00%	0	0	70.77%	90.25%	99.85%	0.00%	48	182	0
36	Tata (TTSL)	All India (Pan India)	100.00%	90.64%	97.31%	228	0.42%	100.00%	100.00%	86.90%	91.53%	0	0	65.00%	91.33%	99.77%	0.06%	67	68.11	0
37	Vasai Cable	Mumbai	100.00%	95.56%	100.00%	Nil	0.11%	100.00%	Nil	79.21%	89.24%	Nil	0	63.00%	90.00%	100.00%	1.00%	4	255	NA
38	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
39	Wish Net Pvt. Ltd.	West Bengal	100.00%	98.83%	100.00%	0	0.04%	100.00%	NA	81.67%	97.67%	0	0	74.08%	100.00%	99.88%	1.00%	20	NA	NA
		Kolkata	100.00%	98.88%	100.00%	0	0.01%	100.00%	NA	81.67%	97.67%	0	0	73.98%	100.00%	99.88%	1.00%	40	NA	NA
40	Yashash Cable Network Pvt	Karnataka	100.00%	91.20%	99.20%	0	0.00%	NA	NA	77.21%	80.57%	0	0	0.00%	80.00%	99.00%	1.00%	30	280	NA
41	World Phone Internet	Pan India	100.00%	92.33%	100.00%	0	0.00%	0.00%	0.00	99.95%	100.00%	0	NA	NA	85.00%	99.83%	1.00%	25	NA	NA
42	Yashash Cable Network Pvt	Karnataka	100.00%	91.20%	99.20%	0	0.00%	NA	NA	77.21%	80.57%	0	0	0.00%	80.00%	99.00%	1.00%	30	280	NA
43	You Broadband	All India	100.00%	95.21%	99.50%	517	0.00%	100.00%	100.00%	91.06%	94.68%	0	0	76.58%	87.10%	99.45%	0.00%	9	273	NA
			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: List of Broadcasters and their Pay TV Channels as reported to TRAI

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Declared as SD or HD
1	M/s 9X Media Private Limited	1	9XM	SD
2	M/s AETN 18 Media Pvt Limited	2	The History Channel	HD
		3	FY1 TV18	HD
3	M/s Asianet Communications Limited	4	Asianet	SD
		5	Asianet Plus	SD
		6	Asianet Movies	SD
		7	Suvarna Plus	SD
		8	Asianet HD	HD
		9	Star Suvarna (Earlier name "Suvarna")	SD
4	M/s Bangla Entertainment Private Limited	10	AATH	SD
5	M/s BBC Global News India Private Limited	11	BBC World News	SD
6	M/s Bennett, Coleman & Company Limited	12	Zoom	SD
		13	Romedy Now	SD
		14	MN+(Earlier name "Movies Now+")	HD
		15	Mirror Now (Earlier name "Magicbricks Now")	SD
		16	ET NOW	SD
		17	Times Now	SD
		18	Romedy Now HD	HD
		19	Movies Now HD	HD
		20	Movies Now 2 HD	HD
		21	Movies Now 2	SD
		22	Times Now HD	HD
7	M/s Business Broadcast News Private Limited	23	BTVi (Earlier name "Bloomberg TV India")	SD
8	M/s Celebrities Management Pvt Limited	24	Travel XP HD (Earlier name "Travel XP")	HD
		25	Travel XP Tamil	SD
9	M/s Greycells18 Media Ltd	26	Topper TV (#)	SD
10	M/s Discovery Communications India	27	Animal Planet	SD
		28	Discovery Channel	SD
		29	Discovery Channel – Tamil	SD
		30	Discovery Kids Channel	SD
		31	Discovery Science	SD
		32	Discovery Turbo	SD
		33	ID Investigation Discovery	SD
		34	Discovery HD World (earlier name "Discovery HD")	HD
		35	Animal Planet HD World (earlier name "Discovery Home and Health")	HD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Declared as SD or HD
		36	TLC HD world (earlier name "Military Channel")	HD
		37	TLC	SD
		38	Dsport	SD
11	M/s Da Vinci Media India Private Limited	39	Da Vinci Learning	HD
12	E-24 Glamour Limited	40	E 24	SD
13	M/s Eenadu Televisoin Private Limited	41	ETV Telugu	SD
		42	ETV Andhra Pradesh (earlier name "ETV-2")	SD
		43	ETV - Telangana (earlier name "ETV-3")	SD
		44	ETV Cinema	SD
		45	ETV Life	SD
		46	ETV Plus	SD
		47	ETV Abhiruchi	SD
		48	ETV HD	HD
14	M/s EPIC Television Networks Pvt Limited	49	EPIC TV (HD Distribution)	HD
15	M/s Genx Entertainment Limited	50	UTV Bindass	SD
		51	UTV Action	SD
16	M/s IBN Lokmat News Private Ltd	52	IBN Lokmat	SD
17	M/s Mavis Satcom Limited	53	J Movies	SD
		54	Jaya Max	SD
		55	Jaya Plus	SD
		56	Jaya TV HD	HD
18	M/s ABP News Network Pvt Limited	57	ABP Ananda	SD
		58	ABP Majha	SD
19	M/s Sony Pictures Networks Distribution India Private Limited	59	Sony YAY! (Earlier name "Animax")	SD
		60	AXN	SD
		61	SET MAX	SD
		62	MIX	SD
		63	SAB	SD
		64	SONY ENTERTAINMENT CHANNEL (SET)	SD
		65	PIX	SD
		66	SIX	SD
		67	MAX 2 (Earlier name "MAX HD")	SD
		68	PAL (Earlier Name "SAB HD")	SD
		69	SET HD	HD
		70	SIX HD	HD
71	PIX HD	HD		
72	MAX HD	HD		

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Declared as SD or HD
		73	SONY ESPN HD	HD
		74	Le PLEX HD	HD
		75	SAB HD	HD
		76	SONY ROX HD	HD
20	M/s MSM World Wide Factual Media Private Limited	77	SONY BBC EARTH	SD
		78	SONY BBC EARTH HD	HD
21	M/s NDTV Life style Limited	79	NDTV Good Times	SD
22	M/s Neo Sports Broadcast Pvt Limited	80	NEO Prime (Earlier name "Neo Cricket")	SD
		81	Neo Sports	SD
23	M/s New Delhi Television Limited	82	NDTV 24*7	SD
		83	Granada TV (HD)	HD
		84	Trace Sports HD	HD
		85	NDTV Profit	SD
24	M/s NGC Network (India) Pvt Limited	86	Fox Life	SD
		87	National Geographic Channel (NGC)	SD
		88	Fox Life HD	HD
		89	Nat Geo Wild	SD
		90	National Geographic HD	HD
		91	Nat Geo Music HD	HD
		92	Nat Geo Wild HD	HD
		93	Nat Geo People HD	HD
		94	Baby TV HD	HD
25	M/s Odisha Television Limited	95	Prarthana	SD
		96	Tarang	SD
		97	Tarang Music	SD
		98	Alankar	SD
26	M/s Panorama Television Private Limited	99	ETV Bihar Jharkhand	SD
		100	ETV MP Chattisgarh	SD
		101	ETV Rajasthan	SD
		102	ETV Uttar Pradesh Uttarachal	SD
		103	ETV Urdu	SD
		104	ETV News Kannada	SD
		105	ETV News Bangla	SD
		106	News 18 Punjab /Haryana / Himanchal Pradesh (Earlier name "ETV Haryana/Himanchal Pradesh")	SD
		107	ETV News Gujarati	SD
		108	ETV News Odia	SD
27	M/s Paul Entertainments Pvt Limited	109	9X Tashan (Earlier name "Purvaiya")	SD
28	M/s Raj Television Network Limited	110	Raj Musix Kannada	SD
		111	Raj Digital Plus	SD
		112	Raj Musix	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Declared as SD or HD
		113	Raj News	SD
		114	Raj TV	SD
		115	Vissa TV	SD
29	M/s Sahara India Commercial Corporation Ltd	116	Sahara Filmy	SD
		117	Sahara One	SD
30	M/s Sarthak Entertainment Pvt Limited	118	Sarthak TV	SD
31	M/s Silverstar Communications Limited	119	Mega 24	SD
		120	Mega Musiq	SD
		121	Mega TV	SD
32	M/s Star India Private Limited	122	Channel (V)	SD
		123	Star Sports 1 Tamil (Earlier name "Star Sports 4")	SD
		124	Star Sports Select 2 (Earlier name "FX")	SD
		125	Life Ok (earlier name "Star One")	SD
		126	Movies OK (earlier name "Gold Action")	SD
		127	Star Sports 1 Hindi (Earlier name "Star Sports 3")	SD
		128	Star Gold	SD
		129	Star Jalsha	SD
		130	Star Movies	SD
		131	Star Gold Select (Earlier name "Star Movies Action")	SD
		132	Star Plus	SD
		133	Star Pravah	SD
		134	Star Sports 1	SD
		135	Star Sports 2	SD
		136	Star World	SD
		137	Jalsha Movies (Earlier name "Star Bengali")	SD
		138	Star Sports HD 2	HD
		139	Star Sports HD 1	HD
		140	Life Ok HD	HD
		141	Star Gold HD	HD
		142	Star Movies HD	HD
		143	Star Plus HD	HD
		144	Star World Prmiere HD	HD
		145	Star Sports 1 HD Hindi (Earlier name "Star Sports HD 3")	HD
		146	Star Sports Select 1 (Earlier name "Star Sports HD 4")	SD
		147	Star Movies Select HD	HD
		148	Star World HD	HD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Declared as SD or HD
		149	FX HD	HD
		150	MAA Gold	SD
		151	MAA Movies	SD
		152	MAA Music	SD
		153	MAA TV	SD
		154	Star Pravah HD	HD
		155	Star Jalsha HD	HD
		156	Jalsha Movies HD	HD
		157	Star Sports Select HD 1	HD
		158	Star Sports Select HD 2	HD
		159	MAA HD	HD
		160	Star Gold Select HD	HD
		161	MAA Movies HD	HD
33	M/s SUN TV Network Limited	162	Adithya TV	SD
		163	Chintu TV	SD
		164	Chutti TV	SD
		165	Gemini Comedy	SD
		166	Gemini Life	SD
		167	Gemini Movies	SD
		168	Gemini Music	SD
		169	Gemini News	SD
		170	Gemini TV	SD
		171	KTV	SD
		172	Kiran TV	SD
		173	Kushi TV	SD
		174	SUN Life	SD
		175	Sun Music	SD
		176	Sun News	SD
		177	Surya Music (Earlier name "Sun News English")	SD
		178	SUN TV	SD
		179	SUN TV RI	SD
		180	Surya TV	SD
		181	Udaya Comedy	SD
		182	Udaya Movies	SD
		183	Udaya Music	SD
		184	Udaya News	SD
		185	Udaya TV	SD
		186	Kochu TV	SD
		187	Sun TV HD	HD
		188	KTV HD	HD
		189	Sun Music HD	HD
		190	Gemini TV HD	HD
		191	Sun Action (#)	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Declared as SD or HD
		192	Gemini Action (#)	SD
		193	Surya Action (#)	SD
		194	Suriyan TV (#)	SD
34	M/s Taj Television India Private Limited	195	Ten 2 (earlier name 'Ten Action')	SD
		196	Ten 1 (earlier name 'Ten Sports')	SD
		197	Ten 3	SD
		198	Ten Golf HD	HD
		199	Ten 1 HD(earlier name 'Ten HD')	HD
35	M/s Turmeric Vision Pvt Ltd	200	Food Food TV	SD
36	M/s Turner International India Pvt Ltd	201	Cartoon Network	SD
		202	CNN International	SD
		203	HBO	SD
		204	POGO	SD
		205	Toonami (Earlier name "Boomerang")	SD
		206	WB	SD
		207	HBO HD (Earlier name "HBO Hits HD")	HD
37	M/s TV 18 Broadcast Limited	208	CNN News 18 (earlier name "CNN-IBN")	SD
		209	CNBC Bazaar	SD
		210	CNBC TV 18 Prime HD	HD
		211	CNBC Awaaz	SD
		212	CNBC TV 18	SD
38	M/s TV Today Network Limited	213	Aaj Tak	SD
		214	Delhi Aaj Tak	SD
		215	India Today (Earlier name "Headlines Today")	SD
		216	Aaj Tak Tez	SD
39	M/s United Home Entertainment Pvt Limited	217	Hungama TV	SD
40	M/s Disney Broadcasting (India) Limited	218	Disney Junior (Earlier name "UTV Comedy")	SD
		219	UTV Movies	SD
		220	Disney XD (Earlier name "UTV World Movies")	SD
		221	Bindass Play (Earlier name "UTV Stars")	SD
		222	The Disney Channel	SD
41	M/s Viacom 18 Media Private Limited	223	Colors	SD
		224	Comedy Central(HD Distribution)	HD
		225	MTV	SD
		226	NICK	SD
		227	NICK JR (Earlier name "Nick Jr / Teen Nick")	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Declared as SD or HD
		228	SONIC	SD
		229	VH 1 (HD Distribution)	HD
		230	Colors Infinity HD	HD
		231	Colors Infinity	SD
		232	Colors HD	HD
		233	NICKS HD+	HD
		234	MTV Indies (HD Distribution)	HD
		235	Rishtey Cineplex	SD
		236	MTV Beats(Earlier name "X Zone")	SD
		237	Colors Kannada HD	HD
		238	Colors Marathi HD	HD
		239	Colors Bangla HD	HD
		240	Colors Super	SD
		241	Colors Bangla (Earlier name "ETV Bangla")	SD
		242	Colors Gujarati (Earlier name "ETV Gujarati")	SD
		243	Colors Kannada (Earlier name "ETV Kannada")	SD
		244	Colors Marathi (Earlier name "ETV Marathi")	SD
		245	Colors Oriya (Earlier name "ETV Oriya")	SD
		246	MTV Beats HD	HD
		247	Cineplex HD	HD
		248	VH 1	SD
		249	Comedy Central	SD
42	M/s Vijay Television Pvt Limited	250	Vijay TV (except Tamil Nadu)	SD
		251	Vijay Super	SD
		252	Vijay HD	HD
43	M/s Zee Akaash News Pvt Ltd	253	24 Ghanta	SD
44	M/s Zee Entertainment Enterprises Limited	254	Zee ETC Bollywood (Earlier name "Zee Bollywood")	SD
		255	Action Cinema	SD
		256	Zee Bangla Cinema	SD
		257	Zee Café HD	HD
		258	Zee Café	SD
		259	Zee Cinema	SD
		260	Classic Cinema	SD
		261	Zee Studio	SD
		262	Zee Talkies	SD
		263	Zee TV	SD
		264	Zing	SD
		265	& Picture	SD
		266	Zee Bangla	SD

Annexure 5.1(Contd.)

Sl. No.	Name of the broadcaster	Sl. No	Name of the channel	Declared as SD or HD
		267	Zee Marathi	SD
		268	Living Foodz (earlier name "Zee Khana Khazana")	SD
		269	Zee TV HD	HD
		270	Zee Cinema HD	HD
		271	Zee Studio HD	HD
		272	& TV	SD
		273	& TV HD	HD
		274	Zee Kannada	SD
		275	Zee Telugu	SD
		276	& Pictures HD	HD
		277	Zee Cinemalu	SD
		278	Zee Yuva	SD
		279	Zee Marathi HD	HD
		280	Living Zen	SD
		281	Zee Bangla HD	HD
		282	Zee Talkies HD	HD
45	M/s Zee Media Corporation Limited	283	Zee 24 Taas	SD
		284	Zee Kalinga (Earlier name "Zee 24 Ghantalu)	SD
		285	Zee Business	SD
		286	Zee Punjab Haryana Himachal (Earlier name "Zee Punjabi")	SD
		287	Zee Madhya Pradesh Chattisgarh	SD
		288	WION	SD
		289	Zee Rajasthan News (Earliner name "Zee Marudhara" and "Zee Rajasthan Plus")	SD
46	M/s Zoom Entertainment Network Limited	290	Movies Now	SD
47	M/s NOIDA Software Technology Park Limited	291	NHK World Premium (HD Distribution)	HD
48	M/s AXN Networks India Private Limited	292	SONY ESPN (Earlier name "SONY KIX")	SD
		293	AXN HD	HD

Note: (A) Indicative a-la-carte rates of the pay channels, as reported to TRAI as offered by the broadcaster to the DPOs, are for information of the stakeholders.

(B) # Advertisement free channels

(C) The rate of pay channels has been reported by the broadcasters in accordance with the Telecommunication (Broadcasting and Cable) Services (Fourth) (Addressable Systems) Tariff Order, 2010 dated 21.07.2010 as amended from time to time.

Annexure 5.2 : List of pay DTH Operators

- 1. M/s. Tata Sky Ltd.,**
3rd Floor, C-1, Wadia International Centre (Bombay Dyeing)
Pandurang Budhkar Marg, Worli,
Mumbai – 400 025
Tel: 022-6613 3000
Fax-022-6613 3030
Website : www.tatasky.com

- 2. M/s Dish TV India Ltd.**
FC-19, Sector-16A, Film City,
Noida-201301
Tel: 91-120-2467005 / 2467000
Fax: 91-120-4357082
Website : www.dishtv.in

- 3. SUN Direct TV(P) Ltd.**
Murasoli Maran Towers, 73, MRC Nagar,
Main Road, MRC Nagar, Chennai – 28
PH: 044-44676767, Fax No 044-40679191
Website : www.sundirect.in

- 4. Bharti Telemedia Ltd.**
Airtel Centre, Plot No 16,
Udyog Vihar Phase IV,
Gurgaon – 122 015
Ph: 0124-4222222
Fax : 0124-4248063
Website : www.airtel.in

- 5. Reliance Big TV Pvt. Ltd.**
3rd Floor, A-Wing,
Reliance Centre, Maharaja Ranjit Singh Marg,
New Delhi – 110 002
Ph: 011-30331012
Fax : 011-30331781
Website : www.rcom.co.in

- 6. M/s Videocon d2h Limited
(Formerly Bharat Business Channel Limited)**
Plot No 1D, Udyog Vihar Industrial Area,
Surajpur, Greater NOIDA,
Distt, Gautam Budh Nagar - 201 306
Ph: 0120-6141000
Fax : 0120-6141250
Website : www.vedeocond2h.com

Annexure 5.3: List of 86 existing cities with operational FM Radio Channels in India

S.No.	Name of City	Category	Number of operational channels
1	Agra	B	3
2	Agartala	D	1
3	Ahmedabad	A	7
4	Ahmednagar	C	3
5	Aizwal	D	2
6	Ajmer	C	4
7	Akola	C	2
8	Aligarh	C	2
9	Allahabad	B	3
10	Amritsar	B	4
11	Asansol	B	2
12	Aurangabad	C	4
13	Bareilly	C	3
14	Bengaluru	A	8
15	Bhopal	B	4
16	Bhubaneshwar	C	4
17	Bikaner	C	3
18	Bilaspur	C	2
19	Chandigarh	C	4
20	Chennai	A+	8
21	Cochin	B	4
22	Coimbatore	B	4
23	Delhi	A+	9
24	Dhule	C	2
25	Gangtok	D	2
26	Gorakhpur	C	3
27	Gulbarga	C	1
28	Guwahati	C	4
29	Gwalior	C	4
30	Hissar	D	4
31	Hyderabad	A	7
32	Itanagar	D	1
33	Indore	B	4
34	Jabalpur	B	4
35	Jaipur	A	6

Annexure- 5.3 (Contd.)

S.No.	Name of City	Category	Number of operational channels
36	Jalandhar	C	4
37	Jalgaon	C	3
38	Jammu	C	1
39	Jamshedpur	B	4
40	Jhansi	C	1
41	Jodhpur	C	4
42	Kannur	C	4
43	Kanpur	A	6
44	Karnal	D	3
45	Kolhapur	C	4
46	Kolkata	A+	8
47	Kota	C	4
48	Kozhikode	C	2
49	Lucknow	A	6
50	Madurai	B	4
51	Mangalore	C	3
52	Mumbai	A+	9
53	Muzaffarpur	C	2
54	Mysore	C	2
55	Nagpur	A	6
56	Nanded	C	2
57	Nasik	C	4
58	Panaji	D	3
59	Patiala	C	4
60	Patna	B	4
61	Puducherry	C	3
62	Pune	A	6
63	Raipur	C	4
64	Rajahmundry	C	1
65	Rajkot	B	4
66	Ranchi	C	4
67	Rourkela	C	2
68	Sangli	C	3
69	Shillong	D	3
70	Shimla	D	3
71	Sholapur	C	3
72	Siliguri	C	3
73	Srinagar	C	1

Annexure- 5.3 (Contd.)

S.No.	Name of City	Category	Number of operational channels
74	Surat	A	6
75	Thiruvananthapuram	C	4
76	Thrissur	C	4
77	Tiruchy	C	2
78	Tirunelveli	C	2
79	Tirupati	C	2
80	Tuticorin	C	2
81	Udaipur	C	4
82	Vadodra	B	4
83	Varanasi	B	4
84	Vijayawada	B	2
85	Vishakapatnam	B	4
86	Warrangal	C	1
Total			310

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

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