



Telecom Regulatory Authority of India

The Indian Telecom Services Performance Indicators

October - December, 2013

New Delhi, India 28th April, 2014

Mahanagar Doorsanchar Bhawan, Jawahar Lal Nehru Marg, New Delhi-110002 Tel: +91-11- 23230752, Fax: +91-11- 23236650

Website: www.trai.gov.in

Disclaimer

The Information and Statistics contained in this report are derived from variety of sources, but are mainly reliant on data obtained from Service Providers. This report does not constitute commercial or other advice. No warranty, representation or undertaking of any kind, express or implied, is given in relation to the information and statistics contained in this report.

Table of Contents

Snapshot	
Trends at a Glance	x
Introduction	xiii
Chapter 1:	
Subscription Data	
Section A: Access Service - An Overview	
Section B : Wireless Service	. 10
Section C: Wireline Service	
Section D : Internet Service	
Chapter 2: Revenue and Usage	
Section A: GSM Service	
Section B: CDMA - Full Mobility Service	
Chapter 3: Financial Data of Telecom Service Sector	
Chapter 4: Quality of Service (QoS)	
Section A: Quality of Service Performance of Wireless Service Providers	
Section B: Quality of Service Performance of Wireline Service Providers	
Section C: Quality of Service Performance of Broadband Service	
Chapter 5: Performance of Cable TV, DTH and Radio Broadcasting Services	
Annexures	
Annexure 1.1: Licensed Cellular (GSM & CDMA) Service Providers	
Annexure 1.2: Wireless Subscriber Base	
Annexure 1.3: Wireline Subscriber Base	
Annexure 1.4: Service Area and Operator wise details of PCOs	
Annexure 1.5: Service Provider wise details of Village Public Telephones	
Annexure 1.6: List of Internet Service Providers Providing Internet Telephony	
Service	99
Annexure 1.7: Internet Service Provider(ISP) wise Internet Subscriber base	0.4
(except subscribers accessing internet by mobile devices)	
Annexure 1.8: Service Area wise PMRTS subscriber Base	
Annexure 2.1: GSM Service - Service Area wise Statistics for QE Dec-13	
Annexure 2.2: CDMA Full Mobility Service - Service Area wise Statistics for Q	
Dec-13	
Annexure 4.1: Performance of QoS Parameters for Cellular Mobile 2G Service	
Annexure 4.2: Performance of QoS Parameters for Cellular Mobile 3G Service	
Annexure 4.3: Performance of QoS Parameters for Basic (Wire-line) Service	
Annexure 4.4: Quality of Service Performance of Broadband Service Providers	
Annexure 5.1: A-la-carte rates of pay channels for non-CAS areas, as reported	
TRAI by the respective Broadcasters	
Annexure 5.2: List of operational private FM Radio Stations in India	
Annexure 5.3: List of applicants who have been granted DTH License	
Index of Tables & Charts	
Index of Tables & Chaits	133

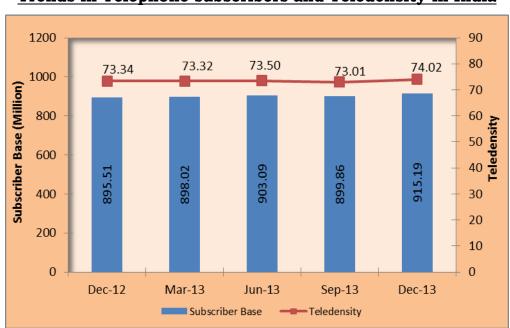
Snapshot

(Data As on 31st December, 2013)	
Telecom Subscribers (Wireless +Wireline)	
Total Subscribers	915.19 Million
% change over the previous quarter	1.70%
Urban Subscribers	549.40 Million
Rural Subscribers	365.79 Million
Market share of Private Operators	86.63%
Market share of PSU Operators	13.37%
Teledensity	74.02
Urban Teledensity	144.95
Rural Teledensity	42.67
Wireless Subscribers	
Total Wireless Subscribers	886.30 Million
% change over the previous quarter	1.81%
Urban Subscribers	526.63 Million
Rural Subscribers	359.67 Million
GSM Subscribers	824.06 Million
CDMA Subscribers	62.24 Million
Market share of Private Operators	88.73%
Market share of PSU Operators	11.27%
Teledensity	71.69
Urban Teledensity	138.94
Rural Teledensity	41.95
Wireline Subscribers	
Total Wireline Subscribers	28.89 Million
% change over the previous quarter	-1.33%
Urban Subscribers	22.77 Million
Rural Subscribers	6.12 Million
Market share of Private Operators	22.21%
Market share of PSU Operators	77.79%
Teledensity	2.34
Urban Teledensity	6.01
Rural Teledensity	0.71
Village Public Telephones (VPT)	0.59 Million
Public Call Office (PCO)	1.02 Million

238.71 Million
183.51 Million
55.20 million
18.33 Million
220.38 Million
782
242
62.97 Million
35.81 Million
₹ 58385 Crore
1.62%
₹39575 Crore
1.97%
12.36%
₹116
₹ 112
₹ 80
379 Minutes
230 Minutes
319 Million
50.70 MB
175.90 MB
59.62 MB

Executive Summary

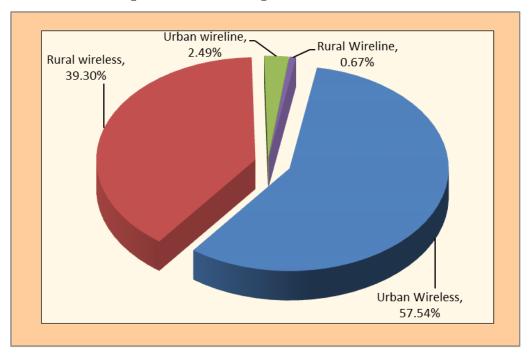
1. The number of telephone subscribers in India increased from 899.86 million at the end of Sep-13 to 915.19 million at the end of Dec-13, registering a growth of 1.70% over the previous quarter. This reflects year-on-year (Y-O-Y) growth of 2.20% over the same quarter of last year. The overall Tele-density in India increased from 73.01 as on 30th September, 2013 to 74.02 as on 31st December, 2013.



Trends in Telephone subscribers and Teledensity in India

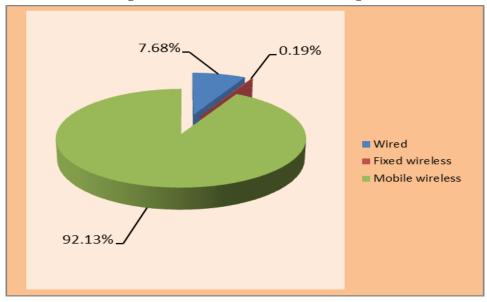
- 2. Subscription in Urban Areas increased from 543.18 million at the end of Sep-13 to 549.40 million at the end of Dec-13, and Urban Tele-density also increased from 144.02 to 144.95. Rural subscription increased from 356.68 million to 365.79 million, and Rural Tele-density also increased from 41.70 to 42.67.
- 3. Share of subscription in Rural areas out of total subscription increased from 39.64% at the end of Sep-13 to 39.97% at the end of Dec-13.

Composition of Telephone Subscribers



- 4. With a net addition of 15.33 million subscribers during the quarter, total wireless(GSM+CDMA) subscriber base increased from 870.58 million at the end of Sep-13 to 886.30 million at the end of Dec-13, registering a growth rate of 1.81% over the previous quarter. The year-on-year (Y-O-Y) growth rate of Wireless subscribers for Dec-13 is 2.50%. Wireless Tele-density increased from 70.63 at the end of Sep-13 to 71.69 at the end of Dec-13.
- 5. Wireline subscriber base further declined from 29.28 million at the end of Sep-13 to 28.89 million at the end of Dec-13, registering a decline of 1.33%. Wireline Tele-density also declined from 2.38 at the end of Sep-13 to 2.34 at the end of Dec-13.
- 6. Total number of Internet subscribers is 238.71 million at the end of Dec-13. Out of which Wired Internet subscribers are 18.33 million and Wireless Internet subscribers are 220.38 million.

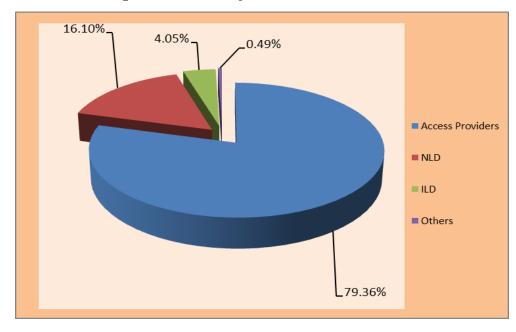
Composition of internet subscription



- 7. Number of Broadband subscribers (as per revised definition i.e. minimum speed of 512 kbps) is 55.20 million and the number of Narrowband subscribers is 183.51 million at the end of Dec-13.
- 8. Monthly Average Revenue Per User (ARPU) for GSM service increased by 2.62%, from ₹109 in QE Sep-13 to ₹112 in QE Dec-13, whereas Y-O-Y increase of 14.06%. Prepaid ARPU per month increased from ₹95 in QE Sep-13 to ₹98 in QE Dec-13 while Postpaid ARPU per month decreased from ₹463 in QE Sep-13 to ₹456 in OE Dec-13.
- 9. On an all India average, the overall MOU per subscriber per month for GSM service increased by 1.10% from 375 in QE Sep-13 to 379 in QE Dec-13. Prepaid MOU per subscriber increased from 351 in QE Sep-13 to 355 in QE Dec-13 while postpaid MOUs decreased from 981 in QE Sep-13 to 964 in QE Dec-13.
- 10. Monthly ARPU for CDMA full mobility service increased by 5.48%, from ₹98.22 in QE Sep-13 to ₹103.60 in QE Dec-13. ARPU for CDMA has increased by 29.58% on Y-O-Y basis in this quarter.

- 11. The total MOU for CDMA per subscriber per month increased by 3.53%, from 262 in QE Sep-13 to 272 QE Dec-13. The outgoing MOUs increased from 137 in QE Sep-13 to 141 in QE Dec-13 and incoming MOUs also increased from 125 in QE Sep-13 to 130 in QE Dec-13.
- 12. Gross Revenue (GR) and Adjusted Gross Revenue (AGR) of Telecom Service Sector for the QE Dec-13 has been ₹58385 Crore and ₹39575 Crore respectively. There has been an increase of 1.62% in GR and 1.97% in AGR as compared to previous quarter. The year-on-year (Y-O-Y) growth in GR and AGR over the same quarter in last year has been 10.46% and 14.62% respectively.
- 13. Pass-through charges accounted 32.22% of the GR for the quarter ending Dec-13. The quarterly and the year-on-year (Y-O-Y) growth rates of pass-through charges for QE Dec-13 are 0.90% and 2.62% respectively.
- 14. The License Fee has been 3168 Crore for the QE Dec-13. The quarterly and the year-on-year (Y-O-Y) growth rates of license fee are 2.03% and 12.57% respectively in this quarter.
- 15. Access services contributed 79.36% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue, Adjusted Gross Revenue (AGR), License Fee, Spectrum Usage Charges and Pass Through Charges increased by 3.00%, 3.47%, 3.54%, 7.30% and 1.84% respectively in QE Dec-13.
- 16. Monthly Average Revenue per User (ARPU) for Access Services based on AGR increased from ₹112 in QE Sep-13 to ₹116 in QE Dec-13.

Composition of Adjusted Gross Revenue



17. The performance of 2G wireless service providers in terms of QoS during the quarter vis-à-vis that in previous quarter is depicted as under:

Parameters showing Improvement in QoS	Parameters showing deterioration in QoS							
• Metering and billing	BTSs Accumulated downtime (not available for service)							
credibility - post paid	Worst affected BTSs due to downtime							
• Metering and billing • Call Set-up Success Rate (within licensee's own								
credibility - pre paid	network)							
• %age of calls answered by	• SDCCH/ Paging Channel Congestion (%age)							
the operators (voice to	• TCH Congestion							
voice) within 60 sec	• Call Drop Rate							
• %age requests for	• Worst affected cells having more than 3% TCH drop							
Termination/ Closure of	(call drop) rate							
service complied within 7	Connection with good voice quality							
days.	• 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 							
	• Time taken for refund of deposits after closures.							

18. The performance of 3G wireless service providers in terms of QoS during the quarter vis-à-vis that in previous quarter is depicted as under:

Parameters showing Improvement in QoS	Parameters showing deterioration in QoS
Worst affected cells having more	Node-B's Accumulated downtime (not available
than 3% TCH drop (call drop)	for service) (%age).
and Circuit Switched Voice	• Worst affected Node-B's due to downtime
Drop Rate - CBBH.	(%age).
• Point of Interconnection (POI)	Call Set-up Success Rate (within licensee's own
Congestion	network)
	SDCCH/ Paging Channel and RRC Congestion
	(%age)
	Connection with good voice quality and Circuit
	Switch Voice Quality (CSV Quality)

19. The performance of wireline service providers in terms of QoS during the quarter vis-à-vis that in previous quarter is depicted as under:

Parameters showing Improvement in QoS	Parameters showing deterioration in QoS
 Faults incidences (No. of faults/ 100 Subs./month) % Fault repaired by next working day % of faults repaired within 3 days (for urban area) % of faults repaired within 5 days (for rural & hilly areas) Mean Time to Repair (MTTR). Resolution of billing/ charging/ validity complaints %age requests for Termination/Closure of service complied within 7 days 	Metering & Billing Credibility – Postpaid (<= 0.1%)

- 20. Total number of private satellite TV channels permitted by the Ministry of I&B, as obtained from its website, are 782. There are a total of 187 pay channels, as reported by the broadcasters/distributors for which the rates have been taken on records at the QE Dec-13.
- 21. Maximum number of TV channels (Pay, FTA and Local) being carried by any of the reported MSOs is 231 whereas in the conventional analogue form, maximum number of channels being carried by any of the reported MSOs is 100 channels.
- 22. Apart from All India Radio, Prasar Bharti a public broadcaster, there are 242 private FM Radio stations in operation at the end of Dec-13.
- 23. Besides the free DTH service of Doordarshan, there are 6 private DTH licensees, offering their services to the DTH subscribers. As on 31.12.2013, total registered subscribers are 62.97 million and active subscribers are 35.81 as reported by these 6 operators.

Trends at a Glance

A. Wireline & Wireless Services

	QE Dec 2012	QE Mar 2013	QE Jun 2013	QE Sep 2013	QE Dec 2013	%age change over Dec- 2012 (12	%age change over Mar- 2013 (9	%age change over Jun- 2013 (6	%age change over Sep- 2013		
						months)	months)	months)	months)		
1) Subscriber's Ba	1) Subscriber's Base (in million)										
i) Wireline	30.79	30.21	29.73	29.28	28.89	-6.15%	-4.37%	-2.80%	-1.33%		
ii) Wireless	864.72	867.80	873.36	870.58	886.30	2.50%	2.13%	1.48%	1.81%		
Total	895.51	898.02	903.09	899.86	915.19	2.20%	1.91%	1.34%	1.70%		
Rural	338.54	349.22	357.61	356.68	365.79	8.05%	4.75%	2.29%	2.55%		
Urban	556.96	548.80	545.48	543.18	549.40	-1.36%	0.11%	0.72%	1.15%		
2) Traffic (MOU)	(minutes o	of use/ su	b/month)							
Wireless - full mol	oility										
i) GSM	360	383	388	375	379	5.36%	-0.87%	-2.17%	1.10%		
ii) CDMA	230	275	278	262	272	18.06%	-1.21%	-2.41%	3.53%		
3) ARPU (Rs./sub	/ month)										
Wireless - full mol	oility										
i) GSM	98.14	105.00	111.45	109.08	112	14.06%	6.61%	0.45%	2.62%		
ii) CDMA	79.95	95.25	98.35	98.22	104	29.58%	8.77%	5.34%	5.48%		
4) Teledensity											
Population in million (Estimated)	1221	1225	1229	1233	1236						
i) Wireline teledensity	2.52	2.47	2.42	2.38	2.34	-7.31%	-5.26%	-3.40%	-1.63%		
ii) Wireless teledensity	70.82	70.85	71.08	70.63	71.69	1.22%	1.18%	0.85%	1.49%		
Total Teledensity	73.34	73.32	73.50	73.01	74.02	0.93%	0.97%	0.71%	1.39%		
Rural teledensity	39.85	41.02	41.90	41.70	42.67	7.06%	4.03%	1.82%	2.32%		
Urban teledensity	149.90	146.96	145.35	144.02	144.95	-3.30%	-1.37%	-0.27%	0.65%		

B. Subscriber Base

(i) Wireline Subscribers Base (in Million)										
Service Provider	QE Dec 2012	QE Mar 2013	QE Jun 2013	QE Sep 2013	QE Dec 2013	%age change over Dec- 2012	%age change over Mar- 2013	%age change over Jun- 2013	%age change over Sep- 2013	
						(12 months)	(9 months)	(6 months)	(3 months)	
BSNL	21.04	20.45	19.89	19.37	18.94	-10.01%	-7.39%	-4.80%	-2.23%	
MTNL	3.46	3.46	3.55	3.54	3.54	2.44%	2.31%	-0.28%	-0.08%	
Bharti	3.28	3.28	3.28	3.34	3.35	2.33%	2.18%	2.22%	0.51%	
Tata	1.49	1.51	1.47	1.49	1.51	1.22%	0.14%	2.53%	1.15%	
Reliance Communications Group	1.26	1.24	1.24	1.24	1.24	-1.40%	-0.12%	-0.14%	-0.02%	
Quadrant	0.18	0.19	0.20	0.20	0.21	13.34%	11.03%	6.36%	2.94%	
Sistema	0.05	0.05	0.05	0.05	0.06	12.39%	6.43%	4.14%	2.76%	
Vodafone	0.03	0.04	0.04	0.04	0.05	69.74%	40.45%	19.79%	13.77%	
Total	30.79	30.21	29.73	29.28	28.89	-6.15%	-4.37%	-2.80%	-1.33%	

Service Provider	QE Dec 2012	QE Mar 2013	QE Jun 2013	QE Sep 2013	QE Dec 2013	%age change over Dec- 2012	%age change over Mar- 2013	%age change over Jun- 2013	%age change over Sep- 2013
						(12 months)	(9 months)	(6 months)	(3 months)
Bharti	181.91	188.20	190.91	193.39	198.41	9.07%	5.43%	3.93%	2.60%
Vodofone	147.48	152.35	155.03	155.54	160.41	8.77%	5.29%	3.47%	3.13%
Idea	113.95	121.61	124.97	127.23	128.69	12.93%	5.82%	2.97%	1.15%
Reliance Communications Group	118.53	122.97	125.73	116.26	117.24	-1.08%	-4.66%	-6.75%	0.84%
BSNL	99.92	101.21	97.99	97.86	96.29	-3.63%	-4.86%	-1.73%	-1.60%
Aircel	63.35	60.07	60.97	63.25	66.91	5.63%	11.39%	9.75%	5.80%
Tata	69.56	66.42	64.63	63.55	63.27	-9.04%	-4.74%	-2.10%	-0.44%
Telewings	41.52	31.68	32.30	32.36	32.78	-21.05%	3.46%	1.50%	1.31%
Sistema	14.88	11.91	9.77	9.56	9.81	-34.09%	-17.67%	0.39%	2.62%
Videocon	3.64	2.01	2.42	3.24	3.97	9.04%	97.54%	64.17%	22.35%
MTNL	5.30	5.00	4.51	3.74	3.59	-32.26%	-28.16%	-20.38%	-4.00%
Loop	3.00	3.01	2.72	2.89	2.98	-0.53%	-0.96%	9.68%	3.21%
Quadrant	1.70	1.37	1.42	1.73	1.96	15.32%	43.15%	37.92%	13.33%
Total	864.72	867.80	873.36	870.58	886.30	2.50%	2.13%	1.48%	1.81%

C. Internet Services

	QE Dec 2012	QE Mar 2013	QE Jun 2013	QE Sep 2013	QE Dec 2013	%age change over Dec- 2012	%age change over Mar- 2013	%age change over Jun- 2013	%age change over Sep- 2013
						(12 months)	(9 months)	(6 months)	(3 months)
Total Internet Subscribers	N/A	164.81	198.39	210.38	238.71	-	44.84%	20.32%	13.47%

D. Telecom Financial Data

	QE Dec 2012	QE Mar 2013	QE Jun 2013	QE Sep 2013	QE Dec 2013	%age change over Dec- 2012	%age change over Mar- 2013	%age change over Jun- 2013	%age change over Sep- 2013
Telecom Sector						(12 months)	(9 months)	(6 months)	(3 months)
i) Gross Revenue (Rs. in Crores)	52858.39	54283.78	57260.98	57452.56	58385.39	10.46%	7.56%	1.96%	1.62%
ii) Adjusted Gross Revenue (Rs. in Crores)	34527.50	35279.50	38640.30	38810.56	39574.99	14.62%	12.18%	2.42%	1.97%
Access Services									
Adjusted Gross Revenue (Rs. in Crores)	27455.16	27801.94	30492.88	30353.17	31406.54	14.39%	12.97%	3.00%	3.47%
ARPU per month (AGR/ Average subscribers/3)	99.00	103.66	113.04	111.85	115.70	16.87%	11.61%	2.35%	3.44%

Introduction

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending December, 2013. 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 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). Any suggestion pertaining to this report may please be addressed to Advisor(F&EA), TRAI; Tel. +91-11-23230752, Fax. +91-11-23236650 and e-mail: manishsinha@trai.gov.in

Chapter 1: Subscription Data

[•] Teledensity 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 899.86 million at the end of Sep-13 to 915.19 million at the end of Dec-13, registering a growth of 1.70% over the previous quarter. This reflects year-on-year (Y-O-Y) growth of 2.20% over the same quarter of last year. The overall Tele-density in India increased to 74.02 at the end of Dec-13 from 73.01 at the end of the previous quarter.

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

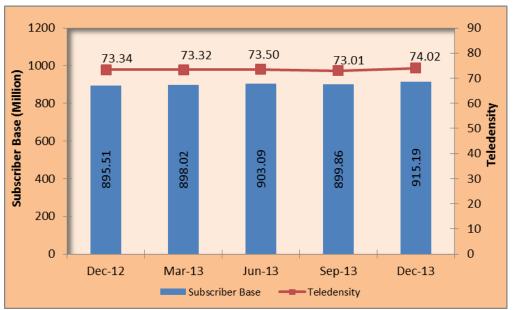


Table 1.1: Subscriber Base & Teledensity - Rural & Urban

Quarter	Subscriber Ba	Teledensity		
ending	Rural	Urban	Rural	Urban
Dec-12	338.54	556.96	39.85	149.90
Mar-13	349.22	548.80	41.02	146.96
Jun-13	357.61	545.48	41.90	145.35
Sep-13	356.68	543.18	41.70	144.02
Dec-13	365.79	549.40	42.67	144.95

- 1.2 Subscription in Urban Areas increased from 543.18 million at the end of Sep-13 to 549.40 million at the end of Dec-13 and the Urban Tele-density also increased from 144.02 to 144.95 during the quarter. Rural subscription increased from 356.68 million to 365.79 million and the Rural Tele-density also increased from 41.70 to 42.67 during the quarter.
- 1.3 The year-on-year (Y-O-Y) growth rate of Rural and Urban Tele-density from Dec-12 to Dec-13 is 7.06% and -3.30% respectively.

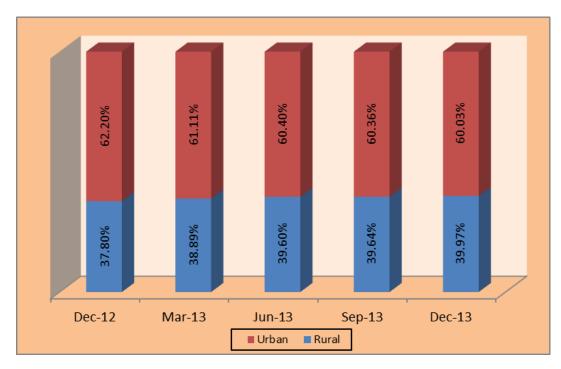


Chart 1.2: Market Share - Rural & Urban

1.4 Share of rural areas in total subscription has increased from 39.64% at the end of Sep-13 to 39.97% at the end of Dec-13. The year-on-year (Y-O-Y) growth of the market share of the rural areas for Dec-13 is 5.72%.

Chart 1.3: Composition of Access subscription - Wireline & Wireless

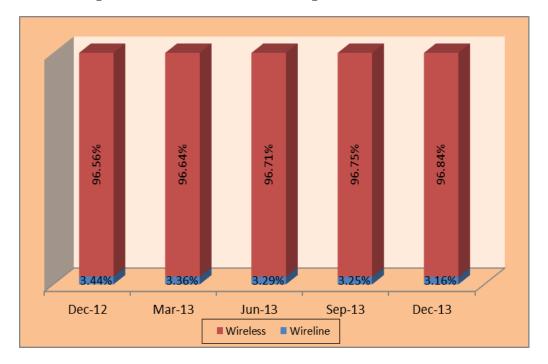


Chart 1.4: Composition of Telephone Subscribers at the end of the quarter

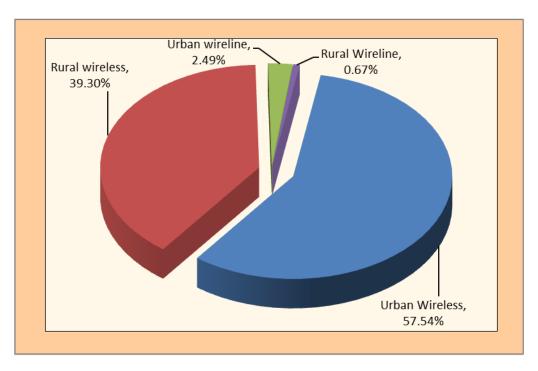
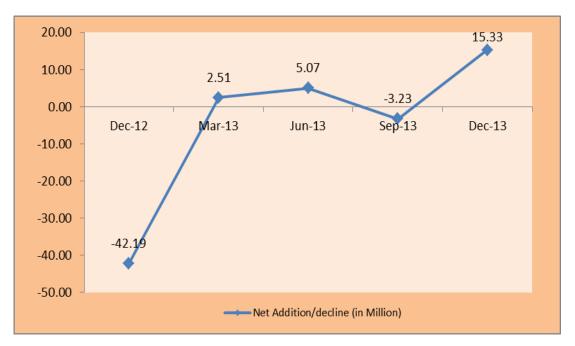


Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base

Service Area	Subscribers (million)					
	Sep-13	Dec-13	Net Additions	Rate of Growth(%)		
Andhra Pradesh	66.85	67.72	0.86	1.29		
Assam	14.86	15.23	0.37	2.51		
Bihar	58.71	59.55	0.84	1.42		
Delhi	44.10	45.25	1.15	2.61		
Gujarat	53.86	55.05	1.18	2.20		
Haryana	20.42	21.01	0.59	2.87		
Himachal Pradesh	7.30	7.39	0.09	1.28		
Jammu & Kashmir	7.60	7.78	0.19	2.45		
Karnataka	55.80	56.69	0.89	1.60		
Kerala	33.99	34.26	0.27	0.80		
Madhya Pradesh	54.57	55.86	1.29	2.36		
Maharashtra	71.05	72.82	1.77	2.49		
Mumbai	32.36	33.16	0.81	2.49		
North East	9.52	9.73	0.21	2.18		
Orissa	25.50	25.01	-0.48	-1.90		
Punjab	31.48	31.63	0.15	0.49		
Rajasthan	50.70	51.94	1.24	2.45		
T.N. (incl. Chennai)	76.32	77.22	0.90	1.18		
U.P.(E)	73.62	75.42	1.80	2.44		
U.P.(W)	47.39	48.02	0.63	1.32		
Kolkata	22.61	22.96	0.35	1.56		
West Bengal	41.26	41.49	0.23	0.56		
All India	899.86	915.19	15.33	1.70		

1.5 During the quarter, Haryana Circle has recorded the highest growth rate of 2.87%, followed by Delhi (2.61%). Orissa Circle shows the decline rate of 1.90% during the quarter ending Dec-13.

Chart 1.5: Net Addition/decline in Telephone Subscription



1.6 The net addition in telephone subscribers is 15.33 million in QE Dec-13 as against the net decline of 3.23 million in QE Sep-13.

Table 1.3: Service Area wise Teledensity

	As on 30 th September, 2013			As on 31st December, 201		
Service Area	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	43.51	164.43	77.15	44.14	165.74	77.99
Assam	32.36	127.30	47.10	33.23	128.94	48.15
Bihar	27.51	147.38	43.95	28.16	146.76	44.43
Delhi	-	-	222.10	-	_	226.29
Gujarat	54.53	134.18	87.29	56.03	135.87	88.92
Haryana	57.07	114.32	77.06	58.87	116.23	78.97
Himachal Pradesh	75.59	333.15	104.93	76.22	337.19	106.04
J&K	40.28	122.68	62.82	40.85	125.93	64.17
Karnataka	44.60	167.95	91.52	45.75	169.06	92.76

	As on 30	O th Septemb	er, 2013	As on 31st December, 2013			
Service Area	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity	
Kerala	62.88	194.79	96.43	64.20	193.39	97.05	
Madhya Pradesh	31.87	115.52	54.44	32.80	116.90	55.52	
Maharashtra*	53.34	124.87	87.29	54.48	127.44	89.17	
Mumbai*							
North East	41.73	157.14	70.15	42.45	160.12	71.48	
Orissa	39.40	165.83	61.21	38.52	162.27	59.92	
Punjab	68.83	153.11	104.68	69.16	152.86	104.87	
Rajasthan	45.68	154.65	71.88	46.94	156.80	73.37	
T.N. (incl Chennai)	69.45	138.33	108.96	71.08	138.76	110.07	
U.P.(E)*	33.04	130.28	54.99	33.99	130.75	55.86	
U.P.(W)*							
Kolkata*	41.97	136.08	68.87	43.78	133.19	69.35	
W.B.*							
All India	41.70	144.02	73.01	42.67	144.95	74.02	

^{*} Population data/projections are available state-wise only. Notes:

1.7 Himachal Pradesh has the highest Rural Teledensity of 76.22, followed by Tamil Nadu (71.08). Bihar continues to have the lowest Rural Teledensity of 28.16, followed by Madhya Pradesh (32.80).

^{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 wireless subscribers of the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).

Table 1.4: Growth/Decline in Subscribers

Service	Subscri	Subscriber base (millions)			Market Share	Market Share □
Provider	Sep-13	Dec-13	Net Additions	Growth (%)	Sep-13 (%)	Dec-13 (%)
Bharti	196.73	201.76	5.04	2.56	21.86	22.05
Vodafone	155.59	160.46	4.87	3.13	17.29	17.53
IDEA	127.23	128.69	1.46	1.15	14.14	14.06
Reliance Communications Group	117.50	118.48	0.98	0.83	13.06	12.95
Tata	65.04	64.78	-0.26	-0.40	7.23	7.08
Aircel	63.25	66.91	3.67	5.80	7.03	7.31
Loop Mobile	2.89	2.98	0.09	3.21	0.32	0.33
Quadrant	1.93	2.16	0.24	12.23	0.21	0.24
Sistema	9.61	9.86	0.25	2.62	1.07	1.08
Telewings	32.36	32.78	0.42	1.31	3.60	3.58
Videocon	3.24	3.97	0.72	22.35	0.36	0.43
BSNL	117.23	115.23	-2.00	-1.70	13.03	12.59
MTNL	7.28	7.13	-0.15	-2.09	0.81	0.78
Total	899.86	915.19	15.33	1.70		

1.8 Bharti is the leading operator in Access segment in terms of number of subscribers and net addition. During the quarter, Bharti recorded the highest net addition of 5.04 million, followed by Vodafone (4.87 million) and Aircel (3.67 million). BSNL recorded the highest net decline of 2.00 million subscribers during this quarter.

Table 1.5: Market Share of the operators in total rural subscriber base for the quarter ending Dec-13

Service Provider	No. of Total Subscribers (in millions)	No. of Rural Subscribers (in millions)	Percentage of Rural subscribers	Market share of Rural subscribers (%)
Bharti	201.76	90.16	44.68	24.65
Vodafone	160.46	86.12	53.67	23.54
IDEA	128.69	70.38	54.69	19.24
BSNL	115.23	38.62	33.52	10.56
Reliance Communications Group	118.48	28.54	24.09	7.80
Aircel	66.91	24.24	36.23	6.63
Tata	64.78	15.09	23.30	4.13
Telewings	32.78	10.32	31.47	2.82
Sistema	9.86	2.27	23.06	0.62
Quadrant	2.16	0.05	2.26	0.01
MTNL	7.13	-	-	-
Videocon	3.97	-	-	-
Loop Mobile	2.98	-	-	-
Total	915.19	365.79	39.97	

1.9 IDEA continues to be the Service provider with highest proportion of Rural subscribers (54.69%), followed by Vodafone (53.67%) to their total subscribers.

Section B: Wireless Service

Table 1.6: List of Cellular Mobile (GSM & CDMA) Service Providers currently providing service [As on 31st December, 2013]

Sl.No.	Service Provider	Area of Operation
1	Bharti	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, OR, Assam & NE
5	Vodafone	All India
6	Tata Teleservices	All India except Assam, NE & J&K
7	IDEA/Spice	All India
8	Sistema Shyam Telelink	Delhi, Kolkata, Guj., KTK, T.N. incl. Chennai, Kerala, UP(W), Rajasthan & W.B.
9	BSNL	All India (except Delhi & Mumbai)
10	MTNL	Delhi & Mumbai
11	Loop Mobile (India) Ltd	Mumbai
12	Quadrant	Punjab
13	Telewings Communications Services Pvt. Ltd.	MH, Guj., AP, UP(W), UP(E), Bihar
14	Videocon Telecommunications Ltd	Guj, Haryana, UP(W)*, UP(E)*, MP, Bihar*

^{*} M/s Videocon has no subscriber in UP(W), UP(E) and Bihar service areas as on 31.12.2013.

- 1.10 Complete list of licensed Cellular (GSM & CDMA) Service providers as on 31st December, 2013 is at Annexure -1.1
- 1.11 Total Wireless (GSM+CDMA) subscriber base increased from 870.58 million at the end of Sep-13 to 886.30 million at the end of Dec-13, thereby showing a gowth rate of 1.81%. During this quarter net addition of 15.72 million subscribers was recorded. The year-on-year (Y-O-Y), wireless subscribers shows growth rate of 2.50% for Dec-13. Wireless Teledensity increased from 70.63 at the end of Sep-13 to 71.69 at the end of Dec-13.



Chart 1.6: Wireless Subscriber Base and Teledensity

Table 1.7: Wireless Subscriber Base & Teledensity - Rural & Urban

Quarter ending	Subscriber E	Teledensity		
	Rural Urban		Rural	Urban
Dec-12	331.60	533.12	39.04	143.48
Mar-13	342.50	525.30	40.23	140.67
Jun-13	351.10	522.27	41.14	139.16
Sep-13	350.37	520.21	40.96	137.93
Dec-13	359.67	526.63	41.95	138.94

- 1.12 The Rural Wireless subscribers increased from 350.37 million at the end of Sep-13 to 359.67 million at the end of Dec-13.
- 1.13 Rural subscription increased at the rate of 2.65% in QE Dec-13 as against the decline rate of 0.21% in QE Sep-13. Urban subscription increased at the rate of 1.23% as against the decline rate of 0.39% in the previous quarter. The share of Rural wireless subscription increased from 40.25% to 40.58% in total wireless subscription in this quarter.

Chart 1.7: Wireless Market Share - Rural & Urban

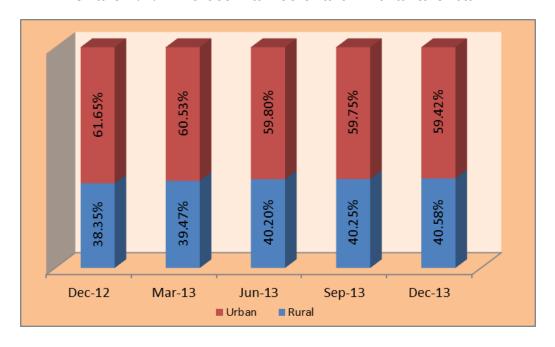


Table 1.8: Growth in Wireless Subscriber base

Service Provider	Subscr	Subscriber Base (millions)			Market	Market
	Sep-13	Dec-13	Net Additions	Growth (%)	Share □ Sep-13 (%)	Share □ Dec-13 (%)
Bharti	193.39	198.41	5.02	2.60	22.21	22.39
Vodafone	155.54	160.41	4.86	3.13	17.87	18.10
IDEA	127.23	128.69	1.46	1.15	14.61	14.52
Reliance Communications Group	116.26	117.24	0.98	0.84	13.35	13.23
BSNL	97.86	96.29	-1.57	-1.60	11.24	10.86
Aircel	63.25	66.91	3.67	5.80	7.26	7.55
Tata	63.55	63.27	-0.28	-0.44	7.30	7.14
Telewings	32.36	32.78	0.42	1.31	3.72	3.70
Sistema	9.56	9.81	0.25	2.62	1.10	1.11
Videocon	3.24	3.97	0.72	22.35	0.37	0.45
MTNL	3.74	3.59	-0.15	-4.00	0.43	0.41
Loop	2.89	2.98	0.09	3.21	0.33	0.34
Quadrant	1.73	1.96	0.23	13.33	0.20	0.22
Total	870.58	886.30	15.72	1.81	-	-

1.14 Bharti remains the leading operator with 198.41 million subscribers at the end of Dec-13, followed by Vodafone (160.41 million) and Idea (128.69 million). In terms of net additions during the quarter, Bharti (5.02 million) has added the highest number of subscribers, followed by Vodafone (4.86 million). BSNL has the maximum net loss of 1.57 million wireless subscribers during this quarter.

Table 1.9: Service Area wise Wireless Subscriber base

Service Area	a Subscriber base (in million)					
	Sep-13	Dec-13	Net Additions	Rate of change (%)		
Andhra Pradesh	64.72	65.65	0.93	1.44		
Assam	14.66	15.04	0.38	2.59		
Bihar	58.32	59.17	0.84	1.45		
Delhi	41.05	42.16	1.11	2.71		
Gujarat	52.14	53.35	1.21	2.31		
Haryana	19.90	20.50	0.60	3.00		
Himachal Pradesh	7.03	7.13	0.10	1.39		
Jammu & Kashmir	7.41	7.59	0.19	2.52		
Karnataka	53.43	54.35	0.92	1.73		
Kerala	31.00	31.33	0.33	1.05		
Madhya Pradesh	53.47	54.76	1.30	2.43		
Maharashtra	68.68	70.48	1.80	2.62		
Mumbai	29.30	30.11	0.81	2.76		
North East	9.38	9.59	0.21	2.23		
Orissa	25.14	24.66	-0.47	-1.89		
Punjab	30.20	30.36	0.16	0.54		
Rajasthan	49.73	50.98	1.26	2.53		
T.N. (incl. Chennai)	73.31	74.26	0.95	1.29		
U.P.(E)	72.75	74.58	1.83	2.52		
U.P.(W)	46.74	47.38	0.64	1.38		
Kolkata	21.50	21.88	0.38	1.76		
West Bengal	40.73	40.98	0.24	0.60		
All India	870.58	886.30	15.72	1.81		

Table 1.10: Service Area wise Wireless Teledensity

	As on 3	0 th Septem	ber, 2013	As on 31st December, 2013		
Service Area	Rural Teledensity	Urban Feledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Feledensity
Andhra Pradesh	42.58	157.97	74.69	43.27	159.44	75.61
Assam	32.22	124.13	46.49	33.10	125.87	47.56
Bihar	27.41	145.87	43.66	28.06	145.28	44.15
Delhi	-	-	206.73	-	-	210.84
Gujarat	53.61	128.72	84.50	55.12	130.49	86.18
Haryana	56.20	110.29	75.09	58.03	112.30	77.04
Himachal Pradesh	72.43	324.41	101.13	73.13	328.52	102.31
Jammu & Kashmir	39.90	117.97	61.26	40.47	121.25	62.61
Karnataka	43.65	159.27	87.63	44.86	160.46	88.93
Kerala	55.37	183.51	87.96	56.86	182.27	88.74
Madhya Pradesh	31.66	112.02	53.34	32.58	113.45	54.44
Maharashtra*	52.42	116.26	82.71	53.58	118.89	84.64
Mumbai*						
North East	41.38	153.93	69.10	42.10	156.94	70.44
Orissa	39.11	162.22	60.35	38.24	158.73	59.09
Punjab	66.72	145.98	100.43	67.08	145.83	100.68
Rajasthan	45.24	150.28	70.49	46.52	152.49	72.01
T.N. (incl. Chennai)	67.69	132.15	104.67	69.35	132.70	105.85
U.P.(E)* U.P.(W)*	32.86	127.80	54.30	33.82	128.36	55.19
Kolkata* West Bengal*	41.59	130.83	67.10	43.41	128.06	67.62
All India	40.96	137.93	70.63	41.95	138.94	71.69

^{*} 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).

Table 1.11: Rural Wireless Subscriber base and Market Share

Service Provider	Subscribers at the end of Dec-13	Rural Subscribers (in millions)		% of Rural subscribers in total		Market Share of Rural Subscribers (%)		
	(in millions)	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	
Bharti	198.41	86.81	90.16	44.89	45.44	24.78	25.07	
Vodafone	160.41	83.19	86.12	53.48	53.69	23.74	23.94	
IDEA	128.69	69.16	70.38	54.36	54.69	19.74	19.57	
BSNL	96.29	33.55	32.56	34.28	33.81	9.58	9.05	
Reliance Communications Group	117.24	28.29	28.54	24.33	24.34	8.07	7.94	
Aircel	66.91	23.25	24.24	36.76	36.23	6.64	6.74	
Tata	63.27	14.45	15.04	22.73	23.77	4.12	4.18	
Telewings	32.78	10.24	10.32	31.66	31.47	2.92	2.87	
Sistema	9.81	1.40	2.27	14.61	23.10	0.40	0.63	
Quadrant	1.96	0.04	0.05	2.29	2.50	0.01	0.01	
MTNL	3.59	0.00	0.00	0.00	0.00	0.00	0.00	
Videocon	3.97	0.00	0.00	0.00	0.00	0.00	0.00	
Loop	2.98	0.00	0.00	0.00	0.00	0.00	0.00	
Total	886.30	350.37	359.67	40.25	40.58	100	100	

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

Dec-12 Mar-13 Jun-13 Sep-13 Dec-13 ■ CDMA ■ GSM

Chart 1.8: Wireless Subscription: GSM vs CDMA

1.16 At the end of Dec-13, GSM subscribers constituted 92.98% of the wireless market.

GSM Services

1.17 The GSM subscribers were 824.06 million at the end of Dec-13 as against 807.68 million at the quarter ending Sep-13, showing a growth of 2.03%. Bharti with 198.41 million subscribers continues to be the largest GSM mobile operator, followed by Vodafone (160.41 million).

Table 1.12: Group-wise Market Share (in terms of subscription) within GSM Service

	Sep-13		Dec-1	3	
Service Provider	No of Subscribers (in millions)	Market Share (%)	No of Subscribers (in millions)	Market Share (%)	Net Additions (in million)
Bharti	193.39	23.94	198.41	24.08	5.02
Vodafone	155.54	19.26	160.41	19.47	4.86
Idea	127.23	15.75	128.69	15.62	1.46
BSNL	95.47	11.82	93.99	11.41	-1.48
Reliance Communications Group	83.85	10.38	84.88	10.30	1.03
Aircel	63.25	7.83	66.91	8.12	3.67
Tata	45.13	5.59	45.64	5.54	0.51
Telewings	32.36	4.01	32.78	3.98	0.42
MTNL	3.61	0.45	3.46	0.42	-0.15
Videocon	3.24	0.40	3.97	0.48	0.72
Loop	2.89	0.36	2.98	0.36	0.09
Quadrant	1.72	0.21	1.95	0.24	0.23
Total	807.68	100	824.06	100	16.39

1.18 There has been a net increase of 16.39 million GSM subscribers during the quarter ending Dec-13.

CDMA Services

1.19 The CDMA subscriber base further declined from 62.91 million at the end of Sep-13 to 62.24 million at the end of Dec-13, thereby showing a negative growth rate of 1.07%. Reliance Communications Group with 32.37 million subscribers continues to be the largest CDMA mobile operator. In terms of net additions during the quarter, all the service providers except Systema Shyam recorded decline in their subscriber base.

Table 1.13: Market Share (in terms of subscription) within CDMA Service

Service Provider	Sep-13		Dec-13		Net
	No of Subscribers (in million)	Market Share (%)	No of Subscribers (in million)	Market Share (%)	Addition/ Decline (in million)
Reliance Communications Group	32.42	51.53	32.37	52.01	-0.05
Tata	18.41	29.27	17.63	28.32	-0.78
Sistema	9.56	15.19	9.81	15.76	0.25
BSNL	2.39	3.79	2.30	3.70	-0.08
MTNL	0.13	0.21	0.13	0.21	-0.002
Quadrant	0.01	0.01	0.003	0.004	-0.004
Total	62.91	100	62.24	100	-0.67

1.20 There has been a net decline of 0.67 million CDMA subscribers during the quarter ending Dec-13.

Section C: Wireline Service

Table 1.14: Service Providers providing Wireline Service

[as on 31st December, 2013]

S1. 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, Delhi, Gujarat, Haryana, Madhya Pradesh & Chhatisgarh, Maharashtra, Mumbai, Punjab, Tamil Nadu (incl. 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 Assam & North-East	
8	Vodafone	Andhra Pradesh, Assam, Bihar, Delhi, Gujarat, Karnataka, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Orissa Punjab, Rajasthan, Tamilnadu including Chennai, U.P.(East) & U.P.(West)	

- 1.21 Total Wireline subscriber base declined from 29.28 million at the end of Sep-13 to 28.89 million at the end of Dec-13 with declining rate of 1.33%. Overall Wireline Teledensity is 2.34 at the end of this quarter as against 2.38 of the previous quarter.
- 1.22 Rural subscriber base has shown decline of 2.99%, from 6.31 Million at the end of Sep-13 to 6.12 Million at the end of Dec-13. During the same period, Urban subscription also recorded decline of 0.87%, from 22.97 million to 22.77 million.

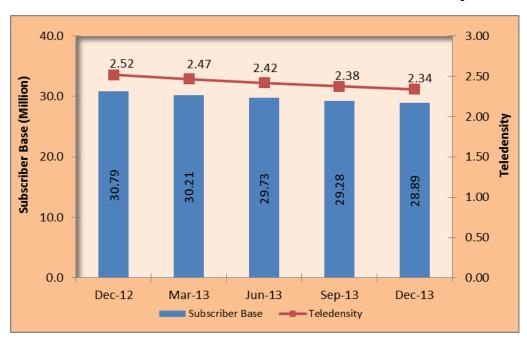


Chart 1.9: Wireline Subscriber Base and Teledensity

Table 1.15: Wireline Subscriber Base & Tele-density - Rural & Urban

Quarter ending	Subscriber Base (million)		Teledensity	
	Rural	Urban	Rural	Urban
Dec-12	6.95	23.84	0.82	6.42
Mar-13	6.71	23.50	0.79	6.29
Jun-13	6.51	23.22	0.76	6.19
Sep-13	6.31	22.97	0.74	6.09
Dec-13	6.12	22.77	0.71	6.01

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

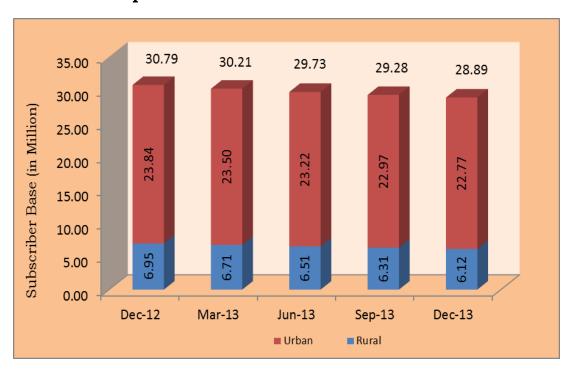


Table 1.16: Service Provider wise Subscriber base (Rural - Urban) & Share of Rural Subscription

Service Provider	Subscribe	Share of Rural subscription		
	Rural	Urban	Total	(% <mark>)</mark>
BSNL	6.06	12.87	18.94	32.02
MTNL	-	3.54	3.54	
Bharti	_	3.35	3.35	
Reliance Communications	0.002	1.24	1.24	0.16
Tata	0.05	1.46	1.51	3.27
Quadrant	-	0.21	0.21	
Sistema	0.01	0.05	0.06	16.58
Vodafone	-	0.05	0.05	
Total	6.12	22.77	28.89	21.19

Table 1.17: Service Provider wise growth in Subscriber base

Service Provider	Subso	Subscriber Base (million)			Market	Market
	Sep-13	Dec-13	Net Addition	change (%)	share- Sep-13 (%)	share- Dec-13 (%)
BSNL	19.37	18.94	-0.433	-2.23	66.14	65.54
MTNL	3.54	3.54	-0.003	-0.08	12.10	12.25
Bharti	3.34	3.35	0.017	0.51	11.40	11.61
Tata	1.49	1.51	0.017	1.15	5.09	5.22
Reliance Com.	1.24	1.24	0.0002	-0.02	4.24	4.30
Quadrant	0.20	0.21	0.006	2.94	0.69	0.72
Sistema	0.05	0.06	0.002	2.76	0.19	0.19
Vodafone	0.04	0.05	0.006	13.77	0.15	0.17
Total	29.28	28.89	-0.388	-1.33		

Table 1.18: Service Area wise Wireline Subscriber base (in million)

Service Area	Sep-13	Dec-13	Net Additions	Rate of
			(in million)	Change (%)
Andhra Pradesh	2.14	2.07	-0.069	-3.23
Assam	0.19	0.19	-0.006	-2.92
Bihar	0.39	0.38	-0.009	-2.23
Delhi	3.05	3.09	0.037	1.21
Gujarat	1.72	1.70	-0.023	-1.31
Haryana	0.52	0.51	-0.011	-2.10
Himachal Pradesh	0.26	0.26	-0.004	-1.65
Jammu & Kashmir	0.19	0.19	-0.001	-0.29
Karnataka	2.37	2.34	-0.034	-1.41
Kerala	2.99	2.93	-0.053	-1.79
Madhya Pradesh	1.10	1.09	-0.010	-0.94
Maharashtra	2.36	2.33	-0.028	-1.17
Mumbai	3.06	3.06	-0.003	-0.10
North East	0.14	0.14	-0.001	-0.95
Orissa	0.36	0.35	-0.009	-2.47
Punjab	1.28	1.27	-0.011	-0.88
Rajasthan	0.98	0.96	-0.016	-1.67
T.N. (incl. Chennai)	3.01	2.96	-0.047	-1.55
U.P.(E)	0.87	0.84	-0.037	-4.23
U.P.(W)	0.65	0.64	-0.015	-2.35
Kolkata	1.11	1.09	-0.026	-2.35
W.B.	0.53	0.52	-0.012	-2.28
All India	29.28	28.89	-0.388	-1.33

1.23 Only Delhi Service Area showed positive growth in wireline service during this quarter.

Table 1.19: Service Area wise Wireline Teledensity

	As on 3	30th Septembe	er, 2013	As on 31st December, 2013			
Service Area	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Feledensity	
Andhra Pradesh	0.93	6.46	2.47	0.87	6.30	2.38	
Assam	0.14	3.17	0.61	0.13	3.06	0.59	
Bihar	0.10	1.51	0.29	0.10	1.47	0.28	
Delhi	-	-	15.37	-	-	15.45	
Gujarat	0.93	5.46	2.79	0.90	5.38	2.75	
Haryana	0.87	4.04	1.97	0.84	3.92	1.92	
Himachal Pradesh	3.16	8.75	3.80	3.09	8.66	3.73	
Jammu & Kashmir	0.39	4.71	1.57	0.38	4.68	1.56	
Karnataka	0.95	8.68	3.89	0.89	8.59	3.82	
Kerala	7.51	11.28	8.47	7.35	11.12	8.31	
Madhya Pradesh	0.22	3.50	1.10	0.21	3.45	1.09	
Maharashtra* Mumbai*	0.93	8.62	4.58	0.90	8.54	4.54	
North East	0.35	3.22	1.06	0.34	3.18	1.04	
Orissa	0.29	3.61	0.86	0.27	3.55	0.84	
Punjab	2.11	7.13	4.25	2.08	7.03	4.20	
Rajasthan	0.44	4.37	1.38	0.42	4.31	1.36	
T.N. (incl. Chennai)	1.76	6.18	4.29	1.73	6.05	4.22	
U.P.(E)*	0.17	2.48	0.69	0.16	2.40	0.67	
U.P.(W)*							
Kolkata*	0.38	5.25	1.77	0.36	5.12	1.73	
W.B.*							
All India	0.74	6.09	2.38	0.71	6.01	2.34	

^{*} Population data/projections are available state-wise only

Note:

1.24 Detailed table on service provider wise subscriber base in each service area is at Annexure-1.3.

^{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.

Public Call Offices (PCO)

1.25 Total number of PCOs in the country at the end of Dec-13 is 10.20 lakh as compared to 10.89 lakh at the end of Sep-13, showing a decline of 0.69 lakh PCOs. Detailed table is at Annexure -1.4.

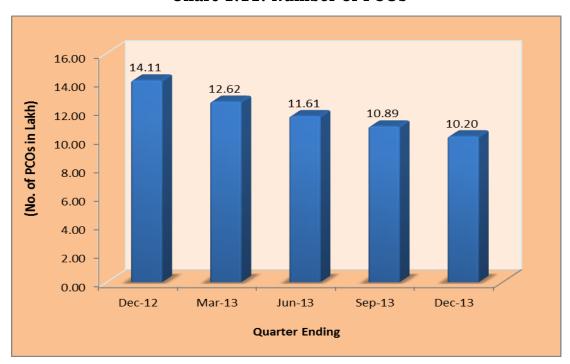


Chart 1.11: Number of PCOs

Table 1.20: Rate of change & Market share of PCOs

Service Provider	Sep-13 (In Lakh)	Dec-13 (In Lakh)	Rate of change (%)	% Market share (Sep-13)
BSNL	6.95	6.54	-5.87	64.16
MTNL	1.47	1.45	-1.55	14.21
Bharti	0.34	0.29	-15.14	2.82
Quadrant	0.04	0.03	-5.46	0.33
Sistema	0.12	0.12	-1.94	1.20
Tata	1.03	0.91	-11.29	8.96
Reliance Communications	0.94	0.85	-9.83	8.31
Vodafone	-	-	-	-
Total	10.89	10.20	-6.38%	100.00

1.26 Number of PCOs continued to show declining trend. This quarter has recorded a decline of 6.38%. The year-on-year (Y-O-Y) decline over the same quarter of the last year is 27.72%.

Village Public Telephones (VPTs)

- 1.27 There are 5,93,731 inhabited villages in India as per census 2001. At the end of the quarter, 99.26% of the total inhabited villages in India have been connected by VPT. The number of VPTs increased from 5,89,313 at the end of Sep-13 to 5,89,330 at the end of Dec-13.
- 1.28 BSNL (5,82,340) has 98.8% market share of total VPTs followed by Tata (3953) with 0.7%. Detailed table is at Annexure -1.5.

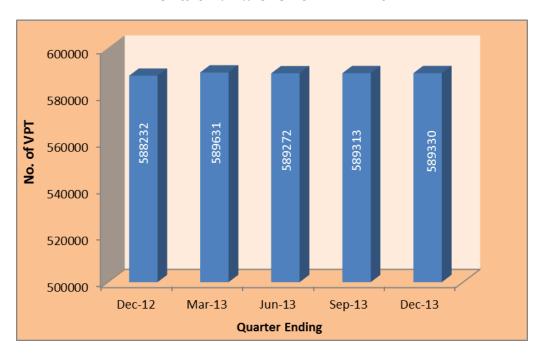


Chart 1.12: Growth in VPTs

Section D: Internet Service

1.29 Department of Telecommunication vide its notification dated 18th July,2013 has revised the definition of broadband as follows;

'Broadband is a data connection that is able to support interactive service including internet access and has the capability of the minimum download speed of 512 kbps to an individual subscriber from the Point of Presence (PoP) of the service provider intending to provide broadband service'.

Accordingly, the minimum download speed has been increased from 256 kbps to 512 kbps in broadband service.

- 1.30 From the report of this quarter, the service providers have started reporting the data of broadband subscribers in accordance with the revised definition i.e. >=512 kbps. Hence, comparison of data vis-à-vis data for previous quarter is not attempted.
- 1.31 The report summarized information submitted by 143 service providers. It is divided into three parts. **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)

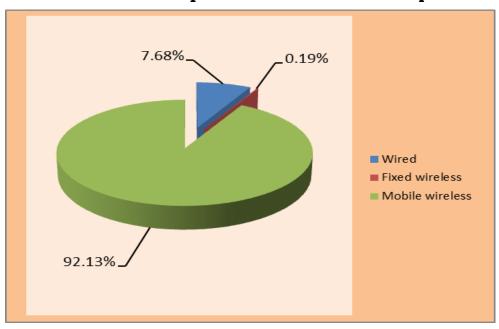
1.32 As per reports received from service providers, there were 238.71 million Internet Subscribers as on 31st December, 2013. Out of which Wired Internet subscribers are 18.33 million and Wireless Internet subscribers are 220.38 million.

Table 1.21: Trend of Internet subscriber base

			Wireless					
Segment	gment Wired (Wi-H Poin Radi		Mobile Wireless (Phone + Dongle)	(Phone + Total				
Broadband	14.54	0.39	40.27	40.66	55.20			
Narrowband	3.79	0.07	179.65	179.72	183.51			
Total	18.33	0.46	219.92	220.38	238.71			

1.33 The following chart presents the composition of Internet Subscribers by mode of access.

Chart 1.13: Composition of Internet subscription



1.34 Number of Broadband subscribers is 55.20 million and the number of Narrowband subscribers is 183.51 million at the end of Dec-13.

Chart 1.14: Composition of Broadband & Narrowband subscription

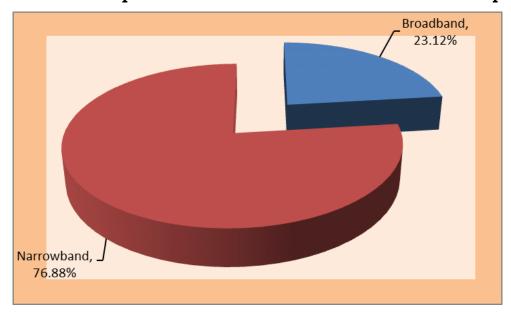


Table 1.22: Internet Subscriber Base and Market Share of top 10
Service Providers

S.No	ISP	Subs	Share (%)
1	Bharti	55787450	23.37
2	Vodafone	45653907	19.13
3	BSNL	41080353	17.21
4	Reliance Communications Group	36387480	15.24
5	Idea	25525638	10.69
6	Aircel	15054166	6.31
7	Telewings (Uninor)	6559648	2.75
8	Tata	3065785	1.28
9	Loop	2829274	1.19
10	MTNL	1758448	0.74
	Total of Top 10 ISPs	233702149	97.90
	Others	5006192	2.10
	Grand Total	238708341	100.00

1.35 Bharti holds the top position with 23.37% of market share of internet subscribers followed by Vodafone with 19.13%. Top 10 Service Providers together hold 97.90% of total internet subscriber base. Detailed table of all the SPs is available at Annexure-1.6.

1.36 The following chart depicts the trend of subscriber base achieved by top ten ISPs in the QE Dec-13.

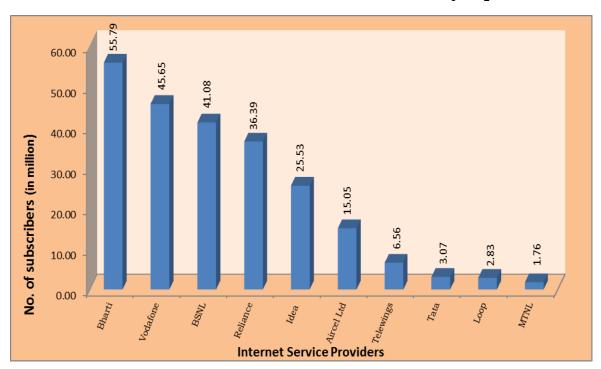


Chart 1.15: Trends of subscriber base achieved by top ten ISPs

- 1.37 Top five states in terms of internet subscriptions (wired + wireless) are Maharashtra (38.77 million), Uttar Pradesh (22.90 million), Tamil Nadu (19.65 million), Gujarat (17.92 million) and Andhra Pradesh (17.07 million).
- 1.38 In wired internet segment, BSNL holds 71.91% market share with 13.18 million subscribers, followed by Bharti with 1.47 million and MTNL with 1.11 million subscribers.
- 1.39 The following chart shows the composition of Wired Internet Subscribers.

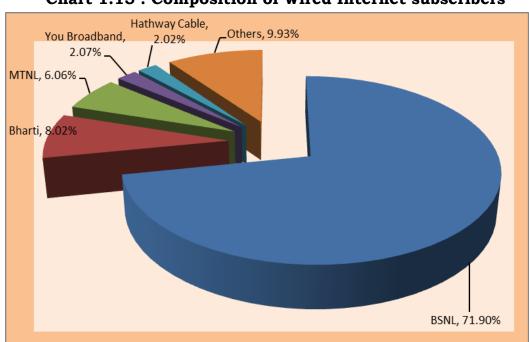


Chart 1.15: Composition of Wired Internet subscribers

1.40 In wireless internet segment, Bharti holds 24.65% market share with 54.32 million subscribers followed by Vodafone with 45.65 million and Reliance Communications Group with 36.22 million internet subscribers.

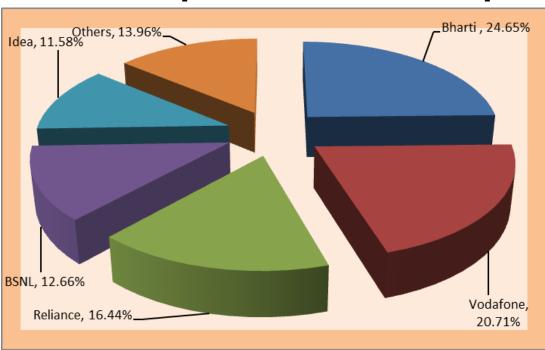


Chart 1.16: Composition of Wireless Internet subscription

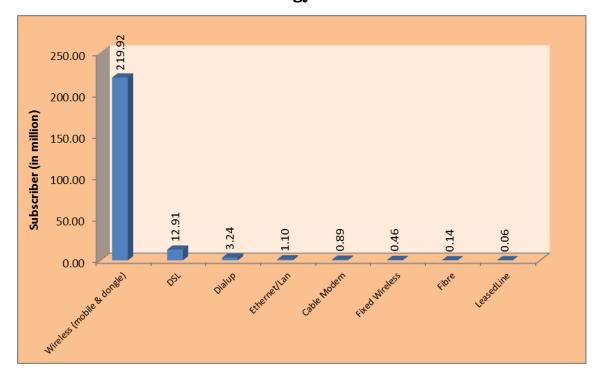


Chart 1.17: Technology trend for Internet Access

ISP Connectivity

1.41 The International Internet bandwidth owned by various SPs is reported to be 1209 GB during the quarter ending Dec-13.

Internet Telephony

1.42 As per the reports available with the TRAI, 33 ISPs are providing Internet Telephony services presently. Total outgoing minutes of usage for internet telephony during the quarter ending Dec-13 were 319 million. The list of Internet Telephony Service providers is available at Annexure-1.7.



Chart 1.19: Trends in MOU for Internet Telephony

Part-II: Broadband Service

- 1.43 As per information received from service providers, the total number of broadband subscribers as on 31st December, 2013 is 55.20 million. Out of which wired broadband subscribers are 14.54 million and wireless broadband subscribers are 40.66 million.
- 1.44 Top five broadband (wired + wireless) service providers in term of subscribers are BSNL (16.54 million), Bharti (10.88 million), Reliance Communications Group (6.98 million), Idea (5.87 million) and Vodafone (5.20 million).
- 1.45 In wired broadband segment, BSNL holds 68.68% market share with 9.98 million subscribers followed by Bharti with 1.39 million and MTNL with 1.11 million wired broadband subscribers.

1.46 In wireless broadband segment, Bharti holds 23.33% market share with 9.49 million subscribers followed by Reliance Communications Group with 6.87 million and BSNL with 6.55 million wireless broadband subscribers.

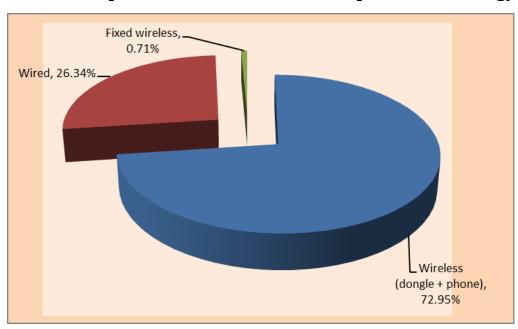


Chart 1.20: Composition of Broadband subscription - Technology wise

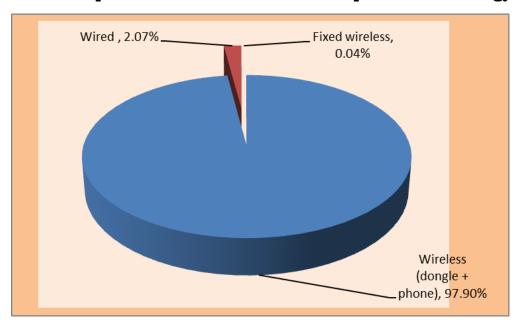
- 1.47 Wireless (dongle + phone) is the most preferred technology used by the Service Providers to provide Broadband Services and it constitutes 72.95% of total broadband subscribers.
- 1.48 Top five states in respect of broadband subscriptions are Maharashtra (9.23 million), Delhi (5.78 million), Tamil Nadu (5.77 million), Karnataka (4.61 million) and Andhra Pradesh (4.40 million).

Part-II: Narrowband Service

1.49 As reported by the service providers, total number of narrowband subscriber is 183.51 million at the end of Dec-13. Out of which Wired Narrowband subscribers are 3.79 million and Wireless Narrowband subscribers are 179.72 million.

- 1.50 The top five narrowband (wired + wireless) service providers in term of subscriber base area Bharti (44.91 million), Vodafone (40.45 million), Reliance Communications Group (29.40 million), BSNL (24.55 million) and Idea (19.66 million).
- 1.51 In wired narrowband segment, BSNL holds 84.30% market share with 3.19 million subscribers followed by YOU Broadband (0.17 million) and Bharti (0.08 million).
- 1.52 In wireless narrowband segment, Bharti holds 24.95% market share with 44.84 million subscribers followed by Vodafone (40.45 million) and Reliance Communications Group (29.35 million).

Chart 1.21: Composition of Narrowband subscription - Technology wise



1.53 Wireless (dongle + Phone) is the most preferred technology used by the service providers to provide narrowband service.

Section E: Other Value Added Services - PMRTS & VSAT

Public Mobile Radio Trunk Services (PMRTS)

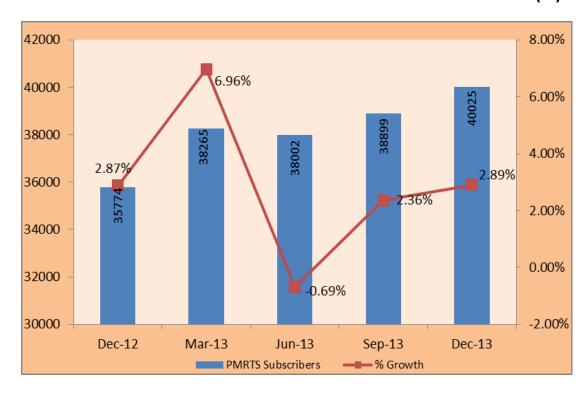
Table 1.23: PMRTS Subscriber base - Service Provider wise

Sr. No.	Name of the Service Provider	Subscriber Base as on 30.09.13	Subscriber Base as on 31.12.13	%age Growth in Subscribers	%age in Market Share
1	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	28494	29636	4.02	74.05
2	Procall Ltd.	5740	5865	2.18	14.65
3	Smartalk Pvt Ltd.	1014	1061	4.64	2.65
4	QuickCall	2550	2753	7.96	6.88
5	Bhilwara Telenet Services Pvt.Ltd.	1101	707	-35.79	1.77
6	India Satcom Ltd.	0	0	0.00	0.00
	Total	38899	40025	2.89	100.00

^{*}M/s India Satcom Ltd. reported that their MRTS department is non-functional and they do not have any subscriber.

- 1.54 The subscriber base of PMRTS increased from 38,889 at the end of Sep-13 to 40,025 at the end of Dec-13 with quarterly growth rate of 2.89%.
- 1.55 Detailed table on Service Area wise subscriber base of PMRTS is at Annexure-1.8.

Chart 1.22: Number of PMRTS subscribers & Rate of Growth (%)



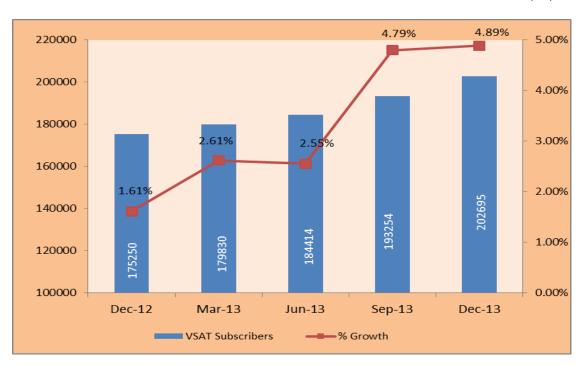
Very Small Aperture Terminal (VSAT)

Table 1.24: VSAT Service Providers currently providing service & their subscriber base

Sr.	Name of Service Providers	Subscriber Quarter	base at the ending	%age	Market Share (%)
No		Sep-13	Dec-13	Growth	Dec-13
1	Hughes Communications Ltd.	77399	82634	6.76	40.77
2	Bharti Airtel Limited,	50334	51305	1.93	25.31
3	Tatanet Services	25985	30664	18.01	15.13
4	HCL Comnet	21981	21907	-0.34	10.81
5	BSNL	12978	13803	6.36	6.81
7	Infotel Satcom	1713	1856	8.35	0.92
6	Essel Shyam	2728	400	-85.34	0.20
8	Bharti Broadband	129	119	-7.75	0.06
9	Infinium India Ltd.	7	7	0.00	0.00
	Total	193254	202695	4.89	100.00

- 1.56 The total number of VSAT subscribers increased from 1,93,254 at the end of Sep-13 to 2,02,695 at the end of Dec-13. Net additions during the quarter has been 9,441 at the quarterly growth rate of 4.89%.
- 1.57 Hughes Communication Limited with subscriber base of 82,634 continues to be the market leader.
- 1.58 Tatanet Service has recorded maximum growth rate of 18.01%, whereas Essel Shyam has registered 85.34% decline in VSAT subscribers in this 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 October, 2013 to 31st December, 2013 in the various service areas.

Section A: GSM Service

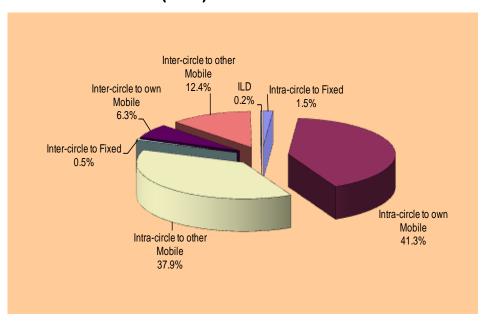
Table 2.1: Key Indicators - GSM Service

Parameter	Q.E. Dec-13	Q.E. Sep-13	Q.E. Dec-12	QoQ %age change over Sep-13	YoY %age change over Dec-12
Subscriber Base# (million)	823.23	807.16	786.64	1.99	4.65
Share of Prepaid (%)	95.99	96.07	96.46	-0.08	-0.48
Incoming MOU* per sub. per month	195	193	186	1.17	5.04
Outgoing MOU* per sub. per month	184	182	174	1.02	5.70
Outgoing SMS per sub. per month	28	29	39	-3.37	-26.59
Average Revenue Per User (ARPU) per month	112	109	98	2.62	14.06

[#] Subscriber figures are closing figures as on the last day of the respective quarters

* Minutes of Usage

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



2.1 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.

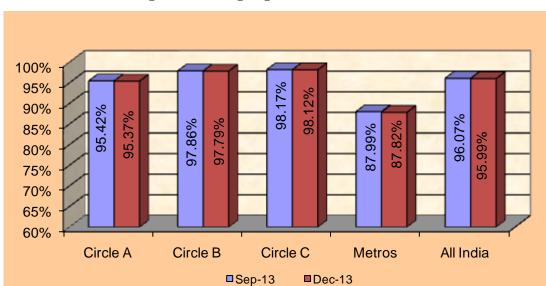


Chart 2.2: Proportion of prepaid subscribers - GSM Service

- 2.2 Market share of prepaid segment slightly declined from 96.07% at the end of Sep-13 to 95.99% at the end of Dec-13.
- 2.3 The ARPU per month (all India, blended) increased from Rs.109 in Q.E. Sep-13 to Rs.112 in Q.E. Dec-13. 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 Service

0:1- 0-4	ARPU per month in Q.E. December 2013						
Circle Category	Post-paid	Pre-paid	Blended				
Circle A	451	103	119				
Circle B	433	93	101				
Circle C	434	97	103				
Metros	484	98	145				
All India	456	98	112				
All private SPs	464	101	116				
BSNL/MTNL	391	73	85				

- 2.4 The ARPU per month for pre-paid segment increased from Rs.95 in QE Sep-13 to Rs.98 in QE Dec-13 and the ARPU per month for post-paid segment decreased from Rs.463 in QE Sep-13 to Rs.456 in QE Dec-13.
- 2.5 The following table presents the composition of ARPU per month in the Q.E. Dec-13.

Table 2.3: Composition of ARPU per month - GSM Service

S. No.	Item	Revenue (excl. service tax) per subscriber per month (in Rs.)	% share of total revenue from subscribers
1	Usage from Home Service Area		
1.1.	Rental Revenue	18.65	15.05
1.2.	Revenue from calls	71.71	57.87
1.3.	Revenue from SMS	4.20	3.39
1.4.	Revenue from data usage	14.96	12.07
1.5.	Revenue from other VAS	5.01	4.05
1.6.	Other revenue	1.89	1.53
2	Usage outside Home Service Area		
2.1.	Revenue from outroamers	7.49	6.05
3	Total revenue from subscribers (1+2)	123.91	100
4	Net inter-operator settlement charges receivable *	-11.97	
5	Net Revenue (ARPU) per month(3+4)	111.94	

^{*} includes Interconnect Usages Charges and roaming settlement charges

- 2.6 From the above table, it may be seen that the net inter-operator settlement charges payable (Rs.11.97) accounts for 9.66% of the total revenue from subscribers.
- 2.7 On an all India average, the overall MOU per subscriber per month increased from 375 in QE Sep-13 to 379 in QE Dec-13. The following table presents the total minutes of usage (MOU) and SMS usage (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 Service

	MOU per subscriber per month								
	Postpaid		Prepaid			Blended			
Circle category	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming	Total MOU	Outgoing MOU	Incoming MOU	Total MOU
Circle A	588	420	1008	168	171	339	187	183	370
Circle B	574	386	960	160	189	348	169	193	362
Circle C	513	397	910	176	227	403	182	230	412
Metro	547	369	916	199	174	373	241	198	439
All India	568	396	964	169	187	355	184	195	379

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

- 2.8 The overall ratio of incoming MOU and outgoing MOUs remained unchanged 51:49 during the quarter ending Dec-13.
- 2.9 Outgoing SMS per subscriber per month decreased from 29 in Q.E. Sep-13 to 28 in Q.E. Dec-13. 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: Outgoing SMS per subscriber per month - GSM Service

Circle	Outgoing SMS per subscriber month					
category	Postpaid	Prepaid	Blended			
Circle A	74	39	40			
Circle B	56	19	20			
Circle C	40	17	18			
Metro	70	30	35			
All India	67	27	28			

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

Chart 2.3 : Minutes of Usage by Outroamers as a % of Total Minutes of Usage

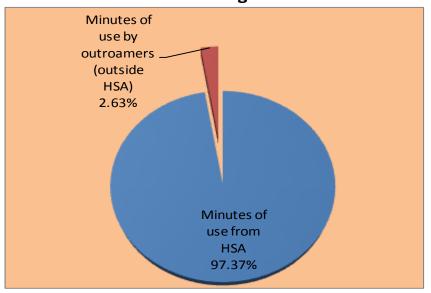
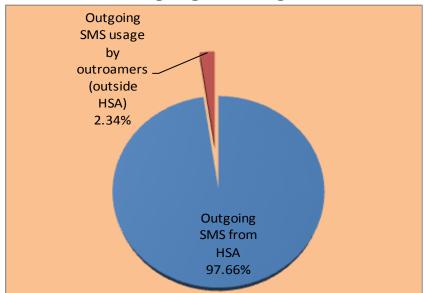


Chart 2.4: Outgoing SMS Usage by Outroamers as a % of Total Outgoing SMS Usage



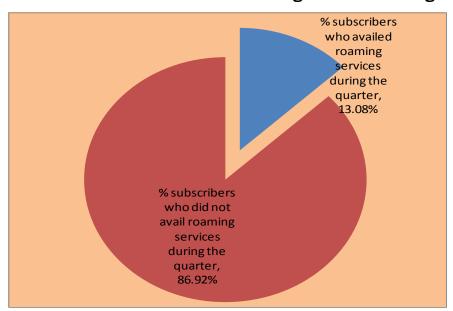
2.10 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks.

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

Circle category	% Intra- circle to wireline	% Intra- circle to own wireless	% Intracircle to other wireless	% Intercircle to wireline	% Intercircle to own wireless	% Intercircle to other wireless	% ILD
Circle A	1.71	39.56	42.43	0.37	4.59	11.19	0.15
Circle B	1.12	43.45	37.44	0.48	7.03	10.34	0.14
Circle C	1.26	52.83	31.01	0.76	4.71	9.38	0.05
Metros	2.21	26.16	33.68	0.71	11.30	25.59	0.34
All India	1.49	41.26	37.88	0.51	6.32	12.38	0.15

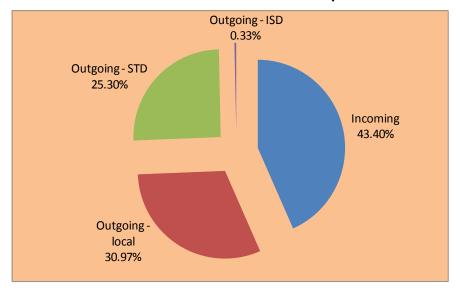
2.11 The chart given below presents the percentage of subscribers who availed roaming services (outroamers) during the quarter.

Chart 2.5: % subscribers who availed roaming services during the quarter



2.12 The usage pattern of outroamers i.e. usage from outside the home service area shows that incoming minutes accounts for 43.4% of the total minutes of usage by outroamers as against 42.6% in the previous quarter. The chart given below presents the break-up of minutes of usage of outroamers during the Q.E. Dec-13.

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



Average Subscriber outgo* per Outgoing Minute for usage from Home Service Area (HSA)

2.13 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

= Rental revenue + revenue from outgoing calls from HSA No. of outgoing minutes from HSA

Table 2.7: Average subscriber outgo per outgoing minute from HSA - GSM Service

(₹ per minute)

Circle Category	Postpaid	Prepaid	Blended
Circle A	0.56	0.52	0.52
Circle B	0.56	0.48	0.49
Circle C	0.65	0.46	0.47
Metros	0.64	0.52	0.55
All India	0.59	0.49	0.51

2.14 All India average subscriber outgo per outgoing minute remained at the same level i.e. $\stackrel{?}{\sim}$ 0.51 in the QE Dec-13.

Table 2.8: Trends of Key Parameters - GSM Service

Parameter	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13		
1. ARPU (₹ Per month)	98	105	111	109	112		
2. MOU per subscriber per month	360	383	388	375	379		
3. Outgoing MOU per subscriber per month							
3.1 Local (Intra-circle)	142	150	154	145	147		
3.2 NLD (inter-circle)	33	35	35	37	37		
3.3 ILD	0.3	0.3	0.3	0.3	0.3		
4. Outgoing SMS per subscriber per month SMS	39	30	27	29	28		
5. Average subscriber Outgo per outgoing minute from HSA (₹)	0.47	0.48	0.50	0.51	0.51		

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

Section B: CDMA - Full Mobility Service

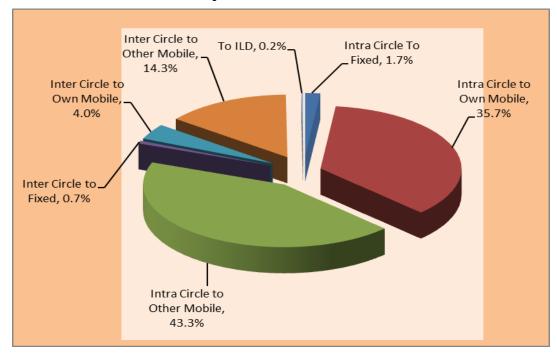
Table 2.9: Key Indicators - CDMA Full Mobility Service

Parameters	QE Dec-13	QE Sep-13	QE Dec-12	QoQ change (%)	YoY change (%)
Subscriber Base in Millions*	50.69	51.48	65.15	-1.54	-22.20
Share of Prepaid (%)	89.9	89.8	90.8	0.06	-1.00
Incoming MOUs per subs per month	130.25	125.41	113.31	3.86	14.95
Outgoing MOUs per subs per month	141.35	136.94	116.75	3.23	21.07
Outgoing SMS per subs per month	17.0	16.9	21.19	0.96	-19.56
ARPU (Rs. per month)	103.60	98.22	79.95	5.48	29.58

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

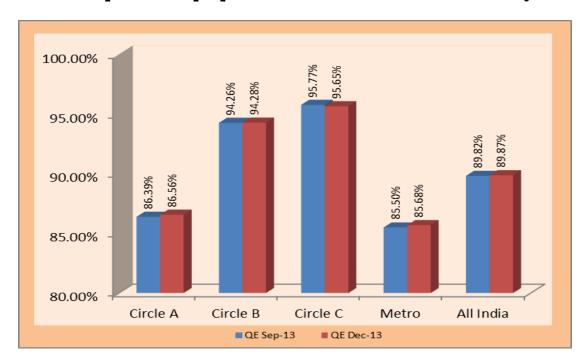
2.16 The following chart depicts % break-up of outgoing minutes from home service area (HSA).

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



2.17 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



- 2.18 Market share of Prepaid segment slightly increased from 89.82% in QE Sep-13 to 89.87% in QE Dec-13.
- 2.19 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 (₹ per month)

Circle category	Postpaid	Prepaid	Blended ARPU
Circle A	474	76	129
Circle B	369	55	72
Circle C	409	59	74
Metro	463	71	128
All India	446	65	104

- 2.20 The All India blended Average Revenue Per User (ARPU) per month has shown an increase of 5.48% from Rs.98.22 in QE Sep-13 to Rs.103.60 in QE Dec-13.
- 2.21 ARPU for Prepaid service increased by 5.66% from Rs.61.49 in QE Sep-13 to Rs.64.97 in QE Dec-13. ARPU for Postpaid service has decreased by 0.63% from Rs.449.04 in QE Sep-13 to Rs.446.20 in QE Dec-13.

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

S. No.	Item	Revenue (excl. service tax) per subscriber per month (in Rs.)	% Share of total revenue from subscribers
1	Usage from Home Service Area		
1.1	Rental Revenue	21.64	19.25
1.2	Revenue from Calls	45.35	40.34
1.3	Revenue from SMS	1.87	1.66
1.4	Revenue from data usage	37.91	33.72
1.5	Revenue from other VAS	3.44	3.06
1.6	Other Revenue	-0.71#	-0.06
2	Usage outside Home Service Ar	ea	
2.1	Revenue from Outroamers	2.93	2.61
3	Total Revenue from Subscribers (1+2)	112.42	100%
4	Net inter-operator settlement charges receivable*	-8.82	
5	Net Revenue (ARPU) (3+4)	103.60	

[#] Other Revenue is negative because of the adjustment of Exceptional Items (Bad Debt) by one of the service provider.

- 2.22 The total MOUs per subscriber per month increased by 3.53%, from 262.35 in QE Sep-13 to 271.60 in QE Dec-13. The outgoing MOUs increased by 3.23% and incoming MOUs increased by 3.86%.
- 2.23 Prepaid MOUs per subscriber per month increased by 4.85% and postpaid MOUs per subscriber per month decreased by 5.59% in this quarter.

^{*} Includes Interconnect Usage Charges and roaming settlement charges

2.24 Outgoing SMS per subscriber per month has more or less remained stable at 17 in QE Sep-13.

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

	MOU per subscriber per month								
Circle		Postpaid	ı	I	Prepai	d	В	lended	
category	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU
Circle A	295	145	440	120	122	241	143	125	268
Circle B	382	184	566	123	132	254	138	135	272
Circle C	457	345	802	99	151	250	114	159	274
Metro	282	133	416	132	118	250	153	121	274
All India	314	156	470	122	127	249	141	130	272

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

Table 2.13 : Outgoing SMS per subscriber per month – CDMA Full Mobility Service

Circle	Outgoing SMS per subscriber month					
category	Postpaid	Prepaid	Blended			
Circle A	14	20	19			
Circle B	13	14	14			
Circle C	13	10	10			
Metro	17	21	21			
All India	15	17	17			

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

Chart 2.9: Minutes of usage by outroamers as a percentage of total usage

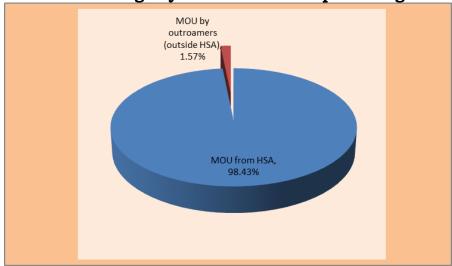


Chart 2.10: Outgoing SMS usage by outroamers as a percentage of total usage

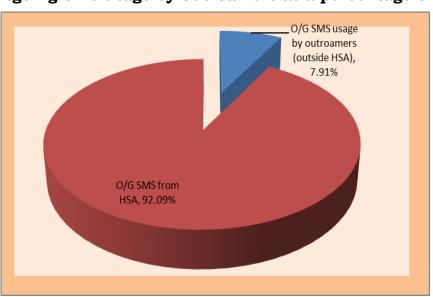


Table 2.14: %Break-up of Outgoing minutes from Home Service Area (HSA)
- CDMA Full Mobility Service

Circle	Intra Circle To Wireline (%)	Intra Circle to Own Wireless(%)	to Other	to Wireline		to Other	ILD (%)
Circle A	2.2	31.3	54.4	0.8	2.8	8.3	0.3
Circle B	1.0	43.0	42.1	0.6	3.7	9.5	0.1
Circle C	1.8	43.4	28.7	1.4	4.9	19.7	0.0
Metro	2.1	29.2	36.6	0.6	5.6	25.8	0.2
All India	1.7	35.7	43.3	0.7	4.0	14.3	0.2

2.25 The chart given below presents the percentage of subscribers who availed roaming services (outroamers) during the quarter.

Chart 2.11: Percentage of subscribers who availed roaming service during the quarter

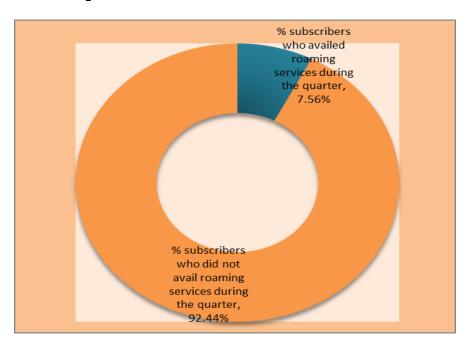


Chart 2.12: Percentage breakup of minutes of usage of Outroamers (usage from outside the Home Service Area)

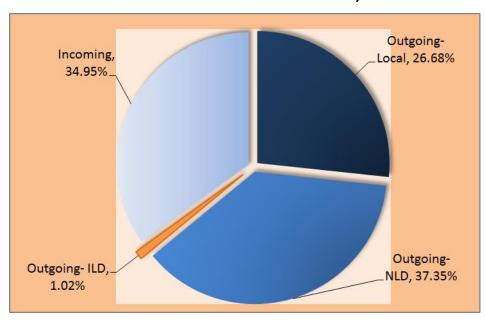


Table 2.15: Average subscriber outgo per outgoing minute from HSA - CDMA Full Mobility Service

[₹ Per min]

Circle Category	Postpaid	Prepaid	Blended
Circle A	0.84	0.40	0.52
Circle B	0.67	0.33	0.38
Circle C	0.77	0.48	0.52
Metros	0.88	0.45	0.56
All India	0.81	0.39	0.48

Average Subscriber Outgo per Outgoing Minute for usage from HSA

= Rental revenue + revenue from outgoing calls from HSA
No. of outgoing minutes from HSA

Table 2.16: Trends of Key Parameters - CDMA Full Mobility Service

Parameter	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13
1. ARPU (₹ Per month)	80	95	98	98	104
2. MOU per subscriber per month	230	275	278	262	272
3. Outgoing MOU per subscriber 1	per mont	h			
3.1 Local (Intra-circle)	96	114	117	108	112
3.2 NLD (inter-circle)	21	26	26	26	26
3.3 ILD	0.17	0.23	0.24	0.24	0.25
4. Outgoing SMS per subscriber per month SMS	21	18	17	17	17
5. Average subscriber Outgo per outgoing minute from HSA (₹)	0.49	0.49	0.42	0.48	0.48

2.26 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 Dec-12 (₹ in Crore)	QE Sep-13 (₹ in Crore)	QE Dec-13 (₹ in Crore)	Q-O-Q % Change Over Sep-13	Y-O-Y % Change over Dec-12
Gross Revenue (GR)	52858	57453	58385	1.62	10.46
Adjusted Gross Revenue (AGR)	34528	38811	39575	1.97	14.62
Pass Through (GR-AGR)	18331	18642	18810	0.90	2.62
License Fee	2814	3105	3168	2.03	12.57
Spectrum Charges	1281	1477	1585	7.27	23.69

- 3.1 Gross Revenue(GR) and Adjusted Gross Revenue(AGR) increased by 1.62% and 1.97% respectively in the QE Dec-13.
- 3.2 Pass through increased by 0.90% in the QE Dec-13, and on annual basis it has increased by 2.62%.
- 3.3 Pass-through charges as % Gross Revenue: 32.22% in QE Dec-13 as against 32.45% 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 Charges
Access Providers	43817	31407	2514	1582
NLD	8383	6372	510	-
ILD	3544	1601	128	-
Others	2642	195	16	3
Total	58385	39575	3168	1585

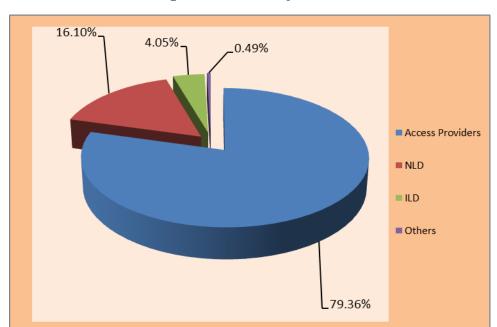


Chart 3.1: Composition of Adjusted Gross Revenue

- 3.4 Access services contributed 79.36% to the total Adjusted Gross Revenue (AGR) of telecom services. In Access services, Gross Revenue, AGR, License Fee, Spectrum Usage Charges and Pass Through Charges increased by 3.00%, 3.47%, 3.54%, 7.30% and 1.84% respectively in QE Dec-13.
- 3.5 Public Sector Undertakings' share in the Access AGR of telecom services is 12.36% in the QE Dec-13.
- 3.6 Monthly ARPU based on AGR for Access services is ₹116 for the Q.E. Dec-13. Chart below shows the trend in ARPU.





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

(₹ in Crore)

Service	QE Sep-13	QE Dec-13	% Change
Bharti	8655.57	9009.60	4.09
Vodafone	6452.15	6609.90	2.45
Idea	4633.65	4857.83	4.84
BSNL	3228.61	3279.38	1.57
Tata	2188.95	2291.72	4.70
Reliance	2068.55	2208.66	6.77
Aircel	1551.97	1635.18	5.36
MTNL	746.38	601.67	-19.39
Telewings	480.27	555.41	15.65
Sistema Shyam	200.63	212.19	5.76
Loop	113.06	97.10	-14.12
Quadrant	33.39	25.96	-22.25
Videocon	*	21.93	-
Grand Total (Access)	30353.17	31406.54	3.47

^{*}Data not received.

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

Category	Access AGR for QE Dec-13	%age share of AGR
	(₹ in Crore)	
Metro	4847	15.4
A	12057	38.4
В	10750	34.2
С	3752	12.0
Total	31407	100.0

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

			No. of CMTS Licensees not Meet the Benchmarks				
S1. No.	Parameters	Benchmark	Quarter Septemb	Ending er, 2013		Ending er, 2013	
			Out Of 183 (Nos.)	Out of 183 (%)	Out Of 183 (Nos.)	Out of 183 (%)	
I.	Network Related Parameters						
1	Network Availability						
(i)	BTSs Accumulated downtime (not available for service)	≤ 2%	1	0.55%	4	2.19%	
(ii)	Worst affected BTSs due to downtime	≤ 2%	7	3.83%	8	4.37%	
2	Connection Establishment (Accessibility)						
(i)	Call Set-up Success Rate (within licensee's own network)	≥ 95%	0	0	1	0.55%	
(ii)	SDCCH/ Paging Chl. Congestion	≤ 1%	0	0	1	0.55%	
(iii)	TCH Congestion	≤ 2%	0	0	1	0.55%	
3	Connection Maintenance (Retain ability)						
(i)	Call Drop Rate	≤ 2%	0	0	2	1.09%	
(ii)	Worst affected cells having more than 3% TCH drop (call drop) rate	≤ 3%	5	2.73%	10	5.46%	
(iii)	Connection with good voice quality	≥ 95%	2	1.09%	4	2.19%	
4	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)	≤ 0.5%	1	0.55%	1	0.55%	

			No. of CMTS Licensees not Meeting the Benchmarks			
S. No.	Parameters	Benchmark	Septeml	Ending, per, 2013	Decemb	Ending, er, 2013
			Out Of 183 (Nos.)	Out Of 183 (%)	Out Of 183 (Nos.)	Out Of 183 (%)
II.	Customer Service Quality Parameters					
5	Metering and Billing					
(i)	Metering and billing credibility - post paid	≤ 0.1%	6	3.28%	4	2.19%
(ii)	Metering and billing credibility - pre paid	≤ 0.1%	4	2.19%	3	1.64%
(iii)	Resolution of billing/charging/validity complaints	100% within 4 weeks	2	1.09%	4	2.19%
(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	3	1.64%	5	2.73%
6	Response time to the customer for assistance	-				
(i)	Accessibility of call centre/ customer care	≥ 95%	4	2.19%	15	8.20%
(ii)	%age of calls answered by the operators (voice to voice) within 60 seconds	≥ 90%	60	32.79%	41	22.40%
7	Termination / closure of service					
(i)	%age requests for Termination / Closure of service complied within 7 days	100% within 7 days	7	3.83%	5	2.73%
(ii)	Time taken for refund of deposits after closures	100% within 60 days	3	1.64%	5	2.73%

- 4.1 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters:
 - a. Metering and billing credibility post paid
 - b. Metering and billing credibility pre paid
 - c. %age of calls answered by the operators (voice to voice) within 60 sec
 - d. %age requests for Termination / Closure of service complied within 7 days.
- 4.2 The performance has deteriorated in this quarter as compared to the previous quarter in respect of the following parameters:
 - a. BTSs Accumulated downtime (not available for service)
 - b. Worst affected BTSs due to downtime
 - c. Call Set-up Success Rate (within licensee's own network)
 - d. SDCCH/Paging Channel Congestion (%age)
 - e. TCH Congestion
 - f. Call Drop Rate
 - g. Worst affected cells having more than 3% TCH drop (call drop) rate
 - h. Connection with good voice quality
 - i. Resolution of billing/ charging/ validity complaints.
 - j. Period of applying credit/waiver/adjustment to customer's account from the date of resolution of complaints
 - k. Accessibility of call centre/ customer care
 - 1. 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		Service	Service	Danfanna
	Benchmark	Provider	Area	Performance
D/DC - A 1 - 4 - 4 - 4 4			ASM	2.70
BTSs Accumulated downtime	. 00/	BSNL	NE	6.03
(not available for service) (%age)	≤ 2%		WB	2.22
		Idea	MP	3.49
			ASM	6.00
			BH	4.26
		Aircel	CHN	4.57
Worst affected BTSs due to	. 00/		NE	6.14
downtime (%age)	≤ 2%		ASM	6.30
, , ,		BSNL	NE	15.85
			WB	8.19
		Idea	MP	8.61
Call Set-up Success Rate	. 050/			
(within licensee's own network)	≥ 95%	BSNL	ASM	92.67
SDCCH/ Paging Chl.	10/	2011	NID	2.22
Congestion (%age)	≤ 1%	BSNL	NE	3.00
TCH Congestion (%age)	≤ 2%	BSNL	NE	4.22
, , ,	≤ 2%		ASM	2.17
Call Drop Rate (%age)		BSNL	NE	4.08
			ASM	3.94
		Aircel	BH	3.10
			HR	8.33
			KR	3.11
Worst affected cells having	. 00/		MP	4.51
more than 3% TCH drop	≤ 3%		NE	5.47
-			ASM	5.57
		DOM	NE	12.77
		BSNL	PB	5.37
			WB	11.01
			ASM	93.77
Connection with good voice	> 050/	Aircel	NE	94.22
quality	≥ 95%		ASM	91.33
		BSNL	NE	92.50
Point of Interconnection (POI)				
Congestion (No. of POIs not	≤ 0.5%	BSNL	HR	2
meeting the benchmark)	= 0.070	- 	· 	_
<u> </u>			AP	0.11
Metering and billing credibility		Idea	KL	0.11
- post paid	≤ 0.1%		DLI	0.15
Feet Para		Vodafone	MP	0.13

			KOL	0.40
Metering and billing credibility	≤ 0.1%	BSNL	WB	0.33
- pre paid		Idea	TN	0.14
	1000/		KOL	65.90
Resolution of	100%	BSNL	WB	99.50
billing/charging/validity	within 4	T7 1 C	AP	99.94
complaints	weeks	Vodafone -	MP	99.90
	within 1		BH	99.97
Period of applying credit/	week of	Airtel	UPE	99.97
waiver/ adjustment to	resolution		UPW	99.98
customer's account from the date of resolution of complaints	of	BSNL	KOL	66.00
	complaint		MH	NR
			ASM	76.02
			BH	94.30
			CHN	91.66
			GUJ	93.61
			HR	93.08
		Aircel	J&K	93.01
Accessibility of call centre/		Ancei	KR	93.92
customer care	≥ 95%		MH	92.13
customer care			MP	93.01
			OR	92.54
			UPE	88.84
			UPW	87.91
		BSNL	ASM	80.00
			BH	48.50
		Idea	J&K	94.90
		-	DLI	74.64
		Aircel	MH	66.56
			MBI	82.91
			HR	65.00
		BSNL	J&K	64.00
			KOL	88.30
	0.007		NE	89.00
Percentage of calls answered by	≥ 90%	BSNL	PB	67.00
the operators (voice to voice)			UPW	68.20
within 60 seconds		MTNL CDMA	MUM	47.52
		RCOM	AP	76.76
		CDMA	BH	80.11
			CHN	73.05
			HR	73.84
			KOL	82.46
			KR	78.06
			KTK	74.22

Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 81.31 kR 73.26 kTK 42.58 mHH 81.58 mBI 89.36 pB 74.89 pB 74.89 mBI 89.36 pB 74.89 mBI 89.36 pB 74.89 mBI 89.02 mTN 32.60 nNE 83.54 oR 82.07 mTN 80.09 mTN 80.09 mTN 80.09 mTN 80.09 mTN 80.09 mTN 78.77 voice mTATA GSM TN 80.99 mTN 78.77 voice mTATA GSM RAJ NR TATA GSM RAJ NR TATA GSM RAJ NR TATA GSM RAJ NR RAJ NR RAJ NR RAJ NR RAJ RATA GSM RAJ NR RAJ NR RAJ NR RAJ RATA GSM RAJ NR RAJ NR RAJ NR RAJ RATA GSM RAJ NR RAJ RAJ RATA GSM RAJ NR RAJ RATA GSM RAJ NR RAJ RATA GSM RAJ NR RAJ RAJ RATA GSM RAJ NR RAJ RATA GSM RAJ NR RAJ RATA GSM RAJ NR RAJ RAJ RATA GSM RAJ NR RAJ RATA GSM RAJ NR RAJ RATA GSM RAJ NR RAJ RAJ RATA GSM RAJ RAJ RATA GSM RAJ RAJ RATA GSM RAJ RAJ RAJ RATA GSM RAJ RAJ RATA GSM RAJ RAJ RATA GSM RAJ RAJ RAJ RATA GSM RAJ RAJ RATA GSM RAJ RAJ RAJ RATA GSM RAJ RAJ RATA GSM RAJ RAJ RATA GSM RAJ RAJ RATA GSM RAJ RAJ RATA GSM RAJ RAJ RATA GSM RAJ RAJ RATA			RCOM	TN	73.05
Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the minute of the percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the RCOM SE.13 While St. 42.58 MH 81.31 NR PASS M 89.02 BH 87.66 PERCOM TN 32.60 ASM 89.02			CDMA	WB	82.46
Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds PB 74.89 RAJ 88.00 TN 32.60 ASM 89.02 BH 87.66 RTL HP 63.60 NE 83.54 OR 82.07 TATA KR 83.75 CDMA TN 80.09 TATA GSM TN 78.77 Vodafone MH 86.91 HR 88.58 TN 78.77 Vodafone MH 86.91 Airtel AP 99.94 BSNL WB 97.21 Idea AP 98.42 TATA GSM RAJ NR Vodafone MH 99.16 Aircel TN 99.73 Idea AP 96.26 Idea OR 70.37 TATA GSM RAJ NR TATA GSM RAJ NR TIme taken for refund of deposits after closures				AP	62.32
Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) MHB 181.58 MH 81.58 MH 81.58 MH 81.58 MH 89.36 PB 74.89 RAJ 88.00 TN 32.60 ASM 89.02 BH PF 63.60 NE 83.54 OR 82.07 TATA KR 83.75 CDMA TN 80.09 TATA GSM TN 78.77 Vodafone MH 86.91 Airtel AP 99.94 BSNL WB 97.21 Idea AP 99.42 TATA GSM RAJ NR Vodafone MH 99.16 Aircel TN 99.73 Idea AP 96.26 Idea AP NR				DLI	64.62
Percentage of calls answered by the operators (voice to voice) within 60 seconds ≥ 90% Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) Percentage Perce				GUJ	69.69
Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) within 60 seconds Percentage of calls answered by the operators (voice to voice) MHB				HR	81.31
Percentage of calls answered by the operators (voice to voice) within 60 seconds ≥ 90%			DOOM.	KR	73.26
Percentage of calls answered by the operators (voice to voice) within 60 seconds ≥ 90% MH 81.58 MBI 89.36 PB 74.89 RAJ 88.00 TN 32.60 ASM 89.02 BH 87.66 NE 83.54 OR 82.07 TATA KR 83.75 CDMA TN 80.09 TATA GSM TN 78.77 Vodafone MH 86.91 Airtel AP 99.94 BSNL WB 97.21 Idea AP 99.42 TATA GSM RAJ NR TATA GSM RAJ NR Tata AP 99.73 Tata AR AR AR Tata AR AR Tata AR AR Tata Tata				KTK	42.58
## 100% Within 60 seconds		000/	GSM	MH	81.58
within 60 seconds PASS NAM NAME NOT NAME NAME NAME NAME NAME NAME NAME NAME		≥ 90%		MBI	89.36
NASION NASION NASION NASION NASION NASION NASION NE NE NE NE NE NE NE	· · · · · · · · · · · · · · · · · · ·			PB	74.89
Name	within 60 seconds			RAJ	88.00
RTL				TN	32.60
NE 83.54				ASM	89.02
NE 83.54				BH	87.66
Name			RTL	HP	63.60
TATA KR 83.75				NE	83.54
CDMA TN 80.09				OR	82.07
TATA GSM GUJ HR 85.19 HR 88.58 TN 78.77 Vodafone MH 86.91 Airtel AP 99.94 BSNL WB 97.21 BSNL WB 97.21 Idea AP 98.42 TATA GSM RAJ NR Vodafone MH 99.16 Aircel TN 99.73 Idea AP 96.26 Idea AP 96.26			TATA	KR	83.75
Mage requests for Termination 100% within 7 days 100% Within 7 days 100% TATA RAJ NR 100% Within 60 days 100% Within 60 days 100% TATA RAJ NR 100% RAJ			CDMA	TN	80.09
CSM				GUJ	85.19
Wage requests for Termination / Closure of service 100% within 7 days Airtel AP Pos. 4 99.94 Wage requests for Termination / Closure of service Within 7 days Idea AP Pos. 4 Pos. 4 TATA GSM Vodafone MH Pos. 16 deposits after closures Aircel TN Pos. 7 Pos. 7 100% within 60 days Idea AP Pos. 26 Pos. 26 TATA GSM RAJ NR NR				HR	88.58
**Mage requests for Termination / Closure of service 100% within 7 days Airtel AP 99.94 **Volume of Service 100% within 7 days RAJ NR **Volume of Service Volume of Service NR **Volume of Service NR Volume of Service **Volume of Service NR Volume of Service **Volume of Service NR Aircel TN 99.73 **Idea AP 96.26 **Idea OR 70.37 **TATA GSM RAJ NR				TN	78.77
%age requests for Termination / Closure of service 100% within 7 days Idea AP SAJ NR 98.42 TATA GSM RAJ NR Vodafone MH 99.16 Vodafone Aircel TN 99.73 Idea AP 96.26 Idea AP 96.26 Idea AP 96.26 Idea AP 96.26 Idea AP NR Idea AP NR Idea AP NR			Vodafone	MH	86.91
**Mage requests for Termination / Closure of service Idea (AP) 98.42 TATA (GSM) RAJ (NR) Vodafone (MH) 99.16 Aircel (TN) 99.73 Idea (AP) 96.26 Idea (AP) 96.26 Idea (AP) 96.26 Idea (AP) 97.33 Idea (AP) 96.26 Idea (IN) 10000 Idea (IN) 10000 Idea (IN) 10000 Idea (IN) </th <th></th> <th></th> <th>Airtel</th> <th>AP</th> <th>99.94</th>			Airtel	AP	99.94
Within 7 days Idea (AP) AP (SSM) 98.42 TATA GSM RAJ NR Vodafone MH 99.16 Aircel TN 99.73 Idea (AP) AP 98.42 NR Vodafone MH 99.16 Aircel TN 99.73 Idea (AP) AP 96.26 Idea (AP) OR 70.37 TATA (GSM) RAJ (RAJ) NR		100%	BSNL	WB	97.21
days			Idea	AP	98.42
Vodafone MH 99.16 Aircel TN 99.73 Idea AP 96.26 Idea OR 70.37 TATA GSM RAJ NR	/ Closure of service			RAJ	NR
100% 100%				MH	99.16
Time taken for refund of deposits after closures 100% within 60 days			1		
Time taken for refund of deposits after closures Tole		1000/			
deposits after closures days RAJ NR	Time taken for refund of			OR	
	deposits after closures		TATA	RAJ	NR
			Vodafone	GUJ	43.00

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 (excluding BSNL) who have not met the benchmarks in this quarter is given in below table.

Table 4.3: QoS Summary - 3G Wireless Service

						Licensees Benchma	
S. No	1	Parameters	Bench mark	Quarter Sep, 2	•	Quarter Ending, Dec, 2013	
•				Out Of 72 (Nos.)	Out of 72 (in %)	Out Of 93 (Nos.)	Out of 93 (in %)
1	Network Availability	Node-B's Accumulated downtime (not available for service) (%age)	≤ 2%	0	0	1	1.08%
		Worst affected Node-B's due to downtime (%age)	≤ 2%	3	4.17%	4	4.30%
	Connection Establishment	Call Set-up Success Rate (within licensee's own network)	≥ 95%	0	0	1	1.08%
2		SDCCH/Paging Channel and RRC Congestion (%age)	≤ 1%	0	0	3	3.23%
		TCH and Circuit Switched RAB Congestion (%age)	≤ 2%	0	0	1	1.08%
		Call Drop and Circuit Switched Voice Drop Rate: (%age)	≤ 2%	0	0	0	0
3	Connection Maintenance (Retainability)	Worst affected cells having more than 3% TCH drop (call drop) and Circuit Switched Voice Drop Rate:-CBBH	≤ 3%	9	12.50%	11	11.83
		Connections with good voice quality and Circuit Switch Voice Quality (CSV quality)	≥ 95%	0	0	3	3.23%
4	Point of Interconnecti on	Point of Interconnection (POI) Congestion	≤ 0.5%	1	1.39%	1	1.08%

- 4.5 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters:
 - a. Worst affected cells having more than 3% TCH drop (call drop) and Circuit Switched Voice Drop Rate:-CBBH
 - b. 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. Node-B's Accumulated downtime (not available for service) (%age)
 - b. Worst affected Node-B's due to downtime (%age)
 - c. Call Set-up Success Rate (within licensee's own network)
 - d. SDCCH/ Paging Channel and RRC Congestion (%age)
 - e. TCH and Circuit Switched RAB Congestion (%age)
 - f. Connection with good voice quality and Circuit Switch Voice Quality (CSV Quality)

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

Parameter	Benchmark	Service Provider	Service Area	Performance
Node-B's Accumulated downtime (not available for service) (%age)	≤ 2 %	BSNL	NE	3.85
		Aircel	ВН	4.45
Worst affected Node-B's due to	≤ 2%	AllCel	CHN	8.51
downtime (%age)		BSNL	NE	3.00
		DOINL	WB	11.47
Call Set-up Success Rate (within licensee's own network)	≥ 95%	BSNL	MP	64.91
		Aircel	ВН	1.17
SDCCH/Paging Channel and RRC Congestion (%age)	≤ 1%	BSNL	NE	2.03
into congestion (/ouge)		DONL	UPW	NR

TCH and Circuit Switched RAB Congestion (%age)	≤ 2 %	BSNL	UPW	NR
			ASM	9.01
			ВН	12.04
			CHN	7.95
		Aircel	NE	19.78
Worst affected cells having		All Cel	OR	11.79
more than 3% TCH drop (call drop) and Circuit Switched	≤ 3 %		PB	20.83
Voice Drop Rate:-CBBH			TN	6.25
			WB	5.69
			MP	3.28
		BSNL	NE	3.60
			WB	3.96
Connections with good voice			AS	92.87
quality and Circuit Switch Voice Quality (CSV quality)	≥ 95%	BSNL	UPE	31.67
			WB	81.33
Point of Interconnection (POI) Congestion	≤ 0.5%	BSNL	HR	1

4.7 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

			me	No. of license operators not meeting the benchmarks				
S. No.	Parameters	Benchmark	_	ember, 013	December, 2013			
NO.			Out of 111 In Nos.	Out of 111 In %age	Out of 111 In Nos.	Out of 111 In %age		
(i)	Fault incidences per 100 subs/month	≤ 5	11	9.91%	1	0.90%		
(ii) a	% Fault repaired by next working day	≥ 90%	13	11.71%	2	1.80%		
(ii) b	% Fault repaired within 3 days (for urban areas)	100%	20	18.02%	9	8.11%		
(ii) c	% Fault repaired within 5 days (for rural & hilly areas)	100%	14	12.61%	2	1.80%		
(iii)	MTTR	<8Hrs	12	10.81%	0	0.00%		
(iv) a	Call Completion Rate (in local network)	≥ 55%	0	0.00%	0	0.00%		
(iv) b	Answer to Seizure Ratio (ASR)	≥ 75 %	0	0.00%	0	0.00%		
(v)	Point of Interconnection (POI) Congestion (No. of PoIs not meeting benchmark)	≤ 0.5 %	0	0.00%	0	0.00%		
(vi)	Metering & billing credibility □ Post-paid	≤ 0.1 %	1	0.90%	2	1.80%		
(vii)	Metering & billing credibility □ Pre-paid	≤ 0.1%	0	0.00%	0	0.00%		
(viii)	Resolution of billing/charging/Credit & validity complaints	100% within 4 weeks	1	0.90%	0	0.00%		
(ix)	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	0.00%	0	0.00%		
(x)	Response time to the customer for assistance	-	_	-	-	-		
(x) a	Accessibility of call centre/customer care	≥ 95 %	1	0.90%	1	0.90%		

			No of lie	-	rators not	meeting
S. No.	Parameters	Benchmark	_	September, 2013		er, 2013
NO.			Out of 111 In Nos.	Out of 111 In %age	Out of 111 In Nos.	Out of 111 In %age
(x) b	%age of calls answered by the operators (voice to voice) within 60 seconds	≥ 90%	18	16.22%	18	16.22%
(xi)	Termination / closure of service	100% within 7 days	5	4.50%	1	0.90%
(xii)	Time taken for refund of deposits after closures	100% within 60 days	0	0.00%	0	0.00%

NOTE: (1) As per "The Standards of Quality of Service of Basic Telephone Service (Wireline) and Cellular Mobile Telephone Service Regulations, 2009 ", the service providers who cannot measure and report Call Completion Rate (CCR) due to constraint in network architecture may opt to measure and report their performance on Answer to Seizure Ratio (ASR). M/s RCOM have reported the ASR for 20 licensed service areas. Therefore, 90 Licensees for CCR and 21 Licensees for ASR have been taken into account for the analysis of these parameters.

- (2) Most of the SPs have not reported for the parameter "Metering and billing credibility pre paid" because most of the service providers are not providing prepaid service in Basic (Wireline) service.
- 4.8 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters:
 - a. Faults incidences (No. of faults/100 Subs./month)
 - b. % Fault repaired by next working day
 - c. % of fault repaired within 3 days
 - d. % of faults repaired within 5 days (for rural & hilly areas)
 - e. Mean Time to Repair (MTTR)
 - f. Resolution of billing/ charging/ validity complaints
 - g. %age requests for Termination / Closure of service complied within 7 days

- 4.9 The performance has deteriorated in this quarter as compared to the previous quarter in respect of the following parameters:
 - a. Metering and billing credibility post paid (≤ 0.1%)

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

Parameters and Benchmark	Service Providers	Service Area	Parameters not met
Faults incidences (No. of faults/100 Subs./month) Benchmark(≤5)	MTNL	DEL	7.17
% of faults repaired by next working	MTNL	DEL	86.89%
day Benchmark(≥ 90%)	Vodafone	OR	89.47%
		AS	99.86%
% of faults repaired within 3 days	BSNL	Chhattisgarh	99.69%
	BONL	HP	99.85%
		Uttaranchal	99.94%
Benchmark (For urban areas:	Tata	MH	99.94%
100%)	Teleservices	MUM	99.98%
	Quadrant	PB	99.90%
	<i>1.47</i> 5/NTT	DL	96.06%
	MTNL	MUM	98.39%
% of faults repaired within 5 days	DOM	HP	99.87%
Benchmark (For rural and hilly areas: 100%)	BSNL	Uttaranchal	99.99%
Metering and Billing credibility - post	BSNL	OR	0.11%
paid (≤ 0.1%)	Quadrant	PB	0.11%
Accessibility of call centre/ customer care Benchmark(≥ 95%)	BSNL	Chhattisgarh	94.69%

		,	
		AP	81.33%
		ВН	50.67%
		Chhattisgarh	45.00%
		CN	84.00%
		GUJ	63.67%
		HP	85.33%
		HR	51.07%
		J&K	68.33%
Percentage of calls answered by the	DOM	KOL	85.67%
operators (voice to voice) within 60 seconds (Benchmark≥ 90%)	BSNL	KTK	64.67%
		MH	53.00%
		PB	62.33%
		RAJ	20.00%
		TN	79.33%
		UPE	36.67%
		UPW	38.67%
		Uttaranchal	66.67%
		WB	81.00%
%age requests for Termination / Closure of service complied within 7 days Benchmark (100%)	MTNL	MUM	96.69%

4.10 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 Service

4.11 Out of 141 Broadband Service providers, 30 Service Providers are having subscriber base >10,000 and these 30 Service providers share the 98.84% of total subscriber base. This report covers performance of 30 broadband Service Providers vis-à-vis the QoS benchmarks prescribed by TRAI, for the QE December, 2013.

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

			No. of Lice	nsees not M	eeting the I	Benchmarks	
S.	Parameters	Benchmark	Quarter Septemb	Ending, er, 2013	Quarter Ending, December, 2013		
No.			Out of 108 (in Nos.)	Out of 108 (in %)	Out of 87 (in Nos.)	Out of 87 (in %)	
1	Service Provisioning/ Activation Time	100% in =< 15 working days					
1.2	%age of connections provided within 15 days of registration of demand	100%	20	18.51%	9	10.34%	
2	Faults Repair/ Restoration Time						
2.2	% of faults repaired by next working day	>90%	23	21.29%	2	2.29%	
2.3	% of faults repaired within 3 working day	=>99%	27	25.00%	7	8.04%	
2.4	No. of customers to whom rent rebate is given in minimum monthly charges or equivalent usage allowance for delay in fault repair						
3	Billing Performance						
3.3	%age of bills disputed	<2%	0	0	0	0	
3.4	%age of complaints resolved within 4 weeks	100% within 4 weeks	2 1.85 %		0	0	
3.5	%age of cases to whom refund of deposits is made within 60 days of closures	100% within 60 days	10 9.25 %		1	1.14%	

			No. of Licensees not Meeting the Benchmarks						
S. No.	Parameters	Benchmark	Septemb	Ending, er, 2013	Decemb	Ending, er, 2013			
			Out of 108 (in Nos.)	Out of 108 (in %)	Out of 87 (in Nos.)	Out of 87 (in %)			
4	Response Time to the Customer for assistance		,						
4.2	%age of calls answered by operator (Voice to voice) within 60 sec	>60%	16	14.81%	2	2.29%			
4.3	%age of calls answered by operator (Voice to voice) within 90 sec	>80%	21	19.44%	4	4.59%			
5	Bandwidth utilisation/ throughput								
5.2	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)		1	0.92%	0	0			
5.4	No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)		3	2.77%	3	3.44%			
5.7	% International bandwidth utilization during peak hours (TCBH) (Enclose MRTG)		1	0.92%	0	0			
5.8	Broadband Connection Speed available (download) from ISP node to user	>80%	1	0.92%	0	0			
6	Service Availability/ Uptime (for all users) in %age	>98%							
6.3	Service availability/uptime (for all users) in %age	>98%	2	1.85%	2	2.29%			
7	Packet loss (for wired broadband access) in %	<1%	1	0.92%	1	1.14%			
8	Network latency (for wired								
8.1	User reference point at								
	POP/ISP Gateway node to IGSP/NIXI	<120 ms	0	0	0	0			
8.2	User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	<350 ms	0	0	0	0			
8.3	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)	<800 ms	0	0	0	0			

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

S1.	Parameters	Benchmarks	Name of Service Provider not Meeting
No.			the Benchmark
1	Activation Time • %age of connections provided within 15 days of registration of demand	100% in =< 15 working days	MTNL - Delhi(92.46%), Mumbai(90.11%) You Broadband - All India (95.00%), MH(97.00%), Guj(93.00%), TN(97.00%), HR(99.00%), AP(99.09%) Home Systems - Mumbai(99.00%)
2	Faults Repair /Restoration	Time	
	% of faults repaired by next working day	>90%	MTNL - Delhi (81.83%) Atria Convergence- All India(79.00%)
	% of faults repaired within 3 working day	= >99%	MTNL - Delhi(95.17%), Mumbai(96.11%) D-Vois Broadband- All India(98.00%) Tata Communications - MH&Goa(98.00%) You Broadband - KTK(98.00%), AP(98.00%) Atria Convergence- All India (96.00%)
3	Billing Performance		
	%age of cases to whom refund of deposits is made within 60 days of closures	100% within 60 days	You Broadband - HR (99.00%)
4	Response Time to the Cus	tomer for assist	ance
	%age of calls answered by operator (Voice to voice) within 60 sec	Benchmark >60%	BSNL- All India(52.10%) You Broadband - MH(58.00%)
	%age of calls answered by operator (Voice to voice) within 90 sec	Benchmark >80%	BSNL- All India (57.04%) MTNL - Mumbai(73.34%) You Broadband - MH(64.0%), Guj(76.0%)
5	Bandwidth utilisation/thre	oughput	
	No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	Benchmark 0	BSNL- All India (3 links) MTNL- Delhi (1 link) Siti Cable Network Limited – All India (3 links)
	Service availability/uptime (for all users) in %age	Benchmark >98%	Gujarat Telelink – All India (97.97%) Indusland Medial & Communications Ltd – All India (96.00%)
6.	Packet Loss		
	Packet loss (for wired broadband access) in %age	Benchmark <1%	BSNL- All India (1.50%)

4.12 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

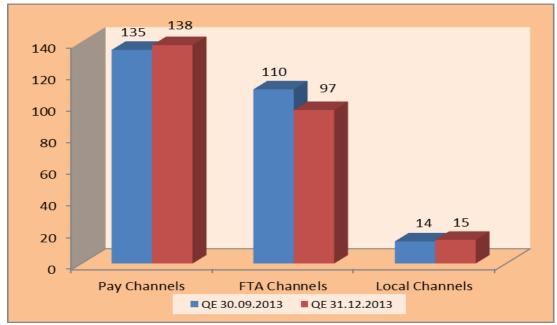
Table 5.1: Key Parameters - Broadcasting & Cable Services

S.No	Parameter	QE Sep-13	QE Dec-13
1	Number of private satellite TV channels registered with Ministry of I&B	784	782
2	Maximum number of Pay TV Channels carried by certain cable operator in non-CAS areas	135	138
3	Maximum number of Free-to-Air (FTA) TV Channels carried by certain cable operator in non-CAS areas	110	97
4	Private FM Radio stations in operation	242	242
5	Private DTH Operators	6	6
6	Licensees of community radio stations	196	196
7	Operational community radio station	156	162

Cable TV Services

- 5.1 Chart 5.1 depicts the maximum number of Free-to-Air (FTA) channels, Pay channels and local channels being carried by the Multi System Operators (MSOs) in their network across the country. This is based on the reports received from some of the major service providers regarding the number of channels being carried by them in their networks analogue and/or in digital form. These channels have been reported across different networks of the service providers having different combinations of pay, FTA and Local channels in their network.
- 5.2 The maximum number of Free-to-Air (FTA) and Pay Channels reportedly being carried in the cable networks in non-CAS areas are 97 and 138 respectively in the QE Dec-13. However, these numbers relate to different networks and hence cannot be added for arriving at the total number of channels being carried in network.





- 5.3 Maximum number of TV channels (Pay, FTA and Local) being carried by any of the reported MSOs is 231 whereas in conventional analogue form, the maximum number of channels being carried any by the reported MSOs is 100 channels.
- 5.4 The digitization of cable TV sector is in progress in a phase manner in the country. The first phase for migration to Digital Addressable Cable TV System was 31.10.2012 and second phase was 31.03.2013. The final schedule notified by the Government for migration to Digital Addressable Cable TV System is given in Table-5.2.

Table 5.2: Migration to Digital Addressable Cable TV Systems

Phase	Areas	Sunset date for Analog Cable TV
Phase □I	Four Metros of Delhi, Mumbai, Kolkata, Chennai	31.10.2012
Phase □II	Cities with a population more than one million (38 cities)	31.03.2013
Phase □III	All Urban areas (Municipal Corporation/ Municipalities)	30.09.2014
Phase □IV	Rest of India	31.12.2014

Satellite TV Channels

- 5.5 The total number of private satellite TV channels permitted by the Ministry of Information & Broadcasting, as obtained from its website, is 782 at the QE Dec-13.
- 5.6 There are a total of 187 pay channels as reported by broadcasters / distributors for which rates have been taken on records. The list of broadcasters/ distributors of pay TV channels along with the reported rates of pay channels for Non-CAS areas is at Annexure-5.1.

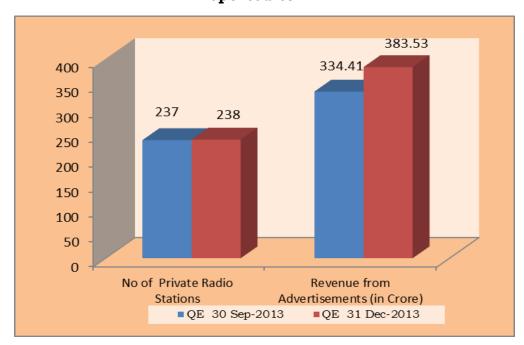
DTH Services

5.7 Besides the free DTH service of Doordarshan- a public broadcaster, there are 6 private DTH licensees, offering their services to the DTH subscribers. As on 31.12.2013, their reported registered and active subscriber base is 62.97 million 35.81 million respectively. The list of DTH licensees is at Annexure-5.3.

FM Radio Services

- 5.8 Apart from All India Radio of Prasar Bharti a public broadcaster, there are 242 FM Radio stations in operation at the end of Dec-13. The list of 242 private FM Radio stations is at Annexure-5.2.
- 5.9 The total Advertisement Revenue during the quarter ending Sep-13 in respect of 237 private FM Radio stations was ₹334.41 crore and for quarter ending Dec-13 in respect of 238 private FM Radio stations, the total Advertisement Revenue was ₹383.53 crore. The reports prepared on the basis of reports submitted by the FM Radio service providers to TRAI. However, the details do not pertain to the same set of service providers.

Chart 5.2 : Comparative position of Revenue from FM Radio Stations as reported to TRAI



Community Radio

5.10 At the quarter ending Sep-13, out of 196 licensees of community radio stations, 156 stations were in operation. During the QE Dec-13, no license was issued and 6 new stations were operationalized. At the end of Dec-13, out of 196 licensees, 162 Community Radio Stations are in operation, as per the information received from Ministry of Information & Broadcasting.

Table 5.3: Status of applications for community radio station licenses received from Ministry of Information and Broadcasting

	As on 31.12.2013
Total No. of Applications Received	1292
No. of Licenses issued	196
No. of Letters of Intent Issued	461
No. of Applications rejected	580
No. of stations operational	162

Source: Ministry of Information & Broadcasting

Teleport Service

5.11 As per the information available on the website of the Ministry of Information and Broadcasting, there are 90 numbers of permitted Teleports as on 20.03.2013. A list of the permitted Teleports is at Annexure-5.4.

Annexures

Annexure 1.1: Licensed Cellular (GSM & CDMA) Service Providers

S1. No	Service Provider	Area for which licensed with No.	UASL/UL(AS)	CMTS
1	Bharti	All India (22)	All India except NE	North East
2	Aircel Group	All India (23)	All India except Chennai & TN	Chennai & Tamil Nadu
3	Reliance Communications Ltd	All India (except Assam & NE) (20)	A11	
4	Reliance Telecom Ltd	Kolkata, MP, WB, HP, Bihar, OR, Assam & NE (8)	A11	
5	Vodafone	All India (23)	A11	
6	Tata Teleservices	All India except Assam, NE & J&K (19)	All	
7	IDEA	All India except KTK & Punjab (20)	Mumbai, TN incl. Chennai, Kol, WB, Bihar, OR, Assam, NE & J&K	Delhi, MH, Guj., AP, Kerala, Haryana, UP- W, UP-E, Raj., MP, HP
8	Shyam Telelink	Delhi, Kol, Guj, KTK, TN incl. Chennai, Kerala, UP-W, Raj, WB (9)	All	
9	BSNL	All India (except Delhi & Mumbai) 20		All
10	MTNL	Delhi, Mumbai (2)		All
11	Loop Telecom Private Ltd	Mumbai (1)		Mumbai
12	Telewings Communication Services Pvt Ltd	MH, Guj, AP, UP-W, UP-E, Bihar (6)	All	
13	Videocon Telecommunications. Ltd.	Guj, Har, UP-W, UP-E, MP, Bihar (6)	All	
14	Spice Communications	KTK, Punjab (2)	All	
15	Quadrant	Punjab (1)	Punjab	

Source: DoT and Service providers UASLs/UL(AS) CMTSs 145 37

Total 182

Annexure 1.2: Wireless Subscriber Base

Service Area	Vodafon	e (GSM)	Bharti	(GSM)	Idea ((GSM)	Aircel/Dish	net (GSM)	Relianc	e (GSM)	Reliance	(CDMA)
	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13
Andhra Pradesh	5,863,892	6,077,497	18,902,208	19,436,219	11,981,302	11,871,133	1,858,428	1,915,091	3,302,018	3,368,207	2,536,067	2,538,547
Assam	2,556,126	2,675,731	4,196,065	4,328,881	476,682	522,948	3,588,972	3,688,411	2,596,140	2,587,203		
Bihar	6,747,640	6,981,540	20,518,049	21,199,942	6,164,066	6,176,803	4,677,210	4,956,916	6,123,656	6,379,154	2,694,819	2,742,005
Delhi	8,845,576	9,027,906	9,725,980	9,905,645	5,251,411	5,286,966	3,133,898	3,616,425	4,557,804	4,730,797	3,228,548	3,201,908
Gujarat	16,518,850	17,013,839	7,117,258	7,214,153	8,690,983	8,921,842	35,773	30,773	5,128,669	5,143,415	1,568,723	1,568,019
Haryana	4,681,275	4,785,526	2,337,348	2,350,583	3,882,250	3,973,386	11,092	11,092	1,614,441	1,662,566	517,621	499,680
Himachal Pradesh	534,203	525,407	2,090,603	2,136,526	513,452	504,451	742,881	791,195	1,267,067	1,306,505	198,739	200,228
Jammu & Kashmir	687,681	722,504	2,532,977	2,568,145	267,487	286,557	2,014,339	2,083,022	672,572	691,528	54	54
Karnataka	6,920,902	7,105,202	16,564,821	16,906,063	6,586,224	6,554,392	2,201,043	2,339,135	4,441,790	4,494,243	1,838,724	1,839,144
Kerala	6,489,482	6,615,300	3,599,838	3,668,530	8,466,741	8,610,522	4,883	1,183	1,130,014	1,015,151	1,201,330	1,159,647
Madhya Pradesh	4,256,579	4,526,810	10,209,163	10,421,680	16,295,647	16,569,091	22,694	22,694	9,908,435	9,876,445	2,569,387	2,592,615
Maharashtra	14,076,683	14,730,310	10,226,355	10,363,527	17,421,267	18,052,738	1,312,246	1,368,100	5,157,213	5,325,678	2,032,701	2,060,384
Mumbai	6,831,544	7,022,548	4,107,494	4,265,414	3,237,854	3,308,930	1,704,239	1,966,337	2,805,549	2,956,907	3,120,434	3,102,968
North East	1,045,692	1,112,729	2,852,276	2,987,775	328,482	326,038	2,352,414	2,345,455	992,057	1,023,042		
Orissa	3,168,882	3,257,688	7,289,389	7,441,424	1,063,004	1,045,241	2,908,410	3,386,838	3,754,694	3,842,728	379,860	385,234
Punjab	4,503,245	4,586,222	7,107,014	7,276,076	5,845,234	5,779,877	1,002,025	833,256	2,689,306	2,566,045	381,418	387,985
Rajasthan	9,270,335	9,492,378	14,836,741	15,367,403	5,660,460	5,596,326	3,566,660	4,097,283	4,806,161	4,856,013	1,091,245	1,061,915
Tamil Nadu (incl. Chennai)	12,665,721	12,848,672	13,929,539	14,166,935	2,486,098	2,584,110	21,968,800	22,304,026	4,106,932	4,002,037	2,157,626	2,118,118
UP(E)	14,400,071	14,918,878	15,433,113	15,961,838	7,594,778	7,627,574	4,767,195	5,030,073	5,537,833	5,672,983	2,998,214	2,974,721
UP(W)	9,261,589	9,523,020	6,484,305	6,701,790	11,014,960	11,171,838	109,150	109,150	4,274,851	4,309,748	1,653,053	1,664,984
Kolkata	4,365,823	4,509,247	3,751,235	3,807,919	1,316,958	1,235,606	2,179,944	2,652,293	2,761,261	2,614,826	1,201,709	1,206,155
West Bengal	11,851,390	12,349,011	9,575,630	9,930,069	2,682,852	2,678,674	3,082,883	3,363,082	6,218,327	6,451,392	1,044,939	1,061,628
Total	155,543,181	160,407,965	193,387,401	198,406,537	127,228,192	128,685,043	63,245,179	66,911,830	83,846,790	84,876,613	32,415,211	32,365,939

Annexure 1.2 (contd.)

Service Area	Tata (GSM)		Tata (C	Tata (CDMA)		BSNL (GSM)		CDMA)	MTNL	(GSM)	MTNL (CDMA)	
	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13
Andhra Pradesh	4,723,236	4,802,176	1,699,113	1,681,313	9,349,505	9,604,480	87,158	76,421				
Assam					1,153,377	1,143,663	95,649	95,371				
Bihar	2,033,802	1,919,561	1,238,615	1,033,023	3,510,198	2,939,328	214,798	204,800				
Delhi			2,869,124	2,898,651					2,519,080	2,520,737	37,612	36,467
Gujarat	2,092,574	2,266,660	535,624	515,423	4,218,468	4,297,197	109,037	104,912				
Haryana	1,824,233	1,877,141	817,589	801,970	3,065,505	3,193,250	18,550	17,235				
Himachal Pradesh	69,671	63,761	79,785	70,910	1,481,202	1,477,516	53,943	52,797				
Jammu & Kashmir					1,166,603	1,178,974	65,798	63,072				
Karnataka	5,157,911	5,294,829	689,734	644,396	6,955,768	7,072,026	145,763	140,436				
Kerala	1,398,752	1,426,913	255,706	250,114	7,756,318	7,857,756	260,649	271,097				
Madhya Pradesh	3,218,368	3,326,886	711,197	661,718	4,953,138	5,176,348	196,441	190,971				
Maharashtra	3,446,184	3,565,541	2,627,930	2,607,010	6,477,014	6,474,446	135,438	129,233				
Mumbai	2,138,244	2,197,159	1,282,546	1,274,075					1,091,980	942,465	92,434	91,853
North East					1,657,849	1,641,699	151,150	152,276				
Orissa	1,774,216	1,777,597	268,993	222,674	4,467,195	3,243,644	61,835	58,832				
Punjab	1,554,875	1,572,920	894,229	880,504	4,460,100	4,490,945	35,907	33,990				
Rajasthan	978,466	839,646	1,445,410	1,384,505	5,720,320	5,808,585	171,097	161,098				
Tamil Nadu (incl. Chennai)	4,910,490	5,038,164	393,235	373,646	9,502,797	9,606,131	102,651	98,175				
UP(E)	3,570,283	3,544,089	701,993	682,508	9,910,844	10,052,307	294,068	271,481				
UP(W)	2,700,299	2,754,713	1,048,448	914,218	4,514,419	4,481,829	90,971	88,949				
Kolkata	2,227,895	2,267,470	646,206	573,001	2,259,186	2,242,865	22,543	21,361				
West Bengal	1,314,911	1,104,517	207,051	158,095	2,893,021	2,005,493	71,908	71,229				
Total	45,134,410	45,639,743	18,412,528	17,627,754	95,472,827	93,988,482	2,385,354	2,303,736	3,611,060	3,463,202	130,046	128,320

Annexure 1.2 (contd.)

Service Area	Sistema	(CDMA)	Quadrant (GS	, ,	Quadrant (CDI	, ,	Loop	(GSM)	Telewing	gs (GSM)	Videoc	on (GSM)	Tot	al
	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13
Andhra Pradesh									4,414,731	4,278,351			64,717,658	65,649,435
Assam													14,663,011	15,042,208
Bihar									4,398,886	4,633,099			58,321,739	59,166,171
Delhi	882,224	938,558											41,051,257	42,164,060
Gujarat	175,572	179,551							4,960,851	4,846,861	988,327	1,244,101	52,140,709	53,346,746
Haryana											1,131,142	1,326,511	19,901,046	20,498,940
Himachal Pradesh													7,031,546	7,129,296
Jammu & Kashmir													7,407,511	7,593,856
Karnataka	1,924,172	1,961,615											53,426,852	54,351,481
Kerala	436,353	449,336											31,000,066	31,325,549
Madhya Pradesh											1,125,094	1,398,950	53,466,143	54,764,208
Maharashtra									5,770,597	5,806,333			68,683,628	70,483,300
Mumbai							2,886,719	2,979,460					29,299,037	30,108,116
North East													9,379,920	9,589,014
Orissa													25,136,478	24,661,900
Punjab			1,718,915	1,953,050	6,920	2,761							30,199,188	30,363,631
Rajasthan	2,178,127	2,316,631											49,725,022	50,981,783
Tamil Nadu (incl. Chennai)	1,085,246	1,117,198											73,309,135	74,257,212
UP(E)									7,541,316	7,846,532			72,749,708	74,582,984
UP(W)	318,743	293,125							5,269,519	5,369,705			46,740,307	47,383,069
Kolkata	764,521	745,896											21,497,281	21,876,639
West Bengal	1,791,852	1,805,129											40,734,764	40,978,319
Total	9,556,810	9,807,039	1,718,915	1,953,050	6,920	2,761	2,886,719	2,979,460	32,355,900	32,780,881	3,244,563	3,969,562	870,582,006	886,297,917

Annexure 1.3: Wireline Subscriber Base

Service Area	Bha	ırti	Relia	ance	Quadran	t (HFCL)	Sist	ema	Ta	ta
	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13
Andhra Pradesh	125,802	126,496	88,593	87,876	-	=	-	-	165,416	166,744
Assam					-	-	1	-	-	-
Bihar			5,592	5,834	-	-	-	-	10,692	11,189
Delhi	1,162,863	1,186,998	183,570	184,055	-	-	-	-	93,159	100,738
Gujarat	55,994	56,133	96,795	95,800	-	-	-	-	72,875	73,128
Haryana	20,742	16,477	5,440	5,759	-	-	-	-	26,489	26,749
Himachal Pradesh			4,733	4,856	-	-	-	-	2,446	2,448
Jammu & Kashmir					-	-	-	-	-	-
Karnataka	487,776	493,897	115,937	117,531	-	-	-	-	149,472	154,795
Kerala	49,218	49,272	52,885	51,980	-	-	-	-	11,420	11,841
Madhya Pradesh	231,995	226,033	25,563	24,879	-	-	-	-	17,100	17,093
Maharashtra	68,774	69,319	99,408	98,502	-	-	-	-	247,964	249,660
Mumbai	350,592	356,733	233,286	234,398	-	-	-	-	523,465	518,645
North East					-	-	-	-		-
Orissa			3,676	3,784	-	-	-	-	6,738	6,954
Punjab	97,111	91,883	24,577	23,735	202,402	208,344	1	-	17,087	17,382
Rajasthan	36,466	37,007	24,193	23,629	-	-	54,351	55,850	7,935	8,381
Tamil Nadu (incl. Chennai)	471,287	465,007	147,040	147,584	-	-	-	-	74,523	76,902
U.P.(E)	51,230	50,791	40,525	40,807	-	-	-	-	14,000	14,205
U.P.(W)	21,128	21,257	5,998	6,038	-	-	-	-	8,464	8,446
Kolkata	106,901	107,463	81,377	81,744	-	-	-	-	37,917	38,984
West Bengal			2,153	2,315	-	-	-	-	3,755	3,764
Total	3,337,879	3,354,766	1,241,341	1,241,106	202,402	208,344	54,351	55,850	1,490,917	1,508,048

Annexure 1.3 (contd.)

Service Area M TNL		BSNL		Vodafone		Total		
	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13	Sep-13	Dec-13
Andhra Pradesh	-	-	1,751,010	1,679,727	5,940	6,870	2,136,761	2,067,713
Assam	-	-	191,564	185,797	840	990	192,404	186,787
Bihar	-	-	372,808	363,274	270	390	389,362	380,687
Delhi	1,598,794	1,602,073			14,490	15,840	3,052,876	3,089,704
Gujarat	-	-	1,496,328	1,473,942	630	1,110	1,722,622	1,700,113
Haryana	-	-	470,023	462,718			522,694	511,703
Himachal Pradesh	-	-	256,824	252,335			264,003	259,639
Jammu & Kashmir	-	-	189,774	189,215			189,774	189,215
Karnataka	-	-	1,613,635	1,566,297	4,260	5,040	2,371,080	2,337,560
Kerala	-	-	2,871,487	2,818,490			2,985,010	2,931,583
Madhya Pradesh	-	-	830,208	826,412	120	150	1,104,986	1,094,567
Maharashtra	-	-	1,942,678	1,913,174	3,210	3,630	2,362,034	2,334,285
Mumbai	1,944,053	1,937,858			8,190	8,790	3,059,586	3,056,424
North East	-	-	143,447	142,023		60	143,447	142,083
Orissa	-	-	348,150	338,976	360	360	358,924	350,074
Punjab	-	-	935,140	923,595	270	360	1,276,587	1,265,299
Rajasthan	-	-	852,978	834,746	510	540	976,433	960,153
Tamil Nadu (incl. Chennai)	-	-	2,310,589	2,266,474	3,000	3,870	3,006,439	2,959,837
U.P.(E)	-	-	766,715	729,687	540	570	873,010	836,060
U.P.(W)	-	-	616,600	601,092	270	270	652,460	637,103
Kolkata	-	-	886,504	858,171	1,320	1,470	1,114,019	1,087,832
West Bengal	-	-	521,979	509,748			527,887	515,827
Total	3,542,847	3,539,931	19,368,441	18,935,893	44,220	50,310	29,282,398	28,894,248

Annexure 1.4: Service Area and Operator wise details of PCOs

S. No.	Name of the Circle/Service Area	Service Provider	As on 30 th September, 2013	As on 31 st December, 2013	Net PCO increase/ decrease	Percentage Growth/ Decline
1	Andaman & Nicobar	BSNL	227	215	-12	-5.29%
		BSNL	1,954	6,445	-5,509	-7.66%
2	Andhra	Bharti	345	238	-107	-31.01%
	Pradesh	TATA	10,694	9,766	-928	-8.68%
		Reliance Com.	28,002	24,991	-3,011	-10.75%
2	A = = = ==	BSNL	11,694	11,338	-356	-3.04%
3	Assam	TATA	-	-	0	0.00%
	Dila a ufina alaa dina a	BSNL	8,700	8,397	-303	-3.48%
4	Bihar(including Jharkhand)	Reliance Com.	1,249	1,054	-195	-15.61%
		TATA	555	411	-144	-25.95%
		Bharti	2,321	1,844	-477	-20.55%
5	Delhi	MTNL	58,929	57,852	-1,077	-1.83%
5	Deini	Reliance Com.	1,072	944	-128	-11.94%
		TATA	5,402	4,896	-506	-9.37%
	Gujarat	BSNL	35,278	34,410	-868	-2.46%
_		Bharti	24	19	-5	-20.83%
6		Reliance Com.	3,719	3,147	-572	-15.38%
		TATA	7,580	6,659	-921	-12.15%
		BSNL	8,634	8,058	-576	-6.67%
7	Homrono	Bharti	281	251	-30	-10.68%
<i>'</i>	Haryana	Reliance Com.	182	155	-27	-14.84%
		TATA	246	213	-33	-13.41%
	I Jimaahal	BSNL	5,851	5,756	-95	-1.62%
8	Himachal Pradesh	Reliance Com.	892	885	-7	-0.78%
	Frauesii	TATA	116	84	-32	-27.59%
9	Jammu &	BSNL	7,138	6,476	-662	-9.27%
9	Kashmir	TATA	-	-	0	0.00%
		BSNL	1,03,822	96,612	-7,210	-6.94%
10	Karnataka	Bharti	9,080	7,499	-1,581	-17.41%
10		Reliance Com.	10,252	9,142	-1,110	-10.83%
		TATA	8,642	7,349	-1,293	-14.96%
		BSNL	40,231	38,053	-2,178	-5.41%
11	Kerala	Bharti	883	804	-79	-8.95%
11		Reliance Com.	2,144	1,868	-276	-12.87%
		ТАТА	461	379	-82	-17.79%
	Madhya	BSNL	31,682	31,078	-604	-1.91%
12	Pradesh	Bharti	5,405	4,683	-722	-13.36%
12	(Including	Reliance Com.	2,879	2,563	-316	-10.98%
	Chattisgarh)	TATA	3,010	2,651	-359	-11.93%

Annexure 1.4 (Contd.)

	NT C.41		A	A 01 . 4	N. A. DOO	D
S.	Name of the	Service Provider	As on 30th	As on 31st	Net PCO	Percentage Growth/
No.	Circle/Service Area	Service Provider	September, 2013	December, 2013	increase/ decrease	Decline
	Alea	BSNL & MTNL	1,89,329	1,83,938	-5,391	-2.85%
	Maharashtra	Bharti	123	48	-3,391	-60.98%
13	(including					
	Mumbai)	Reliance Com.	19,527	18,312	-1,215	-6.22%
		TATA	48,296	43,419	-4,877	-10.10%
		Bharti	52	48	-4	-7.69%
	Mumbai	MTNL	88,269	87,067	-1,202	-1.36%
		Reliance Com.	10,017	9,782	-235	-2.35%
		TATA	10,122	8,780	-1,342	-13.26%
	Maharashtra	BSNL	1,01,060	96,871	-4,189	-4.15%
	excluding	Bharti	71	-	-71	-100.00%
	Mumbai	Reliance Com.	9,510	8,530	-980	-10.30%
	mumbai	Tata	38,174	34,639	-3,535	-9.26%
14	North East	BSNL	8,532	8,484	-48	-0.56%
14	North East	TATA	-	-	0	0.00%
		BSNL	9,279	7,894	-1,385	-14.93%
15	Orissa	Reliance Com.	321	252	-69	-21.50%
		TATA	572	468	-104	-18.18%
		BSNL	11,272	10,825	-447	-3.97%
		Bharti	246	202	-44	-17.89%
16	Punjab	Quadrant	3,555	3,361	-194	-5.46%
		Reliance Com.	1,238	1,064	-174	-14.05%
		TATA	1,954	1,765	-189	-9.67%
		BSNL	19,741	16,823	-2,918	-14.78%
		Bharti	261	235	-26	-9.96%
		Sistema				
17	Rajasthan	Shyam	12,493	12,251	-242	-1.94%
		Reliance Com.	2,059	1,767	-292	-14.18%
		TATA	1,041	916	-125	-12.01%
		BSNL	ŕ			
	Tamil Nadu		1,11,613	1,06,793	-4,820	-4.32%
	(incl.	Bharti	14,246	12,400	-1,846	-12.96%
	Chennai)	Reliance Com.	14,993	13,731	-1,262	-8.42%
	,	TATA	7,455	6,569	-886	-11.88%
18	Chennai	BSNL	16,263	15,616	-647	-3.98%
	Chennai	Reliance Com.	4,081	3,832	-249	-6.10%
	Tamil Nadu (excluding Chennai)	BSNL	95,350	91,177	-4,173	-4.38%
		Bharti	14,246	12,400	-1,846	-12.96%
		Reliance Com.	10,912	9,899	-1,013	-9.28%
		TATA	7,455	6,569	-886	-11.88%
		BSNL	54,054	47,792	-6,262	-11.58%
10	Uttar Pradesh	Bharti	318	239	-79	-24.84%
19	(East)	Reliance Com.	1,377	1,213	-164	-11.91%
	(Dasi)	TATA	989	850	-139	-14.05%
			707	550	109	11.00/0

Annexure 1.4 (Contd.)

S. No.	Name of the Circle/Service Area	Service Provider	As on 30th September, 2013	As on 31st December, 2013	Net PCO increase/ decrease	Percentage Growth/ Decline
	Uttar Pradesh	BSNL	17,859	16,359	-1,500	-8.40%
20	(West)	Bharti	268	220	-48	-17.91%
40	(including	Reliance Com.	1,000	897	-103	-10.30%
	Uttranchal)	TATA	1,422	1,213	-209	-14.70%
	West Bengal	BSNL	36,305	35,471	-834	-2.30%
	(including Kolkata)	Bharti	93	80	-13	-13.98%
		Reliance Com.	3,092	2,769	-323	-10.45%
		TATA	4,589	3,781	-808	-17.61%
	Kolkata	BSNL	9,135	8,447	-688	-7.53%
21		Bharti	93	80	-13	-13.98%
		Reliance Com.	1,452	1,313	-139	-9.57%
		TATA	3,201	2,757	-444	-13.87%
	West Bengal	BSNL	27,170	27,024	-146	-0.54%
	(excluding	Reliance Com.	1,640	1,456	-184	-11.22%
	Kolkata)	TATA	1,388	1,024	-364	-26.22%
	TOTAL		10,89,088	10,19,586	-69,502	-6.38%

Annexure 1.5: Service Area & Operator wise details of Village Public Telephones

S. No.	Name of the Circle/Service Area	Service Provider	As on 30 th September, 2013	As on 31st December, 2013	Net VPT increase/ decrease	Percentage Growth/ Decline
1	Andaman & Nicobar	BSNL	352	352	0	0%
		BSNL	25,107	25,107	0	0%
	A 411	Bharti	-	-	0	0%
2	Andhra	TATA	1,358	1,358	0	0%
	Pradesh	Reliance Com.	-	-	0	0%
		Vodafone	-	-	0	0%
3	A = = ===	BSNL	24,688	24,688	0	0%
3	Assam	TATA	_	-	0	0%
	Dile online also dine a	Vodafone	_	-	0	0%
4	Bihar(including	BSNL	67,748	67,748	0	0%
	Jharkhand)	Reliance Com.	-	-	0	0%
		TATA	-	-	0	0%
		Vodafone	_	-	0	0%
5	Delhi	Bharti	-	-	0	0%
		MTNL	-	-	0	0%
		TATA	-	-	0	0%
		Reliance Com.	-	-	0	0%
		Vodafone	-		0	0%
6	Gujarat	BSNL	18,051	18,051	0	0%
	-	Bharti	-	-	0	0%
		TATA	-	-	0	0%
	Haryana	Reliance Com.	-	-	0	0%
7		Vodafone	-		0	0%
,		BSNL	6,678	6,678	0	0%
		Bharti	-	-	0	0%
		Reliance Com.	-	-	0	0%
8	Himachal	TATA	-	-	0	0%
	Pradesh	BSNL	17,408	17,408	0	0%
9	Jammu & Kashmir	Reliance Com.	-	-	0	0%
		TATA	-	_	0	0%
	Karnataka	BSNL	6,384	6,384	0	0%
10		BSNL	27,449	27,449	0	0%
		Bharti	, <u> </u>	_	0	0%
		TATA	-	_	0	0%
		Reliance Com.	-	_	0	0%
11	TZ = n = 1 =	Vodafone	-		0	0%
11	Kerala	BSNL	1,372	1,372	0	0%
		Bharti	<u> </u>	_	0	0%

Annexure 1.5 (contd.)

S. No.	Name of the Circle/Service Area	Service Provider	As on 30th September, 2013	As on 31st December, 2013	Net VPT increase/ decrease	Percentage Growth/ Decline
		Reliance Com.	-	-	0	0%
	Madhya	TATA	-	-	0	0%
12	Pradesh	BSNL	70,309	70,309	0	0%
	(Including	Bharti	ı	ı	0	0%
	Chattisgarh)	Reliance Com.	-	-	0	0%
		BSNL& MTNL	40,654	40,654	0	0%
	Maharashtra	Bharti	•	ı	0	0%
	(including	TATA	2,595	2,595	0	0%
	Mumbai)	Reliance Com.	-	ı	0	0%
		Vodafone	-	1	0	0%
		MTNL	-	-	0	0%
		Bharti	-	-	0	0%
13	Mumbai	Reliance Com.	-	-	0	0%
		TATA	-	-	0	0%
		Vodafone	_	_	0	0%
		BSNL	40,654	40,654	0	0%
	Maharashtra	Bharti	-	-	0	0%
	Excluding Mumbai	Reliance Com.	-	_	0	0%
		TATA	2,595	2,595	0	0%
		Vodafone	-	_	0	0%
14	North East	BSNL	13,017	13,017	0	0%
	Orissa	BSNL	45,215	45,215	0	0%
1 -		Reliance Com.	-	-	0	0%
15		TATA	-	-	0	0%
		Vodafone	_	_	0	0%
		BSNL	12,065	12,065	0	0%
	Punjab	Quadrant Televentures	27	27	0	0%
16		Ltd.			0	00/
		Bharti	_	_	0	0%
		Reliance Com.	-	-	0	0%
		TATA		_	0	0%
\vdash		Vodafone	20.50	-	0	0%
		BSNL	39,568	39,568	0	0%
	Rajasthan	Bharti	-	-	0	0%
17		Sistema Shyam	3,010	3,010	0	0%
		Reliance Com.	-	-	0	0%
		TATA	-	-	0	0%
		Vodafone	-	-	0	0%

S. No.	Name of the Circle/Service Area	Service Provider	As on 30th September, 2013	As on 31st December, 2013	Net VPT increase/ decrease	Percentage Growth/ Decline
		BSNL	15,492	15,492	0	0%
	Tamil	Bharti	-	-	0	0%
	Nadu(including	TATA	-	-	0	0%
	Chennai)	Vodafone	-	-	0	0%
		Reliance Com.	-	-	0	0%
18		BSNL	1,655	1,655	0	0%
	Chennai	Vodafone	-	-	0	0%
		Reliance Com.	-	-	0	0%
	Tamil Nadu	BSNL	13,837	13,837	0	0%
	(excluding	TATA	-	-	0	0%
	Chennai)	Reliance Com.	-	-	0	0%
	Circiniaij	Bharti	-	-	0	0%
		BSNL	74,145	74,145	0	0%
19	U P (East)	Bharti	-	-	0	0%
19		Reliance Com.	-	-	0	0%
		TATA	-	-	0	0%
	UP (West) (incl. Uttaranchal)	BSNL	39,071	39,071	0	0%
20		Reliance Com.	-	_	0	0%
20		Bharti	-	-	0	0%
		TATA	-	-	0	0%
		BSNL	37,550	37,567	17	0.05%
	West Bengal	Bharti	-	-	0	0.00%
	(including Kolkata)	Reliance Com.	-	-	0	0.00%
		ТАТА	-	-	0	0.00%
21		BSNL	613	613	0	0%
	Kolkata	Bharti	-	-	0	0%
		Reliance Com.	-	-	0	0%
		TATA	-	-	0	0%
	West Bengal	BSNL	36,937	36,954	17	0.05%
	(excluding Kolkata)	Reliance Com.	-		0	0%
	Noikataj	TATA	-	-	0	0%
	Total		5,89,313	5,89,330	17	0.003%

Annexure 1.6: Internet Service Provider(ISP) wise Internet Subscriber base

s.no	Name of Service Provider	Narrowband (< 512 Kbps Speed)	Broadband (> 512 Kbps Speed)	Total
1	Bharti Airtel Ltd./ Bharti Hexacom Ltd.	44912289	10875161	55787450
2	Vodafone	40453634	5200273	45653907
3	Bharat Sanchar Nigam Limited	24545106	16535247	41080353
4	Reliance Communications Group	29404921	6982559	36387480
5	Idea Cellular Limited	19660190	5865448	25525638
6	Aircel	13424430	1629736	15054166
7	Uninor	6559648	0	6559648
8	Tata	201997	2863788	3065785
9	Loop	2829274	0	2829274
10	Mahanagar Telephone Nigam Ltd.	264	1758184	1758448
11	Sistema Shyam Teleservices Ltd.	33796	1294254	1328050
12	Videocon	715241	0	715241
13	Quadrant Televentures Ltd.(HFCL Infotel Ltd.)	354979	116970	471949
14	You Broadband & Cable India Private Limited	172004	211748	383752
15	Hathway Cable & Datacom Pvt. Ltd.	9823	369290	379113
16	Beam Telecom Pvt. Ltd.	0	354376	354376
17	Tikona Digital Networks Pvt Ltd	4032	247251	251283
18	Asianet Satellite Communications Ltd.	0	121504	121504
19	D-Vois Broadband Private Limited	0	74239	74239
20	Syscon Infoway Pvt Ltd	4945	68684	73629
21	Atria Convergence Technologies Pvt. Ltd.	0	70670	70670
22	Five Network Solution (India) Ltd.	0	56959	56959
23	Ortel Communication Ltd.	5368	49266	54634
24	Chandra Net Pvt. Limited	25072	25050	50122
25	Broadband Pacenet (I) Pvt. Ltd.	1145	43921	45066
26	Alliance Broadband Services Pvt. Ltd.	35724	7052	42776
27	Gujarat Telelink Pvt Ltd	5421	36056	41477
28	Citycom Networks Pvt. Ltd.	7197	33318	40515
29	Siti Cable Network Ltd. (Wire and Wireless India Ltd.)	22060	12113	34173
30	Indusind Media & Communications Limited (In2cable (I) Ltd.)	4750	23587	28337
31	Honesty Net Solutions (I) Pvt Ltd	7502	20245	27747
32	Noida Software Technology Park Ltd.	0	24160	24160
33	Meghbela Cable & Broadband Servies (P) Ltd	16915	6617	23532
34	City Online Services Ltd	12977	7900	20877
35	Digital Network associates Pvt. Ltd	7754	12971	20725

S.NO	Name of Service Provider	Narrowband (< 512 Kbps Speed)	Broadband (> 512 Kbps Speed)	Total
36	Home Systems Pvt. Ltd.	0	20063	20063
37	Shyam Internet Services Ltd	15733	2935	18668
38	Wish Net Pvt. Ltd.	10186	7429	17615
39	Rajesh Multi Channel Pvt. Ltd.	6061	11275	17336
40	Southern Online Bio Technologies Ltd.	3933	11116	15049
41	Vasai Cable Pvt. Ltd.	0	12961	12961
42	R.K. Infratel Limited	1299	9248	10547
43	SmartLink Broadband Services	1720	8610	10330
44	Sify Technologies Ltd.	4818	5483	10301
45	Nivyah Infrastructure & Telecom Services Ltd. (Softeng Computers Pvt. Ltd.)	0	8312	8312
46	Limras Eronet Broadband Service Pvt Ltd	3721	4436	8157
47	RailTel Corporation of India Ltd.	3191	4800	7991
48	Blazenet Ltd.	3934	3061	6995
49	Swiftmail Communications Ltd.	1028	5757	6785
50	Apna Telelink Ltd.	0	6594	6594
51	Nextra Teleservices Pvt. Ltd.	0	5863	5863
52	DEN Networks Ltd	619	4822	5441
53	Nettlinx Ltd.	0	5227	5227
54	Quest Consultancy Pvt. Ltd.	514	4065	4579
55	Spacenet Internet Services Pvt Ltd	0	4365	4365
56	Narmada Cyberzone Pvt Ltd	1853	2040	3893
57	Kaizen Infonet Pvt Ltd	1455	2271	3726
58	Hathway Bhawani Cabletel & Datacom Pvt Ltd	97	3343	3440
59	HCL Comnet Systems & Services Ltd.	3396	25	3421
60	Geocity Network Solutions Pvt. Ltd.	728	2561	3289
61	North East Dataa Network Pvt Ltd.	0	3282	3282
62	Rajesh Patel Net Services Pvt. Ltd.	300	2858	3158
63	CJ Online Pvt. Ltd.	24	3133	3157
64	F/X Wireless Technology Services Pvt. Ltd.	0	2859	2859
65	Ishan Netsol Pvt Ltd	2679	121	2800
66	IKF Technologies Ltd	790	1898	2688
67	Symbois Creations Pvt. Ltd.	0	2591	2591
68	Intermedia Cable Communication Pvt Ltd	50	2500	2550
69	Kappa Internet Services Pvt Ltd.	752	1613	2365
70	Shri Omkar Infocom Pvt. Ltd.	42	2260	2302

S.NO	Name of Service Provider	Narrowband (< 512 Kbps Speed)	Broadband (> 512 Kbps Speed)	Total	
71	Siliguri Internet & Cable TV Pvt. Ltd.	0	2255	2255	
72	CJM Consultancy Services Pvt. Ltd.	0	2183	2183	
73	Capture Network Systems Pvt. Ltd.	157	1447	1604	
74	Hughes Communications India Ltd.	1195	288	1483	
75	Star Broadband Services (I) Pvt Ltd	0	1347	1347	
76	Touch Net India Pvt. Ltd.	709	608	1317	
77	Speed Online.net Pvt. Ltd.	0	1295	1295	
78	Tikona Infinet Ltd.(HCL Infinet Ltd.)	353	919	1272	
79	United Telecoms Ltd.	179	873	1052	
80	Data Infosys Ltd.	253	679	932	
81	Wan and Lan Internet Pvt. Ltd.	70	785	855	
82	Readylink Internet Services Pvt Ltd	0	826	826	
83	delDSL Internet Pvt Ltd	4	551	555	
84	Primenet Global Ltd.	235	281	516	
85	Sab Infotech (Sab Industries)	286	176	462	
86	Multinet (Udaipur) Pvt. Ltd.	191	255	446	
87	Sikka Broadband(P) Ltd.(Gomti Cable Network Pvt. Ltd.)	39	371	410	
88	Rajdhani Telecom Pvt. Ltd.	44	359	403	
89	ERNET India	242	151	393	
90	S.S.Netcom Pvt Ltd	0	290	290	
91	Rida Communication Pvt. Ltd.	264	0	264	
92	Bhiwani Communications Pvt. Ltd.	111	114	225	
93	Microsense Pvt. Ltd.	0	206	206	
94	QBC Infotech Pvt. Ltd.	41	163	204	
95	Infonet Comm Services Enterprises Private Limited (earlier Mynet Services India Pvt. Ltd.)	110	76	186	
96	Karuturi Telecom Private Limited(Estel Communications Pvt. Ltd).	24	129	153	
97	Amber Online Services Ltd.	0	152	152	
98	Aeroway Networks Pvt Ltd.	0	146	146	
99	Conjoinix Technologies Pvt Ltd	0	125	125	
100	Tatanet Services Ltd	0	112	112	
101	Nihar Internet Services (P) Ltd	0	100	100	
102	Khetan Cable Network (P) Ltd	0	87	87	
103	Shri Vinayagaa Internet Pvt Ltd	36	35	71	
104	Pulse Telesystems Pvt. Ltd.	0	67	67	
	J		Ţ.,	J .	

s.no	Name of Service Provider	Narrowband (< 512 Kbps Speed)	Broadband (> 512 Kbps Speed)	Total
105	Harisree CableNet Pvt. Ltd.	0	54	54
106	NetMagic Solutions(P) Ltd.	0	53	53
107	Verizon Communications India Pvt. Ltd. (Worldcom Communications).	0	53	53
108	Kelnet Communication Services Pvt. Ltd	0	42	42
109	Essel Shyam Communications Limited	42	0	42
110	Adya Tech One Services Pvt Ltd	0	39	39
111	AT&T Global Network Services India Private Limited	0	35	35
112	Sanyog Networks Pvt Ltd	15	20	35
113	Power Grid Corporation of India Ltd.	0	33	33
114	West Bengal Electronics Industry Development Corp. Ltd.	0	28	28
115	Nelco Ltd.	0	27	27
116	Dreamzcraft Info Solutions Pvt Ltd	2	22	24
117	STN Communication & Advertising Pvt Ltd.	0	21	21
118	Reach Network India Pvt. Ltd.	3	15	18
119	Financial Technologies Communications Ltd.	0	17	17
120	Vcare Call Centres India Pvt. Ltd.	0	14	14
121	Chemical And Metallurgical Design Co. Ltd	0	13	13
122	Novanet Ltd.	0	11	11
123	Nextgen Communications Ltd (RPG Infotech Ltd).	0	8	8
124	ABT Ltd.	0	5	5
125	Opto Network Pvt. Ltd.	0	3	3
126	VIVA Communications Pvt Ltd(Mylai Karpagambal Information Systems (P) Ltd)	0	3	3
127	Godrej Infotech Ltd.	2	1	3
128	Centre for Development of Advanced Computing, C-DAC	0	2	2
129	Devas Multimedia Pvt.Ltd.	0	2	2
130	Orange Business Services India Network Pvt. Ltd.	0	2	2
131	Compucom (I) Pvt. Ltd.	2	0	2
132	Maple PC & Peripherals Pvt Ltd	0	1	1
133	Reliance Jio Infocomm Ltd (Infotel Broadband Services Limited)	0	1	1
134	L&T Finance Ltd.(L&T Netcom Ltd.)	1	0	1
135	Advanced Financial Services Pvt Ltd	0	0	0

S.NO	Name of Service Provider	Narrowband (< 512 Kbps Speed)	Broadband (> 512 Kbps Speed)	Total
	Kerala State Electronics Development Corp			
136	Ltd.(Keltron)	0	0	0
137	Manipal Ecommerce Ltd.	0	0	0
138	Pan India Network Infravest Pvt. Ltd.	0	0	0
	Reliance Wimax Limited (Gateway Systems (I)			
139	Ltd)	0	0	0
140	Spectrum Softech Solutions Pvt. Ltd.	0	0	0
141	Tata Internet Services Ltd.	0	0	0
142	Trikon Electronics Pvt. Ltd.	0	0	0
143	Urban Communications Infrastructure Pvt Ltd.	0	0	0
	Total	183511991	55196350	238708341
	Total (in Million)	183.51	55.20	238.71

Annexure 1.7: List of Internet Service Providers Providing Internet Telephony Service

S.No	Name of the Service Providers
1	Alliance Broadband Services Pvt. Ltd.
	Apna Telelink Ltd.
	Asianet Satellite Communications Ltd.
	Bharat Sanchar Nigam Ltd.
	Blazenet Ltd.
	City Online Services Ltd
	Citycom Networks Pvt. Ltd. Cordia LT Communications Pvt Ltd
8	
	Data Infosys Ltd.
	delDSL Internet Pvt Ltd
	Digital2Virtual ISP Pvt. Ltd.
	Dishnet Wireless Ltd
	Fast Lynx Internet Service Pvt Ltd.
	Indusind Media & Communications Limited (In2cable (I) Ltd.)
	Karuturi Telecom Private Limited (Estel Communications Pvt. Ltd).
16	Manipal Ecommerce Ltd.
17	My Own Infotech Pvt. Ltd
18	Novanet Ltd.
19	Oistel Telecom Pvt. Ltd.
20	Opto Network Pvt. Ltd.
21	Ortel Communication Ltd.
22	Pipetel Communications Pvt. Ltd.
23	Pulse Telesystems Pvt. Ltd.
24	QBC Infotech Pvt. Ltd.
25	Sify Technologies Ltd.
26	Swiftmail Communications Ltd.
27	Tata Communications Limited
28	Tata Teleservices(Maharashtra) Ltd.
29	Trikon Electronics Pvt. Ltd.
30	Tulip Telecom Limited (Tulip IT Services Ltd.)
31	VIVA Communications Pvt Ltd (Mylai Karpagambal Information Systems (P) Ltd)
32	World Phone Internet Services Pvt Ltd
33	You Broadband & Cable India Private Limited

Annexure 1.8: Service Area wise PMRTS subscriber Base

SNo.	Operative Area	Service Providers	Subscriber Base		
			30.9.2013	31.12.2013	
1	Delhi(Faridabad/ Gurgaon)	Arya Omnitalk Radio Trunking Servives Pvt.Ltd.	2652	2617	
		Procall(Delhi)	3910	4103	
		Procall (Faridabad)	452	368	
		Procall (Gurgaon)	871	864	
		Total	7885	7952	
2	Mumbai(Navi Mumbai/Vashi)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	5234	6404	
		Smartalk (Mumbai)	446	513	
		Smartalk (Vashi)	65	65	
		Bhilwara Telenet(Mumbai)	1101	707	
		Total	6846	7689	
3	Kolkata	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1845	1825	
		Total	1845	1825	
4	TN(Chennai)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	4828	4649	
		Quick Calls	259	451	
		Total	5087	5100	
5	Karnataka (Bangalore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	5122	5290	
		Quick Calls	507	469	
		India Satcom	0	0	
		Total	5629	5759	
6	Andhra Pradesh (Vishakhapatnam)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2838	2873	
		Quick Calls	1784	1833	
		Total	4622	4706	
7	Madhya Pradesh (Indore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	732	755	
		Total	732	755	
8	Rajasthan (Jaipur)	Procall	507	530	
		Total	507	530	
9	Gujrat(Ahmedabad/ Surat/Baroda/	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	4038	4048	
	Bharuch)	Total	4038	4048	
10	Maharashtra (Pune)	Smartalk	503	483	
		Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1205	1178	
		Total	1708	1661	
		Grand Total	38899	40025	

Annexure 2.1: GSM Service - Service Area wise Statistics for QE Dec-13

Key parameters for service areas of category-A

Service Area	% of pre-paid	ARPU	Total usage (from & outside HSA)				
	in total	(Rs. per	per subscriber per month				
	subscribers	month)	Outgoing Outgoing Incoming		Total		
		ŕ	SMS	MOU	MOU	MOU	
AP	96.42	123	30	193	200	393	
Gujarat	95.04	103	22	182	159	341	
Karnataka	95.07	127	50	201	190	391	
MH	95.16	119	43	182	169	352	
TN (incl. Chennai)	95.12	121	54	182	191	373	

Key parameters for service areas of category-B

		<u> </u>					
Service Area	% of pre-paid	ARPU	Total usage (from & outside HSA)				
	in total	(Rs. per	per s	subscriber	per montl	h	
	subscribers	month)	Outgoing	Outgoing	Incoming	Total	
		,	SMS	MOU	MOU	MOU	
Haryana	97.05	97	21	197	183	380	
Kerala	96.54	155	23	202	236	438	
MP	97.99	92	20	149	149	298	
Punjab	94.05	117	46	204	196	400	
Rajasthan	98.05	103	13	157	174	330	
UP(E)	98.78	92	13	161	226	387	
UP(W)	98.15	93	20	170	189	358	
WB	99.17	81	15	153	189	343	

Key parameters for service areas of category-C

<u> </u>		•				
Service Area	% of pre-paid	ARPU	Total usage (from & outside HSA)			
	in total	(Rs. per	per s	subscriber	per mont	h
	subscribers	month)	Outgoing	Outgoing	Incoming	Total
			SMS	MOU	MOU	MOU
Assam	96.05	127	39	212	238	450
Bihar	99.40	91	8	156	239	395
HP	98.16	100	24	199	201	400
J&K	91.80	172	2	309	286	595
NE	97.17	135	67	205	197	402
Orissa	98.82	85	11	173	207	380

Key parameters for service areas of category-Metro

Service Area	% of	ARPU	Total usage (from & outside HSA)			
	pre-paid in	(Rs. per	per subscriber per month			h
	total	month)	Outgoing	Outgoing	Incoming	Total
	subscribers	,	SMS	MOU	MOU	MOU
Kolkata	93.46	103	29	206	208	414
Delhi	87.02	157	32	234	191	426
Mumbai	84.66	160	43	276	199	476

Annexure 2.2: CDMA Full Mobility Service - Service Area wise Statistics for QE Dec-13

Key parameters for service areas of Category A

					<u> </u>	
Service Area	% of Prepaid in total	ARPU		age (from 8 subscriber	& outside H per month	SA) per
Service Area	subscribers	(Rs. per month)	Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
MH	89	125	21	143	127	269
Gujarat	83	118	32	136	106	242
TN (incl. Chennai)	83	153	17	142	109	251
Karnataka	88	125	11	140	128	268
AP	88	125	20	152	143	295

Key parameters for service areas of Category B

Service Area	% of Prepaid in total	ARPU (Rs. per		age (from 8 subscriber	& outside H per month	SA) per
Service rirea	subscribers	month)	Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
WB	99	57	6	150	167	317
Rajasthan	95	71	13	195	157	352
UP(E)	96	66	18	100	115	215
MP	95	69	15	112	130	242
Kerala	87	108	12	116	92	209
UP(W)	95	70	20	110	126	236
Haryana	91	71	17	147	129	275
Punjab	81	123	17	165	104	269

Key parameters for service areas of Category C

Service Area	% of Prepaid in total subscribers	ARPU (Rs. per month)	Total usa S Outgoing	Subscriber Outgoing	k outside H	Total
	dabberiberb	month	SMS	MOU	MOU	MOU
Orissa	92	84	10	126	159	284
Bihar	97	70	10	112	162	273
HP	86	119	8	131	112	243
J&K	63	100	21	103	88	191
North East		·	NA		·	
Assam			NA			

Key parameters for service areas of Category Metro

Service Area	% of Prepaid in total	ARPU (Rs. per		age (from 8 subscriber)		SA) per
Service fired	subscribers	month)	Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Kolkata	90	102	9	145	150	305
Delhi	87	125	22	174	126	304
Mumbai	81	147	26	126	95	213

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

	l			Perf	ormance M	onitoring Re	port on Q	uality of Ser	vice of Cel	lular Mobile Seriv	/ce (2G) Pro	viders for	quarter ending	, December , 2013				
						Related Par								stomer Service Quality	/ Parameter	's		
ea	Provider	Network A	Availability		ction Establis			ction Mainte		POI		М	etering and Billi	ng		time to the mer for		o / closure of
e A	Pro				Accessibility		(Retainability	")						assis	tance	ser 	vice
Name of Service Area	Name of Service	BTSs Accumulated downtime (not available for service) (%age)	Worst affected BTSs due to downtime (%age)	Call Set-up Success Rate (within licensee's own network)	SDCCH/ Paging Chl. Congestion (%age)	TCH Congestion (%age)	Call Drop Rate (%age)	Worst affected cells having more than 3% TCH drop (call drop) rate (%age)	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 - 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 60 second	Te	Time taken for refund of deposits after dosures
		≤ 2%	≤ 2%	≥ 95%	≤ 1%	≤ 2%	≤2%	≤ 3%	≥95%	≤ 0.5%	≤ 0.1%	≤0.1%	100% within 4 weeks	within 1 week of resolution of complaint	≥ 95%	≥ 90%	100% within 7 days	100% within 60 days
	Aircel	0.05	0.02	99.04	0.07	0.16	0.93	1.41	97.80	0	0.00	0.00	100.00	100.00	97.69	90.68	100.00	100.00
	Airtel	0.01	0.00	99.30	0.08	0.06	0.40	0.55	98.85	0	0.02	0.00	100.00	100.00	100.00	94.00	99.94	100.00
	BSNL	1.70	1.93	98.00	0.47	1.80	0.57	2.07	98.00	0	0.00	0.00	100.00	100.00	97.00	96.00	100.00	100.00
	Idea	0.02	0.01	99.99	0.49	0.67	0.77	2.34	96.86	0	0.11	0.00	100.00	100.00	99.52	95.10	98.42	96.26
AP	RCOM CDMA	0.20	0.45	99.14	0.00	0.02	0.11	0.08	99.69	0	0.10	0.04	100.00	100.00	98.13	76.76	100.00	100.00
	RCOM GSM	0.23	0.81	99.71	0.06 0.01	0.04	0.38	0.06	98.87 98.36	0	0.09	0.10	100.00 100.00	100.00 100.00	98.83 99.19	62.32 94.40	100.00	100.00
	TATA CDMA TATA GSM	0.02	0.50	98.82 98.48	0.01	0.39	0.37	1.04 2.60	98.36	0	0.00	0.00	100.00	100.00	99.19	91.05	100.00	100.00 100.00
	Uninor	0.11	0.96	98.37	0.04	0.28	1.02	2.05	97.67	0	NA	0.00	100.00	100.00 NA	95.54	92.80	NA	NA
	Vodafone	0.25	0.27	99.77	0.24	0.23	0.59	2.38	99.02	0	0.06	0.00	99.94	100.00	100.00	97.90	100.00	100.00
	Aircel	0.86	6.00	96.32	0.79	1.61	0.88	3.94	93.77	0	0.03	0.02	100.00	100.00	76.02	91.19	100.00	100.00
	Airtel	0.22	1.00	98.59	0.16	0.46	1.21	1.13	98.31	0	0.01	0.00	100.00	100.00	100.00	94.00	100.00	100.00
ASM	BSNL	2.70	6.30	92.67	0.77	1.43	2.17	5.57	91.33	0	0.00	0.00	100.00	100.00	80.00	100.00	100.00	100.00
ASIVI	Idea	0.70	0.91	98.90	0.06	0.70	1.44	2.19	95.77	0	0.00	0.00	100.00	100.00	97.13	99.32	100.00	100.00
	RTL	0.30	1.58	98.64	0.02	0.14	0.65	0.08	98.36	0	0.10	0.10	100.00	100.00	98.78	89.02	100.00	100.00
	Vodafone	0.84	1.97	99.40	0.15	0.60	0.60	2.70	97.89	0	0.08	0.01	100.00	100.00	99.89	96.44	100.00	100.00
	Aircel	1.16	4.26	96.72	0.25	0.99	0.51	3.10	95.10	0	0.00	0.00	100.00	100.00	94.30	92.73	100.00	100.00
	Airtel	0.10	0.25	98.70	0.19	0.24	0.50	1.90	99.02	0	0.01	0.01	100.00	99.97	99.00	96.00	100.00	100.00
	BSNL	2.00	1.77	97.50	0.50	0.82	1.53	2.43	95.63	0	0.05	0.05	100.00	100.00	48.50	97.00	100.00	100.00
	Idea RCOM CDMA	0.76 0.37	1.75 0.91	98.61	0.49	0.91	1.24	2.75 0.23	96.88	0	0.02	0.02	100.00	100.00	99.52	99.41	100.00	100.00
ВН	RTL	0.37	0.55	98.33 96.57	0.00 0.17	0.00	0.26	0.23	99.80 97.88	0	0.09	0.10	100.00 100.00	100.00 100.00	98.88 98.67	80.11 87.66	100.00	100.00 100.00
	TATA CDMA	0.11	0.87	97.93	0.00	0.38	0.47	2.78	98.22	0	0.00	0.00	100.00	100.00	99.44	96.81	100.00	100.00
	TATA GSM	0.02	0.00	99.13	0.08	0.07	0.45	0.24	97.92	0	0.00	0.01	100.00	100.00	96.31	95.18	100.00	100.00
	Uninor	0.23	0.65	97.27	0.46	1.85	0.64	1.96	96.72	0	NA	0.01	100.00	NA	96.99	94.11	NA	NA
	Vodafone	0.46	1.85	99.61	0.12	0.39	0.78	2.33	97.57	0	0.04	0.01	100.00	100.00	100.00	97.50	100.00	100.00
	Aircel	0.64	4.57	97.97	0.17	0.80	0.51	0.74	98.00	0	0.00	0.00	100.00	100.00	91.66	90.04	100.00	100.00
	Airtel	0.02	0.00	99.93	0.01	0.01	0.16	0.08	99.73	0	0.03	0.00	100.00	100.00	100.00	92.00	100.00	100.00
	BSNL	0.40	1.60	100.00	0.23	0.37	0.70	1.27	100.00	0	0.10	0.10	100.00	100.00	100.00	93.00	100.00	100.00
	Idea	0.01	0.00	99.66	0.07	0.11	0.57	0.58	97.20	0			1	Incl. In TN	ı			
CHN	RCOM CDMA					Incl. In TN					0.10	0.03	100.00	100.00	99.21	73.05	100.00	100.00
	RCOM GSM*	1				Incl. In TN		1 1		1 -				Incl. In TN				
	TATA CDMA	0.05	0.00	99.32	0.00	0.04	0.25	0.85	98.40	0				Incl. In TN				
	TATA GSM	0.04	0.00	98.21	0.01	0.02	0.83	0.81	98.59	0	0.06	0.01	100.00	Incl. In TN	100.00	06.57	100.00	100.00
	Vodafone	0.02	0.05	99.66	0.02	0.34	0.50	1.14	98.81	0	0.06	0.01	100.00	100.00	100.00	96.57	100.00	100.00

		0.00	1	07.50	0.00	0.54	4.00	2.74	07.60			0.04	100.00	100.00	07.76		100.00	100.00
	Aircel	0.30	1.72	97.52	0.26	0.54	1.09	2.74	97.62	0	0.04	0.01	100.00	100.00	97.76	74.64	100.00	100.00
	Airtel	0.02	0.00	99.88	0.02	0.05	0.57	0.50	99.38	0	0.04	0.05	100.00	100.00	100.00	93.00	100.00	100.00
	Idea	0.01	0.00	99.97	0.56	0.54	0.56	1.52	98.30	0	0.06	0.04	100.00	100.00	99.46	98.37	100.00	100.00
	MTNL CDMA	1.68	1.20	98.68	0.31	0.30	1.64	1.20	99.00	0	0.02	0.00	100.00	100.00	95.29	95.30	100.00	100.00
DLI	MTNL GSM	0.57	0.40	99.51	0.30	0.30	0.92	1.07	98.89	0	0.03	0.01	100.00	100.00	95.64	96.22	100.00	100.00
	MTS	0.09	0.07	99.20	0.00	0.24	0.58	1.75	98.86	0	0.04	0.06	100.00	100.00	99.00	92.94	100.00	100.00
	RCOM CDMA	0.10	0.07	98.67	0.00	0.01	0.54	1.69	99.79	0	0.10	0.10	100.00	100.00	98.42	92.84	100.00	100.00
	RCOM GSM	0.19	0.17	99.57	0.03	0.04	0.40	0.02	98.82	0	0.10	0.10	100.00	100.00	98.70	64.62	100.00	100.00
	TATA CDMA	0.04	0.00	99.10	0.00	0.06	0.57	1.00	99.14	0	0.03	0.00	100.00	100.00	99.02	93.82	100.00	100.00
	Vodafone	0.02	0.00	99.58	0.09	0.18	0.80	1.79	97.62	0	0.15	0.04	100.00	100.00	100.00	98.74	100.00	100.00
	Aircel	0.02	0.04	99.49	0.02	0.02	0.48	1.84	98.60	0	0.00	0.00	100.00	100.00	93.61	96.38	100.00	100.00
	Airtel	0.08	0.24	99.70	0.04	0.25	0.75	0.33	97.08	0	0.01	0.01	100.00	100.00	100.00	93.00	100.00	100.00
	BSNL	1.33	1.83	99.00	0.10	1.03	1.50	2.70	100.00	0	0.03	0.00	100.00	100.00	98.00	92.00	100.00	100.00
	Idea	0.03	0.00	99.35	0.24	0.26	1.19	1.30	95.89	0	0.08	0.03	100.00	100.00	99.64	99.24	100.00	100.00
	MTS	0.02	0.00	99.73	0.00	0.01	0.17	1.99	98.47	0	0.07	0.01	100.00	100.00	100.00	97.00	NA	NA
GJ	RCOM CDMA	0.15	0.22	99.29	0.00	0.00	0.02	0.04	99.87	0	0.10	0.10	100.00	100.00	98.41	93.57	100.00	100.00
0,	RCOM GSM	0.14	0.23	99.63	0.01	0.05	0.20	0.01	98.83	0	0.09	0.10	100.00	100.00	98.85	69.69	100.00	100.00
	TATA CDMA	0.00	0.00	98.59	0.00	0.43	0.47	1.20	99.34	0	0.00	0.00	100.00	100.00	96.93	92.92	100.00	100.00
	TATA GSM	0.00	0.00	98.19	0.02	0.02	0.82	2.28	98.43	0	0.00	0.00	100.00	100.00	99.28	85.19	100.00	100.00
	Uninor	0.09	0.28	97.78	0.12	0.38	0.89	1.56	98.29	0	NA	0.04	100.00	NA	96.25	93.57	NA	NA
	Videocon	0.05	0.07	99.08	0.03	0.13	0.46	0.87	98.65	0	NA	0.02	100.00	100.00	98.65	93.91	NA	NA
	Vodafone	0.01	0.00	99.77	0.10	0.23	0.80	0.83	97.25	0	0.10	0.01	100.00	100.00	100.00	96.19	100.00	43.00
	Aircel	0.41	1.46	98.63	0.03	0.26	0.62	0.83	95.06	0	0.02	0.00	100.00	100.00	97.69	93.26	100.00	100.00
	Airtel	0.01	0.00	99.13	0.07	0.18	0.66	2.30	98.95	0	0.04	0.00	100.00	100.00	100.00	95.00	100.00	100.00
	BSNL	1.90	1.90	96.00	0.80	1.83	1.60	2.90	96.33	0	0.00	0.00	100.00	100.00	100.00	97.90	100.00	100.00
	Idea	0.35	0.00	98.86	0.06	0.61	1.05	2.29	95.54	0	0.00	0.01	100.00	100.00	99.76	99.42	100.00	100.00
HP	RCOM CDMA	0.06	0.00	99.25	0.00	0.00	0.08	0.25	99.78	0	0.07	0.10	100.00	100.00	99.00	94.39	100.00	100.00
	RTL	0.18	0.52	98.59	0.06	0.16	0.66	0.04	98.08	0	0.07	0.10	100.00	100.00	98.98	63.60	100.00	100.00
	TATA CDMA	0.00	0.00	98.81	0.00	0.16	0.15	0.08	98.38	0	0.00	0.00	100.00	100.00	96.85	96.23	100.00	100.00
	TATA GSM	0.03	0.00	98.79	0.00	0.00	1.66	0.00	98.24	0	0.00	0.00	100.00	100.00	99.29	97.36	100.00	100.00
	Vodafone	0.03	0.00	98.14	0.01	0.09	0.62	1.92	98.20	0	0.01	0.00	100.00	100.00	100.00	99.96	100.00	100.00
	Aircel	0.41	1.19	98.52	0.58	0.00	1.36	8.33	99.32	0	0.00	0.00	100.00	100.00	93.08	94.11	100.00	100.00
	Airtel	0.07	0.06	99.14	0.21	0.15	0.41	1.19	99.21	0	0.05	0.02	100.00	100.00	100.00	96.00	100.00	100.00
	BSNL	1.13	1.77	97.33	0.30	1.27	1.23	1.87	97.20	2	0.10	0.00	100.00	100.00	100.00	65.00	100.00	100.00
	Idea	0.01	0.00	99.93	0.47	0.39	0.64	1.91	97.91	0	0.08	0.03	100.00	100.00	100.00	98.17	100.00	100.00
HR	RCOM CDMA	0.11	0.13	98.91	0.00	0.02	0.05	0.11	99.75	0	0.09	0.09	100.00	100.00	99.18	73.84	100.00	100.00
	RCOM GSM	0.14	0.11	99.67	0.02	0.02	0.24	0.06	99.17	0	0.08	0.10	100.00	100.00	98.89	81.31	100.00	100.00
	TATA CDMA	0.05	0.00	98.24	0.00	0.41	0.53	0.88	96.96	0	0.01	0.00	100.00	100.00	96.71	97.30	100.00	100.00
	TATA GSM	0.06	0.16	98.43	0.05	0.69	0.58	0.37	97.70	0	0.00	0.00	100.00	100.00	99.25	88.58	100.00	100.00
	Videocon	0.09	0.13	98.39	0.07	0.15	0.59	0.81	98.31	0	NA	0.01	100.00	100.00	95.92	92.60	NA	NA
	Vodafone	0.04	0.05	99.78	0.10	0.22	0.64	0.44	97.85	0	0.01	0.00	100.00	100.00	100.00	98.13	100.00	100.00
	Aircel	0.40	1.97	96.11	0.47	1.74	0.65	2.08	95.83	0	0.00	0.00	100.00	100.00	93.01	91.36	100.00	100.00
1	Airtel	0.08	0.11	98.96	0.13	0.19	0.49	1.02	98.76	0	0.03	0.02	100.00	100.00	100.00	94.00	100.00	100.00
ј&к	BSNL	1.53	1.87	98.00	0.80	1.37	1.43	2.13	98.00	0	0.00	0.00	100.00	100.00	100.00	64.00	100.00	100.00
	Idea	0.24	1.32	98.87	0.12	0.44	1.13	2.56	96.03	0	0.02	0.01	100.00	100.00	94.90	96.50	100.00	100.00
	RCOM GSM	0.24	0.95	99.65	0.01	0.04	0.41	0.06	98.72	0	0.08	0.10	100.00	100.00	98.71	92.61	100.00	100.00
	Vodafone	0.05	0.18	98.44	0.01	0.15	0.57	2.55	98.43	0	0.04	0.02	100.00	100.00	100.00	99.22	100.00	100.00

	A:I	0.45	1.07	07.27	0.44	0.26	0.75	0.72	07.46	0	0.05	0.00	100.00	100.00	00.77	02.01	100.00	100.00
	Aircel Airtel	0.45	1.97 0.03	97.37 99.65	0.41	0.36 0.05	0.75 0.75	0.73 0.17	97.46 97.66	0	0.05 0.01	0.00	100.00 100.00	100.00 100.00	99.77 100.00	93.91 95.00	100.00 100.00	100.00
										0								
	BSNL	1.23	1.90	99.00	0.47	0.80	0.80	2.90	99.87		0.10	0.40	65.90	66.00	96.00	88.30	100.00	100.00
	Idea	0.45	0.63	99.58	0.06	0.06	0.34	0.32	97.80	0	0.07	0.01	100.00	100.00	99.47	97.68	100.00	100.00
KOL	MTS	0.19	0.00	99.72	0.00	0.05	0.53	0.97	99.53	0	0.09	0.03	100.00	100.00	100.00	91.00	100.00	NA
	RCOM CDMA	0.07	0.00	99.32	0.00	0.01	0.07	0.41	99.75	0	0.10	0.10	100.00	100.00	99.24	82.46	100.00	100.00
	RTL	0.10	0.26	99.33	0.01	0.00	0.44	0.06	98.35	0	0.09	0.10	100.00	100.00	98.91	95.01	100.00	100.00
	TATA CDMA	0.10	0.00	98.75	0.00	0.09	1.11	1.89	98.18	0	0.01	0.00	100.00	100.00	99.46	93.15	100.00	100.00
	TATA GSM	0.02	0.00	98.63	0.03	0.05	0.79	1.49	98.26	0	0.00	0.00	100.00	100.00	99.31	93.43	100.00	100.00
	Vodafone	0.03	0.07	99.57	0.05	0.43	0.84	2.53	97.59	0	0.03	0.02	100.00	100.00	100.00	96.95	100.00	100.00
	Aircel	0.31	0.43	99.87	0.00	0.00	0.78	3.11	98.71	0	0.00	0.00	100.00	100.00	93.92	95.54	100.00	100.00
	Airtel	0.02	0.02	99.80	0.06	0.08	0.24	0.65	99.74	0	0.03	0.01	100.00	100.00	100.00	93.00	100.00	100.00
	BSNL	0.50	0.57	98.00	0.33	2.00	0.70	1.93	99.27	0	0.00	0.00	100.00	100.00	100.00	90.30	100.00	100.00
	Idea	0.09	0.43	99.97	0.18	0.92	0.59	1.83	95.22	0	0.11	0.05	100.00	100.00	99.61	98.36	100.00	100.00
KR	MTS	0.03	0.00	99.62	0.00	0.02	0.63	2.53	98.26	0	0.00	0.05	100.00	100.00	99.60	92.76	NA	NA
	RCOM CDMA	0.06	0.03	99.36	0.00	0.00	0.03	0.14	99.74	0	0.08	0.03	100.00	100.00	98.95	78.06	100.00	100.00
	RCOM GSM	0.05	0.00	99.81	0.00	0.01	0.12	0.07	99.33	0	0.08	0.10	100.00	100.00	98.62	73.26	100.00	100.00
	TATA CDMA	0.03	0.00	98.81	0.00	0.03	0.79	1.96	99.12	0	0.00	0.00	100.00	100.00	99.57	83.75	100.00	100.00
	TATA GSM	0.01	0.00	98.97	0.01	0.02	0.60	1.20	98.32	0	0.00	0.00	100.00	100.00	99.37	92.59	100.00	100.00
	Vodafone	0.02	0.03	99.43	0.11	0.55	0.63	0.73	97.32	0	0.08	0.00	100.00	100.00	98.57	92.57	100.00	100.00
	Aircel	0.05	0.03	99.09	0.05	0.15	1.07	2.67	97.48	0	0.00	0.00	100.00	100.00	97.01	92.29	100.00	100.00
	Airtel	0.36	1.48	99.05	0.24	0.26	0.36	0.39	99.08	0	0.05	0.00	100.00	100.00	100.00	96.00	100.00	100.00
	BSNL	1.20	1.83	98.00	0.10	0.57	1.20	2.17	96.43	0	0.00	0.00	100.00	100.00	99.00	97.50	100.00	100.00
	Idea	0.17	0.52	97.69	0.17	0.53	0.82	1.87	96.80	0	0.06	0.03	100.00	100.00	99.45	98.36	100.00	100.00
ктк	MTS	0.15	0.00	99.03	0.00	0.29	0.40	0.09	98.26	0	0.10	0.01	100.00	100.00	96.93	91.42	100.00	100.00
KIK	RCOM CDMA	0.23	0.36	99.02	0.00	0.00	0.04	0.22	99.77	0	0.10	0.05	100.00	100.00	97.46	74.22	100.00	100.00
	RCOM GSM	0.24	0.77	99.72	0.02	0.04	0.31	0.04	99.02	0	0.09	0.10	100.00	100.00	98.15	42.58	100.00	100.00
	TATA CDMA	0.02	0.00	98.75	0.00	0.04	0.60	2.27	98.37	0	0.01	0.00	100.00	100.00	99.66	91.99	100.00	100.00
	TATA GSM	0.05	0.02	98.67	0.03	0.13	0.66	2.39	98.24	0	0.00	0.00	100.00	100.00	99.52	94.69	100.00	100.00
	Vodafone	0.25	1.57	99.84	0.07	0.16	0.61	2.48	98.87	0	0.09	0.04	100.00	100.00	100.00	96.15	100.00	100.00
	Aircel	0.03	0.02	98.19	0.09	0.17	0.82	1.68	97.99	0	0.00	0.00	100.00	100.00	99.51	82.91	100.00	100.00
	Airtel	0.00	0.00	99.99	0.00	0.00	0.31	0.00	99.97	0	0.02	0.00	100.00	100.00	100.00	94.00	100.00	100.00
	Idea	0.04	0.10	98.22	0.41	1.05	1.90	2.87	98.22	0	0.06	0.02	100.00	100.00	99.36	97.59	100.00	100.00
	Loop Mobile	0.01	0.00	99.19	0.04	0.04	0.63	0.76	98.09	0	0.00	0.01	100.00	100.00	99.34	99.01	100.00	100.00
	MTNL CDMA	0.05	1.64	98.58	0.79	0.01	1.12	2.30	97.63	0	0.08	0.04	100.00	100.00	96.00	47.52	100.00	100.00
MBI	MTNL GSM	0.63	1.58	97.90	0.35	0.05	1.25	2.36	96.86	0	0.03	0.01	100.00	100.00	95.91	95.91	100.00	100.00
	RCOM CDMA	0.21	0.04	98.99	0.00	0.01	0.39	0.07	99.79	0	0.10	0.07	100.00	100.00	99.44	93.41	100.00	100.00
	RCOM GSM	0.18	0.14	99.65	0.03	0.04	0.36	0.02	99.13	0	0.10	0.10	100.00	100.00	99.38	89.36	100.00	100.00
	TATA CDMA	0.01	0.00	98.96	0.00	0.03	0.65	1.06	99.04	0	0.00	0.00	100.00	100.00	99.62	94.54	100.00	100.00
	TATA GSM	0.01	0.00	99.58	0.08	0.15	0.70	1.54	98.47	0	0.00	0.00	100.00	100.00	99.44	94.09	100.00	100.00
	Vodafone	0.00	0.00	99.49	0.05	0.51	0.84	2.66	97.40	0	0.06	0.01	100.00	100.00	99.91	95.10	100.00	100.00
	Aircel	0.13	0.53	99.62	0.06	0.02	0.69	1.85	97.51	0	0.01	0.00	100.00	100.00	92.13	66.56	100.00	100.00
	Airtel	0.01	0.00	99.86	0.04	0.07	0.55	0.27	98.93	0	0.02	0.00	100.00	100.00	100.00	92.00	100.00	100.00
	BSNL	1.87	1.91	95.87	0.74	1.78	1.75	2.76	95.83	0	NA	NA	NA	NR	N/A	N/A	100.00	100.00
	Idea	0.25	1.65	98.88	0.53	0.60	1.12	2.25	97.51	0	0.09	0.00	100.00	100.00	99.17	99.39	100.00	100.00
l	RCOM CDMA	0.19	0.21	98.22	0.00	0.02	0.21	0.82	99.80	0	0.10	0.10	100.00	100.00	99.44	94.67	100.00	100.00
MH	RCOM GSM	0.30	0.89	99.59	0.05	0.04	0.34	0.01	98.87	0	0.09	0.10	100.00	100.00	98.64	81.58	100.00	100.00
	TATA CDMA	0.02	0.00	97.91	0.00	0.78	1.08	2.17	99.10	0	0.00	0.00	100.00	100.00	99.19	95.29	100.00	100.00
	TATA GSM	0.01	0.00	99.34	0.06	0.11	0.75	2.68	98.05	0	0.00	0.00	100.00	100.00	99.10	93.70	100.00	100.00
	Uninor	0.15	0.64	97.78	0.31	1.03	0.86	1.64	97.67	0	NA	0.03	100.00	NA	96.54	91.41	NA	NA
	Vodafone	0.14	0.80	99.45	0.23	0.54	0.73	2.83	97.30	0	0.05	0.03	100.00	100.00	99.92	86.91	99.16	100.00
L	Journal	0.17	0.00	33.43	0.23	0.54	0.75	2.03	57.50		0.05	0.03	100.00	100.00	33.32	00.52	33.10	100.00

	A:1	0.33	0.53	00.00	0.07	0.00	0.72	4 54	00.47	_	0.00	0.00	100.00	100.00	02.04	07.70	100.00	100.00
	Aircel	0.32	0.52	99.09	0.07	0.00	0.72	4.51	99.17	0	0.00	0.00	100.00	100.00	93.01	97.78	100.00	100.00
	Airtel	0.11	0.32	99.49	0.05	0.22	0.96	1.13	95.98	0	0.02	0.01	100.00	100.00	100.00	94.00	100.00	100.00
	BSNL	1.70	1.52	96.17	0.52	1.70	1.57	2.72	96.80	0	0.00	0.05	100.00	100.00	99.50	95.15	100.00	100.00
	Idea	3.49	8.61	98.66	0.56	0.78	1.00	1.58	98.82	0	0.06	0.01	100.00	100.00	99.54	98.74	100.00	100.00
MP	RCOM CDMA	0.35	0.54	99.31	0.00	0.00	0.06	0.21	99.85	0	0.10	0.10	100.00	100.00	98.71	94.44	100.00	100.00
	RTL	0.18	0.59	98.66	0.02	0.19	0.57	0.01	97.91	0	0.09	0.10	100.00	100.00	98.97	91.22	100.00	100.00
	TATA CDMA	0.00	0.00	98.88	0.00	0.09	0.66	0.95	99.18	0	0.00	0.00	100.00	100.00	97.85	92.81	100.00	100.00
	TATA GSM	0.00	0.00	98.49	0.04	0.05	0.68	1.83	98.48	0	0.00	0.00	100.00	100.00	99.24	93.52	100.00	100.00
	Videocon	0.17	0.56	98.87	0.07	0.25	0.60	1.13	98.43	0	NA	0.02	100.00	100.00	95.81	91.90	NA	NA
	Vodafone	0.07	0.04	99.70	0.07	0.30	0.72	2.09	98.99	0	0.13	0.04	99.90	100.00	100.00	96.82	100.00	100.00
	Aircel	0.87	6.14	95.50	0.75	1.64	0.88	5.47	94.22	0	0.01	0.01	100.00	100.00	95.91	93.10	100.00	100.00
	Airtel	0.34	0.82	98.06	0.29	0.36	1.14	0.95	98.90	0	0.00	0.01	100.00	100.00	100.00	95.00	100.00	100.00
NE	BSNL	6.03	15.85	95.00	3.00	4.22	4.08	12.77	92.50	0	0.05	0.05	100.00	100.00	98.50	89.00	100.00	100.00
INE	Idea	1.54	1.52	96.97	0.36	1.59	1.82	2.53	95.63	0	0.00	0.00	100.00	100.00	97.41	99.17	100.00	100.00
	RTL	0.34	1.66	98.46	0.02	0.44	0.63	0.22	98.37	0	0.08	0.10	100.00	100.00	98.41	83.54	100.00	100.00
	Vodafone	1.77	1.88	99.44	0.12	0.56	0.71	2.74	97.92	0	0.07	0.01	100.00	100.00	99.98	97.74	100.00	100.00
	Aircel	0.61	1.59	98.11	0.53	0.50	0.96	2.63	95.46	0	0.00	0.00	100.00	100.00	92.54	93.69	100.00	100.00
	Airtel	0.37	1.15	98.39	0.60	1.11	1.11	0.94	95.84	0	0.00	0.00	100.00	100.00	100.00	94.00	100.00	100.00
	BSNL	1.00	0.80	98.33	0.83	1.40	1.63	2.33	97.00	0	0.00	0.00	100.00	100.00	95.00	97.30	100.00	100.00
	Idea	0.28	1.23	99.48	0.29	0.28	0.42	1.32	96.68	0	0.01	0.02	100.00	100.00	98.32	98.95	100.00	70.37
OR	RCOM CDMA	0.36	0.68	99.39	0.00	0.00	0.10	0.95	99.80	0	0.08	0.07	100.00	100.00	98.50	94.10	100.00	100.00
	RTL	0.06	0.06	98.16	0.21	0.71	0.54	0.20	98.26	0	0.09	0.10	100.00	100.00	98.94	82.07	100.00	100.00
	TATA CDMA	0.05	0.00	98.44	0.00	0.13	0.78	1.07	98.25	0	0.01	0.00	100.00	100.00	99.83	96.73	100.00	100.00
	TATA GSM	0.08	0.59	99.11	0.10	0.22	0.47	0.53	97.86	0	0.00	0.00	100.00	100.00	96.68	91.37	100.00	100.00
	Vodafone	0.14	0.34	99.18	0.47	0.82	0.78	2.36	98.35	0	0.04	0.07	100.00	100.00	99.94	96.84	100.00	100.00
	Aircel	0.14	0.06	98.10	0.04	0.32	0.76	1.65	97.88	0	0.00	0.00	100.00	100.00	99.94	92.61	100.00	100.00
	Airtel	0.05	0.06	99.30	0.08	0.13	0.52	1.02	98.67	0	0.05	0.00	100.00	100.00	100.00	94.00	100.00	100.00
	BSNL	0.20	1.57	97.67	0.90	1.70	1.70	5.37	95.87	0	0.00	0.00	100.00	0.00	100.00	67.00	100.00	100.00
	Idea	0.03	0.01	98.23	0.08	0.49	0.62	0.73	96.82	0	0.04	0.01	100.00	100.00	99.92	98.20	100.00	100.00
	QTL CDMA	0.47	0.00	98.61	0.72	0.73	1.07	0.53	97.66	0	0.00	0.00	100.00	100.00	95.00	93.00	100.00	100.00
PB	QTL GSM	0.23	0.52	98.17	0.57	0.97	1.13	2.21	96.78	0	0.00	0.01	100.00	100.00	95.54	92.06	NA	NA
	RCOM CDMA	0.09	0.04	99.00	0.00	0.00	0.01	0.05	99.70	0	0.09	0.10	100.00	100.00	99.01	92.07	100.00	100.00
	RCOM GSM	0.09	0.16	99.67	0.02	0.04	0.29	0.03	99.03	0	0.08	0.10	100.00	100.00	98.96	74.89	100.00	100.00
	TATA CDMA	0.02	0.00	98.96	0.00	0.06	0.58	0.48	98.97	0	0.00	0.00	100.00	100.00	98.40	95.38	100.00	100.00
	TATA GSM	0.03	0.08	99.20	0.00	0.07	0.55	0.86	97.78	0	0.00	0.00	100.00	100.00	99.08	90.80	100.00	100.00
	Vodafone	0.03	0.10	99.83	0.03	0.17	0.61	0.84	98.10	0	0.04	0.00	100.00	100.00	100.00	99.44	100.00	100.00
	Aircel	0.05	0.17	96.69	0.24	0.44	0.68	0.74	97.49	0	0.00	0.00	100.00	100.00	98.74	90.18	100.00	100.00
	Airtel	0.08	0.19	98.98	0.22	0.33	0.82	1.47	98.99	0	0.01	0.00	100.00	100.00	100.00	93.00	100.00	100.00
	BSNL	1.83	1.90	99.00	0.33	1.17	1.60	2.90	98.30	0	0.00	0.10	100.00	100.00	99.00	93.00	100.00	100.00
	Idea	0.08	0.03	99.09	0.27	0.44	1.29	2.60	95.62	0	0.07	0.02	100.00	100.00	99.43	98.84	100.00	100.00
	MTS	0.04	0.00	99.28	0.00	0.17	0.58	1.29	98.71	0	0.07	0.04	100.00	100.00	99.37	97.20	100.00	100.00
RAJ	RCOM CDMA	0.26	0.42	99.16	0.00	0.00	0.10	0.37	99.67	0	0.10	0.10	100.00	100.00	98.96	98.40	100.00	100.00
	RCOM GSM	0.20	0.47	99.64	0.05	0.06	0.31	0.06	98.75	0	0.09	0.10	100.00	100.00	99.00	88.00	100.00	100.00
	TATA CDMA	0.03	0.00	98.41	0.00	0.61	0.63	2.88	98.96	0	0.00	0.00	100.00	100.00	97.94	94.94	100.00	100.00
	TATA GSM	0.04	0.00	98.55	0.03	0.05	0.69	1.15	98.67	0	0.00	0.00	100.00	100.00	99.33	93.84	NR	NR
	Vodafone	0.27	0.91	99.74	0.19	0.26	0.77	0.66	97.26	0	0.09	0.04	100.00	100.00	100.00	98.79	100.00	100.00
L	Voudione	0.27	0.91	JJ./4	0.13	0.20	0.77	0.00	37.20	3	0.03	0.04	100.00	100.00	100.00	50.73	100.00	100.00

	اممدا	0.28	1.37	98.05	0.39	0.74	0.54	1.09	95.05	0	0.00	0.00	100.00	100.00	97.01	90.51	100.00	99.73
	Aircel				0.39		0.54	0.17										
	Airtel	0.01	0.01	99.81		0.03			99.67	0	0.05	0.00	100.00	100.00	100.00	92.00	100.00	100.00
	BSNL	0.47	1.60	97.67	0.10	0.20	0.67	1.73	99.00	0	0.10	0.00	100.00	100.00	100.00	94.00	100.00	100.00
	Idea	0.02	0.00	99.76	0.06	0.10	0.41	0.47	97.35	0	0.05	0.14	100.00	100.00	99.45	98.47	100.00	100.00
TN	MTS	0.05	0.13	99.46	0.00	0.19	0.42	0.00	98.25	0	0.00	0.01	100.00	100.00	99.48	91.43	NA	NA
	RCOM CDMA	0.24	0.38	99.19	0.00	0.00	0.05	0.09	99.78	0	0.10	0.03	100.00	100.00	97.45	73.05	100.00	100.00
	RCOM GSM	0.26	0.56	99.73	0.02	0.04	0.36	0.02	99.01	0	0.10	0.10	100.00	100.00	98.62	32.60	100.00	100.00
	TATA CDMA	0.03	0.00	98.82	0.00	0.03	0.82	2.25	98.82	0	0.00	0.00	100.00	100.00	99.13	80.09	100.00	100.00
	TATA GSM	0.08	0.18	98.66	0.02	0.02	0.61	0.78	98.59	0	0.00	0.00	100.00	100.00	99.21	78.77	100.00	100.00
	Vodafone	0.07	0.51	99.74	0.12	0.26	0.74	1.10	97.71	0	0.05	0.00	100.00	100.00	100.00	93.29	100.00	100.00
	Aircel	0.40	1.63	97.78	0.79	0.33	0.63	1.17	96.39	0	0.00	0.00	100.00	100.00	88.84	92.71	100.00	100.00
	Airtel	0.69	1.02	99.46	0.10	0.39	0.78	2.66	98.67	0	0.01	0.02	100.00	99.97	100.00	96.00	100.00	100.00
	BSNL	1.25	0.84	97.00	0.73	1.57	1.60	2.53	96.67	0	0.08	0.07	100.00	100.00	97.32	91.00	100.00	100.00
	Idea	0.21	0.94	98.56	0.69	1.37	1.12	2.85	96.53	0	0.05	0.01	100.00	100.00	99.98	99.17	100.00	100.00
UPE	RCOM CDMA	0.35	0.95	98.50	0.00	0.01	0.19	0.22	99.76	0	0.10	0.10	100.00	100.00	97.54	93.40	100.00	100.00
	RCOM GSM	0.23	0.55	99.47	0.11	0.05	0.28	0.01	98.85	0	0.08	0.10	100.00	100.00	99.15	97.04	100.00	100.00
	TATA CDMA	0.04	0.00	98.57	0.00	0.19	0.53	2.95	97.56	0	0.00	0.00	100.00	100.00	99.34	96.93	100.00	100.00
	TATA GSM	0.01	0.00	98.13	0.07	0.66	0.81	1.72	97.57	0	0.00	0.00	100.00	100.00	99.34	95.70	100.00	100.00
	Uninor	0.39	1.92	97.43	0.47	1.58	0.70	2.33	96.14	0	NA	0.01	100.00	NA	96.16	97.01	NA	NA
	Vodafone	0.47	1.78	99.40	0.22	0.60	1.22	2.45	95.83	0	0.06	0.02	100.00	100.00	100.00	93.77	100.00	100.00
	Aircel	0.20	1.33	98.97	0.17	0.16	0.53	1.67	97.76	0	0.00	0.00	100.00	100.00	87.91	94.28	100.00	100.00
	Airtel	0.16	0.39	97.51	0.82	1.22	1.29	2.14	97.62	0	0.03	0.02	100.00	99.98	100.00	92.00	100.00	100.00
	BSNL	0.95	1.90	97.17	0.74	1.45	1.57	2.49	96.58	0	0.00	0.00	100.00	100.00	100.00	68.20	100.00	100.00
	Idea	0.04	0.09	99.94	0.67	0.64	0.91	2.33	96.10	0	0.05	0.00	100.00	100.00	99.57	97.33	100.00	100.00
	MTS	0.05	0.00	99.59	0.00	0.00	0.46	1.26	99.26	0	0.10	0.01	100.00	100.00	97.80	97.32	100.00	NA
UPW	RCOM CDMA	0.29	0.77	98.54	0.00	0.01	0.17	0.56	99.78	0	0.09	0.10	100.00	100.00	97.74	93.74	100.00	100.00
	TATA CDMA 0.02 0.00 98.98 0.00 0.17 0.54 0.53 97.72 0 0.00 0.00 100.00 98.74 97.52 100.00 1															100.00		
	TATA GSM 0.10 0.29 98.89 0.02 0.20 0.67 1.50 98.03 0 0.00 100.00 100.00 99.37 94.51 100.00 100.00																	
	TATA GSM 0.10 0.29 98.89 0.02 0.20 0.67 1.50 98.03 0 0.00 0.00 100.00 99.37 94.51 100.00 100.00																	
	TATA GSM 0.10 0.29 98.89 0.02 0.20 0.67 1.50 98.03 0 0.00 0.00 100.00 100.00 99.37 94.51 100.00 100.00 Uninor 0.16 0.60 98.06 0.22 1.43 0.45 1.56 97.13 0 NA 0.03 100.00 NA 96.23 96.68 NA NA																	
	Vodafone	0.16	0.91	99.32	0.14	0.68	0.73	1.12	97.53	0	0.05	0.02	100.00	100.00	100.00	93.35	100.00	100.00
	Aircel	0.87	1.89	95.75	0.65	1.80	1.05	2.49	95.58	0	0.00	0.00	100.00	100.00	99.80	92.60	100.00	100.00
	Airtel	0.07	0.19	98.85	0.23	1.19	1.38	1.62	97.88	0	0.01	0.00	100.00	100.00	100.00	96.00	100.00	100.00
	BSNL	2.22	8.19	97.20	0.46	0.92	1.48	11.01	96.52	0	0.07	0.33	99.50	100.00	100.00	98.90	97.21	100.00
	Idea	0.36	1.15	98.65	0.06	0.18	0.58	2.48	95.71	0	0.02	0.02	100.00	100.00	99.52	98.24	100.00	100.00
WB	MTS	0.30	0.00	99.33	0.00	0.17	1.03	2.56	99.62	0	0.10	0.03	100.00	100.00	100.00	90.00	100.00	NA
	RCOM CDMA	0.23	0.40	98.97	0.00	0.02	0.15	0.25	99.67	0	0.07	0.10	100.00	100.00	99.12	82.46	100.00	100.00
	RTL	0.24	0.78	98.53	0.02	0.11	0.65	0.11	98.24	0	0.08	0.10	100.00	100.00	98.97	95.21	100.00	100.00
	TATA COMA	0.05	0.00	98.39	0.00	0.15	0.80	2.63	98.01	0	0.00	0.00	100.00	100.00	99.73	96.99	100.00	100.00
	TATA GSM	0.00	0.00	98.30	0.04	0.47	0.79	2.10	97.81	0	0.00	0.00	100.00	100.00	96.05	95.26	100.00	100.00
	Vodafone	0.01	0.02	99.50	0.25	0.50	0.93	1.43	95.33	0	0.04	0.04	100.00	100.00	100.00	95.47	100.00	100.00
N	IA : Not Applicable	e NE	R : Not Report	ed													<u> </u>	
	OM CDMA & RCON																	
	ncluded in TN for		lated parame	ters only														
Doza	RCOM GSM: entage of calls an	curored by	ho operate	has been	norted so	hinad for Th	l and CU fo	r customa:	rolated ==	ramotors anh								
Perc	RCOM CDMA :	swered by t	ne operators	nas peen re	ported com	onieu for IN	anu CH fo	customer	related pai	ашецего опту.								<u> </u>
Perc	entage of calls an	swered by t	he operators	has been re	ported com	bined for TN	and CH fo	r customer	related par	rameters only.								
Perce	entage of calls ans	wered by th	ne operators l	has been rep	orted comb	ined for WB	and KOL fo	or custome	r related pa	rameters only.								1

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

		Performance	Monitoring Repor	t on Quality of Service	e of Cellular Mobil	e Serivce (3G) Prov	iders for quarter	ending, December , 2013	3	
		Network A			Establishment (Acc			ection Maintenance (Ret		POI
Name of the Service Provider	Name of Service Area / City	Node-B's Accumulated downtime (not available for service) (%age)	Worst affected 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	10
	Benchmark	≤ 2%	≤ 2 %	≥ 95%	≤ 1%	≤ 2 %	≤ 2%	≤ 3%	≥ 95%	≤ 0.5%
	Aircel	0.04	0.00	99.04	0.51	0.45	0.65	2.76	99.76	0
AP	Airtel	0.10	0.19	99.00	0.23	0.00	0.64	2.16	99.12	0
7.1	BSNL	1.00	1.73	98.67	0.70	1.20	1.07	2.70	98.27	0
	Idea	0.02	0.00	99.21	0.21	0.75	0.47	1.24	99.62	0
	BSNL	1.90	1.97	96.33	0.00	0.00	0.80	2.90	92.87	0
AS	Airtel	0.15	0.60	98.14	0.69	0.14	0.66	1.33	99.15	0
7.3	RTL	0.38	1.49	97.09	0.07	0.03	0.47	2.22	99.85	0
	Aircel	0.54	1.78	99.25	0.06	0.02	0.97	9.01	99.41	0
	Airtel	0.01	0.64	99.45	0.03	0.04	0.60	0.24	99.63	0
вн	RTL	0.45	1.54	96.76	0.01	0.34	0.64	2.55	99.84	0
	Aircel	1.09	4.45	98.07	1.17	0.12	1.17	12.04	99.11	0
	BSNL	1.43	1.62	98.17	0.18	0.55	1.17	2.93	95.73	0
	Aircel	0.94	8.51	98.21	0.31	0.23	1.30	7.95	98.22	0
CHN	Vodafone	0.04	0.08	99.81	0.01	0.01	0.33	0.71	99.01	0
	Airtel	0.07	0.10	99.76	0.01	0.09	0.27	0.32	98.73	0
	BSNL	0.80	1.83	98.00	0.77	0.27	1.20	1.87	95.90	0
	Airtel	0.14	0.78	97.80	0.51	0.27	0.71	2.21	99.07	0
DL	MTNL	0.53	1.57	96.83	0.50	1.63	1.63	2.33	96.30	0
22	RCOM	0.25	0.90	99.21	0.04	0.13	0.60	2.26	99.73	0
	Vodafone	0.02	0.00	97.72	0.01	0.00	0.79	2.84	99.11	0
	BSNL	1.80	1.83	96.67	0.60	1.27	1.60	2.43	100.00	0
GJ	Idea	0.03	0.01	99.76	0.24	0.12	0.53	1.55	99.11	0
	Tata	0.00	0.00	99.27	0.02	0.26	0.76	1.27	99.74	0
	Vodafone	0.02	0.00	99.80	0.15	0.04	0.24	0.16	99.04	0
	Airtel	0.04	0.00	98.26	0.15	0.00	1.26	2.14	98.62	0
HP	BSNL	1.80	1.33	96.00	0.87	1.90	1.97	2.73	96.70	0
	Idea	0.30	0.00	99.41	0.68	0.33	1.39	2.28	98.94	0
	RTL	0.52	1.38	97.73	0.05	0.00	0.48	2.00	99.90	0
	BSNL	1.72	1.13	96.59	0.70	1.18	1.27	2.13	96.57	1
HR	Idea	0.00	0.00	99.79	0.01	0.00	0.24	1.02	99.01	0
	Tata	0.04	0.00	99.61	0.16	0.11	0.20	0.28	99.22	0
	Vodafone	0.04	0.00	99.85	0.07	0.01	0.29	1.41	99.02	0
	Airtel	0.22	0.56	98.56	0.22	0.00	1.24	2.06	98.77	0 0
J&K	RCOM	0.59	1.59	99.62	0.01	0.02	1.15	2.21	99.46	0
J&K	Aircel	0.31	1.63	98.20	0.50	0.16	1.34	2.87	99.07	
	BSNL	1.40	1.55	96.50	0.75	1.10	1.40	2.55	98.00	0
	Idea	0.43	1.40	99.81	0.24	0.04	1.23	1.85	99.10	0
	Aircel	0.00	0.00	99.59	0.18	0.00 0.07	0.04	0.15	99.93	0
KR	Tata	0.00	0.00	99.62	0.02		0.42	0.64 0.10	99.83	0
	BSNL	0.37 0.04	1.27 0.02	98.33 99.25	0.13 0.69	1.97 0.39	1.07 0.26		97.37 98.78	0
	Idea							1.85		0
	Aircel	0.40	1.14	99.88	0.16	0.17	0.25	1.47	98.87	
KOL	BSNL RTL	1.98	1.68 0.69	98.53	0.80	0.76 0.00	0.25 0.71	1.90 2.47	98.80	0
		0.13 0.03	0.69	97.57	0.04	0.00		0.93	99.86	0
	Vodafone	0.03	0.10	99.89	0.02	0.02	0.29	0.93	99.05	U

	BSNL	1.17	1.83	99.00	0.27	0.40	0.97	2.37	98.43	0
KTK	Aircel	0.08	0.03	98.95	0.45	0.51	0.76	2.29	99.73	0
KIK	Airtel	0.04	0.03	99.03	0.11	0.20	0.35	0.55	99.74	0
	Tata	0.05	0.08	99.42	0.42	0.20	0.45	0.85	99.22	0
	BSNL	1.86	1.65	95.46	0.00	1.88	1.90	2.75	95.73	0
5.41.1	Idea	0.08	0.19	99.75	0.37	0.13	0.99	2.84	98.70	0
MH	Tata	0.01	0.00	99.03	0.02	0.05	0.21	2.39	100.00	0
	Vodafone	0.06	0.20	99.50	0.56	0.15	0.45	1.35	98.98	0
	Airtel	0.01	0.00	99.97	0.00	0.00	0.18	0.24	99.90	0
NADI	MTNL	0.60	1.67	98.63	0.00	0.37	1.43	2.50	99.11	0
MBI	RCOM	0.36	1.48	99.31	0.01	0.11	0.69	2.30	99.68	0
	Vodafone	0.03	0.00	99.57	0.05	0.03	0.42	1.71	99.11	0
	BSNL	1.05	0.97	64.91	0.38	0.70	0.92	3.28	97.37	0
	Idea	0.06	0.05	99.70	0.23	0.08	0.71	1.95	99.32	0
MP	RTL	0.24	0.56	96.85	0.05	0.03	0.53	2.29	99.83	0
	Tata	0.00	0.00	99.67	0.01	0.02	0.81	2.37	99.82	0
	Aircel	0.48	1.72	98.88	0.25	0.02	1.52	19.78	99.16	0
NE	Airtel	1.30	1.49	96.95	0.54	0.94	1.38	1.27	99.13	0
INE	BSNL	3.85	3.00	95.17	2.03	2.00	1.37	3.60	95.50	0
	RTL	0.86	1.24	96.65	0.00	0.01	1.29	2.01	99.81	0
	BSNL	1.00	1.40	97.67	0.77	1.73	0.27	1.00	97.67	0
OR	RTL	0.39	1.58	96.98	0.06	0.00	0.66	2.13	99.84	0
	Aircel	0.33	1.31	98.26	0.06	0.02	1.00	11.79	99.63	0
	Aircel	0.18	0.11	99.09	0.18	0.00	0.69	20.83	97.70	0
РВ	BSNL	0.10	0.60	96.33	0.83	1.87	1.70	2.97	99.83	0
РВ	RCOM	0.20	1.09	99.06	0.02	0.21	0.53	2.17	99.72	0
	Tata	0.05	0.22	99.72	0.15	0.03	0.31	1.19	99.14	0
	Airtel	0.06	0.13	99.31	0.13	0.12	0.65	2.47	99.13	0
RAJ	RCOM	0.16	0.85	99.39	0.03	0.08	0.26	2.32	99.75	0
IVAJ	Tata	0.00	0.00	99.93	0.00	0.00	0.27	0.85	99.93	0
	BSNL	1.97	1.90	99.00	0.00	0.00	0.70	2.83	98.30	0
	Vodafone	0.08	0.35	99.80	0.05	0.02	0.29	1.07	99.08	0
TN	Aircel	0.40	0.85	98.59	0.51	0.72	1.06	6.25	98.45	0
1 11	Airtel	0.03	0.03	99.78	0.07	0.10	0.19	0.29	99.37	0
	BSNL	0.43	1.47	98.67	0.37	0.77	0.27	0.30	99.00	0
	Idea	0.49	0.59	99.39	0.02	0.00	0.28	2.88	99.09	0
UP(E)	Aircel	0.53	1.80	99.48	0.15	0.01	0.61	2.56	99.90	0
O1 (L)	BSNL	1.13	1.77	97.02	0.34	1.70	1.02	0.00	31.67	0
	Vodafone	0.05	0.14	99.79	0.06	0.04	0.41	0.86	99.06	0
	Airtel	0.30	1.05	99.10	0.14	0.00	0.83	2.46	99.05	0
UPW	BSNL	1.18	1.77	97.47	NR	NR	1.45	2.80	96.65	0
0. **	Idea	0.25	0.88	99.09	0.47	0.13	0.29	1.94	99.06	0
	Tata	0.08	0.51	99.58	0.20	0.05	0.25	0.84	99.26	0
	Aircel	0.59	1.59	98.35	0.23	0.22	0.63	5.69	98.70	0
	Airtel	0.10	0.10	99.51	0.02	0.15	0.53	2.88	99.64	0
WB	BSNL	1.63	11.47	97.23	0.15	0.63	1.31	3.96	81.33	0
	RTL	0.36	1.56	96.35	0.07	0.04	0.75	2.19	99.84	0
	Vodafone	0.02	0.00	99.69	0.00	0.01	0.56	2.29	99.04	0

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

					F	erformance	Monitorin	g Repor	t of Basic	Service	(Wireline)	for Quart	er Ending	Decembe	r, 2013				
			(No. of month)		Fault Repa	air		(MTTR)	(CCR)	Ratio	POI		Meterir	g and Billi	•		nse time to the r for Assistance	Termination of se	n / closure rvice
SI. No.	Name of Service Area	ne of Service Provider	Faults incidences (No. of faults/100 Subs./month)	% of faults repaired by next working day	% of faults repaired within 3 days	% of faults repaired within 5 days	Rent Rebate	Mean Time to Repair (Call Completion Rate (CCR)	Answer to Seizure F	Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark	Metering and Billingcredibility - post paid	Metering and billing credibility - pre paid	Resolution of billing/charging/validity complaints	Period of applying credity 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 60 seconds	%age requests for Termination / Closure of service complied within 7 days	Time taken for refund of deposits after closures
	Z	Name		ı				•	1	1	Bend	hmarks	1						
			≤5	By next working day: ≥ 90%	For urban areas: 100%	For rural and hilly areas: 100%		≤8 Hrs	≥ 55%	≥ 75 %	≤ 0.5%	≤ 0.1%	≤ 0.1%	100% within 4 weeks	1 week of resolution of complaint	≥ 95%	≥ 90%	100% within 7 days	100% within 60 days
1	A&N	BSNL	3.29	92.06%	100.00%	100.00%	5	6.93	61.15%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	92.00%	100.00%	100.00%
2		Reliance	0.26	100.00%	100.00%	NA	NA	3:17	NA	86.92%	0.00%	0.00%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
3		TTSL	3.98	92.66%	100.00%	100.00%	NA	5.74	90.98%	NA	NIL	0.08%	NA	100.00%	NIL	95.28%	93.23%	100.00%	100.00%
4	AP	Vodafone	0.39	100.00%	NA	NA	NA	1:31	95.15%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	NA	NA
5		Bharti	2.35	91.10%	100.00%	NA	0	3.66	94.51%	NA	0.00%	0.02%	NA	100.00%	100.00%	100.00%	92.00%	100.00%	100.00%
6		BSNL	4.32	92.54%	100.00%	100.00%	53	6.57	69.76%	NA	0.00%	0.01%	NIL	100.00%	100.00%	96.64%	81.33%	100.00%	100.00%
7		TTSL	NA	NA	NA	NA	NA	NA	NA	NA	NIL	NA	NA	NA	NA	NA	NA	NA	NA
8	ASM	Vodafone	1.20	100.00%	NA	NA	NA	0:56	97.06%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	NA	NA
9		BSNL	3.49	96.53%	99.86%	100.00%	92	3.28	70.10%	NA	0.00%	0.02%	NIL	100.00%	100.00%	99.16%	90.33%	100.00%	100.00%
10		Reliance	0.00	NA	NA	NA	NA	NA	NA	97.24%	0.00%	NIL	NA	NIL	NIL	97.00%	95.00%	100.00%	100.00%
11	BH	TTSL	1.11	100.00%	100.00%	100.00%	NA	2.28	92.72%	NA	NIL	0.03%	NA	100.00%	NIL	97.96%	93.02%	NIL	NA
12	D11	Vodafone	1.07	100.00%	NA	NA	NA	6:23	95.53%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	100.00%	NA
13		BSNL	2.94	95.04%	100.00%	100.00%	0	4.82	66.12%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	99.19%	50.67%	100.00%	100.00%
14	Chattisgarh	BSNL	3.80	97.62%	99.69%	100.00%	1427	5.83	72.15%	NA	0.00%	0.00%	NA	100.00%	100.00%	94.69%	45.00%	100.00%	100.00%
15		Reliance	0.04	100.00%	100.00%	NA	NA	5:45	NA	86.85%	0.00%	0.01%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
16	CN	TTSL	0.73	98.39%	100.00%	100.00%	NA	4.56	99.96%	NA	NIL	0.00%	NA	NA	NIL	96.96%	93.42%	NIL	NA
17	0,1	Vodafone	0.66	100.00%	NA	NA	NA	2:44	94.75%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	NA	NA
18		BSNL	4.95	92.24%	100.00%	100.00%	1157	7.99	85.49%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	97.72%	84.00%	100.00%	100.00%
19		Reliance	0.18	100.00%	100.00%	NA	NA	2:20	NA	93.78%	0.00%	0.01%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
20		TTSL	1.24	94.34%	100.00%	100.00%	NA	4.15	98.81%	NA	NIL	0.08%	NA	100.00%	NIL	98.61%	93.00%	100.00%	NA
21	DEL	Vodafone	0.21	100.00%	NA	NA	NA	2:04	100.00%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	100.00%	NA
22		Bharti	2.99	94.96%	100.00%	NA	0	3.46	90.34%	NA	0.00%	0.01%	NA	100.00%	100.00%	100.00%	98.00%	100.00%	100.00%
23		MTNL	7.17	86.89%	96.06%	NA NA	17863	4.01	56.31%	NA 00.400/	0.00%	0.04%	NA NA	100.00%	DNF	99.85%	99.03%	100.00%	100.00%
24		Reliance	0.76	100.00%	100.00%	NA 100,000/	NA	1:56	NA	86.16%	0.00%	0.05%	NA NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
25	C	TTSL	2.32	95.22%	100.00%	100.00%	NA	4.51	57.34%	NA NA	NIL	0.05%	NA NA	100.00%	NIL	95.87%	93.30%	100.00%	NA NA
26	GUJ	Vodafone	0.91 1.10	100.00%	NA 100.00%	NA NA	NA 0	2:43 3.66	97.25%	NA NA	0.00%	0.00%	NA NA	NA 100.00%	NA 100.00%	100.00% 99.00%	100.00% 94.00%	NA 100.00%	NA 100.00%
27 28		Bharti BSNL	4.43	96.86%	100.00%		7		91.04%	NA NA		0.01%		100.00%	100.00%	1		100.00%	100.00%
∠ŏ		ROINT	4.43	95.73%	100.00%	100.00%	1	4.42	77.12%	INA	0.00%	0.03%	0.00%	100.00%	100.00%	95.71%	63.67%	100.00%	100.00%

29		Reliance	0.00	NA	NA	NA	NA	NA	NA	79.77%	0.00%	NIL	NA	NIL	NIL	97.00%	95.00%	100.00%	100.00%
30		TTSL	NA	NA	NA	NA	NA	NA	NA	NA	NIL	NA	NA	NA	NA	99.81%	93.71%	NA	NA
31	HP	BSNL	3.88	95.06%	99.85%	99.87%	0	6.12	69.38%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	98.07%	85.33%	100.00%	100.00%
32		Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
33		Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
34		Reliance	0.00	NA	NA	NA	NA	NA	NA	82.77%	0.00%	NIL	NA	NIL	NIL	97.00%	95.00%	100.00%	100.00%
35	HR	TTSL	0.11	100.00%	100.00%	100.00%	NA	7.44	99.99%	NA	NIL	0.05%	NA	100.00%	NA	97.87%	94.11%	NA	NA
36		Bharti	4.36	97.26%	100.00%	NA	0	2.71	88.91%	NA	0.00%	0.01%	NA	100.00%	100.00%	100.00%	98.00%	100.00%	100.00%
37		BSNL	4.47	97.52%	100.00%	100.00%	795	6.17	78.29%	NA	0.00%	0.00%	NIL	100.00%	100.00%	96.53%	51.07%	100.00%	100.00%
38		TTSL	NA	NA	NA	NA	NA	NA	NA	NA	NIL	NA	NA	NA	NA	NA	NA	NA	NA
39	J&K	Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
40		BSNL	4.35	94.84%	100.00%	100.00%	16	6.44	69.59%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	97.08%	68.33%	100.00%	100.00%
41	JHAR	BSNL	2.68	98.18%	100.00%	100.00%	45	5.99	75.54%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	99.16%	97.33%	100.00%	100.00%
42		Reliance	0.25	100.00%	100.00%	NA	NA	7:32	NA	81.81%	0.00%	0.02%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
43		TTSL	0.07	100.00%	100.00%	100.00%	NA	5.08	97.61%	NA	NIL	0.00%	NA	NA	NIL	98.69%	93.72%	NA	NA
44	KER	Bharti	1.16	96.96%	100.00%	NA	0	2.41	90.58%	NA	0.00%	0.01%	NA	100.00%	100.00%	100.00%	96.00%	100.00%	100.00%
45		BSNL	4.43	91.43%	100.00%	100.00%	4142347	7.79	73.08%	NA	0.00%	0.08%	0.00%	100.00%	100.00%	97.15%	98.00%	100.00%	100.00%
46		Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
47		Vodafone	0.45	100.00%	NA	NA	NA	3:11	70.52%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	NA	NA
48		Reliance	0.45	100.00%	100.00%	NA	NA	5:39	NA	90.39%	0.00%	0.03%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
49	KOL	TTSL	1.87	100.00%	100.00%	100.00%	NA	2.12	91.91%	NA	NIL	0.00%	NA	NA	NIL	99.51%	92.76%	100.00%	100.00%
50		Bharti	2.73	93.73%	100.00%	NA	0	4.19	98.76%	NA	0.00%	0.00%	NA	100.00%	100.00%	99.00%	98.00%	100.00%	100.00%
51		BSNL	4.84	91.87%	100.00%	NA	167	7.60	60.67%	NA	0.00%	0.07%	NA	100.00%	100.00%	99.47%	85.67%	100.00%	100.00%
52		Vodafone	0.49	98.55%	NA	NA	NA	1:27	91.98%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	NA	NA
53		Reliance	0.06	100.00%	100.00%	NA	NA	6:32	NA	86.75%	0.00%	0.01%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
54	KTK	TTSL	0.44	95.02%	100.00%	100.00%	NA	4.49	80.27%	NA	NIL	0.05%	NA	100.00%	Nil	96.87%	93.51%	100.00%	100.00%
55		Bharti	2.61	90.64%	100.00%	NA	0	3.62	91.00%	NA	0.00%	0.02%	NA	100.00%	100.00%	99.00%	93.00%	100.00%	100.00%
56		BSNL	4.09	92.93%	100.00%	100.00%	230	6.97	73.36%	NA	0.00%	0.00%	NA	100.00%	100.00%	96.69%	64.67%	100.00%	100.00%
57		Bharti	0.96	99.20%	100.00%	NA	0	2.44	84.20%	NA	0.00%	0.01%	NA	100.00%	100.00%	100.00%	93.00%	100.00%	100.00%
58		BSNL	5.00	91.00%	100.00%	100.00%	223	7.00	58.00%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	95.00%	53.00%	100.00%	100.00%
59	MH	Reliance	0.24	100.00%	100.00%	NA	NA	6:00	NA	87.55%	0.00%	0.02%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
60		Vodafone	0.29	96.55%	NA	NA	NA	0:40	92.28%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	NA	NA
61		TTSL	2.03	94.44%	99.94%	100.00%	NA	4.37	98.40%	NA	NIL	0.08%	NA	100.00%	Nil	95.08%	93.41%	100.00%	100.00%
62		Vodafone	3.11	100.00%	NA	NA	NA	2:29	96.18%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	NA	NA
63		Reliance	0.65	100.00%	100.00%	NA	NA	5:17	NA	87.59%	0.00%	0.02%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
64	MP	TTSL	2.29	95.83%	100.00%	100.00%	NA	4.38	100.00%	NA	NIL	0.00%	NA	NA	Nil	97.20%	93.50%	NA	NA
65		Bharti	4.88	95.49%	100.00%	NA	0	3.17	89.17%	NA	0.00%	0.01%	NA	100.00%	100.00%	100.00%	98.00%	100.00%	100.00%
66		BSNL	3.00	95.00%	100.00%	100.00%	202144	3.00	74.00%	NA	0.00%	0.04%	0.00%	100.00%	100.00%	96.00%	95.00%	100.00%	100.00%
67		Vodafone	0.13	100.00%	NA	NA	NA	1:53	79.74%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	100.00%	NA
68		Bharti	0.34	98.51%	100.00%	NA	0	3.04	83.34%	NA	0.00%	0.00%	NA	100.00%	100.00%	100.00%	94.00%	100.00%	100.00%
69	MUM	MTNL	4.79	94.88%	98.39%	NA	27721	5.28	56.93%	80.38%	0.00%	0.02%	NIL	100.00%	NA	96.40%	95.92%	96.69%	100.00%
70		Reliance	0.13	100.00%	100.00%	NA	NA	4:41	NA	88.53%	0.00%	0.01%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
71		TTSL	3.83	96.90%	99.98%	100.00%	NA	4.52	98.84%	NA	NIL	0.10%	NA	100.00%	Nil	95.14%	93.18%	100.00%	100.00%

72		TTSL	NA	NA	NA	NA	NA	NA	NA	NA	NIL	NA	NA	NA	Nil	NA	NA	NA	NA
73	NE	Vodafone	NA.	NA NA	NA NA	NA NA	NA.	0:01	99.34%	NA.	0.00%	NA NA	NA NA	NA.	NA NA	100.00%	100.00%	NA NA	NA NA
74	NE-I	BSNL	3.00	98.00%	100.00%	100.00%	10	6.00	78.00%	NA	0.00%	0.01%	0.00%	100.00%	100.00%	97.43%	92.33%	100.00%	100.00%
75	NE-II	BSNL	2.73	98.63%	100.00%	100.00%	184	6.47	62.04%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	96.21%	94.67%	100.00%	100.00%
76		Reliance	0.00	NA	NA	NA	NA	NA	NA	83.94%	0.00%	NIL	NA	NIL	NIL	97.00%	95.00%	100.00%	100.00%
77	OD	TTSL	0.22	100.00%	100.00%	100.00%	NA	3.74	99.98%	NA	NIL	0.00%	NA	NA	Nil	99.61%	94.86%	NA	NA
78	OR	BSNL	4.34	92.62%	100.00%	100.00%	0	6.15	65.19%	NA	0.00%	0.11%	0.00%	100.00%	100.00%	99.31%	91.33%	100.00%	100.00%
79		Vodafone	1.76	89.47%	NA	NA	NA	4:12	91.52%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	NA	NA
80		Vodafone	0.28	100.00%	NA	NA	NA	0:51	95.73%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	100.00%	NA
81		Reliance	0.43	100.00%	100.00%	NA	NA	6:37	NA	94.09%	0.00%	NIL	NA	NIL	100.00%	97.00%	95.00%	100.00%	100.00%
82	PB	TTSL	0.57	100.00%	100.00%	100.00%	NA	5.84	76.94%	NA	NIL	0.09%	NA	100.00%	Nil	98.25%	92.22%	NA	NA
83	, 5	Bharti	2.77	95.02%	100.00%	NA	0	3.53	96.94%	NA	0.00%	0.01%	NA	100.00%	100.00%	100.00%	98.00%	100.00%	100.00%
84		Quadrant	3.39	91.40%	99.90%	NA	0	6.15	65.19%	NA	0.00%	0.11%	0.00%	100.00%	100.00%	99.31%	91.33%	100.00%	100.00%
85		BSNL	4.02	96.80%	100.00%	100.00%	267	5.20	75.27%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	96.33%	62.33%	100.00%	100.00%
86		Reliance	0.04	100.00%	100.00%	NA	NA	5:49	NA	93.46%	0.00%	0.03%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
87		TTSL	NA	NA	NA	NA	NA	0.00	99.96%	NA	NIL	0.00%	NA	NA	Nil	99.29%	92.72%	NA	NA
88	RAJ	Vodafone	0.44	100.00%	NA	NA	NA	2:11	96.78%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	100.00%	NA
89	10.0	Bharti	1.80	98.75%	100.00%	NA	0	2.10	87.34%	NA	0.00%	0.01%	NA	100.00%	100.00%	100.00%	98.00%	100.00%	100.00%
90		Sistema	1.55	98.80%	100.00%	100.00%	NA	7.82	55.53%	NA	0.00%	0.00%	NA	100.00%	100.00%	96.02%	93.00%	100.00%	100.00%
91		BSNL	4.41	97.10%	100.00%	100.00%	462	5.37	72.99%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	97.03%	20.00%	100.00%	100.00%
92		Reliance	0.11	100.00%	100.00%	NA	NA	7:50	NA	88.82%	0.00%	0.01%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
93		TTSL	0.81	100.00%	100.00%	100.00%	NA	4.66	99.96%	NA	NIL	0.00%	NA	NA	Nil	96.96%	93.42%	NA	NA
94	TN	Vodafone	1.11	100.00%	NA	NA	NA	0:51	91.74%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	NA	NA
95		Bharti	2.75	94.25%	100.00%	NA	0	3.54	91.19%	NA	0.00%	0.01%	NA	100.00%	100.00%	100.00%	94.00%	100.00%	100.00%
96		BSNL	3.23	93.21%	100.00%	100.00%	694	7.27	83.48%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	97.18%	79.33%	100.00%	100.00%
97		Reliance	0.32	100.00%	100.00%	NA	NA	7:58	NA	93.05%	0.00%	0.03%	NA	100.00%	100.00%	97.00%	95.00%	100.00%	100.00%
98		TTSL	2.61	100.00%	100.00%	100.00%	NA	3.38	100%	NA	NIL	0.00%	NA	NA	Nil	99.33%	93.60%	NA	NA
99	UPE	Vodafone	1.02	100.00%	NA	NA	NA	0:24	94.98%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	100.00%	NA
100		Bharti	4.58	98.19%	100.00%	NA	0	2.87	95.22%	NA	0.00%	0.00%	NA	100.00%	100.00%	100.00%	98.00%	100.00%	100.00%
101		BSNL	3.51	95.83%	100.00%	100.00%	312	5.77	75.22%	NA	0.00%	0.07%	NIL	100.00%	100.00%	97.26%	36.67%	100.00%	100.00%
102		Reliance	0.00	NA	NA	NA	NA	NA	NA	92.74%	0.00%	NIL	NA	NIL	NIL	97.00%	95.00%	100.00%	100.00%
103		TTSL	NA	NA	NA	NA	NA	NA	100%	NA	NIL	0.00%	NA	NA	Nil	99.27%	93.19%	NA	NA
104	UPW	Vodafone	0.25	100.00%	NA	NA	NA	0:55	97.93%	NA	0.00%	0.00%	NA	NA	NA	100.00%	100.00%	NA	NA
105		Bharti	3.19	98.47%	100.00%	NA	0	2.19	96.98%	NA	0.00%	0.02%	NA	100.00%	100.00%	99.00%	98.00%	100.00%	100.00%
106		BSNL	4.76	94.30%	100.00%	100.00%	783	5.54	78.09%	NA	0.00%	0.00%	0.00%	100.00%	100.00%	96.97%	38.67%	100.00%	100.00%
107	Uttaranchal	BSNL	4.57	94.83%	99.94%	99.99%	121	5.22	67.81%	NA	0.00%	Nil	0.00%	100.00%	100.00%	97.51%	66.67%	100.00%	100.00%
108		Reliance	0.00	NA	NA	NA	NA	NA	NA	81.22%	0.00%	NIL	NA	NIL	NIL	97.00%	95.00%	100.00%	100.00%
109	WB	TTSL	NA	NA	NA	NA	NA	NA	NA	NA	NIL	NA	NA	NA	Nil	95.93%	94.63%	NA	NA
110	V V D	Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	100.00%	NA	NA
111		BSNL	4.63	92.16%	100.00%	100.00%	424	6.32	64.09%	NA	0.00%	0.05%	0.00%	100.00%	100.00%	98.85%	100.00%	100.00%	100.00%
	Be	nchmark no	t met			NR - D	ata Not R	eported	ı	NA - Not	Applicable	•							

Annexure 4.4: Quality of Service Performance of Broadband Service Providers

Performance Monitoring Report on Quality of Service of Broadband Service Providers for Quarter Ending December, 2013																			
		Service Provisioning	Faults	Repair		Billing	Performance		Response 'Customer fo	Time to the or assistance		Bandwidth utilisation/throughput		Packet Loss		Network la	tency (for wired bro	adband access)	
Sl. No.	Service Operators/Service area	%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	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)	bandwidth utilization during	Broadband Connection Speed available (download) from ISP node to user	Service availability /uptime (for all users) in %age	Packet loss (for wired broadband access) in %age	User reference point at POP/ISP Gateway node to IGSP/NIXI	User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)
		100%	>90%	>99%	in nos.	<2%	100%	100% within 60 days	>60%	>80%	0	0	<90%	>80%	>98%	<1%	<120 ms	<350 ms	<800 ms
1	BSNL																		
1.1	All India	100.00%	93.64%	99.58%	820205	0.07%	100.00%	100.00%	52.10%	57.04%	0	3	81.20%	90.23%	99.71%	1.50%	52	233.7	0
2	MTNL	00.460/	01.000/	05.150/	10000	0.1.100/	100.000/	100.000/	00.050/	00.010/	****		06.710/	05.000/	00.600/	O (DAID	O (DATE	G (DND	27.1
2.1	Delhi	92.46%	81.83%	95.17%	12082	0.140%	100.00%	100.00%	99.85%	99.91%	Nil	1	86.71%	95.00%	99.68%	C/DNF	C/DNF	C/DNF	NA
2.2	Mumbai	90.11%	90.56%	96.11%	15304	0.01%	100.00%	NA	71.00%	73.34%	0	0	88.91%	80.00%	100.00%	1.00%	70	350	NA
3	Bharti Airtel Ltd.		-										+						
3.1	Andhra Pradesh	100.00%	92.05%	100.00%	0	0.02%	100.00%	100.00%	87.00%	92.00%	0	0	63.10%	98.53%	100.00%	0.00%	32	48.67	NA
3.2	Delhi	100.00%	95.25%	99.24%	651	0.01%	100.00%	100.00%	96.00%	98.00%	0	0	79.36%	109.00%	99.97%	0.00%	31	79.61	NA
3.3	Gujarat	100.00%	95.42%	99.43%	17	0.02%	100.00%	100.00%	86.00%	93.00%	0	NA	NA	102.63%	100.00%	0.01%	42	62.84	NA
3.4	Haryana	100.00%	97.96%	99.80%	3	0.00%	100.00%	100.00%	98.00%	99.00%	0	NA	NA	103.00%	99.93%	0.00%	32	79.61	NA
3.5	Karnataka	100.00%	90.64%	99.92%	17	0.01%	100.00%	100.00%	88.00%	93.00%	0	0	63.21%	105.41%	99.99%	0.00%	28	39.33	NA
3.6	Kerala	100.00%	95.25%	100.00%	0	0.01%	100.00%	100.00%	94.00%	95.00%	0	NA	NA	102.05%	100.00%	0.00%	47	33.67	NA
3.7	Kolkata	100.00%	94.87%	99.23%	57	0.02%	100.00%	100.00%	97.00%	99.00%	0	0	52.20%	114.00%	100.00%	0.00%	27	61.23	NA
3.8	Madhya Pradesh & CG	100.00%	95.49%	99.35%	126	0.01%	100.00%	100.00%	98.00%	99.00%	0	0	82.90%	101.00%	99.97%	0.00%	75	71.62	NA
3.9	Maharashtra	100.00%	96.60%	99.50%	13	0.02%	100.00%	100.00%	93.00%	95.00%	0	NA	NA	106.13%	99.87%	0.04%	41	62.84	NA
3.10	Mumbai	100.00%	98.61%	99.86%	6	0.01%	100.00%	100.00%	91.00%	95.00%	0	0	66.28%	100.00%	99.97%	0.00%	25	62.84	NA
3.11	Punjab	100.00%	97.70%	99.71%	17	0.01%	100.00%	100.00%	98.00%	99.00%	0	0	42.90%	104.00%	99.95%	0.00%	39	84	NA
3.12	Rajasthan	100.00%	99.67%	100.00%	0	0.00%	100.00%	100.00%	98.00%	99.00%	0	NA	NA	109.00%	99.99%	0.00%	37	79.61	NA
3.13	Tamilnadu	100.00%	95.08%	99.97%	6	0.01%	100.00%	100.00%	92.00%	95.00%	0	0	59.93%	99.61%	99.99%	0.00%	12	33.67	NA
3.14	UP - East UP - West	100.00%	97.25% 99.27%	99.72% 99.80%	14	0.00%	100.00%	100.00%	98.00%	99.00% 99.00%	0	NA NA	NA NA	108.00%	99.99% 99.99%	0.00%	34 29	79.61 79.61	NA NA
	Hathway	100.00%	99.27%	99.80%	3	0.00%	100.00%	100.00%	98.00%	99.00%	0	NA	NA	103.00%	99.99%	0.00%	29	79.61	NA
4																			
4.1	Andhra Pradesh	100.00%	97.00%	100.00%	223	1.86%	100.00%	100.00%	89.00%	94.00%	0	0	87.00%	85.00%	99.73%	1.00%	75	320	NA
4.2	Delhi	100.00%	95.00%	99.00%	116	1.27%	100.00%	100.00%	95.00%	98.00%	NR	NR	61.00%	85.00%	99.28%	1.00%	4	298	NA
4.3	Gujarat	100.00%	90.00%	99.00%	0	0.00%	NA	NA	83.00%	95.00%	0	0	86.00%	85.00%	99.00%	1.00%	100	270	NA
4.4	Karnataka	100.00%	98.00%	100.00%	13	1.87%	100.00%	100.00%	80.00%	86.00%	0	0	87.00%	85.00%	99.55%	1.00%	75	350	NA
4.5	Maharashtra	100.00%	96.00%	99.00%	1031	0.80%	100.00%	100.00%	74.00%	84.00%	0	0	87.00%	85.00%	99.00%	1.00%	100	280	NA
4.6	Punjab	100.00%		99.00%	7	1.78%	100.00%	100.00%	99.00%	99.00%	NR	0	70.00%	85.00%	99.00%	1.00%	6	285	NA NA
-	-		98.00%									Ü							
4.7	Goa	100.00%	95.00%	100.00%	0	0.00%	NA	NA	74.00%	94.00%	0	0	84.00%	85.00%	98.00%	1.00%	95	250	NA
4.8	Uttar Pradesh	100.00%	96.00%	99.00%	0	1.06%	100.00%	100.00%	DNF	DNF	NR	NA	59.00%	85.00%	100.00%	1.00%	8	301	NA
4.9	Chhatisgarh	100.00%	99.00%	100.00%	0	1.10%	100.00%	100.00%	99.00%	99.00%	0	0	73.00%	85.00%	99.00%	1.00%	8	305	NA
5	Quadrant Televentures Ltd.(Formerly HFCL Infotel Ltd.)																		
	Punjab	100.00%	96.33%	99.82%	7	0.01%	100.00%	100.00%	76.67%	83.67%	Nil	Nil	80.00%	100.00%	99.93%	0.00%	80	280	NA
6	Tata Teleservices (Maharashtra) Ltd.																-		
	Maharashtra & Goa	100.00%	92.49%	100.00%	Nil	0.39%	100.00%	NA	92.00%	96.50%	0	0	78.00%	94.87%	99.73%	0.00%	30	193	NA

-														1					
7	Beam Cables																		
	Hyderabad	100.00%	91.33%	99.00%	2856	2.00%	100.00%	NA	76.52%	85.76%	0	0	66.30%	80.00%	98.66%	1.00%	50	300	NA
8	Broadband Pacenet India Private Ltd.																		
8.1	Mumbai	100.00%	90.00%	99.00%	55	0.00%	100.00%	NA	66.00%	82.00%	0	0	81.00%	DNF	99.00%	1.00%	50	280	NA
8.2	Mumbai-Pune	100.00%	92.00%	100.00%	17	NR	100.00%	NA	72.00%	83.00%	0	0	79.00%	DNF	99.00%	1.00%	50	280	NA
8.3	All India	100.00%	91.00%	99.00%	54	0.00%	NA	NA	68.00%	83.00%	0	0	81.00%	DNF	99.00%	1.00%	75	310	NA
8.4	Madhya Pradesh	100.00%	92.00%	100.00%	0	0.00%	100.00%	NA	72.00%	92.00%	0	0	65.00%	DNF	99.00%	1.00%	50	280	NA
8.5 8.6	Gujarat Rajasthan	100.00%	91.00% 91.00%	100.00% 100.00%	15 0	1.00% 0.00%	100.00% NA	NA NA	70.00% 72.00%	85.00% 82.00%	0	0	65.00% 80.00%	DNF DNF	99.00% 99.00%	1.00%	50 50	280 280	NA NA
8.7	Gujarat	100.00%	91.00%	100.00%	15	1.00%	100.00%	NA NA	67.00%	84.00%	0	0	77.00%	DNF	99.00%	1.00%	50	280	NA NA
9	Tikona Digital Network	100.0070	92.0070	100.0070	10	1.0070	100.0070	1471	07.0070	04.0070	Ü	0	17.00%	Divi	33.0070	1.0070	30	200	1471
	All India	100.00%	93.37%	99.47%	1847	0.40%	100.00%	100.00%	80.00%	82.00%	0	0	66.07%	98.92%	99.65%	NA	NA	NA	NA
10	Asianet Satellite Communications Ltd.																		
	Kerala	100.00%	91.33%	99.54%	NR	1.20%	100.00%	100.00%	NR	NR	0	0	62.96%	90.00%	99.50%	1.00%	50	270	NA
11	IndusInd Media & Communications Ltd. (Broadband Division)																		
	All India	100.00%	97.00%	99.00%	40	0.00%	100.00%	100.00%	100.00%	100.00%	0	0	77.98%	80.00%	96.00%	1.00%	45	260	NA
12	Gujarat Telelink Pvt. Ltd.																		
	Gujarat	100.00%	96.00%	99.00%	64	0.84%	100.00%	NA	96.00%	99.00%	NA	0	89.00%	91.00%	97.97%	0.00%	11	300	NA
13	D-Vois Broadband																		
	All India	100.00%	93.00%	98.00%	NR	0.00%	100.00%	NR	99.00%	99.00%	0	0	0.00%	90.00%	99.99%	0.10%	100	100	100
14	Tata Communications																		
14.1	Andhra Pradesh	100.00%	96.00%	99.00%		0.00%	100.00%	100.00%							99.26%				
14.2	Assam	NA	100.00%	100.00%		NA	NA	100.00%							99.55%				
14.3	Delhi & NCR	NA	99.00%	100.00%		0.03%	100.00%	100.00%							99.91%				
14.4	Gujarat & Daman & Du	100.00%	98.00%	100.00%		0.03%	100.00%	100.00%							99.15%				
14.5	Haryana	NA	100.00%	100.00%		0.00%	100.00%	100.00%							99.69%				
14.6	Himachal Pradesh	NA	100.00%	100.00%	-	0.00%	100.00%	100.00%							99.86%				
14.7 14.8	Jammu & Kashmir Karnataka	NA NA	100.00% 97.00%	100.00% 99.00%	-	NA 0.01%	NA 100.00%	100.00%							99.96% 99.78%				
14.0	Kerala &		97.00%				100.00%	100.00%							99.76%				
14.9	Lakshadweep	100.00%	94.00%	100.00%		0.00%	100.00%	100.00%							98.06%				
14.10	Madhya Pradesh & Chhattisgarh	NA	98.00%	100.00%	225	0.00%	100.00%	100.00%	04.000/	06.000/	0	0	F4.000/	80.000/	98.45%	0.000/	50	045	NI A
14.11	Maharashtra & Goa	100.00%	94.00%	98.00%	335	0.03%	100.00%	100.00%	94.00%	96.00%	U	"	54.00%	80.00%	98.22%	0.00%	50	245	NA
14.12	Mumbai	100.00%	96.00%	99.00%		0.02%	100.00%	100.00%					1		99.10%				
14.13	North Eastern	NA	100.00%	100.00%		NA	NA	100.00%					1		99.63%				
14.14	Orissa	NA	100.00%	100.00%		0.00%	100.00%	100.00%					1		99.48%				
14.15	Punjab	NA	96.00%	99.00%		0.00%	100.00%	100.00%					1		99.95%				
14.16	Rajasthan Tamil Nadu &	NA	93.00%	100.00%	-	0.00%	100.00%	100.00%					1		99.86%				
14.17	Pondicherry	100.00%	96.00%	99.00%		0.04%	100.00%	100.00%							98.61%				
14.18	Uttar Pradesh - East	NA	96.00%	100.00%		0.00%	100.00%	100.00%					1	1	99.80%				
14.19	Uttar Pradesh -West	NA	100.00%	100.00%		NA	NA	100.00%					1		99.95%				
14.20	West Bengal	NA	100.00%	100.00%	+	NA O OOO	NA 100.00%	100.00%					1		99.72%				
14.21	Kolkata Bihar & Jharkhand	100.00% 100.00%	95.00% 100.00%	99.00% 100.00%	-	0.02%	100.00% 100.00%	100.00%					1		99.03% 99.92%				
14.22	Dirial & Jrial Krianu	100.00%	100.00%	100.00%	L	0.00%	100.00%	100.00%				l		L	99.92%				

								I				T	ı	I		1		I	1
15	Ortel Communications																		
	Orissa	100.00%	92.00%	100.00%	NR	0.00%	NA	NA	100.00%	100.00%	0	0	78.00%	92.33%	99.14%	0.00%	86	257	NA
16	Reliance Communications																		
	All India	100.00%	100.00%	100.00%	NA	0.17%	100.00%	100.00%	95.00%	98.00%	0	0	42.69%	89.00%	99.58%	0.55%	DNF	DNF	DNF
17	You Broadband India Pvt Ltd																		
17.1	All India	95.00%	93.00%	99.00%	491	1.00%	100.00%	100.00%	76.00%	83.00%	NA	0	70.62%	87.08%	99.14%	0.00%	10	269	NA
17.2	Maharashtra	97.00%	95.00%	99.00%	85	1.00%	100.00%	100.00%	58.00%	64.00%	NA	0	70.42%	86.09%	99.63%	0.00%	9	276	NA
17.3	Gujarat	93.00%	92.00%	99.00%	181	1.00%	100.00%	100.00%	73.00%	76.00%	NA	0	70.91%	87.92%	98.78%	0.00%	12	263	NA
17.4	Karnataka	100.00%	90.00%	98.00%	46	1.00%	100.00%	100.00%	86.00%	91.00%	NA	0	70.31%	86.81%	98.94%	0.00%	9	265	NA
17.5 17.6	Tamilnadu Haryana	97.00%	94.00% 92.00%	99.00% 99.00%	29 15	1.00%	100.00%	100.00% 99.00%	82.00% 89.00%	93.00% 95.00%	NA NA	0	71.67% 70.48%	87.15% 88.15%	98.81% 99.87%	0.00%	8 8	268 268	NA NA
17.7	Andhra Pradesh	99.00%	92.00%	98.00%	135	0.00%	100.00%	100.00%	67.00%	80.00%	NA NA	0	70.48%	86.39%	99.42%	0.00%	10	271	NA NA
18	Five Networks																		
	All India	100.00%	99.50%	100.00%	NA	NR	100.00%	100.00%	NA	NA	NA	0	NA	90.00%	99.00%	1.00%	NA	NA	NA
19	Noida Software Technology																		
	All India	100.00%	100.00%	NA	Nil	NA	NA	NA	85.00%	100.00%	NR	NA	NA	98.00%	99.28%	1.00%	15	200	NA
20	Atria Convergence Tech																		
	All India	100.00%	79.00%	96.00%	1593	0.07%	100.00%	NA	91.00%	94.00%	Nil	Nil	89.00%	95.00%	99.70%	1.00%	42	212	Nil
21	Citycom Networks Pvt. Ltd.																		
	All India	100.00%	90.30%	99.00%	0	1.02%	100.00%	100.00%	89.00%	92.00%	0	0	57.00%	86.97%	99.20%	1.00%	4	167	NA
22	Digital Network associates																		
	MH & Goa	100.00%	90.68%	99.34%	None	0.64%	100.00%	NA	62.25%	81.68%	None	0	80.00%	80.00%	99.73%	1.00%	4	255	NR
23	Southern Online Bio technologies Ltd.																		
	Andhra Pradesh	100.00%	90.00%	99.00%	0	0.00%	NA	NA	NA	316.00%	0	0	75.00%	90.00%	99.00%	1.00%	120	350	NA
24	Vasai Cable Pvt Ltd.																		
	Mumbai	100.00%	97.28%	99.82%	None	0.56%	100.00%	NA	76.10%	90.21%	0	0	80.00%	80.00%	99.19%	1.00%	4	255	NR
25	Rajesh Multichannel Pvt Ltd.																		
	Mumbai	100.00%	97.00%	NR	0	0.00%	100.00%	NA	92.00%	87.00%	0	0	86.00%	NR	99.00%	NR	NR	NR	NR
26	Chandranet																		
	Gujarat	100.00%	93.97%	99.92%	154	NR	100.00%	100.00%	80.96%	92.30%	0	0	86.00%	97.00%	99.00%	NR	NR	NR	NR
27	Home Systems Private Limited																		
	Mumbai	99.00%	97.00%	99.99%	NA	0.00%	NA	NA	84.66%	92.00%	0	0	75.00%	95.00%	98.00%	0.01%	50	295	NA
28	Honesty Net Solutions Pvt Ltd																		
	Mumbai	100.00%	92.00%	99.10%	NA	0.00%	100.00%	NA	85.00%	100.00%	NA	0	88.00%	87.00%	98.00%	0.00%	69	311	NA
29	Siti Cable Network Ltd																		
	All India	100.00%	92.66%	100.00%	139	0.00%	NA	NA	68.00%	100.00%	0	3	88.67%	87.00%	99.23%	0.48%	6	51.67	180
30	Syscon Infoway Private Limited																		
30.1	Maharashtra	100.00%	96.00%	100.00%	nil	0.00%	100.00%	100.00%	80.00%	100.00%	0	0	83.33%	99.00%	100.00%	1.00%	10	250	nil
30.2	Mumbai	100.00%	96.00%	100.00%	nil	0.00%	100.00%	100.00%	80.00%	100.00%	0	0	85.00%	99.00%	99.00%	1.00%	10	250	NR
		DNF	= Data not a	as per Forma	at			NR=	Data not rep	orted by the S	ervice Provide	er		NA =	Not Applical	ole		Complied the pa not in the requ	

Annexure 5.1: A -la-carte rates of pay channels for non-CAS areas, as reported to TRAI by the respective Broadcasters

S.No	Name of the channel	Reported
1		Rates(in INR)
1	Zee TV	13.88 13.88
3	Zee Cinema	
	Cartoon Network	13.37
5	Zee Marathi	08.56
6	Zee News CNN	08.02 01.60
7	Zee Café	01.60
8	Zee Studios	07.49
9		07.49
10	Zee Bangla Zee Punjabi	01.60
11	Zee Trendz	01.07
12	HBO	16.69
13	POGO	13.37
14	Zee Business	05.14
15	Zee Classic	10.70
16	Zee Action	10.70
17	Zee Premier	11.98
18	Zee Telugu	11.13
19	Zee Kannada	07.98
20	ETC Punjabi	09.63
21	ETC	03.21
22	Zing	05.35
23	Zee Jagran	02.14
24	Zee Smile	06.57
25	24 Ghante	06.42
26	24 Taas	09.09
27	Zee Talkies	16.58
28	WB	06.60
29	Zee 24 Ghantalu	05.60
30	Zee Salaam	15.00
31	9X	20.50
32	Star Plus	18.73
33	Star Gold	17.66
34	Star Movies	17.66
35	Star World	04.87
36	Vijay TV	04.28
37	NGC	06.15
38	Fox Traveller channel	04.71
39	Channel V 116	01.07

S.No	Name of the channel	Reported Rates(in INR)
40	Life Ok	21.94
41	The MGM	06.42
42	Star Jalsha	12.00
43	ABP Ananda	06.00
44	FX	15.50
45	FOX CRIME	15.50
46	BABY TV	13.25
47	Nat Geo Wild	16.00
48	Nat Geo Adventure	16.00
49	Nat GEO Music	07.40
50	Asianet	12.45
51	Star Pravah	12.00
52	Star Movies Action	15.00
53	Movies OK	17.00
54	NDTV 24X7	09.10
55	NDTV Profit	06.42
56	NDTV Good Times	09.63
57	Suvarna	12.00
58	Asianet Plus	07.00
59	NDTV India	08.02
60	Zee Bangla Cinema	16.20
61	ABP Majha	09.20
62	SET(Sony Entertainment Television)	21.40
63	MAX	18.19
64	Discovery	16.05
65	Animal Planet	05.35
66	AXN	15.52
67	Animax	0.50
68	TLC	09.63
69	SAB TV	14.70
70	SET PIX	12.84
71	Aaj Tak	07.49
72	Headlines Today	03.21

S.No	Name of the channel	Reported Rates(in INR)
73	Tez	02.14
74	Channel 8 (Sony AATH)	10.00
75	Discovery Science	12.00
76	Discovery Turbo	10.00
77	Neo Sports	26.60
78	NEO Prime	35.45
79	Discovery Channel – Tamil	16.05
80	MIX	07.50
81	Discovery Kids	13.25
82	SIX	35.00
83	ET NOW	08.50
84	Times Now	09.10
85	Zoom	08.35
86	The Disney Channel	09.52
87	Disney XD	09.52
88	Hangama TV	08.35
89	IBN 7	07.49
90	IBN Lokmat	07.86
91	Colors	21.40
92	MTV	07.49
93	NICK	06.42
94	VH 1	03.21
95	CNBC TV 18	09.10
96	CNN-IBN	05.35
97	CNBC Awaaz	04.82
98	ETV	10.70
99	ETV 2	05.99
100	ETV Bangla	11.12
101	ETV Marathi	11.12
102	ETV Kannada	11.12
103	ETV Gujarathi	11.12
104	ETV Oriya	11.12
105	ETV UP	11.12
106	ETV Bihar	11.12
107	ETV Urdu	11.12
108	ETV Rajasthan	11.12
109	ETV MP	11.12
110	Bindass	10.00
111	UTV Action	10.00
112	World Movies	10.00

S.No	Name of the channel	Reported
	-	Rates(in INR)
113	UTV Movies	15.00
114	Disney Junior	13.37
115	Nick Jr / Teen Nick	13.37
116	Comedy Central	15.50
117	SONIC	13.00
118	SUN TV	13.26
119	Gemini TV	11.02
120	Udaya TV	12.30
121	K TV	16.06
122	Gemini Comedy	05.68
123	Udaya Movies	15.40
124	Sun Music	07.50
125	Gemini Music	07.50
126	Sun News	01.50
127	Gemini News	08.02
128	Udaya News	07.86
129	Gemini Movies	18.20
130	Chintu TV	13.37
131	Udaya Comedy	16.06
132	Kushi TV	13.37
133	Chutti TV	13.37
134	Udaya Music	07.49
135	Adithya TV	18.19
136	Surya TV	12.31
137	Kiran TV	18.19
138	Sun News English	08.00
139	Gemini Life	11.13
140	SUN TV RI	12.50
141	SUN Life	12.50
142	BBC World	05.35
143	Star Sports 4	35.45
144	Star Sports 1	35.45
145	Star Sports 3	29.96
146	Fox Sports News	09.10
147	Star Sports 2	36.00
148	Raj TV	11.77
149	Raj Digital Plus	08.26
150	Vissa TV	05.01
151	Raj Musix	05.00
152	Raj News (24X7)	04.00

S.No	Name of the channel	Reported
150	OTT 5	Rates(in INR)
153	9XM	07.00
154	9X Jhakaas	05.00
155	9XO	05.00
156	9X Jalwa	05.00
157	Sahara One	20.50
158	Filmy	16.50
159	B4U Movies	06.65
160	MAA TV	06.00
161	MAA Music	07.50
162	MAA Movies	18.50
163	MAA Gold	11.00
164	Dilli Aaj Tak	08.50
165	E-24	15.00
166	Toonami	13.37
167	Tarang	10.70
168	Tarang Music	05.00
169	Prarthana	05.00
170	Ten Sports	16.05
171	Ten Cricket	35.45
172	Ten Action	35.00
173	BIG CBS PRIME	14.00
174	BIG CBS LOVE	11.00
175	BIG CBS SPARK	11.00
176	BIG CBS Spark Punjabi	11.00
177	BIG MAGIC	11.00
178	Bloomberg UTV	08.50
179	9X Tashan	05.00
180	Sarthak TV	09.50
181	Jaya TV	09.00
182	Jaya Plus	04.00
183	Jaya Max	06.00
184	J Movies	06.00
185	Mega TV	05.00
186	Mega Musiq	05.00
187	Mega 24	05.00

Annexure 5.2: List of operational private FM Radio Stations in India

S.NO.	CITY		CHANNEL IDENTITY	DATE OF OPERATIONALISA TION
1	DELHI	CLEAR MEDIA	HIT-FM	01.09.2006
2	DELHI	DIGITAL RADIO	RED-FM	29.04.2003
3	DELHI	E.N.I.L.	RADIO- MIRCHI	29.04.2003
4	DELHI	H.T. MEDIA	FEVER 104	30.10.2006
5	DELHI	M.B.P.L.	RADIO-CITY	29.04.2003
6	DELHI	RADIO-ONE LTD.	RADIO-ONE [1]	23.09.2006
7	DELHI	T.V. TODAY BROADCASTING LTD	RADIO- MEOW	28.05.2007
8	DELHI	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK	BIG-FM	24-09-2006
9	MUMBAI	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK	BIG-FM	14.11.2006
10	MUMBAI	DIGITAL RADIO	RED-FM	29.04.2002
11	MUMBAI	E.N.I.L.	RADIO- MIRCHI	29.04.2002
12	MUMBAI	H.T. MEDIA	FEVER 104	15.01.2007
13	MUMBAI	M.B.P.L.	RADIO-CITY	21.05.2002
14	MUMBAI	T.V. TODAY BROADCASTING LTD	RADIO- MEOW	26.01.2008
15	MUMBAI	RADIO-ONE LTD.	RADIO-ONE [1]	29.04.2003
16	KOLKATA	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK	BIG-FM	21.10.2006
17	KOLKATA	T.V. TODAY BROADCASTING LTD	RADIO- MEOW	04.10.2007
18	KOLKATA	ANANDA OFFSET	FRIEND 91.9	28.02.2007
19	KOLKATA	DIGITAL RADIO	RED-FM	03.05.2003
20	KOLKATA	E.N.I.L.	RADIO- MIRCHI	03.05.2003
21	KOLKATA	HITZ FM	POWER-FM	03.05.2003
22	KOLKATA	INDIA FM	AMAR-FM	03.05.2003
23	KOLKATA	RADIO-ONE LTD.	RADIO-ONE [1]	12.12.2008
24	KOLKATA	H.T. MEDIA	FEVER 104	23.01.2008
25	CHENNAI	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	27.09.2006
26	CHENNAI	E.N.I.L.	RADIO- MIRCHI	05.05.2003
27	CHENNAI	M.B.P.L.	RADIO-CITY	10.07.2006
28	CHENNAI	MALAR PUBLICATIONS	HELLO-FM	02.10.2006
29	CHENNAI	MUTHOOT BROADCASTING PVT. LTD.		04.01.2008
30	CHENNAI	NOBLE BROADCASTING	AAHAA-FM	18.01.2007
31	CHENNAI	RADIO-ONE LTD.	RADIO-ONE [1]	10.01.2007
32	CHENNAI	SUN TV	SURYANA FM	05.05.2003

S.NO.	CITY	NAME OF THE COMPANY	CHANNEL IDENTITY	DATE OF OPERATIONALIS ATION
33	AGARTALA	POSITIVE RADIO	OOLALA FM	07.08.2007
34	AGRA	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	18.08.2007
35	AGRA	SHRI PURAN MULTIMEDIA	MANTRA FM	08.07.2007
36	AHMEDABAD	E.N.I.L.	RADIO- MIRCHI	10.12.2001
37	AHMEDABAD	M.B.P.L.	RADIO-CITY	25.07.2007
38	AHMEDABAD	RADIO-ONE LTD.	RADIO-ONE [1]	26.08.2007
39	AHMEDABAD	SOUTH ASIA	S. FM	20.04.2008
40	AHMEDABAD	D. B. CORP.	MY-FM	21.07.2007
41	AHMEDNAGAR	B.A.G. INFOTAINMENT	RADIO- DHAMAL	01.03.2008
42	AHMEDNAGAR	M.B.P.L.	RADIO-CITY	07.02.2008
43	AJMER	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	28-08-2007
44	AJMER	D. B. CORP.	MY-FM	31.08.2007
45	AKOLA	M.B.P.L.	RADIO-CITY	13.03.2008
46	ALIGARH	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	08.12.2006
47	ALLAHABAD	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	29.10.2007
48	ALLAHABAD	SOUTH ASIA	S. FM	18.03.2008
49	AMRITSAR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	01.08.2007
50	AMRITSAR	T.V. TODAY BROADCASTING LTD	RADIO- MEOW	15.05.2008
51	AMRITSAR	D. B. CORP.	MY-FM	27-07-2007
52	ASANSOL	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	29.06.2007
53	ASANSOL	SOUTH ASIA	S. FM	03.06.2008
54	AURANGABAD	E.N.I.L.	RADIO- MIRCHI	24.07.2007
55	AURANGABAD	SOUTH ASIA	S. FM	21.04.2008
56	BANGALURU	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	09.10.2006
57	BANGALURU	E.N.I.L.	RADIO- MIRCHI	17.04.2006
58	BANGALURU	H.T. MEDIA	FEVER 104	06.03.2007
59	BANGALURU	INDIA RADIO VENTURES	RADIO- INDIGO	01.10.2006
60	BANGALURU	KAL RADIO	S. FM	06.11.2006
61	BANGALURU	M.B.P.L.	RADIO-CITY	10.06.2001
62	BANGALURU	RADIO-ONE LTD.	RADIO-ONE [1]	01.08.2006
63	BAREILLY	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	30.03.2007
64	BAREILLY	SHRI PURAN MULTIMEDIA	MANTRA FM	09.04.2007
65	BHOPAL	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	20.05.2007

S.NO.	CITY	NAME OF THE COMPANY	CHANNEL IDENTITY	DATE OF OPERATIONALIS ATION
66	BHOPAL	E.N.I.L.	RADIO- MIRCHI	26.05.2007
67	BHOPAL	SOUTH ASIA	S. FM	06.11.2007
68	BHOPAL	D. B. CORP.	MY-FM	26.05.2007
69	BHUBANESHWAR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	14.04.2007
70	BHUBANESHWAR	EASTERN MEDIA	CHOCOLATE	04.05.2007
71	BHUBANESHWAR	SOUTH ASIA	S. FM	28.06.2007
72	BIKANER	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	19.01.2007
73	BILASPUR	D. B. CORP.	MY-FM	27.09.2007
74	CHANDIGARH	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	12.02.2007
75	CHANDIGARH	D. B. CORP.	MY-FM	19.02.2007
76	COIMBATORE	E.N.I.L.	RADIO- MIRCHI	03.11.2007
77	COIMBATORE	M.B.P.L.	RADIO-CITY	12.11.2007
78	COIMBATORE	MALAR PUBLICATIONS	HELLO-FM	29.10.2007
79	COIMBATORE	SUN TV	SURYANA FM	07.03.2003
80	DHULE	B.A.G. INFOTAINMENT	RADIO- DHAMAL	15.08.2007
81	GANGTOK	CHINAR CIRCUITS	NINE-91.9 FM	10.08.2008
82	GANGTOK	PCM CEMMENTS	MISTY FM	31.01.2009
83	GANGTOK	SOUTH ASIA	S.FM	
84	GORAKHPUR	SHRI PURAN MULTIMEDIA	MANTRA FM	03.06.2007
85	GULBERGA	KAL RADIO	S. FM	02.06.2008
86	GUWAHATI	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	14.04.2007
87	GUWAHATI	PURVY BROADCASTING	GUP-SHUP	09.10.2007
88	GUWAHATI	SOUTH ASIA	S. FM	11.04.2008
89	GWALIOR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	06.08.2007
90	GWALIOR	GWALIOR FARMS	CHASKA	04.08.2007
91	GWALIOR	ITM SOFTWARE	SUNO LEMON	07.09.2007
92	GWALIOR	D. B. CORP.	MY-FM	06.08.2007
93	HISSAR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	02.03.2007
94	HISSAR	B.A.G. INFOTAINMENT	RADIO- DHAMAL	18.06.2007
95	HISSAR	SHRI PURAN MULTIMEDIA	MANTRA FM	21.03.2007
96	HYDERABAD	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	25.09.2006
97	HYDERABAD	E.N.I.L.	RADIO- MIRCHI	19.04.2006

S.NO.	CITY	NAME OF THE COMPANY	CHANNEL IDENTITY	DATE OF OPERATIONALIS ATION
98	HYDERABAD	KAL RADIO	S. FM	06.11.2006
99	HYDERABAD	M.B.P.L.	RADIO-CITY	30.05.2006
100	INDORE	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	03.08.2007
101	INDORE	E.N.I.L.	RADIO- MIRCHI	01.10.2001
102	INDORE	SOUTH ASIA	S. FM	09.12.2007
103	INDORE	D. B. CORP.	MY-FM	11.08.2007
104	ITANAGAR	POSITIVE RADIO	OOLALA FM	05.08.2008
105	JABALPUR	B.A.G. INFOTAINMENT	RADIO- DHAMAL	01.03.2008
106	JABALPUR	E.N.I.L.	RADIO- MIRCHI	15.02.2008
107	JABALPUR	SOUTH ASIA	S. FM	19.03.2008
108	JABALPUR	D. B. CORP.	MY-FM	15.02.2008
109	JAIPUR	E.N.I.L.	RADIO- MIRCHI	17.04.2006
110	JAIPUR	M.B.P.L.	RADIO-CITY	08.09.2006
111	JAIPUR	RAJASTHAN PATRIKA	RADIO- TADKA	15.08.2006
112	JAIPUR	SOUTH ASIA	S. FM	06.11.2006
113	JAIPUR	D. B. CORP.	MY-FM	28.05.2006
114	JALANDHAR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	14.04.2007
115	JALANDHAR	E.N.I.L.	RADIO- MIRCHI	24.04.2007
116	JALANDHAR	SHRI PURAN MULTIMEDIA	MANTRA FM	14.04.2007
117	JALANDHAR	D. B. CORP.	MY-FM	19.04.2007
118	JALGOAN	B.A.G. INFOTAINMENT	RADIO- DHAMAL	22.04.2008
119	JALGOAN	M.B.P.L.	RADIO-CITY	21.05.2008
120	JAMMU	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	07.12.2006
121	JAMSHED PUR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	07.11.2007
122	JAMSHED PUR	SOUTH ASIA	S. FM	13.04.2008
123	JAMSHED PUR	NEUTRAL PUBLICATION	DHOOM FM	18.07.2008
124	JHANSI	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	19.01.2007
125	JODHPUR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	14.12.2007
126	JODHPUR	T.V. TODAY BROADCASTING LTD	RADIO- MEOW	01.06.2008
127	JODHPUR	D. B. CORP.	MY-FM	20.12.2007
128	KANNUR	ASIANET RADIO PVT. LTD.	BEST FM	13.01.2008
129	KANNUR	KAL RADIO	S. FM	12.03.2008*
130	KANNUR	MALAYALLA MANORAMA	MANGO FM	30.12.2007
131	KANNUR	THE MATHRABHUMI	CLUB-FM	30.12.2007

S.NO.	CITY	NAME OF THE COMPANY	CHANNEL IDENTITY	DATE OF OPERATIONALIS ATION
132	KANPUR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	14.06.2007
133	KANPUR	E.N.I.L.	RADIO- MIRCHI	16.06.2007
134	KANPUR	SOUTH ASIA	S. FM	28.01.2008
135	KARNAL	B.A.G. INFOTAINMENT	RADIO- DHAMAL	18.06.2007
136	KARNAL	SHRI PURAN MULTIMEDIA	MANTRA FM	02.04.2007
137	KOCHI	KAL RADIO	S. FM	17.05.2008*
138	KOCHI	MALAYALLA MANORAMA	MANGO FM	18.05.2008
139	KOCHI	THE MATHRABHUMI	CLUB-FM	17.05.2008
140	KOLHAPUR	E.N.I.L.	RADIO- MIRCHI	
141	KOLHAPUR	PUDHARI PUBLICATION	TOMOTO FM	21.09.2007
142	КОТА	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	21.01.2008
143	KOTA	RAJASTHAN PATRIKA	RADIO- TADKA	25.02.2008
144	KOTA	D. B. CORP.	MY-FM	02.02.2008
145	KOZHIKKODE	KAL RADIO	S. FM	07.12.2007
146	KOZHIKKODE	MALAYALLA MANORAMA	MANGO FM	29.11.2007
147	LUCKNOW	E.N.I.L.	RADIO- MIRCHI	13.08.2007
148	LUCKNOW	M.B.P.L.	RADIO-CITY	10.12.2001
149	LUCKNOW	SOUTH ASIA	S. FM	06.11.2007
150	MADURAI	E.N.I.L.	RADIO- MIRCHI	28-09.2007
151	MADURAI	KAL RADIO	S. FM	05.10.2007
152	MADURAI	MALAR PUBLICATIONS	HELLO-FM	01.10.2007
153	MANGALORE	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	24.11.2007
154	MANGALORE	E.N.I.L.	RADIO- MIRCHI	24.11.2007
155	MANGALORE	KAL RADIO	S. FM	21.02.2008
156	MUZAFFARPUR	B.A.G. INFOTAINMENT	RADIO- DHAMAL	01.08.2007
157	MYSORE	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	14.10.2007
158	MYSORE	KAL RADIO	S. FM	07.12.2007
159	NAGPUR	E.N.I.L.	RADIO- MIRCHI	18.10.2007
160	NAGPUR	M.B.P.L.	RADIO-CITY	21.10.2007
161	NAGPUR	SOUTH ASIA	S. FM	04.05.2008
162	NAGPUR	D. B. CORP.	MY-FM	21.10.2007
163	NANDED	M.B.P.L.	RADIO-CITY	15.05.2008
164	NASIK	E.N.I.L.	RADIO- MIRCHI	06.07.2007
165	NASIK	SOUTH ASIA	S. FM	16.04.2008
166	PANAJI	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	22.05.2007
167	PANAJI	E.N.I.L.	RADIO- MIRCHI	22.05.2007

S.NO.	CITY	NAME OF THE COMPANY	CHANNEL IDENTITY	DATE OF OPERATIONALIS ATION
168	PANAJI	INDIA RADIO VENTURES	RADIO INDIGO	25.06.2007
169	PATIALA	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.		01.08.2007
170	PATIALA	B.A.G. INFOTAINMENT	RADIO- DHAMAL	18.06.2007
171	PATIALA	T.V. TODAY BROADCASTING LTD	RADIO- MEOW	01.06.2008
172	PATNA	E.N.I.L.	RADIO- MIRCHI	02.04.2007
173	PUDUCHERRY (UT)	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	01.12.2007
174	PUDUCHERRY (UT)	KAL RADIO	S. FM	20.12.2007
175	PUDUCHERRY (UT)	MALAR PUBLICATIONS	HELLO-FM	22.12.2007
176	PUNE	E.N.I.L.	RADIO- MIRCHI	18.10.2002
177	PUNE	M.B.P.L.	RADIO-CITY	06.04.2008
178	PUNE	RADIO-ONE LTD.	RADIO-ONE [1]	12.05.2008
179	PUNE	SOUTH ASIA	S. FM	22.07.2008
180	RAIPUR	E.N.I.L.	RADIO- MIRCHI	11.01.2008
181	RAIPUR	RAJASTHAN PATRIKA	RADIO- TADKA	10.02.2009
182	RAIPUR	RANEKA FINCOM	RANGILA 104.8	15.01.2008
183	RAIPUR	D. B. CORP.	MY-FM	16.01.2008
184	RAJAHMUNDRY	KAL RADIO	S. FM	19.01.2008
185	RAJKOT	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	13.06.2007
186	RAJKOT	E.N.I.L.	RADIO- MIRCHI	13.06.2007
187	RAJKOT	SOUTH ASIA	S. FM	18.04.2008
188	RANCHI	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	24.10.2007
189	RANCHI	B.A.G. INFOTAINMENT	RADIO- DHAMAL	15.11.2007
190	RANCHI	SHRI PURAN MULTIMEDIA	MANTRA FM	27.10.2007
191	RANCHI	NEUTRAL PUBLICATION	DHOOM FM	18.07.2008
192	ROURKELA	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	06.01.2008
193	ROURKELA	EASTERN MEDIA	RADIO- CHOCOLATE	22.01.2008
194	SANGLI	M.B.P.L.	RADIO-CITY	08.02.2008
195	SANGLI	PUDHARI PUBLICATION	TOMOTO FM	21.09.2009
196	SHILLONG	SOUTH ASIA	S. FM	13.06.2008
197	SHIMLA	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	25.06.2009
198	SHIMLA	T.V. TODAY BROADCASTING LTD	RADIO- MEOW	01.10.2009

S.NO.	CITY	NAME OF THE COMPANY	CHANNEL IDENTITY	DATE OF OPERATIONALIS ATION
199	SHIMLA	B.A.G. INFOTAINMENT	RADIO- DHAMAL	30.11.2009
200	SHOLAPUR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.		08.11.2007
201	SHOLAPUR	M.B.P.L.	RADIO-CITY	14.11.2007
202	SILIGURI	PCM CEMMENTS	MISTY FM	14.11.2007
203	SILIGURI	SYNTECH INFORMATICS	HIGH FM	24.11.2007
204	SILIGURI	SOUTH ASIA	S. FM	25.10.2008
205	SRI-NAGAR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	10.12.2006
206	SURAT	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	29.08.2007
207	SURAT	E.N.I.L.	RADIO- MIRCHI	21.08.2007
208	SURAT	D. B. CORP.	MY-FM	27.08.2007
209	SURAT	M.B.P.L.	RADIO-CITY	22.08.2007
210	THIRUVANANTH A- PURAM	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	29.01.2008
211	THIRUVANANTH A- PURAM	E.N.I.L.	RADIO- MIRCHI	29.01.2008
212	THIRUVANANTH A- PURAM	KAL RADIO	S. FM	06.02.2008
213	THIRUVANANTH A- PURAM	THE MATHRABHUMI	CLUB-FM	29.01.2008
214	THRISSUR	ASIANET RADIO PVT. LTD.	BEST FM	23.12.2007
215	THRISSUR	KAL RADIO	S. FM	26.12.2007
216	THRISSUR	MALAYALLA MANORAMA	MANGO FM	14.12.2007
217	THRISSUR	THE MATHRABHUMI	CLUB-FM	14.12.2007
218	TIRUCHI	KAL RADIO	S. FM	17.01.2008
219	TIRUCHI	MALAR PUBLICATIONS	HELLO-FM	14.01.2008
220	TIRUNELVELI	MALAR PUBLICATIONS	HELLO-FM	13.10.2007
221	TIRUNELVELI	SUN TV	SURYANA FM	07.03.2003
222	TIRUPATI	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	01.08.2007
223	TIRUPATI	KAL RADIO	S. FM	27.08.2007
224	TUTICORIN	KAL RADIO	S. FM	05.10.2007
225	TUTICORIN	MALAR PUBLICATIONS	HELLO-FM	15.10.2007
226	UDAIPUR	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	03.08.2007
227	UDAIPUR	RAJASTHAN PATRIKA	RADIO- TADKA	27.08.2007
228	UDAIPUR	D. B. CORP.	MY-FM	07.07.2007
229	VADODARA	RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	05.06.2007
230	VADODARA	E.N.I.L.	RADIO- MIRCHI	05.06.2007

Annexure 5.2 (Contd.)

S.NO.	CITY	NAME OF THE COMPANY	CHANNEL IDENTITY	DATE OF OPERATIONALIS ATION
231	VADODARA	M.B.P.L.	RADIO-CITY	11.06.2007
232	VADODARA	SOUTH ASIA	S. FM	17.04.2008
233	VARANASI	E.N.I.L.	RADIO- MIRCHI	14.07.2007
234	VARANASI	SHRI PURAN MULTIMEDIA	MANTRA FM	20.07.2007
235	VARANASI	SOUTH ASIA	S. FM	29.12.2007
236	VIJAYWADA	E.N.I.L.	RADIO- MIRCHI	11.12.2007
237	VIJAYWADA	KAL RADIO	S. FM	25.12.2007
238		RELIANCE COMMUNICATIONS GROUP BROADCAST NETWORK LTD.	BIG-FM	27.10.2007
239	VISHAKAPATNAM	E.N.I.L.	RADIO- MIRCHI	26.10.2007
240	VISHAKAPATNAM	M.B.P.L.	RADIO-CITY	29.10.2007
241	VISHAKAPATNAM	UDAYA TV	VISAKHA FM	06.02.2003
242	WARANGAL	KAL RADIO	S. FM	28.05.2008

Source: Ministry of Information & Broadcasting

Annexure 5.3: List of applicants who have been granted DTH License

1. M/s. Tata Sky Ltd.,

3rd Floor, Bombay Dyeing A.O. Building, Pandurang Budhkar Marg, Worli, Mumbai □ 400 025 Tel: 022-6613 3000 Fax-022-6613 3030/6616 3013

2. M/s Dish TV India Ltd.

FC-9, Sector-16A, Film City, Noida-201301 Tel: 91-120-2511064-78 Fax: 91-120-2511186

3. SUN Direct TV(P) Ltd.

Murasoli Maran Towers, 73, MRC Nagar, Main Road, MRC Nagar, Chennai □ 28 PH: 044-44676767

4. Bharti Telemedia Ltd.

Airtel centre, Plot No 16, Udyog Vihar Phase IV, Gurgaon □ 122015 Ph: 0124-422222

5. Reliance Communications Group Big TV Pvt. Ltd.

3rd Floor, B-Wing, Reliance Communications Group Centre, Maharaja Ranjit Singh Marg, New Delhi □ 110 002 Ph: 011-30332832

6. M/s Bharat Business Channel Ltd.

Uplink Centre, Plot No 1D, Udyog Vihar, Industrial Area, Greater NOIDA, Distt-Gautam Budh Nagar (UP) - 201 306 PH: 0120-6141000

Annexure 5.4: List of permitted teleports at various locations in India [As on 20/03/2013]

Sr.	Name of Teleport	Address	Location	Date of
No	_			Permission
1	TV TODAY NETWORK LIMITED	TV TODAY NETWORK LIMITED FC-8, SECTOR-16A, NOIDA(UP)	NEW DELHI	22-Nov-00
2	SUN TV LTD.	R S NO. 4288/72, 73 & 116, BLOCK NO. 94, MRC NAGAR CHENNAI-600018	CHENNAI	12-Mar-01
3	ENTERTAINMENT TELEVISION NETWORK PVT. LTD	7B, SHAH INDUSTRIAL ESTATE, OFF VEERA DESAI ROAD, ANDHERI W , MUMBAI-400053	MUMBAI	23-May-01
4	USHODAYA ENTERPRISES LTD.	6-3-570, EENADU COMPLEX, SOMAJIGUDA, HYDERABAD- 500082	HYDERABAD	23-May-01
5	ESSEL SHYAM COMMUNICATION LIMITED	C-34, SECTOR-62, ELECTRONIC CITY, NOIDA-201307	NOIDA	3-Sep-01
6	ASIANET INFRASTRUCTURE PVT. LTD.	ASIANET STUDIO/COMPLEX, PULIYARAKONAM P.O. THIRUVANANTHAPURAM KERALA	THIRUVANANTHAPURAM	17-Oct-01
7	ESSEL SHYAM COMMUNICATION LTD	C-34, ELECTRONIC CITY, SECTOR-62, NOIDA-201307	NOIDA-2	7-Feb-02
8	SAHARA SANCHAR LIMITED	SAHARA INDIA COMPLEX, C-2, C-3, SECTOR-XI NOIDA-201301	NOIDA	12-Feb-02
9	TELEVISION EIGHTEEN INDIA LIMITED	VIDEOCON TOWER, E-1 RANI JHANSI ROAD, JHANDEWALAN EXTN., NEW DELHI-110055	NEW DELHI	18-Mar-02
10	NEW DELHI TELEVISION LTD. (NDTV)	ARCHANA COMPLEX, GREATER KAILASH-I, NEW DELHI-110048	NEW DELHI	11-Jun-02
11	INDIAVISION COMMUNICATIONS LTD.	SATELLITE TATU'S TOWER, 32/1787, PADIVATTOM, NH BY-PASS ROAD, KOCHI (KERALA) 682024	KOCHI -KERALA	7-Nov-02
12	NOIDA SOFTWARE TECHNOLOGY PARK LTD.	B-23-25, POCKET-C, SURAJPUR INDUSTRIAL AREA, GREATER NOIDA(U.P)	GREATER NOIDA	27-Jan-03
13	DISH TV INDIA LIMITED (Formerly known ASC Enterprises Ltd.)	FC-19, SECTOR-16A, NOIDA- 201301 (U.P.)	NOIDA	2-Apr-03
14	POSITIVE TELEVISION PVT. LTD.	7 C, DOCTORS LANE, GOL MARKET, NEW DELHI-110001	GUWAHATI	9-Jun-03
15	CHANNEL GUIDE INDIA LTD.	BOKADIA MANSION, 3RD FLOOR,229, PRINCESS STREET, MUMBAI	MUMBAI	15-Sep-03
16	INDIASIGN PVT. LTD.	A-49, SECTOR-18, ELECTRONICS CITY, HARTRON COMPLEX, GURGAON(HARYANA)	GURGAON	18-Nov-03
17	ASSOCIATED BROADCASTING PVT. LTD.	CO.NO.97, ROAD NO.3, BANJARA HILLS, HYDERABAD- 500034	HYDERABAD	24-Nov-03
18	AV ENTERTAINMENT PVT. LTD.	240, ZONE-I, M.P.NAGER, BHOPAL(M.P)	BHOPAL	15-Dec-03

Sr.No	Name of Teleport	Address	Location	Date of
19	TELEVISION EIGHTEEN INDIA LIMITED	EMPIRE COMPLEX, 414, SENAPATI BAPAT MARG, LOWER PAREL, MUMBAI-400013	MUMBAI	Permission 19-Mar-04
20	AMRITA ENTERPRISES PVT. LTD.	TCNO.15/1069, AMRITA, GANDHI NAGER, VAZHUTHANCADU, THIRUVANANTHAPURAM-695014	THIRUVANANTHAPURAM	20-Apr-04
21	MAVIS SATCOM LIMITED	NO.48 NP, JAWAHARLAL NEHRU ROAD, EKKATUTHANGAL, CHENNAI- 600092	CHENNAI	22-Apr-04
22	TATA COMMUNICATIONS LTD.VSNL	VSNL, TECHNICAL COMPLEX, SDF BUILDING, SALT LAKE, KOLKATTA-700091	KOLKATTA	14-May-04
23	TATA COMMUNICATIONS LTD. VSNL	VSNL, VSB, KAKKANAD, THIRKKAKARA, ERNAKULAM, COACHIN-682030	COCHIN	14-May-04
24	TATA COMMUNICATIONS LTD., VSNL,	THIRUVELLUVAR SATELLITE VSNL EARTH STATION, REDHILLS ROAD, AMBATTUR, CHENNAI-600053	CHENNAI	14-May-04
25	TATA COMMUNICATIONS LTD., VSNL	VSNL, VSB, BANGLA SAHAB ROAD, NEW DELHI-110001	NEW DELHI	14-May-04
26	TATA COMMUNICATIONS LTD., VSNL	VSNL,VSB, FORT, MG ROAD, MUMBAI-400001	MUMBAI	14-May-04
27	LAMHAS SATELLITE LTD.	SERVICES 161, TOWER-I, INTERNATIONAL INFOTECH PARK, VASHI, NAVI MUMBAI	MUMBAI	10-Aug-04
28	MALAYALAM COMMUNICATIONS LTD.	MALAYALAM COMMUNICATIONS LTD. CHANDRAGIRI 61, VIKRAMPURAM HILLS,KOWDIAR P.O., THIRUVANANTHAPURAM- 695003	THIRUVANANTHAPURAM	22-Dec-04
29	SANSKAR INFO TV PVT. LTD.	B-10, MELKAY BUILDING, OPP. MAROL TELEPHONE EXCHANGE, CENTRAL ROAD, MIDC, ANDHERI E, MUMBAI-400093	MUMBAI	23-Feb-05
30	BENNETT COLEMAN AND CO. LTD.	BENNETT, COLEMAN & CO. LTD., THE TIMES OF INDIA BUILDING DR. D.N ROAD, MUMBAI-400001	MUMBAI	2-May-05
31	SENIOR MEDIA LTD.	SENIOR MEDIA LTD NO.3, SIRI FORT ROAD, NEW DELHI-49	NEW DELHI	5-May-05
32	LOK PRAKASHAN LTD.	LOK PRAKASHAN LTD. 57 CHOWRINGHEE ROAD, HORIZON, 3RD FLOOR, KOLKATA-700071	AHMEDABAD	6-May-05
33	CALCUTTATELEVISION NETWORK PVT. LTD.	CALCUTTA TELEVISION NETWORK PVT. LTD. 89 M.B.ROAD BIRATI, KOLKATA-70051	KOLKATA	22-Aug-05
34	KOHINOOR CORPORATION LTD.	BROADCASTING KOHINOOR BROADCASTING CORPORATION LTD. TAGORE COMPLEX, MODEL TOWN, PATIALA-147001, PUNJAB	RAJPURA - PUNJAB	9-Sep-05

Sr.No	Name of Teleport	Address	Location	Date of Permission
35	TELEVISION EIGHTEEN INDIA LIMITED	EXTN., NEW DELHI-110055		14-Sep-05
36	KAMYAB TV PVT. LTD. (Formerly known as MD TV Pvt. Ltd.)	KAMYAB TV PVT. LTD. 168, EKAMRA MARG, UNIT-6 BHUBANESWER-751001	BHUBANESHWER	30-Sep-05
37	KASTURI MEDIA PVT. LTD.	KASTHURI MEDIAS PVT. LTD. NO.286, 3RD MAIN ROAD, J.P. NAGER, BANGLORE-560078	BANGALORE	10-Nov-05
38	SST MEDIA PVT. LTD.	57 J.L NEHRU ROAD HORIZON, 3RD FLOOR, KOLKATA-700071	KOLKATA	30-Nov-05
39	ESSEL SHYAM COMMUNICATION LTD.	ROYAL PALAMS, SURVEY NO. 169,NEAR UNIT 26, AAREY MILK COLONY GOREGAON EAST, MUMBAI- 400065	MUMBAI	2-Dec-05
40	MM TV LTD.	MM TV LTD. POST BOX NO. 106, KANDATHIL VARGHESE MAPPILLAI MEMORIAL SOCIETY BUILDING K.K.ROAD, KOTTAYAM-686001, KERALA	ALAPUZZA	2-Mar-06
41	IN CABLENET ANDHRA LTD.	IN CABLENET ANDHRA LTD. 98, OM PLAZA, DOMALGUDA, HYDERABAD-500029	HYDERABAD	9-Mar-06
42	INDRA TELEVISION LTD.	INDRA TELEVISION LTD. MEGA CITY NO. 338, ROAD NO.3, ARORA COLONY BANJARA HILLS HYDERABAD-500034		7-Jun-06
43	SUN TV LTD.	R S NO. 4288/72,73 & 116, BLOCK NO. 94, MRC NAGAR CHENNAI- 600018	CHENNAI	14-Jul-06
44	MEDIA CONTENT AND COMMUNICATION INDIA PRIVATE LIMITED	DLF CNTRE, 7TH FLOOR, 4 SNANSAD SERVICESMARG, NEW DELHI-110001	NOIDA	20-Sep-06
45	TATA SKY LIMITED	TATA SKY LTD. 3RD FLOOR,C-1, WADIA INTERNATIONAL CENTRE BOMBAY DYEING, PANDURANG BUDHAR MARG, WORLI, MUMBAI-400025	NEW DELHI	20-Sep-06
46	SATISH SUGERS LTD.	VAISHNAVI BHAVANA, 89/1, 1ST A MAIN ROAD,INDUSTRIAL SUBRUB, 2ND STAGE, YESHWANTHPUR, BANGLORE- 560022	BANGALORE	26-Sep-06
47	SHITAL FIBRES LTD.	SHITAL FIBRES LTD. A-17, FOCAL POINT EXTENSION, P.O.BOX NO. 407 AND 449, JALLANDHAR- 144004	JALANDHAR	29-Sep-06
48	MH ONE TV NETWORK LTD.	MH ONE TV NETWORK LTD. 2,SSI INDUSTRIAL AREA, GT KARNAL ROAD, DELHI-33	DELHI	23-Nov-06
49	STV ENTERPRISES LTD.	268 MASJID KOTH, NEAR UDAI PARK MARKET, NEW DELHI- 110049	NEW DELHI	11-Jan-07
50	AIRR X MEDIA LTD.	502 ASHWIN ATHWA LINES SURAT GUJARAT	SURAT	13-Mar-07

Sr.No	Name of Teleport	Address	Location	Date of Permission
51	BROADCAST EQUIPMENTS INDIA PVT. LTD.	370-371/2, FIRST FLOOR, HOSPITAL ROAD, JANGPURA, NEW DELHI-110014	NEW DELHI	21-May-07
52	WINNING COMMUNICATIONS LTD.	EDGEWINNING EDGE COMMUNICATIONS LTD. 301, SWARNA JAYANTHI COMPLEX, AMEERPET, HYDERABAD-500038	HYDERABAD	25-May-07
53	INDIASIGN PVT. LTD.	GL-34/1 SALTLAKE ELECTRONIC COMPLEX SECTOR-5, KOLKATTA WEST BANGAL	KOLKATA	15-Jun-07
54	INDIASIGN PVT. LTD.		CHENNAI	15-Jun-07
55	RACHANA TELEVISION PVT. LTD.	PLOT NO. 564-A-19-III, ROAD NO.92, JUBILEE HILLS, HYDERABAD-500033	HYDERABAD	15-Jun-07
56	ORTEL COMMUNICATIONS LTD.	ORTEL COMMUNICATIONS LTD. B-7/122 A, SAFDARJUNG ENCLAVE, NEW DELHI-110029	BHUBANESHWER	25-Jun-07
57	SOWBHAGYA EXPORTS LTD.	SOWBHAGYA EXPORTS LTD. 77/14 SKD NAGER, SRINAGER COLONY HYDERABAD-500073 ANDHRA PRADESH	HYDERABAD	4-Jul-07
58	ESSEL SHYAM COMMUNICATION LTD.	C-138, NARAINA INDUSTRIAL AREA-I, AROOR NEW DELI-28	KERALA	5-Jul-07
59	PRAGYA VISION PVT. LTD.	FC-13, SECTOR 16A, FILM CITY, NOIDA-201301	NOIDA	5-Sep-07
60	BRAHMAPUTRA TELE- PRODUCTIONS PVT. LTD.	13 TH MILE TAMULIKUCHI BYRNIHAT RI -BHOI MEGHALAYA	GUWAHATI	25-Sep-07
61	G. NEXT MEDIA PVT. LTD.	78, OKHALA INDUSTRIAL ESTATE PHASE-III, NEW DELHI- 110020	NEW DELHI	5-Oct-07
62	INDIASIGN PVT. LTD.	1343, ROAD NO. 67, JUBILEE HILL, HYDERABAD	HYDERABAD	14-Mar-08
63	TATA COMMUNICATIONS LIMITED	THIRUVALLUR SATELLITE EARTH STATION, 226, RED HILLS ROAD, AMBATTUR, CHENNAI-600053	CHENNAI-2	6-May-08
64	POSITIVE TELEVISION PVT. LTD.	POSSITIVE TELEVISION PVT. LTD. DOCTOR'S LANE, GOL MARKET, NEW DELHI-110001	7C,NOIDA	23-May-08
65	EASTERN MEDIA LTD.	A/62,NAYAPALLI, BHUBANESWAR-751003, ORISSA	BHUBANESHWER	2-Jul-08
66	RAJASTHAN PATRIKA PRIVATE LIMITED	KESARGARH, JLN MARG, JAIPUR- 302004	JAIPUR	5-Aug-08
67	PRIDE EAST ENTERTAINMENT PVT. LIMITED	NEWS LIVE, 558, G.S.ROAD, CHRISTIAN BARTI, DISPUR, GUWAHATI-78	GUWAHATI	13-Aug-08
68	INDIASIGN PVT. LTD.	1343, ROAD NO. 67, JUBILEE HILL, HYDERABAD	HYDERABAD (Location Shifted from Noida)	17-Sep-08
69	VINTAGE STUDIO PVT. LTD.	23/24, EAST PATEL NAGAR, NEW DELHI-110008	NEW DELHI	5-Jan-09
70	SKYLINE TELE MEDIA SERVICES PVT. LTD.	C-4,SHIVALIK, NEAR MALVIYA NAGAR MARKET, NEW DELHI- 110017	NOIDA	27-May-09
71	INFORMATION TV PVT. LTD.	275, CAPTAIN GAUR MARG, SRINIVASPURI, NEW DELHI- 110065	NEW DELHI	3-Jun-09

Sr.No	Name of Teleport	Address	Location	Date of
				Permission
72	UNILAZER EXPORTS AND MANAGEMENT CONSULTANTS LIMITED	PARIJAT HOUSE, 1076, DR. E.MOSES ROAD, WORLI, NAKA, MUMBAI-400018	MUMBAI	26-Jun-09
73	COMSAT SYSTEM PVT. LTD.	PLOT NO.22/A, IDA, MALLAPUR, HYDERABAD-50076	HYDERABAD	14-Oct-09
74	BHARTI TELEPORTS LIMITED	THE GRAND HOTEL, VASANT KUNJ, PHASE-II, NELSON MANDELA ROAD, NEW DELHI-110070	Noida	11-Nov-09
75	SRI VENKATESWARA CHANNEL PVT. LTD.	BHAKTITHIRUNILAYAM, HIMAYATH NAGAR, HYDERABAD	TIRUPATI	11-Nov-09
76	TATA COMMUNICATIONS LIMITED	THIRUVALLUVAR SATELLITE EARTH STATION, 226, RED HILLS ROAD, AMBATTUR, CHENNAI- 600053	CHENNAI -3	13-Jan-10
77	ROYS INSTITUTE OF COMPETITIVE EXAMINATION PVT LTD	11/1 B.T ROAD BELGHORIA KOLKATA-700056 24 PARGANAS NORTH WEST BENGAL	KOLKATA	1-Apr-10
78	INDEPENDENT NEWS SERVICES PVT. LTD.	PLOT NO. 17B & 17C, SECTOR 16A, FILM CITY NOIDA(UP)	NOIDA -2	28-Apr-10
79	RAJ TELEVISION NETWORK LTD.	32, POES ROAD, 2ND STREET, TEYNAMPET, CHENNAI-600018	CHENNAI	5-May-10
80	ESSEL SHYAMCOMMUNICATION LTD.	C-138, NARAINA INDUSTRIAL AREA-I, NEW DELHI-28	NOIDA -3	12-May-10
81	KANSANNEWS PRIVATE LIMITED	HOUSE NO. 18, SECTOR-18, CHANDIGARH	CHANDIGARH	13-May-10
82	TATA COMMUNICATIONS LTD. VSNL	TATA COMMUNICATIONS LTD. VIDESH SANCHAR BHAWAN MAHATMA GANDHI ROAD, MUMBAI-400001	CHENNAI -4	4-Jun-10
83	DISH TV INDIA LTD.	PLOT NO.18, SECTOR-16A, NOIDA-201301	NOIDA	6-Apr-11
84	AASTHA BROADCASTING NETWORK LIMITED	AATHA BHAWAN, A-105, SECTOR-5, NOIDA-201301	NOIDA	2-May-11
85	MAHUAA MEDIA PRIVATE LIMITED	FC 17A & 17B, SECTOR 16A, FILM CITY, NOIDA-201301	NOIDA	25-May-11
86	RTR Broadcast Pvt. Ltd.	D-38, RDC, Raj Nagar, Ghaziabad	Ghaziabad	7-Sep-11
87	Silver Star Communication Ltd.	NO. 24, VI MAIN ROAD, KASTURIBA NAGAR, ADYAR, CHENNAI-600020 INDIA	CHENNAI	2-Nov-11
88	Lamha Satellite Services Ltd	TOWER-I, 6TH FLOOR, INTERNATIONAL INFOTECH PARK, ABOVE VASI RAILWAY STATION, VASI, NAVI MUMBAI-400703.	MUMBAI	13-Feb-12
89	Skyline Tele Media Services Ltd.	FC-23, SECTOR-16A, FILM CITY, NOIDA-201305	NOIDA-2	02-Jul-12
90	Bharti Teleports Limited	Plot No 192, Block B, Phase II, NOIDA - 201 305	NOIDA-2	29-Oct-12

Source: Ministry of Information & Broadcasting

Index of Tables & Charts

Tables

Table 1.1: Subscriber Base & Teledensity - Rural & Urban	
Table 1.2: Service Area wise Access (Wireless+Wireline) Subscribers	5
Table 1.3: Service Area wise Teledensity	
Table 1.4: Growth/Decline in Subscribers	8
Table 1.5: Market Share of the operators in total rural subscriber base for the quarter ending	
Dec-13	9
Table 1.6: List of Cellular Mobile (GSM & CDMA) Service Providers currently providing service	10
Table 1.7: Wireless Subscriber Base & Teledensity - Rural & Urban	
Table 1.8: Growth in Wireless Subscribers	
Table 1.9: Service Area wise Wireless Subscribers	
Table 1.10: Service Area wise Wireless Teledensity	
Table 1.11: Rural Wireless Subscribers and Market Share	
Table 1.12: Group-wise Market Share (in terms of subscription) within GSM Service	
Table 1.13: Market Share (in terms of subscription) within CDMA Service	
Table 1.14: Service Providers providing Wireline service	
Table 1.15: Wireline Subscriber Base & Teledensity - Rural & Urban	
Table 1.16: Service Provider wise Subscribers (Rural & Urban) & Share of Rural Subscription	
Table 1.17: Service Provider wise growth in Subscribers	
Table 1.18: Service Area wise Wireline Subscribers (in million)	
Table 1.19: Service Area wise Wireline Teledensity	
Table 1.20: Rate of change & Market share of PCOs	
Table 1.21: Trend of Internet subscriber base	
Table 1.22: Internet Subscriber Base & Market share of top 10 SPs	
Table 1.23: PMRTS Subscriber base - Service Provider wise	
Table 1.24: VSAT Service Providers currently providing service & their subscriber base	
Table 2.1: Key Indicators - GSM Service	
Table 2.2: Monthly ARPU - GSM Service	
Table 2.3: Composition of ARPU (%) - GSM Service	
Table 2.4: MOU per subscriber per month - GSM Service	
Table 2.5: Outgoing SMS per subscriber per month - GSM Service	
Table 2.6: %Break-up of Outgoing minutes from Home Service Area (HSA)- GSM Service	
Table 2.7: Average subscriber outgo per outgoing minute from HSA - GSM Service	
Table 2.8: Trends of Key Parameters - GSM Service	
Table 2.9: Key Indicators - CDMA Full Mobility Service	
Table 2.10: Monthly ARPU - CDMA Full Mobility Service	
Table 2.11: Composition of ARPU (%) - CDMA Full Mobility Service	
Table 2.12: MOU per subscriber per month - CDMA Full Mobility Service	
Table 2.13: Outgoing SMS per subscriber per month - CDMA Full Mobility Service	
Table 2.14: %Break-up of Outgoing minutes from Home Service Area (HSA) - CDMA Full Mobility	
Service	
Table 2.15: Average subscriber outgo per outgoing minute from HSA - CDMA Full Mobility Serv	
Table 0.16, Then the of Very Decree story CDMA Dell Medities Combine	
Table 2.16: Trends of Key Parameters - CDMA Full Mobility Service	52
Table 3.1: Gross Revenue (GR), Adjusted Gross Revenue (AGR), License Fee (LF) & Spectrum	г 1
Charges	54
Table 3.2: Service-wise Gross Revenue, Adjusted Gross Revenue, License Fee and Spectrum	- 4
Charges	
Table 3.3: Access Services - Service Provider wise Adjusted Gross Revenue	
Table 3.4: Category-wise share in Access Services Adjusted Gross Revenue (AGR)	
Table 4.1: QoS Summary - 2G Wireless Service	59
Table 4.2: Parameter wise Analysis of Non-compliance of QoS Benchmarks for 2G Wireless	
Service Providers	
Table 4.3 : QoS Summary - 3G Wireless Service	. 61
Table 4.4: Parameter wise Analysis of Non-compliance of QoS Benchmarks for 3G Wireless	_
Service Providers.	
Table 4.5: QoS Summary - Wireline Service	
Table 4.6: Parameter wise Analysis of Non-compliance of QoS Benchmarks for Wireline Service	
Providers	70

Table 4.7: Summary of Performance of Broadband Service Providers against identified	70
parameters	72
Table 4.8: Parameter-wise Analysis of non-compliance of QoS benchmarks for Broadband Ser	vice
Providers	
Table 5.1: Key Parameters - Broadcasting & Cable Services	
Table 5.2 : Migration to Digital Addressable Cable TV Systems	
Table 5.3: Status of applications for community radio station licenses received from Ministry	
Information and Broadcasting	79
Charts	
	_
Chart 1.1: Trends in Telephone Subscribers and Teledensity in India	
Chart 1.2: Market Share - Rural & Urban	
Chart 1.3: Composition of Access subscription - Wireline & Wireless	
Chart 1.4: Composition of Telephone Subscribers at the end of the quarter	
Chart 1.5: Net Addition/decline in Telephone Subscription	
Chart 1.6: Wireless Subscriber Base and Teledensity	
Chart 1.7: Wireless Market Share - Rural & Urban	
Chart 1.8: Wireless Subscription: GSM vs CDMA	
Chart 1.9: Wireline Subscriber Base and Teledensity	
Chart 1.10: Composition of Wireline Subscribers - Rural & Urban	
Chart 1.11: Number of PCOs	
Chart 1.12: Growth in VPTs	
Chart 1.13: Composition of Internet subscription	
Chart 1.14: Composition of Broadband & Narrowband subscription	
Chart 1.15: Trend of subscriber base achieved by top ten ISPs	28
Chart 1.16: Compostion of Wired Internet Subscribers	
Chart 1.17: Composition of Wireless Internet Subscribers	
Chart 1.18: Technology Trend for Internet Access	
Chart 1.19: Trend in MoU for Internet Telephony	
Chart 1.20: Composition of Broadband Subscription – Technology wise	
Chart 1.21: Composition of Narrowband Subscription – Technology wise	
Chart 1.22: Number of PMRTS subscribers & Rate of Growth (%)	
Chart 1.23: Number of VSAT Subscribers & Rate of Growth (%)	
Chart 2.1: Break-up of Outgoing minutes from Home Service Area (HSA) – GSM Service	38
Chart 2.2: Proportion of prepaid subscribers - GSM Service	
Chart 2.3: Minutes of Usage by Outroamers as a $\%$ of Total Minutes of Usage - GSM Service	41
Chart 2.4: Outgoing SMS Usage by Outroamers as a % of Total Outgoing SMS Usage – GSM	
Service	
Chart 2.5: % Subscribers who availed roaming services during the quarter – GSM Service	
Chart 2.6: % Break-up of minutes of usage of outroamers (usage from outside the Home Service)	
Area) – GSM Service	43
Chart 2.7: % Break-up of outgoing minutes from Home Servie Area (HSA) – CDMA Full Mobili	ty
Service	
Chart 2.8: Proportion of prepaid subscribers - CDMA Full Mobility Service	
Chart 2.9: Minutes of Usage by Outroamers as a % of Total Minutes of Usage - GSM Service	
Chart 2.10: Outgoing SMS Usage by Outroamers as a % of Total Outgoing SMS Usage - GSM	
Service	49
Chart 2.11: Percentage of subscribers who availed roaming service during the quarter - CDM.	A
Full Mobility Service	
Chart 2.12: Percentage break-up of minutes of usage of outroamers (usage from outside the H	
Service Area) – CDMA Full Mobility Service	50
Chart 3.1: Composition of Gross Revenue	55
Chart 3.2: Trend in ARPU per month for Access Services	
Chart 5.1: Maximum number of TV Channels being carried by certain Cable operators in their	r
networks	
Chart 5.2 : Comparative position of Revenue from FM Radio Stations as reported to TRAI	79