



## **Telecom Regulatory Authority of India**

### **The Indian Telecom Services Performance Indicators** April - June, 2013

New Delhi, India  
2<sup>nd</sup> December, 2013

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# Snapshot

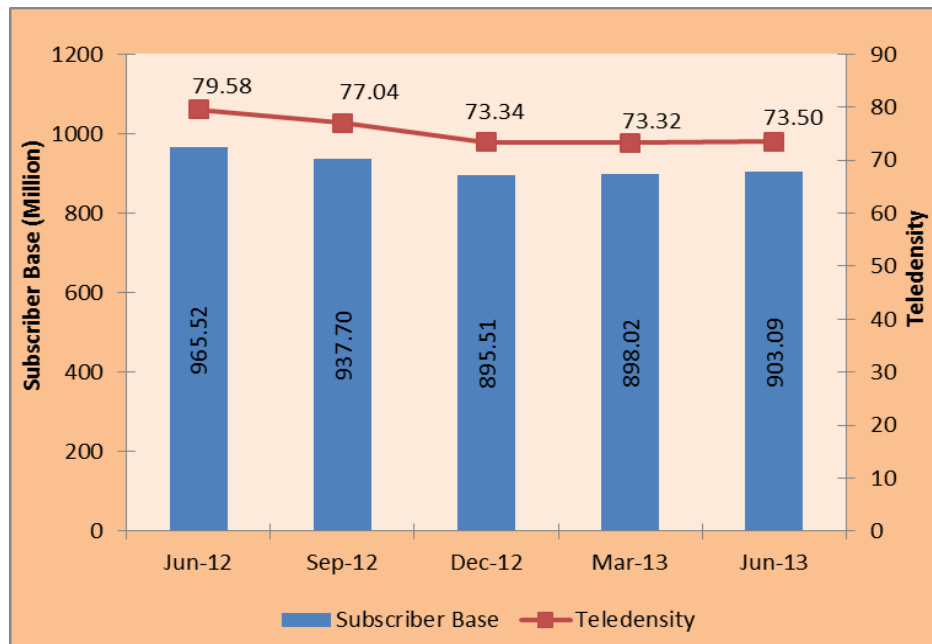
<b>(Data As on 30<sup>th</sup> June, 2013)</b>	
<b>Telecom Subscribers (Wireless +Wireline)</b>	
Total Subscribers	903.09 Million
% change over the previous quarter	0.56%
Urban Subscribers	545.48 Million
Rural Subscribers	357.61 Million
Market share of Private Operators	86.05%
Market share of PSU Operators	13.95%
Teledensity	73.50
Urban Teledensity	145.35
Rural Teledensity	41.90
<b>Wireless Subscribers</b>	
Total Wireless Subscribers	873.36 Million
% change over the previous quarter	0.64%
Urban Subscribers	522.27 Million
Rural Subscribers	351.10 Million
GSM Subscribers	802.12 Million
CDMA Subscribers	71.24 Million
Market share of Private Operators	88.26%
Market share of PSU Operators	11.74%
Teledensity	71.08
Urban Teledensity	139.16
Rural Teledensity	41.14
<b>Wireline Subscribers</b>	
Total Wireline Subscribers	29.73 Million
% change over the previous quarter	-1.61%
Urban Subscribers	23.22 Million
Rural Subscribers	6.51 Million
Market share of Private Operators	21.15%
Market share of PSU Operators	78.85%
Teledensity	2.42
Urban Teledensity	6.19
Rural Teledensity	0.76
Village Public Telephones (VPT)	0.59 Million
Public Call Office (PCO)	1.16 Million

<b>Internet / Broadband Subscribers</b>	
Total Internet Subscribers	198.39 Million
Narrowband subscribers (excluding subscribers who accessed internet through mobile devices)	6.69 Million
Broadband subscribers (excluding subscribers who accessed internet through Mobile devices)	15.20 million
Subscribers who accessed internet through Mobile Devices	176.50 Million
<b>Broadcasting &amp; Cable Services</b>	
No. of private satellite TV channels registered with Ministry of I & B	795
Number of private FM Radio Stations	242
DTH Subscribers registered with Pvt. SPs	58.89 Million
<b>Telecom Financial Data (for the QE Jun-13)</b>	
Gross Revenue(GR) during the quarter	₹ 57260.98 Crore
% change in GR over the previous quarter	5.48%
Adjusted Gross Revenue (AGR) during the quarter	₹38640.30 Crore
% change in AGR over the previous quarter	9.53%
Share of Public sector undertaking's in Access AGR	12.83%
Monthly Average Revenue Per User (ARPU) for Access Services	₹113
<b>Revenue &amp; Usage Parameters (for the QE Jun-13)</b>	
Monthly ARPU GSM Service	₹ 111
Monthly ARPU CDMA Full Mobility Service	₹ 98
Minutes of Usage (MOU) per subscriber per month GSM Service	388 Minutes
Minutes of Usage (MOU) per subscriber per month CDMA Full Mobility Service	278 Minutes
Minutes of Usage for Internet Telephony	266.21 Million

## Executive Summary

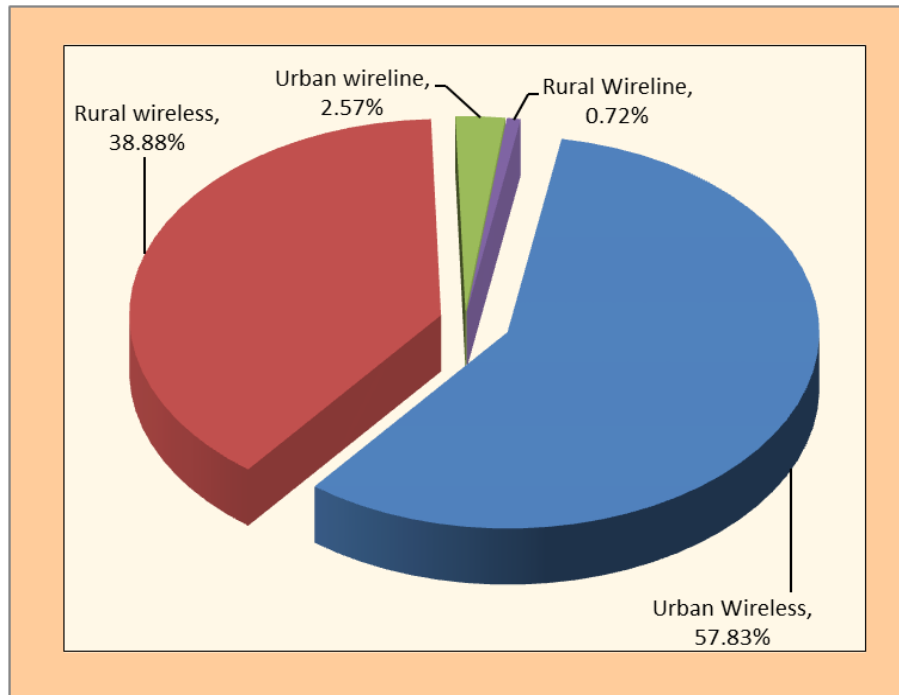
1. The number of telephone subscribers in India increased from 898.02 million at the end of Mar-13 to 903.09 million at the end of Jun-13, registering a growth of 0.56% over the previous quarter. This reflects year-on-year (Y-O-Y) negative growth of 6.47% over the same quarter of last year. The overall Tele-density in India slightly increased from 73.32 as on 31<sup>st</sup> March, 2013 to 73.50 as on 30<sup>th</sup> June, 2013.

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



2. Subscription in Urban Areas decreased from 548.80 million at the end of Mar-13 to 545.48 million at the end of Jun-13, and Urban Teledensity also declined from 146.96 to 145.35. Whereas, Rural subscription increased from 349.22 million to 357.61 million, and Rural Teledensity also increased from 41.02 to 41.90. Share of subscription in Rural areas out of total subscription increased from 38.89% at the end of Mar-13 to 39.60% at the end of Jun-13.

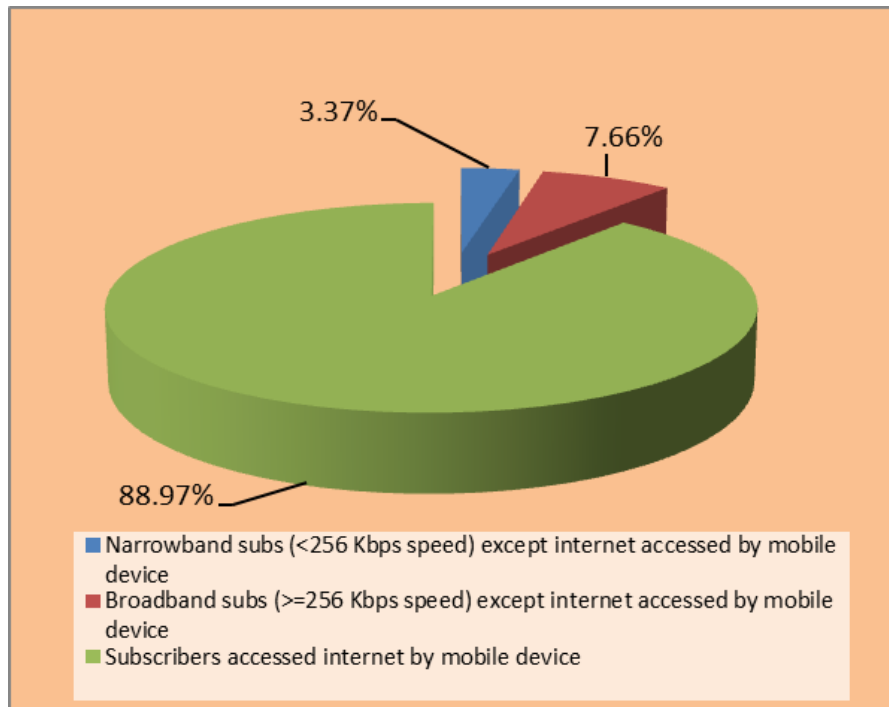
### Composition of Telephone Subscribers



3. With a net addition of 5.56 million subscribers during the quarter, total wireless(GSM+CDMA) subscriber base increased from 867.80 million at the end of Mar-13 to 873.36 million at the end of Jun-13, registering a growth rate of 0.64% over the previous quarter. The year-on-year (Y-O-Y) growth rate of Wireless subscribers for Jun-13 is -6.50%. Wireless Teledensity increased from 70.85 at the end of Mar-13 to 71.08 at the end of Jun-13.
4. Wireline subscriber base further declined from 30.21 million at the end of Mar-13 to 29.73 million at the end of Jun-13, registering a decline rate of 1.61%. Wireline Teledensity declined from 2.47 at the end of Mar-13 to 2.42 at the end of Jun-13.
5. Number of subscribers who accessed internet by mobile devices is 176.50 million during QE Jun-13.

6. Number of internet subscribers (except internet access by mobile devices) increased from 21.61 million at the end of Mar-13 to 21.89 million at the end of Jun-13, registering a quarterly growth rate of 1.30%.
7. Number of Broadband subscribers (except broadband access by mobile devices) increased from 15.05 million at the end of Mar-13 to 15.20 million at the end of Jun-13, registering a quarterly growth of 0.98% and Y-O-Y growth of 4.32%.
8. Number of Narrowband subscribers (except internet access by mobile devices) increased from 6.56 million at the end of Mar-13 to 6.69 million at the end of Jun-13, registering a quarterly growth of 1.98%

**Composition of internet subscription**

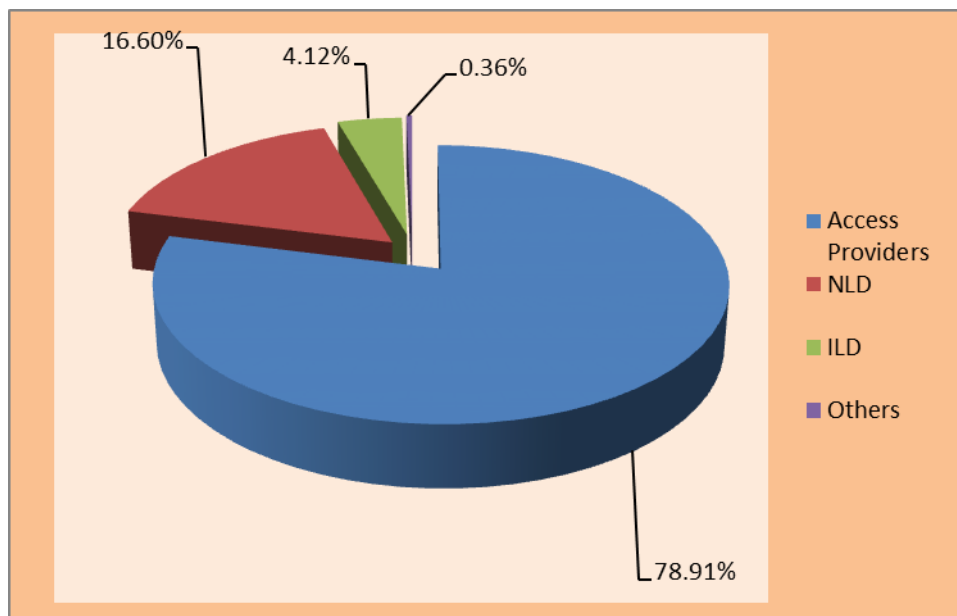




9. Monthly Average Revenue Per User (ARPU) for GSM service increased by 6.14%, from ₹105 in QE Mar-13 to ₹111 in QE Jun-13, with Y-O-Y increase of 16.73%.
10. On an all India average, the overall MOU per subscriber per month for GSM service increased by 1.38% from 383 in QE Mar-13 to 388 in QE Jun-13. Prepaid MOU per subscriber increased from 361 to 364 and postpaid MOUs increased from 946 to 990 in this quarter.
11. Monthly ARPU for CDMA full mobility service increased by 3.26%, from ₹95 in QE Mar-13 to ₹98 in QE Jun-13. ARPU for CDMA has increased by 31.28% on Y-O-Y basis in this quarter.
12. The total MOU for CDMA per subscriber per month increased by 1.24%, from 275 in QE Mar-13 to 278 QE Jun-13. The Outgoing MOUs increased from 141 to 146, while Incoming MOUs decreased from 134 to 132 in this quarter.
13. Gross Revenue (GR) and Adjusted Gross Revenue (AGR) of Telecom Service Sector for the QE Jun-13 has been ₹57260.98 Crore and ₹38640.30 Crore respectively. There has been an increase of 5.48% in GR and 9.53% 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 9.04% and 8.85% respectively. Pass-through charges accounted for 32.52% of the GR for the quarter ending Jun-13. The quarterly and the year-on-year (Y-O-Y) growth rates of pass-through charges for QE Jun-13 are -2.02% and 9.45% respectively.

14. The quarterly and the year-on-year (Y-O-Y) growth rates of license fee are 8.09% and 5.14% respectively for the QE Jun-13.
15. Access services contributed 78.91% of the total Adjusted Gross Revenue of telecom services. In Access services, Gross Revenue, Adjusted Gross Revenue (AGR), License Fee and Spectrum Charges increased by 5.75%, 9.68%, 4.39% and 9.86% respectively, whereas Pass Through decreased by 2.62% in QE Jun-13.
16. Monthly Average Revenue per User (ARPU) for Access Services based on AGR increased from ₹104 in QE Mar-13 to ₹113 in QE Jun-13.

**Composition of Adjusted Gross Revenue**



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

<b>Parameters showing Improvement in QoS</b>	<b>Parameters showing deterioration in QoS</b>
<ul style="list-style-type: none"> <li>• BTSs Accumulated downtime (not available for service)</li> <li>• TCH Congestion</li> <li>• Worst affected cells having more than 3% TCH drop (call drop) rate</li> <li>• Connection with good voice quality</li> <li>• Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark)</li> <li>• Resolution of billing/ charging/ validity complaints.</li> <li>• Accessibility of call centre/customer care</li> <li>• %age requests for Termination/ Closure of service complied within 7 days.</li> </ul>	<ul style="list-style-type: none"> <li>• Metering and billing credibility - post paid</li> <li>• Metering and billing credibility - pre paid</li> <li>• Period of applying credit/ waiver/adjustment to customer's account from the date of resolution of complaints</li> <li>• %age of calls answered by the operators (voice to voice) within 60 sec</li> <li>• Time taken for refund of deposits after closures.</li> </ul>

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

<b>Parameters showing Improvement in QoS</b>	<b>Parameters showing deterioration in QoS</b>
<ul style="list-style-type: none"> <li>• % of faults repaired within 3 days (for urban area)</li> <li>• % of faults repaired within 5 days (for rural &amp; hilly areas)</li> <li>• Call Completion Rate (CCR)</li> </ul>	<ul style="list-style-type: none"> <li>• Faults incidences (No. of faults/ 100 Subs./month)</li> <li>• % Fault repaired by next working day</li> <li>• Mean Time to Repair (MTTR).</li> </ul>

<ul style="list-style-type: none"> <li>• Metering and billing credibility - post paid</li> <li>• Metering and billing credibility - pre paid</li> <li>• %age requests for Termination / Closure of service complied within 7 days.</li> </ul>	<ul style="list-style-type: none"> <li>• Resolution of billing/ charging/ validity complaints</li> <li>• Accessibility of call centre/ customer care</li> <li>• % of calls answered by the operators (Voice to Voice) within 60 Sec.</li> <li>• Time Taken for refund of deposits after closures</li> </ul>
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19. Total number of private satellite TV channels permitted by the Ministry of I&B, as obtained from its website, are 795. 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 Jun-13.
20. Maximum number of TV channels (Pay, FTA and Local) being carried by any of the reported MSOs is 228 whereas in the conventional analogue form, maximum number of channels being carried by any of the reported MSOs is 100 channels.
21. Apart from All India Radio, Prasar Bharti a public broadcaster, there are 242 private FM Radio stations in operation at the end of Jun-13.
22. Besides the free DTH service of Doordarshan, there are 6 private DTH licensees, offering their services to the DTH subscribers. As on 30.06.2013, 58.89 million subscribers are registered with these 6 private DTH operators.

## Trends at a Glance

### A. Wireline & Wireless Services

	QE Jun 2012	QE Sep 2012	QE Dec 2012	QE Mar 2013	QE Jun 2013	%age change over Jun- 2012	%age change over Sep- 2012	%age change over Dec- 2012	%age change over Mar- 2013
						(12 months)	(9 months)	(6 months)	(3 months)
<b>1) Subscriber's Base (in million)</b>									
i) Wireline	31.43	31.08	30.79	30.21	29.73	-5.41%	-4.36%	-3.44%	-1.61%
ii) Wireless	934.09	906.62	864.72	867.80	873.36	-6.50%	-3.67%	1.00%	0.64%
<b>Total</b>	<b>965.52</b>	<b>937.70</b>	<b>895.51</b>	<b>898.02</b>	<b>903.09</b>	<b>-6.47%</b>	<b>-3.69%</b>	<b>0.85%</b>	<b>0.56%</b>
Rural	343.76	342.01	338.54	349.22	357.61	4.03%	4.56%	5.63%	2.40%
Urban	621.76	595.69	556.96	548.80	545.48	-12.27%	-8.43%	-2.06%	-0.60%
<b>2) Traffic (MOU) (minutes of use/ sub/ month)</b>									
Wireless - full mobility									
i) GSM	346	343	360	383	388	12.19%	13.08%	7.70%	1.33%
ii) CDMA	229	225	230	275	278	21.73%	23.57%	20.98%	1.24%
<b>3) ARPU (Rs./sub/ month)</b>									
Wireless - full mobility									
i) GSM	95.47	95.25	98.14	105.00	111.45	16.73%	17.00%	13.55%	6.14%
ii) CDMA	74.91	77.76	79.95	95.25	98.35	31.28%	26.47%	23.01%	3.26%
<b>4) Teledensity</b>									
Population in million (Estimated)	1213	1217	1221	1225	1229				
i) Wireline teledensity	2.59	2.55	2.52	2.47	2.42	-6.60%	-5.26%	-4.04%	-1.92%
ii) Wireless teledensity	76.99	74.49	70.82	70.85	71.08	-7.67%	-4.57%	0.37%	0.33%
<b>Total Teledensity</b>	<b>79.58</b>	<b>77.04</b>	<b>73.34</b>	<b>73.32</b>	<b>73.50</b>	<b>-7.64%</b>	<b>-4.60%</b>	<b>0.22%</b>	<b>0.25%</b>
Rural teledensity	40.66	40.36	39.85	41.02	41.90	3.06%	3.83%	5.14%	2.17%
Urban teledensity	169.03	161.13	149.90	146.96	145.35	-14.01%	-9.79%	-3.03%	-1.10%

## B. Subscriber Base

### (i) Wireline Subscribers Base (in Million)

Service Provider	QE Jun 2012	QE Sep 2012	QE Dec 2012	QE Mar 2013	QE Jun 2013	%age change over Jun-2012	%age change over Sep-2012	%age change over Dec-2012	%age change over Mar-2013
						(12 months)	(9 months)	(6 months)	(3 months)
BSNL	21.71	21.36	21.04	20.45	19.89	-8.38%	-6.89%	-5.47%	-2.72%
MTNL	3.45	3.45	3.46	3.46	3.55	2.77%	2.78%	2.73%	2.60%
Bharti	3.27	3.27	3.28	3.28	3.28	0.31%	0.23%	0.11%	-0.03%
Reliance	1.27	1.26	1.26	1.24	1.24	-2.02%	-1.20%	-1.26%	0.02%
Tata	1.46	1.47	1.49	1.51	1.47	0.85%	-0.15%	-1.28%	-2.34%
Quadrant (HFCL)	0.20	0.19	0.18	0.19	0.20	-0.30%	3.68%	6.57%	4.40%
Sistema	0.05	0.05	0.05	0.05	0.05	10.56%	9.72%	7.92%	2.20%
Vodafone	0.02	0.02	0.03	0.04	0.04	110.53%	81.58%	41.70%	17.25%
<b>Total</b>	<b>31.43</b>	<b>31.08</b>	<b>30.79</b>	<b>30.21</b>	<b>29.73</b>	<b>-5.41%</b>	<b>-4.36%</b>	<b>-3.44%</b>	<b>-1.61%</b>

### (ii) Wireless Subscriber Base (in Million)

Service Provider	QE Jun 2012	QE Sep 2012	QE Dec 2012	QE Mar 2013	QE Jun 2013	%age change over Jun-2012	%age change over Sep-2012	%age change over Dec-2012	%age change over Mar-2013
						(12 months)	(9 months)	(6 months)	(3 months)
Bharti	187.30	185.92	181.91	188.20	190.91	1.93%	2.68%	4.95%	1.44%
Vodafone	153.71	152.66	147.48	152.35	155.03	0.86%	1.55%	5.12%	1.76%
Reliance	154.60	134.85	118.53	122.97	125.73	-18.67%	-6.76%	6.08%	2.24%
Idea	117.16	115.46	113.95	121.61	124.97	6.66%	8.23%	9.67%	2.76%
BSNL	98.28	99.63	99.92	101.21	97.99	-0.29%	-1.65%	-1.93%	-3.18%
Tata	80.23	78.36	69.56	66.42	64.63	-19.45%	-17.52%	-7.09%	-2.70%
Aircel/Dishnet	64.88	66.61	63.35	60.07	60.97	-6.02%	-8.46%	-3.75%	1.49%
Unitech	45.58	42.15	41.52	31.68	32.30	-29.14%	-23.37%	-22.22%	1.93%
Sistema	16.55	16.59	14.88	11.91	9.77	-40.97%	-41.13%	-34.35%	-17.99%
MTNL	5.57	5.29	5.30	5.00	4.51	-19.01%	-14.79%	-14.92%	-9.77%
Videocon	5.58	4.45	3.64	2.01	2.42	-56.66%	-45.68%	-33.58%	20.33%
Loop	3.15	3.03	3.00	3.01	2.72	-13.78%	-10.30%	-9.31%	-9.70%
Quadrant	1.51	1.60	1.70	1.37	1.42	-6.12%	-11.63%	-16.39%	3.79%
<b>Total</b>	<b>934.09</b>	<b>906.62</b>	<b>864.72</b>	<b>867.80</b>	<b>873.36</b>	<b>-6.50%</b>	<b>-3.67%</b>	<b>1.00%</b>	<b>0.64%</b>

### C. Internet & Broadband Services

	QE Jun 2012	QE Sep 2012	QE Dec 2012	QE Mar 2013	QE Jun 2013	%age change over Jun- 2012 (12 months)	%age change over Sep- 2012 (9 months)	%age change over Dec- 2012 (6 months)	%age change over Mar- 2013 (3 months)
<b>1) Subscriber's Base (in million)</b>									
<b>A. Internet Subscribers (except internet accessed by mobile devices)</b>	19.66	21.25	21.57	21.61	21.89	11.34%	3.00%	1.45%	1.29%
<b>i. Narrowband Subscribers (&lt;256 Kbps)</b>	5.09	6.56	6.59	6.56	6.69	31.42%	1.89%	1.48%	1.99%
<b>ii. Broadband Subscribers (&gt;=256 Kbps)</b>	14.57	14.68	14.98	15.05	15.20	4.32%	3.50%	1.44%	0.98%
<b>B. No. of subscribers accessed internet by mobile devices</b>	N/A	N/A	N/A	143.20	176.50	-	-	-	23.26%
<b>Total Internet Subscribers</b>	N/A	N/A	N/A	<b>164.81</b>	<b>198.39</b>	-	-	-	<b>20.38%</b>

### D. Telecom Financial Data

	QE Jun 2012	QE Sep 2012	QE Dec 2012	QE Mar 2013	QE Jun 2013	%age change over Jun- 2012 (12 months)	%age change over Sep- 2012 (9 months)	%age change over Dec- 2012 (6 months)	%age change over Mar- 2013 (3 months)
<b>Telecom Sector</b>									
i) Gross Revenue (Rs. in Crores)	52512.10	52937.32	52858.39	54283.78	57260.98	9.04%	8.17%	8.33%	5.48%
ii) Adjusted Gross Revenue (Rs. in Crores)	35499.01	35473.16	34527.50	35279.50	38640.30	8.85%	8.93%	11.91%	9.53%
<b>Access Services</b>									
Adjusted Gross Revenue (Rs. in Crores)	28225.28	27773.79	27455.16	27801.94	30492.88	8.03%	9.79%	11.06%	9.68%
ARPU per month (AGR/Average subscribers/3)	98.27	97.93	99.00	103.66	113.04	15.03%	15.42%	14.18%	9.04%

## **Introduction**

This Report presents the Key Parameters and growth trends for the Telecom Services in India for the quarter ending June, 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 Teledensity 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](http://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@traigov.in](mailto:manishsinha@traigov.in)



# **Chapter 1 :**

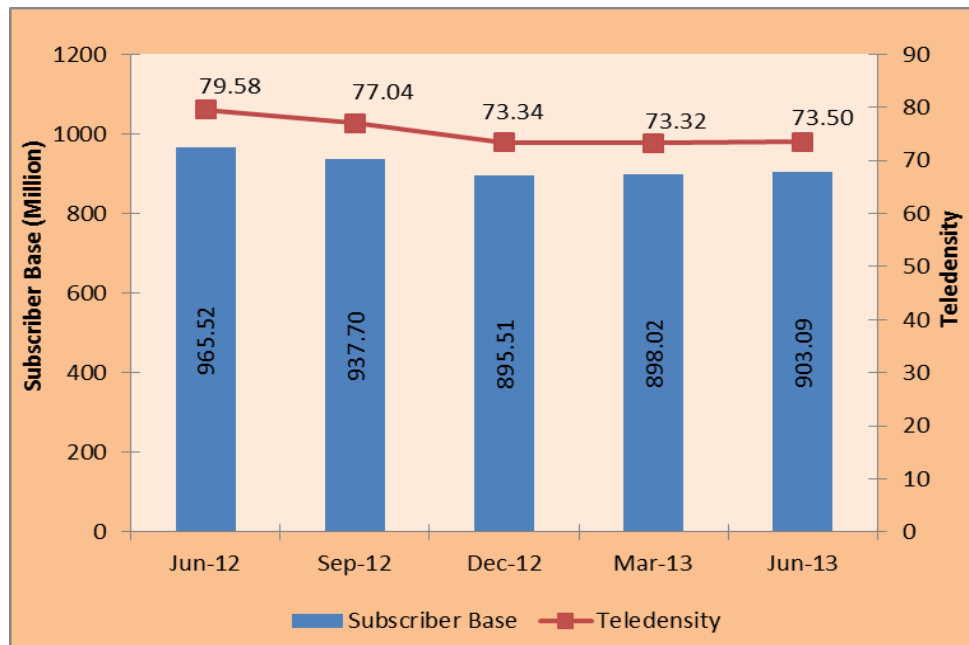
# **Subscription Data**

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- 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 898.02 million at the end of Mar-13 to 903.09 million at the end of Jun-13, registering a growth of 0.56% over the previous quarter. This reflects year-on-year (Y-O-Y) negative growth of 6.47% over the same quarter of last year. The overall Teledensity in India slightly increased to 73.50 at the end of Jun-13 from 73.32 at the end of the previous quarter.

**Chart 1.1: Trends in Telephone Subscribers and Teledensity in India**

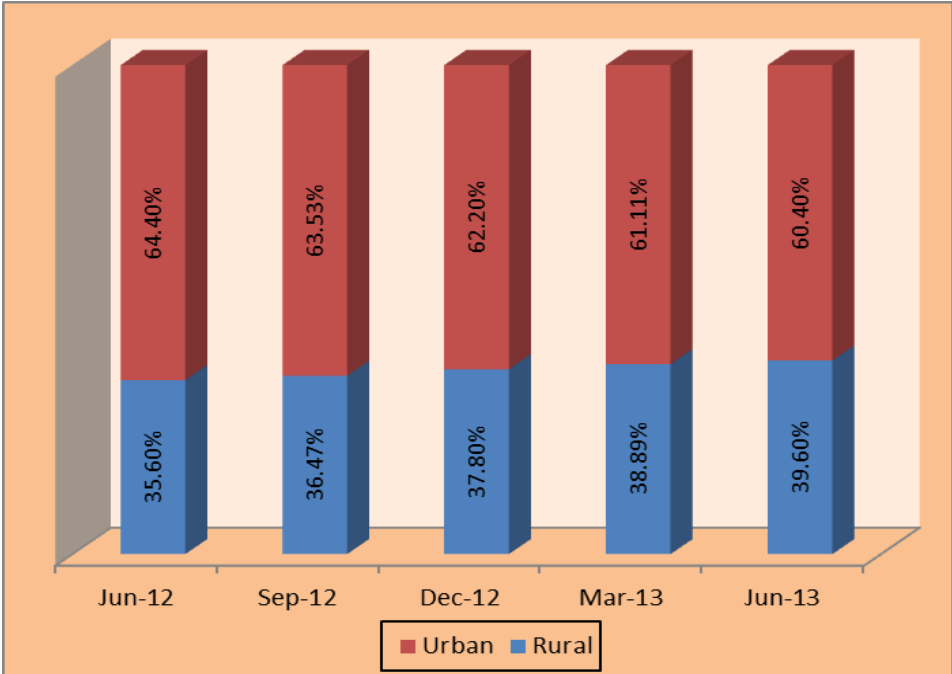


**Table 1.1: Subscriber Base & Teledensity - Rural & Urban**

Quarter ending	Subscriber Base (million)		Teledensity	
	Rural	Urban	Rural	Urban
Jun-12	343.76	621.76	40.66	169.03
Sep-12	342.01	595.69	40.36	161.13
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

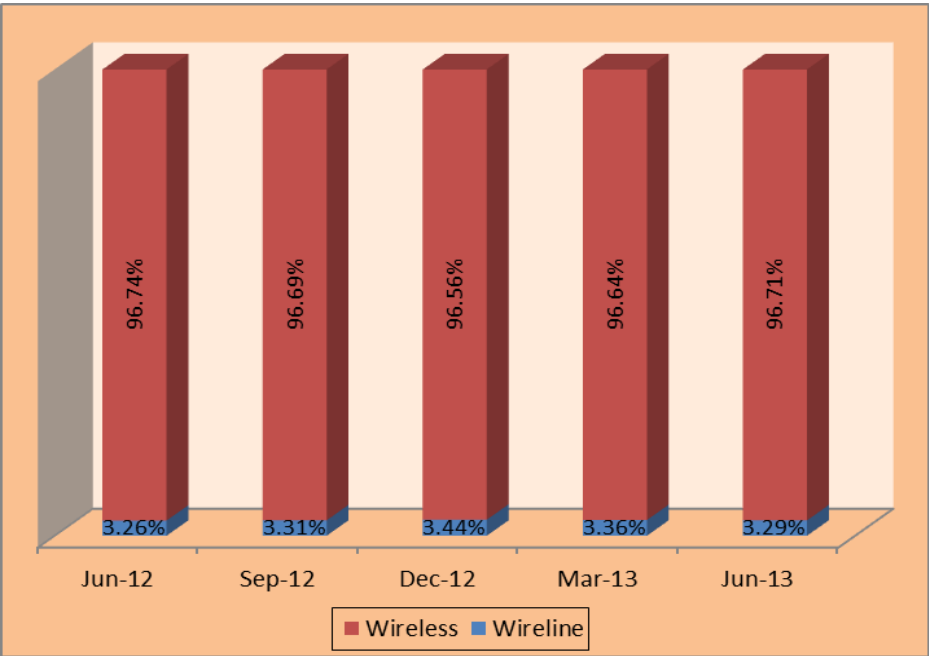
1.2 Subscription in Urban Areas decreased from 548.80 million at the end of Mar-13 to 545.48 million at the end of Jun-13 and the Urban Teledensity also declined from 146.96 to 145.35 during the quarter. Whereas Rural subscription increased from 349.22 million to 357.61 million and the Rural Teledensity also increased from 41.02 to 41.90 during the quarter. The year-on-year (Y-O-Y) growth rate of Rural and Urban Teledensity from Jun-12 to Jun-13 is 3.06% and -14.01% respectively.

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

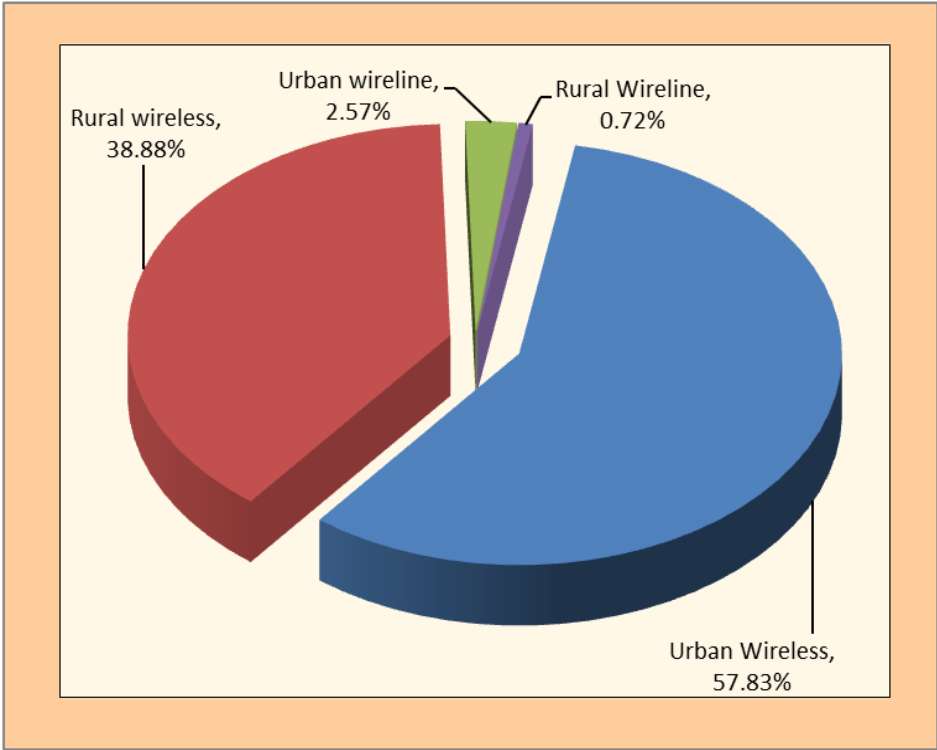


1.3 Share of Rural areas in total subscription has increased from 38.89% at the end of Mar-13 to 39.60% at the end of Jun-13. The year-on-year (Y-O-Y) growth of the market share of the Rural areas for Jun-13 is 11.22%.

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



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

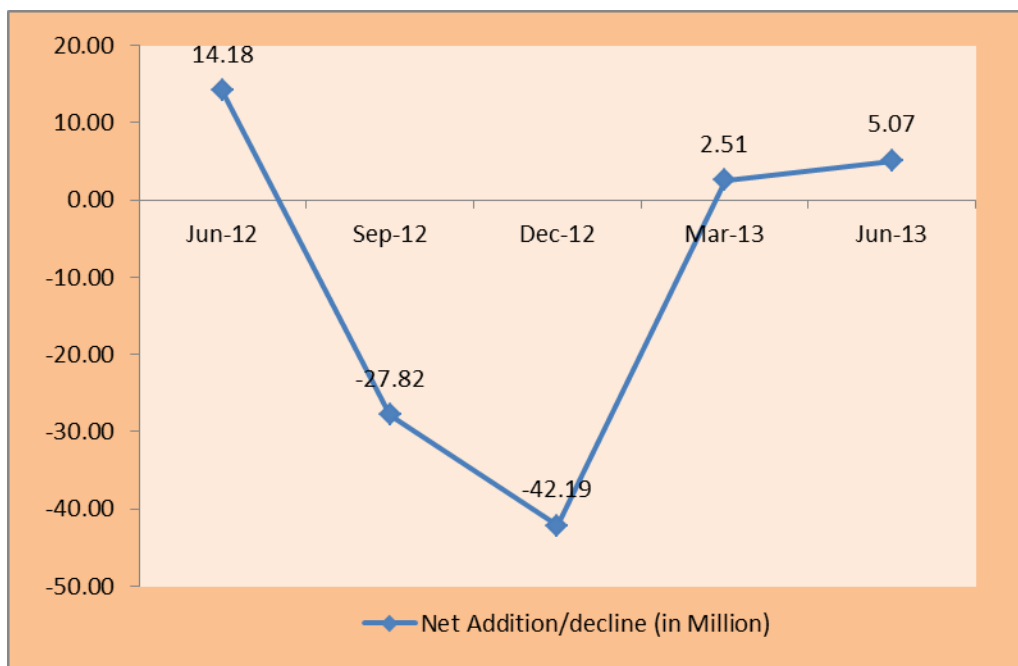


**Table 1.2: Service Area wise Access (Wireless+Wireline) Subscriber base**

Service Area	Subscribers (million)			
	Mar-13	Jun-13	Net Additions	Rate of Growth(%)
Andhra Pradesh	66.60	67.28	0.67	1.01
Assam	14.58	14.93	0.35	2.41
Bihar	60.70	60.40	-0.29	-0.48
Delhi	43.39	43.15	-0.24	-0.54
Gujarat	53.49	53.71	0.22	0.42
Haryana	20.10	20.45	0.35	1.74
Himachal Pradesh	7.30	7.28	-0.01	-0.19
Jammu & Kashmir	7.04	7.34	0.30	4.29
Karnataka	55.36	55.51	0.15	0.27
Kerala	33.76	34.17	0.42	1.23
Madhya Pradesh	53.28	54.34	1.05	1.97
Maharashtra	70.87	70.54	-0.33	-0.46
Mumbai	33.36	32.37	-0.99	-2.96
North East	9.15	9.37	0.22	2.38
Orissa	24.98	25.21	0.23	0.93
Punjab	30.78	31.12	0.33	1.09
Rajasthan	49.61	50.51	0.90	1.82
T.N. (incl. Chennai)	75.52	75.89	0.37	0.49
U.P.(E)	74.87	76.06	1.19	1.59
U.P.(W)	49.17	48.98	-0.18	-0.38
Kolkata	22.40	22.67	0.27	1.18
West Bengal	41.71	41.80	0.09	0.22
<b>All India</b>	<b>898.02</b>	<b>903.09</b>	<b>5.07</b>	<b>0.56</b>

- 1.4 During the quarter, J&K Circle has recorded the highest growth rate of 4.29%, followed by Assam (2.41%) and North-East (2.38%). Mumbai Circle has recorded the highest decline rate of 2.96%.

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



1.5 The net addition in telephone subscribers is 5.07 million in QE Jun-13 as against the net addition of 2.51 million in QE Mar-13.

**Table 1.3: Service Area wise Teledensity**

Service Area	As on 31 <sup>st</sup> March, 2013			As on 30 <sup>th</sup> June, 2013		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	41.83	169.00	77.19	43.61	166.54	77.80
Assam	31.13	130.92	46.51	32.10	131.61	47.49
Bihar	27.54	160.28	45.72	27.87	155.46	45.36
Delhi	-	-	221.64	-	-	218.86
Gujarat	53.12	136.39	87.23	53.44	135.97	87.31
Haryana	56.78	113.51	76.44	57.43	115.03	77.47
Himachal Pradesh	75.27	341.39	105.39	75.50	334.98	104.96
J&K	36.72	116.91	58.57	38.56	120.41	60.91
Karnataka	43.00	170.38	91.24	43.43	169.45	91.26
Kerala	61.93	196.11	96.09	62.89	197.39	97.12

Service Area	As on 31 <sup>st</sup> March, 2013			As on 30 <sup>th</sup> June, 2013		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Madhya Pradesh	30.91	115.09	53.55	32.11	114.88	54.40
Maharashtra*	52.64	128.64	88.56	53.56	124.50	87.15
Mumbai*						
North East	40.57	151.53	67.78	41.30	154.84	69.20
Orissa	38.72	164.01	60.21	39.20	163.83	60.64
Punjab	66.90	152.31	102.99	67.78	152.74	103.80
Rajasthan	44.63	153.82	70.85	45.95	153.85	71.87
T.N. (incl Chennai)	66.33	139.94	108.17	68.86	138.34	108.52
U.P.(E)*	33.34	137.69	56.83	34.29	135.26	57.05
U.P.(W)*						
Kolkata*	42.01	138.03	69.43	42.30	138.07	69.66
W.B.*						
<b>All India</b>	<b>41.02</b>	<b>146.96</b>	<b>73.32</b>	<b>41.90</b>	<b>145.35</b>	<b>73.50</b>

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

Notes:

1. Teledensity figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country, published by the Office of the Registrar General & Census Commissioner, India.
2. Delhi Service area, apart from the State of Delhi, includes wireless subscribers of the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).

1.6 Himachal Pradesh has the highest Rural Teledensity of 75.50, followed by Tamil Nadu (68.86). Bihar continues to have the lowest Rural Teledensity of 27.87, followed by Assam (32.10).

**Table 1.4: Growth/Decline in Subscribers**

Service Provider	Subscriber base (millions)			Rate of Growth (%)	Market Share □ Mar-13 (%)	Market Share □ Jun-13 (%)
	Mar-13	Jun-13	Net Additions			
Bharti	191.48	194.19	2.72	1.42	21.32	21.50
Vodafone	152.39	155.08	2.69	1.76	16.97	17.17
IDEA	121.61	124.97	3.36	2.76	13.54	13.84
Reliance	124.22	126.98	2.76	2.22	13.83	14.06
Tata	67.92	66.10	-1.83	-2.69	7.56	7.32
Aircel	60.07	60.97	0.90	1.49	6.69	6.75
Loop Mobile	3.01	2.72	-0.29	-9.70	0.33	0.30
Quadrant (HFCL)	1.55	1.61	0.06	3.86	0.17	0.18
Sistema	11.96	9.82	-2.14	-17.90	1.33	1.09
Unitech	31.68	32.30	0.61	1.93	3.53	3.58
Videocon	2.01	2.42	0.41	20.33	0.22	0.27
BSNL	121.65	117.88	-3.77	-3.10	13.55	13.05
MTNL	8.46	8.06	-0.40	-4.71	0.94	0.89
<b>Total</b>	<b>898.02</b>	<b>903.09</b>	<b>5.07</b>	<b>0.56</b>		

1.7 Bharti is the leading operator in Access segment in terms of number of subscribers. However, in term of net additions during the quarter, Idea recorded the highest addition of 3.36 million, followed by Reliance (2.76 million) and Bharti (2.72 million).



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

<b>Service Provider</b>	<b>No. of Total Subscribers (in millions)</b>	<b>No. of Rural Subscribers (in millions)</b>	<b>Percentage of Rural subscribers</b>	<b>Market share of Rural subscribers (%)</b>
Bharti	194.19	85.90	44.24	24.02
Vodafone	155.08	84.01	54.17	23.49
Reliance	126.98	30.14	23.74	8.43
IDEA	124.97	68.73	55.00	19.22
BSNL	117.88	40.23	34.13	11.25
Tata	66.10	14.17	21.44	3.96
Aircel	60.97	22.73	37.28	6.36
Unitech	32.30	10.22	31.66	2.86
Sistema	9.82	1.43	14.55	0.40
MTNL	8.06	-	0.00	0.00
Loop Mobile	2.72	-	0.00	0.00
Videocon	2.42	-	0.00	0.00
Quadrant (HFCL)	1.61	0.03	1.89	0.01
<b>Total</b>	<b>903.09</b>	<b>357.61</b>	<b>39.60</b>	<b>100</b>

1.8 IDEA continues to be the Service provider with highest proportion of Rural subscribers (55%), followed by Vodafone (54.17%) to their total subscribers.

## Section B : Wireless Service

**Table 1.6: List of Cellular Mobile (GSM & CDMA) Service Providers currently providing service [As on 30<sup>th</sup> June, 2013]**

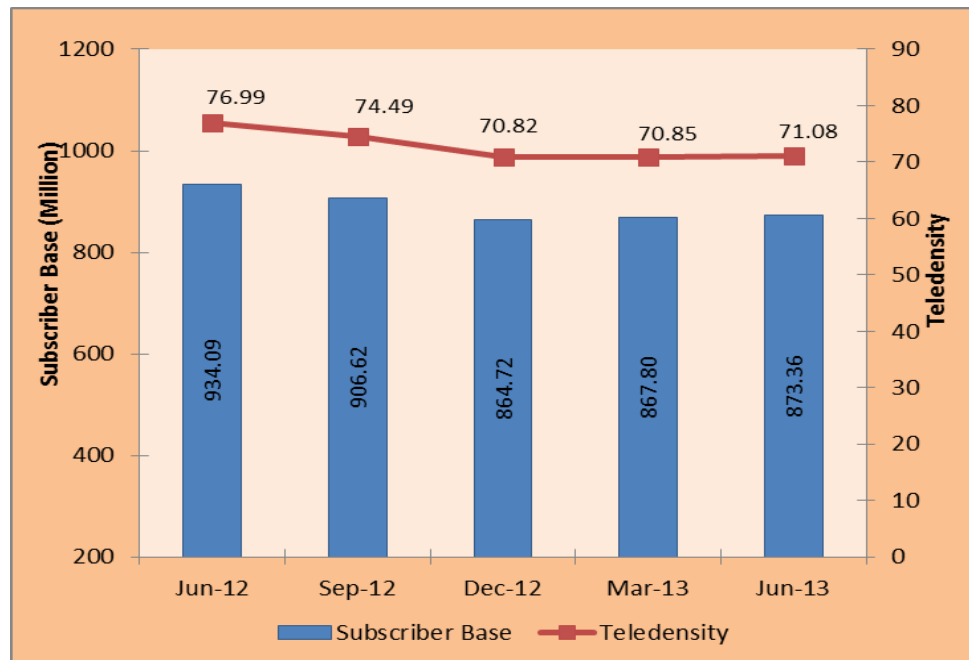
SLNo.	Service Provider	Area of Operation
1	Bharti	All India
2	Aircel Group	All India
3	Reliance Communications	All India (except Assam & NE)
4	Reliance Telecom	Kolkata, MP, WB, HP, Bihar, OR, Assam & NE
5	Vodafone	All India
6	Tata Teleservices	All India except Assam, NE & J&K
7	IDEA (Including Spice)	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 (HFCL)	Punjab
13	Unitech Group	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 30.06.2013.

1.9 Complete list of licensed Cellular (GSM & CDMA) Service providers as on 30<sup>th</sup> June, 2013 is at Annexure -1.1

1.10 Total Wireless (GSM+CDMA) subscriber base increased from 867.80 million at the end of Mar-13 to 873.36 million at the end of Jun-13, thereby showing a growth of 0.64%. During this quarter net addition of 5.56 million subscribers was recorded. The year-on-year (Y-O-Y), wireless subscribers shows negative growth rate of 6.50% for Jun-13. Wireless Teledensity increased from 70.85 at the end of Mar-13 to 71.08 at the end of Jun-13.

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



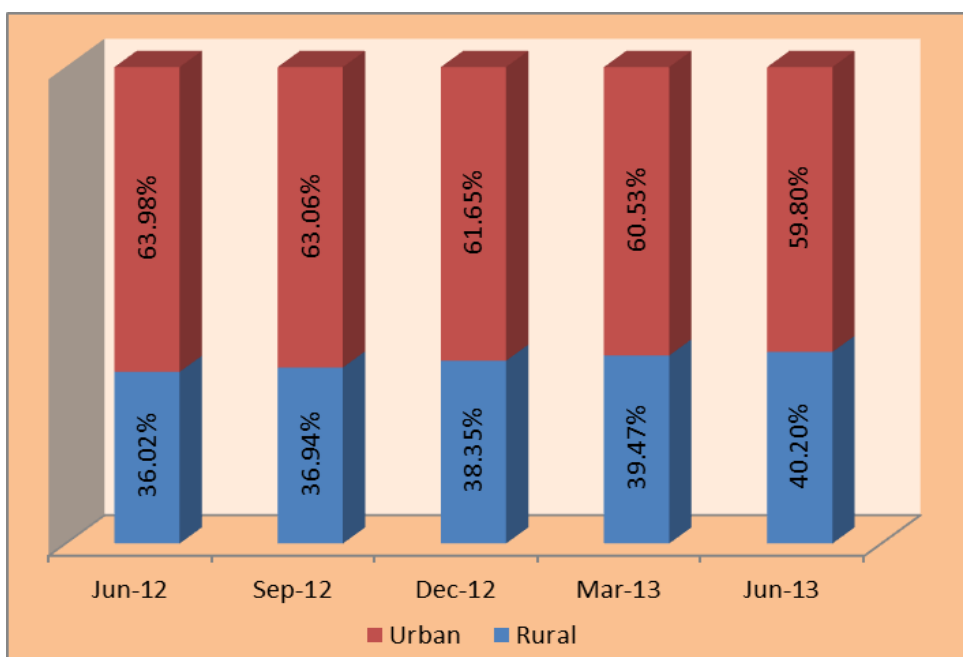
**Table 1.7: Wireless Subscriber Base & Teledensity □ Rural & Urban**

Quarter ending	Subscriber Base (million)		Teledensity	
	Rural	Urban	Rural	Urban
Jun-12	336.51	597.59	39.80	162.46
Sep-12	334.92	571.70	39.52	154.64
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

1.11 The Rural Wireless subscribers increased from 342.50 million at the end of Mar-13 to 351.10 million at the end of Jun-13.

1.12 Rural subscription increased at the rate of 2.51% in QE Jun-13 as against the growth rate of 3.29% in QE Mar-13. Urban subscription declined at the rate of 0.58% as against negative growth rate of 1.47% in the previous quarter. The share of Rural wireless subscription increased from 39.47% to 40.20% 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	Subscriber Base (millions)			Rate of Growth (%)	Market Share □ Mar-13 (%)	Market Share □ Jun-13 (%)
	Mar-13	Jun-13	Net Additions			
Bharti	188.20	190.91	2.72	1.44	21.69	21.86
Vodafone	152.35	155.03	2.68	1.76	17.56	17.75
Reliance	122.97	125.73	2.76	2.24	14.17	14.40
IDEA	121.61	124.97	3.36	2.76	14.01	14.31
BSNL	101.21	97.99	-3.22	-3.18	11.66	11.22
Tata	66.42	64.63	-1.79	-2.70	7.65	7.40
Aircel	60.07	60.97	0.90	1.49	6.92	6.98
Unitech	31.68	32.30	0.61	1.93	3.65	3.70
Sistema	11.91	9.77	-2.14	-17.99	1.37	1.12
MTNL	5.00	4.51	-0.49	-9.77	0.58	0.52
Loop	3.01	2.72	-0.29	-9.70	0.35	0.31
Videocon	2.01	2.42	0.41	20.33	0.23	0.28
Quadrant (HFCL)	1.37	1.42	0.05	3.79	0.16	0.16
<b>Total</b>	<b>867.80</b>	<b>873.36</b>	<b>5.56</b>	<b>0.64</b>	-	-

1.13 Bharti remains the leading operator with 190.91 million subscribers at the end of Jun-13, followed by Vodafone (155.03 million) and Reliance (125.73 million). In terms of net additions during the quarter, Idea (3.36 million) has added the highest number of subscribers, followed by Reliance (2.76 million).

**Table 1.9: Service Area wise Wireless Subscriber base**

Service Area	Subscriber base (in million)			
	Mar-13	Jun-13	Net Additions	Rate of change (%)
Andhra Pradesh	64.36	65.09	0.73	1.13
Assam	14.39	14.74	0.35	2.45
Bihar	60.30	60.01	-0.29	-0.48
Delhi	40.43	40.18	-0.25	-0.61
Gujarat	51.69	51.96	0.27	0.52
Haryana	19.54	19.91	0.37	1.89
Himachal Pradesh	7.02	7.01	0.00	-0.05
Jammu & Kashmir	6.84	7.15	0.31	4.46
Karnataka	52.91	53.10	0.19	0.35
Kerala	30.69	31.14	0.45	1.46
Madhya Pradesh	52.16	53.22	1.06	2.03
Maharashtra	68.40	68.14	-0.26	-0.38
Mumbai	30.37	29.32	-1.05	-3.46
North East	8.96	9.20	0.24	2.67
Orissa	24.60	24.84	0.24	0.97
Punjab	29.46	29.82	0.35	1.20
Rajasthan	48.60	49.52	0.92	1.89
T.N. (incl. Chennai)	72.41	72.83	0.41	0.57
U.P.(E)	73.82	75.06	1.23	1.67
U.P.(W)	48.40	48.31	-0.08	-0.17
Kolkata	21.26	21.55	0.29	1.36
West Bengal	41.16	41.26	0.10	0.24
<b>All India</b>	<b>867.80</b>	<b>873.36</b>	<b>5.56</b>	<b>0.64</b>

**Table 1.10: Service Area wise Wireless Teledensity**

Service Area	As on 31 <sup>st</sup> March, 2013			As on 30 <sup>th</sup> June, 2013		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	40.84	162.22	74.59	42.65	159.94	75.27
Assam	30.99	127.68	45.89	31.95	128.41	46.88
Bihar	27.43	158.75	45.42	27.77	153.94	45.06
Delhi	-	-	206.51	-	-	203.79
Gujarat	52.12	130.70	84.31	52.48	130.43	84.47
Haryana	55.82	109.17	74.31	56.52	110.87	75.42
Himachal Pradesh	71.75	333.15	101.33	72.20	326.49	101.07
Jammu & Kashmir	36.31	112.00	56.93	38.16	115.58	59.30
Karnataka	41.98	161.41	87.21	42.45	160.63	87.31
Kerala	54.19	184.50	87.37	55.26	185.89	88.50
Madhya Pradesh	30.69	111.49	52.42	31.90	111.32	53.29
Maharashtra*	51.63	119.97	83.92	52.60	115.82	82.54
Mumbai*						
North East	40.13	147.16	66.38	40.91	150.98	67.96
Orissa	38.40	160.26	59.31	38.90	160.15	59.76
Punjab	64.66	144.92	98.57	65.61	145.44	99.46
Rajasthan	44.15	149.32	69.40	45.49	149.39	70.45
T.N. (incl. Chennai)	64.51	133.48	103.72	67.08	132.01	104.14
U.P.(E)*	33.12	134.77	56.00	34.09	132.56	56.29
U.P.(W)*						
Kolkata*	41.63	132.58	67.60	41.93	132.74	67.87
West Bengal*						
<b>All India</b>	<b>40.23</b>	<b>140.67</b>	<b>70.85</b>	<b>41.14</b>	<b>139.16</b>	<b>71.08</b>

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

Notes:

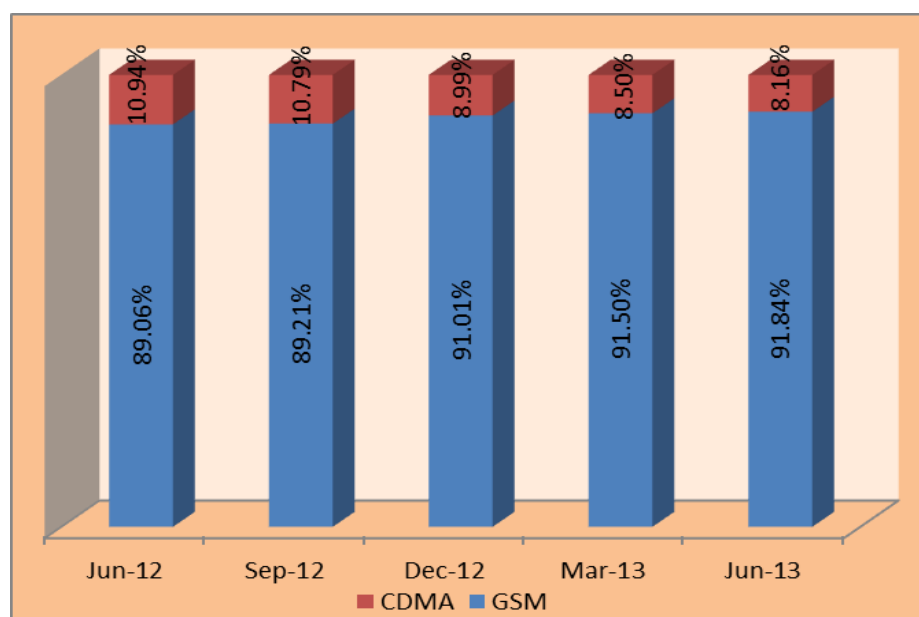
1. Teledensity figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country, published by the Office of the Registrar General & Census Commissioner, India.
2. Delhi service area, apart from the State of Delhi, includes the areas served by the local exchanges of Ghaziabad & Noida (in UP) and Gurgaon & Faridabad (in Haryana).

**Table 1.11: Rural Wireless Subscriber base and Market Share**

Service Provider	Subscribers at the end of Jun-13 (in millions)	Rural Subscribers (in millions)		% of Rural subscribers in total		Market Share of Rural Subscribers (%)	
		Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13
Bharti	190.91	82.16	85.90	43.66	45.00	23.99	24.47
Vodafone	155.03	82.29	84.01	54.01	54.19	24.02	23.93
Reliance	125.73	29.34	30.14	23.86	23.97	8.57	8.58
IDEA	124.97	65.78	68.73	54.09	55.00	19.21	19.58
BSNL	97.99	34.84	33.78	34.42	34.48	10.17	9.62
Tata	64.63	13.78	14.12	20.74	21.85	4.02	4.02
Aircel	60.97	22.33	22.73	37.16	37.28	6.52	6.47
Unitech	32.30	10.04	10.22	31.67	31.66	2.93	2.91
Sistema	9.77	1.93	1.42	16.19	14.54	0.56	0.40
MTNL	4.51	0.00	0.00	0.00	0.00	0.00	0.00
Videocon	2.42	0.00	0.00	0.00	0.00	0.00	0.00
Loop	2.72	0.00	0.00	0.00	0.00	0.00	0.00
Quadrant (HFCL)	1.42	0.04	0.03	2.95	2.15	0.01	0.01
<b>Total</b>	<b>873.36</b>	<b>342.50</b>	<b>351.10</b>	<b>39.47</b>	<b>40.20</b>	<b>100</b>	<b>100</b>

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

**Chart 1.8: Wireless Subscription: GSM vs CDMA**



1.15 At the end of Jun-13, GSM subscribers constituted 91.84% of the wireless market.

### **GSM Services**

1.16 The GSM subscribers were 802.12 million at the end of Jun-13 as against 794.03 million at the quarter ending Mar-13, showing a growth of 1.02%. Bharti with 190.91 million subscribers continues to be the largest GSM mobile operator, followed by Vodafone (155.03 million).

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

<b>Service Provider</b>	<b>Mar-13</b>		<b>Jun-13</b>		<b>Net Additions (in millions)</b>
	<b>No of Subscribers (in millions)</b>	<b>Market Share (%)</b>	<b>No of Subscribers (in millions)</b>	<b>Market Share (%)</b>	
Bharti	188.20	23.70	190.91	23.80	2.72
Vodafone	152.35	19.19	155.03	19.33	2.68
Idea	121.61	15.32	124.97	15.58	3.36
BSNL	98.50	12.41	95.41	11.90	-3.09
Reliance	84.29	10.62	86.39	10.77	2.10
Aircel	60.07	7.57	60.97	7.60	0.90
Tata	46.13	5.81	45.26	5.64	-0.87
Unitech	31.68	3.99	32.30	4.03	0.61
MTNL	4.82	0.61	4.34	0.54	-0.48
Loop	3.01	0.38	2.72	0.34	-0.29
Videocon	2.01	0.25	2.42	0.30	0.41
Quadrant(HFCL)	1.35	0.17	1.40	0.17	0.05
<b>Total</b>	<b>794.03</b>	<b>100</b>	<b>802.12</b>	<b>100</b>	<b>8.09</b>

1.17 There has been a net increase of 8.09 million GSM subscribers during the quarter ending Jun-13.



## **CDMA Services**

1.18 The CDMA subscriber base further declined from 73.78 million at the end of Mar-13 to 71.24 million at the end of Jun-13, thereby showing a negative growth rate of 3.43%. Reliance with 39.34 million subscribers continues to be the largest CDMA mobile operator. In terms of net additions during the quarter, all the service providers recorded decline in subscriber base except Reliance.

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

<b>Service Provider</b>	<b>Mar-13</b>		<b>Jun-13</b>		<b>Net Additions (in millions)</b>
	<b>No of Subscribers (in millions)</b>	<b>Market Share (%)</b>	<b>No of Subscribers (in millions)</b>	<b>Market Share (%)</b>	
Reliance	38.69	52.44	39.34	55.22	0.66
Tata	20.28	27.49	19.36	27.18	-0.92
Sistema	11.91	16.15	9.77	13.71	-2.14
BSNL	2.70	3.66	2.58	3.62	-0.12
MTNL	0.18	0.24	0.18	0.25	-0.003
Quadrant (HFCL)	0.02	0.02	0.02	0.02	-0.001
<b>Total</b>	<b>73.78</b>	<b>100.00</b>	<b>71.24</b>	<b>100</b>	<b>-2.53</b>

1.19 There has been a net decline of 2.53 million CDMA subscribers during the quarter ending Jun-13.

## Section C : Wireline Service

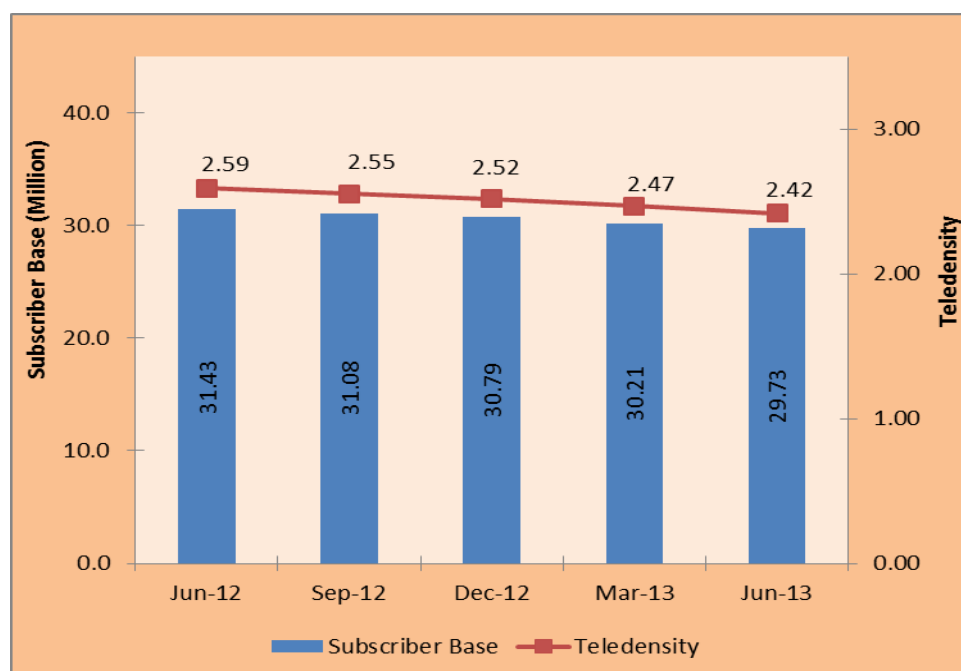
**Table 1.14: Service Providers providing Wireline service**

[as on 30<sup>th</sup> June, 2013]

Sl. No.	Name of the Service Provider	Area of Operation
1	BSNL	All India except Delhi & Mumbai
2	MTNL	Delhi & Mumbai
3	Bharti Airtel Ltd	Andhra Pradesh, 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)

1.20 Total Wireline subscriber base declined from 30.21 million at the end of Mar-13 to 29.73 million at the end of Jun-13. Overall Wireline Teledensity is 2.42 at the end of this quarter. Rural subscriber base has shown decline of 3.06%, from 6.71 Million at the end of Mar-13 to 6.51 Million at the end of Jun-13. During the same period, Urban subscription recorded decline of 1.20%, from 23.50 million to 23.22 million.

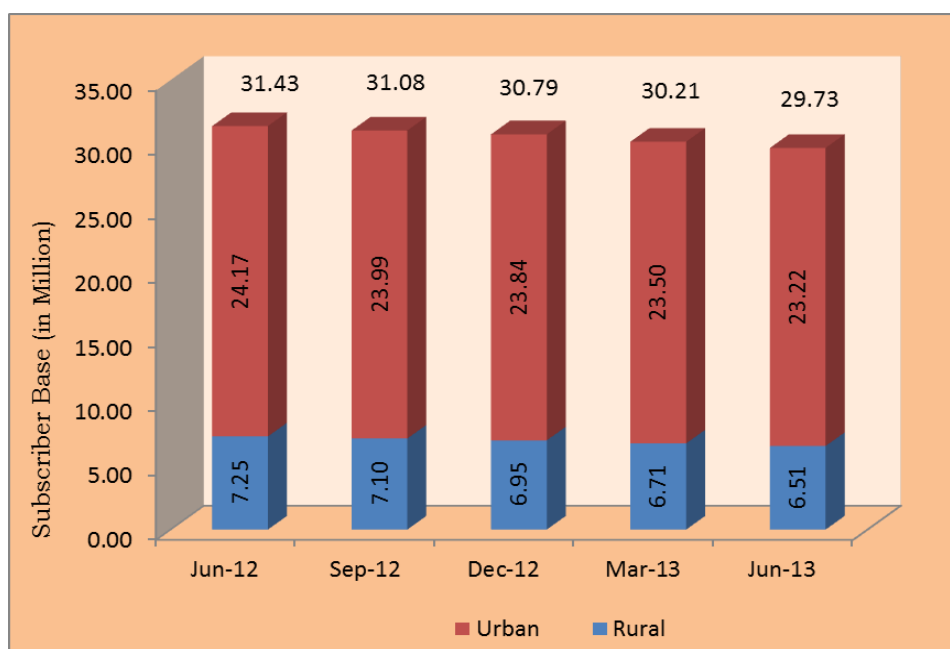
**Chart 1.9: Wireline Subscriber Base and Teledensity**



**Table 1.15: Wireline Subscriber Base & Teledensity - Rural & Urban**

Quarter ending	Subscriber Base (million)		Teledensity	
	Rural	Urban	Rural	Urban
Jun-12	7.25	24.17	0.86	6.57
Sep-12	7.10	23.99	0.84	6.49
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

**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	Subscriber Base (million) Jun-13			Share of Rural subscription (%)
	Rural	Urban	Total	
BSNL	6.45	13.44	19.89	32.42
MTNL	-	3.55	3.55	--
Bharti	-	3.28	3.28	--
Reliance	0.002	1.24	1.24	0.15
Tata	0.05	1.42	1.47	3.27
Quadrant (HFCL)	-	0.20	0.20	--
Sistema	0.01	0.04	0.05	16.53
Vodafone	0.00	0.04	0.04	--
<b>Total</b>	<b>6.51</b>	<b>23.22</b>	<b>29.73</b>	<b>21.89</b>

**Table 1.17: Service Provider wise growth in Subscriber base**

Service Provider	Subscriber Base (million)			Rate of change (%)	Market share-Mar-13 (%)	Market share-Jun-13 (%)
	Mar-13	Jun-13	Net Addition			
BSNL	20.45	19.89	-0.556	-2.72	67.67	66.91
MTNL	3.46	3.55	0.090	2.60	11.45	11.94
Bharti	3.28	3.28	-0.001	-0.03	10.87	11.04
Tata	1.51	1.47	-0.035	-2.34	4.98	4.95
Reliance	1.24	1.24	0.000	0.02	4.11	4.18
Quadrant	0.19	0.20	0.008	4.40	0.62	0.66
Sistema	0.05	0.05	0.001	2.20	0.17	0.18
Vodafone	0.04	0.04	0.006	17.25	0.12	0.14
<b>Total</b>	<b>30.21</b>	<b>29.73</b>	<b>-0.486</b>	<b>-1.61</b>		

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

Service Area	Mar-13	Jun-13	Net Additions	Rate of Change (%)
Andhra Pradesh	2.24	2.19	-0.053	-2.37
Assam	0.19	0.19	-0.001	-0.54
Bihar	0.39	0.39	-0.003	-0.72
Delhi	2.96	2.97	0.011	0.36
Gujarat	1.79	1.75	-0.046	-2.56
Haryana	0.56	0.54	-0.021	-3.70
Himachal Pradesh	0.28	0.27	-0.011	-3.82
Jammu & Kashmir	0.20	0.19	-0.003	-1.50
Karnataka	2.44	2.41	-0.038	-1.55
Kerala	3.06	3.03	-0.031	-1.02
Madhya Pradesh	1.12	1.12	-0.005	-0.45
Maharashtra	2.47	2.40	-0.066	-2.68
Mumbai	2.99	3.05	0.063	2.12
North East	0.19	0.17	-0.022	-11.43
Orissa	0.37	0.37	-0.007	-1.88
Punjab	1.32	1.30	-0.018	-1.38
Rajasthan	1.01	1.00	-0.016	-1.55
T.N. (incl. Chennai)	3.11	3.06	-0.047	-1.50
U.P.(E)	1.05	1.01	-0.039	-3.72
U.P.(W)	0.77	0.67	-0.100	-13.08
Kolkata	1.14	1.12	-0.024	-2.14
W.B.	0.55	0.54	-0.009	-1.70
<b>All India</b>	<b>30.21</b>	<b>29.73</b>	<b>-0.486</b>	<b>-1.61</b>

1.21 Only Delhi & Mumbai Service Areas showed positive growth in wireline service during this quarter.

**Table 1.19: Service Area wise Wireline Teledensity**

Service Area	As on 31 <sup>st</sup> March, 2013			As on 30 <sup>th</sup> June, 2013		
	Rural Teledensity	Urban Teledensity	Total Teledensity	Rural Teledensity	Urban Teledensity	Total Teledensity
Andhra Pradesh	0.99	6.77	2.60	0.96	6.60	2.53
Assam	0.14	3.24	0.62	0.14	3.20	0.61
Bihar	0.10	1.54	0.30	0.10	1.52	0.29
Delhi	-	-	15.13	-	-	15.08
Gujarat	1.00	5.69	2.92	0.96	5.54	2.84
Haryana	0.96	4.34	2.13	0.92	4.16	2.04
Himachal Pradesh	3.52	8.24	4.05	3.30	8.49	3.89
Jammu & Kashmir	0.41	4.91	1.64	0.40	4.83	1.61
Karnataka	1.02	8.96	4.03	0.98	8.82	3.95
Kerala	7.74	11.61	8.72	7.64	11.50	8.62
Madhya Pradesh	0.22	3.59	1.13	0.22	3.56	1.12
Maharashtra*	1.01	8.68	4.63	0.96	8.68	4.61
Mumbai*						
North East	0.44	4.37	1.41	0.39	3.87	1.24
Orissa	0.31	3.75	0.90	0.30	3.67	0.88
Punjab	2.24	7.39	4.42	2.17	7.30	4.34
Rajasthan	0.48	4.50	1.44	0.46	4.45	1.42
T.N. (incl. Chennai)	1.81	6.46	4.45	1.79	6.33	4.38
U.P.(E)*	0.22	2.92	0.83	0.20	2.70	0.76
U.P.(W)*						
Kolkata*	0.38	5.46	1.83	0.38	5.33	1.79
W.B.*						
<b>All India</b>	<b>0.79</b>	<b>6.29</b>	<b>2.47</b>	<b>0.76</b>	<b>6.19</b>	<b>2.42</b>

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

Note:

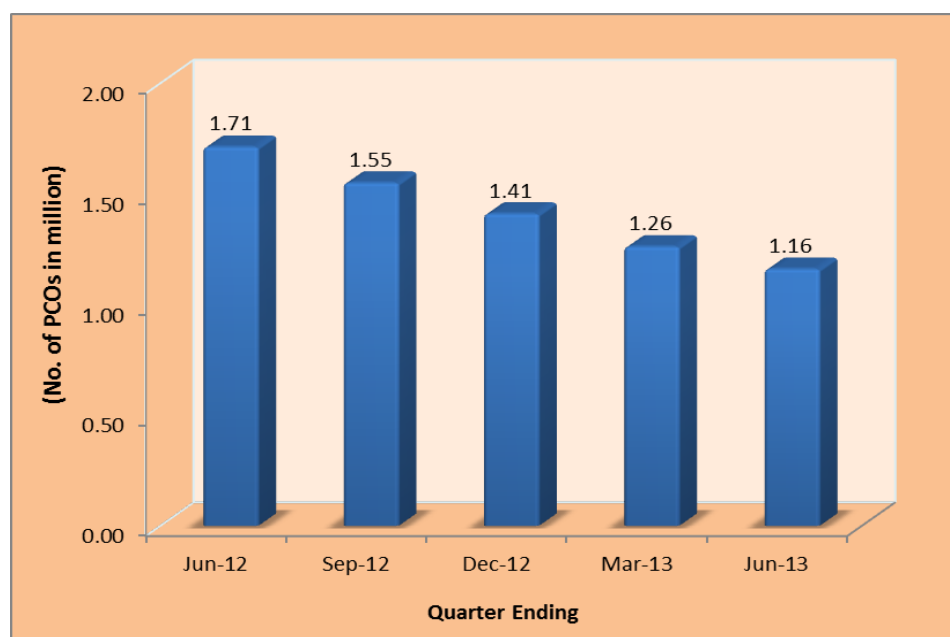
1. Teledensity figures are derived from the subscriber data provided by the operators and the population projections, for Urban and Rural areas, of the country, published by the Office of the Registrar General & Census Commissioner, India.

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

## Public Call Offices (PCO)

1.23 Total number of PCOs in the country at the end of Jun-13 is 1.16 million as compared to 1.26 million at the end of Mar-13, showing a decline of 0.10 million PCOs. Detailed table is at Annexure -1.4.

**Chart 1.11: Number of PCOs**



1.24 Number of PCOs continued to show declining trend. This quarter has recorded a decline of 8.01%. The year-on-year (Y-O-Y) decline over the same quarter of the last year is 32.22%.

**Table 1.20: Rate of change & Market share of PCOs**

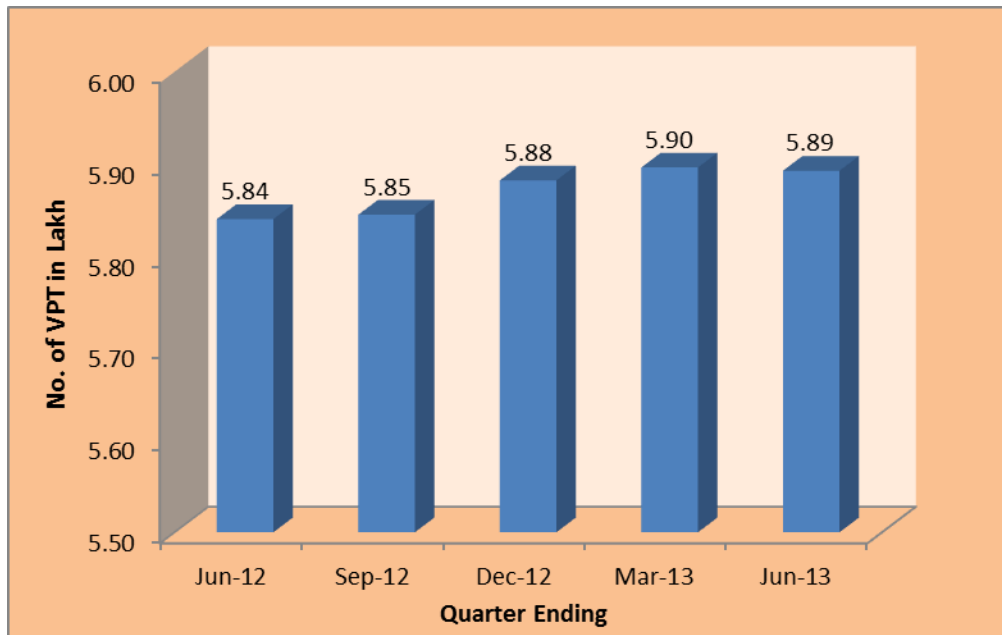
Service Provider	Mar-13 (Million)	Jun-13 (Million)	Rate of change (%)	% Market share (Jun-13)
BSNL	0.796	0.737	-7.42	63.49
MTNL	0.150	0.149	-0.93	12.83
Bharti	0.036	0.033	-7.09	2.85
Quadrant (HFCL)	0.004	0.004	-4.85	0.33
Sistema	0.013	0.013	-1.52	1.10
Tata	0.142	0.120	-15.54	10.34
Reliance	0.121	0.105	-12.88	9.07
Vodafone	-	-	-	-
<b>Total</b>	<b>1.26</b>	<b>1.16</b>	<b>-8.01</b>	

## Village Public Telephones (VPTs)

1.25 There are 5,93,731 inhabited villages in India as per census 2001. The number of VPTs decreased from 5,89,631 at the end of Mar-13 to 5,89,272 at the end of Jun-13. At the end of the quarter, 99.25% of the total inhabited villages in India have been connected by VPT.

1.26 BSNL (5,82,282) 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

1.27 Total number of internet subscribers including internet access by mobile device subscribers increased from 164.81 million at the end of Mar-13 to 198.39 million at the end of Jun-13, registering a quarterly growth of 20.37%.

**Table 1.21: State wise Internet subscriber base including internet access by mobile devices**

S.No	Name of State	Total Internet Subscriber base
1	Uttar Pradesh (including UP(E), UP(W) & Uttaranchal)	19920985
2	Maharashtra (including Goa)	16678558
3	Delhi	15400355
4	Mumbai	14479659
5	Andhra Pradesh	14479630
6	Gujarat (including Dadar and Nagar Haveli)	12769438
7	Tamilnadu (including Pondicherry)	12182400
8	Karnataka	11613235
9	Madhya Pradesh (including Chhattisgarh)	10750127
10	Bihar (including Jharkhand)	10020659
11	Rajasthan	9789938
12	Kerala	9021211
13	Punjab (including Chandigarh)	8230235
14	West Bengal (including Sikkim & A&N)	6377383
15	Kolkata	5040012
16	Chennai	4732163
17	Haryana	4420720
18	Orissa	3447858
19	Assam	3231600
20	North East (including Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Manipur and Tripura)	2285651
21	J & K	2017131
22	Himachal Pradesh	1499767
	<b>Total</b>	<b>198388715</b>

1.28 In this section, report of statistics in respect of Internet Service is divided into two parts. **Part-I** is Internet Subscribers Statistics other than internet access by mobile devices and **Part-II** is Internet Services access by mobile devices subscribers.

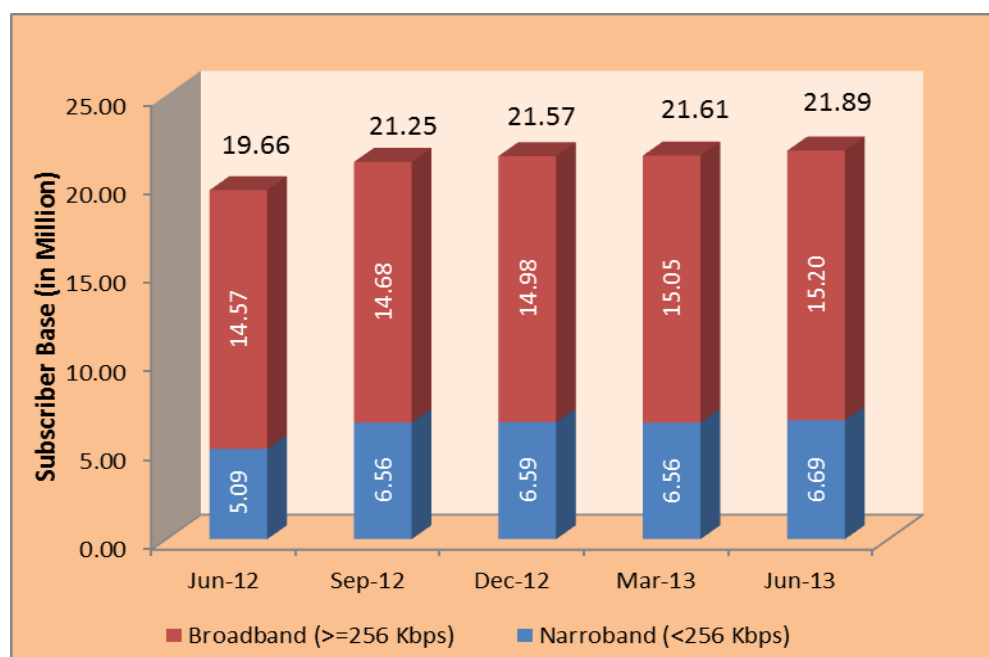
**Part-I : Internet Access (except through mobile devices)**

1.29 There are 186 service providers providing internet service (except internet access by mobile device). Out of these 186 SPs, 143 service providers have submitted their internet performance report for the quarter ending June, 2013. In respect of the service providers, who did not submit their report in this quarter (constitute about 0.88 per cent market share), data from the previous available report has been retained.

1.30 There were 21.89 million internet subscribers excluding those subscribers accessing internet by mobile devices, at the end of Jun-13 as compared to 21.61 million at the end of Mar-13, registering a quarterly growth of 1.30%.

1.31 Internet access by CDMA subscribers which was hitherto being reported under narrowband internet access, has been reported under 'Internet Access by Mobile Devices'. In this report, Internet access by CDMA subscriber has been excluded from narrowband internet access for the quarter ending Jun-12, Sep-12, Dec-12, Mar-13 and Jun-13.

**Chart 1.13: Trends in Internet subscription**

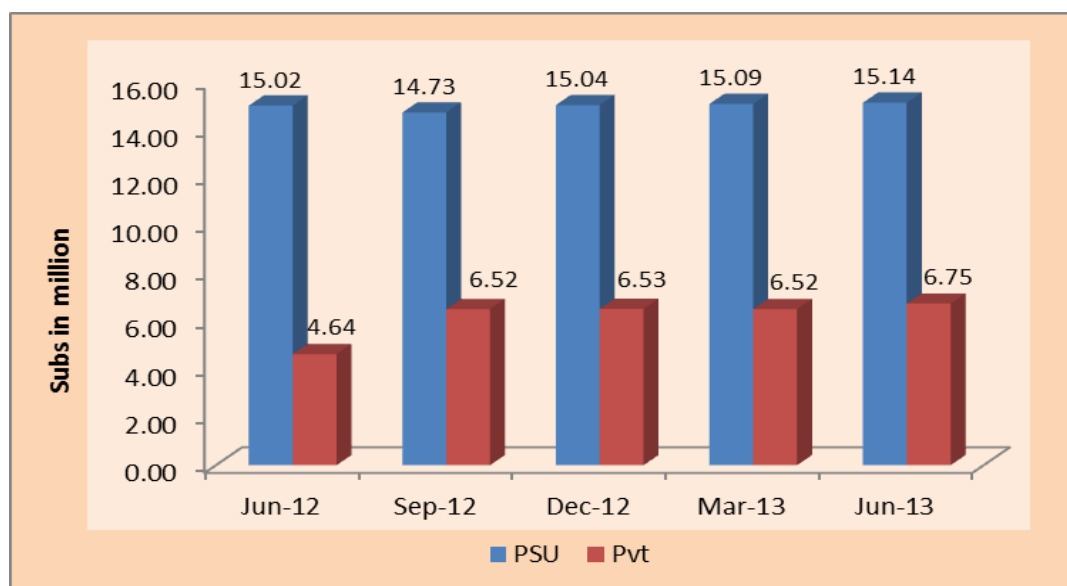


1.32 In the internet subscription (except internet access by mobile devices), share of Broadband subscription is 69.44% and share of Narrowband subscription is 30.56% at the end of Jun-13.

1.33 Number of Broadband subscribers increased from 15.05 million at the end of Mar-13 to 15.20 million at the end of Jun-13, registering a quarterly growth of 0.98% and Y-O-Y growth of 4.32%.

1.34 Number of Narrowband subscribers increased from 6.56 million at the end of Mar-13 to 6.69 million at the end of Jun-13, thereby showing a quarterly growth of 1.99%.

**Chart 1.14 : Trends in subscribers (in Million) of PSUs Vs. Pvt. Internet Service Providers (except internet access by mobile device)**



Note : PSU includes BSNL, MTNL, ERNET India, Gujarat Info Petro Ltd., West Bengal Electronics Industry Development Corp. Ltd., Power Grid Corporation of India Ltd., Software Technology Park of India and RailTel Corporation of India Ltd.

- 1.35 The total Internet leased line customers stood at 41,481 at the end of Jun-13 as compared to 41,041 at the end of Mar-13, registering an increase of about 1.07%.
- 1.36 As per the report received from SPs, there are 5295 Cyber Cafes during the quarter ending Jun-13 as compared to 7930 in the previous quarter registering a decrease of 33.23%.

### **Internet Telephony**

- 1.37 As per the reports available with the TRAI, 32 ISPs are providing Internet Telephony services presently. The list is at Annexure-1.6.

### **ISP Connectivity**

- 1.38 The International Internet bandwidth owned by various SPs is reported to be 1179 GB during the quarter ending Jun-13 as compared to 745.41 GB at the quarter ending Mar-13.

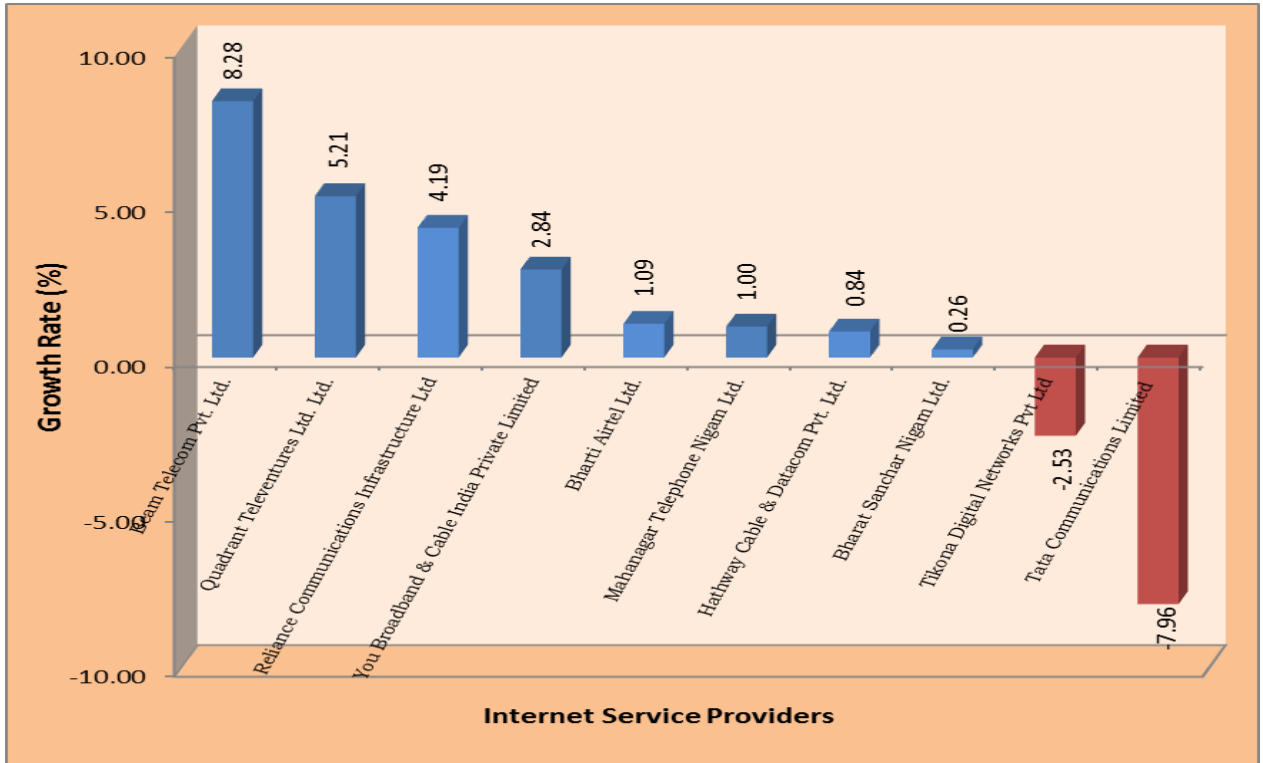
**Table 1.22 : Internet Subscriber Base & Market share of top 10 SPs  
(except internet access by mobile devices)**

S.No	SP	Category	Service Area	Subs	Share (%)
1	Bharat Sanchar Nigam Ltd.	A	All India	13158831	60.13
2	Reliance Communications Infrastructure Limited	A	All India	2596164	11.86
3	Mahanagar Telephone Nigam Ltd.	B	Delhi & Mumbai	1977627	9.04
4	Bharti Airtel Ltd.	A	All India	1413929	6.46
5	Hathway Cable & Datacom Pvt. Ltd.	A	All India	368435	1.68
6	You Broadband & Cable India Private Limited	A	All India	361252	1.65
7	Beam Telecom Pvt. Ltd.	B	Andhra Pardesh	294211	1.34
8	Tikona Digital Networks Pvt Ltd	B	Andhra Pradesh	269196	1.23
9	Quadrant Televentures Ltd. (HFCL Infotel Ltd.)	A	All India	119367	0.55
10	Tata Communications Limited	B	Kerala/ Tamil Nadu	115545	0.53
	<b>Total of Top 10 ISPs</b>			<b>20674557</b>	<b>94.47</b>
	<b>Others</b>			<b>1210800</b>	<b>5.53</b>
	<b>Grand Total</b>			<b>21885357</b>	

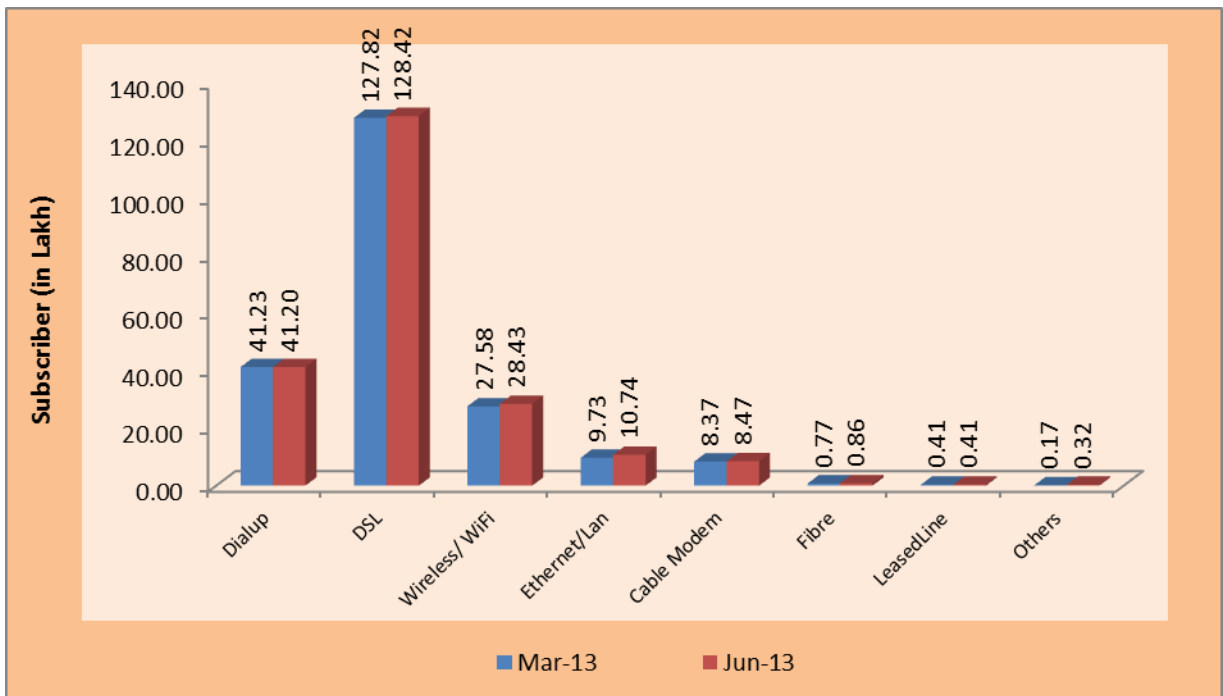
1.39 BSNL holds 60.13% of the market share with reported subscriber base of 13.16 million Internet subscribers at the end of Jun-13. Reliance is at second position (2.60 million) followed by MTNL (1.98 million). Detailed table with subscriber numbers of all the SPs is available at Annexure-1.7

1.40 Top 10 SPs together hold 94.47% of the total Internet subscriber base (excluding subscribers of internet access by mobile devices).

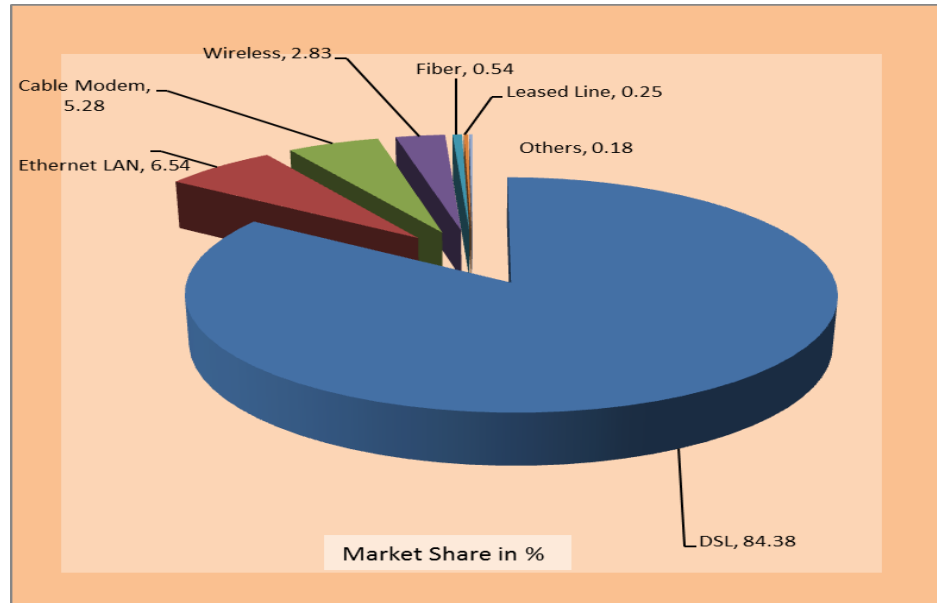
**Chart 1.15: Growth in subscriber base achieved by top ten ISPs (except internet access by mobile devices)**



**Chart 1.16: Technology trends for Internet Access including Broadband Service (except internet access by mobile devices)**

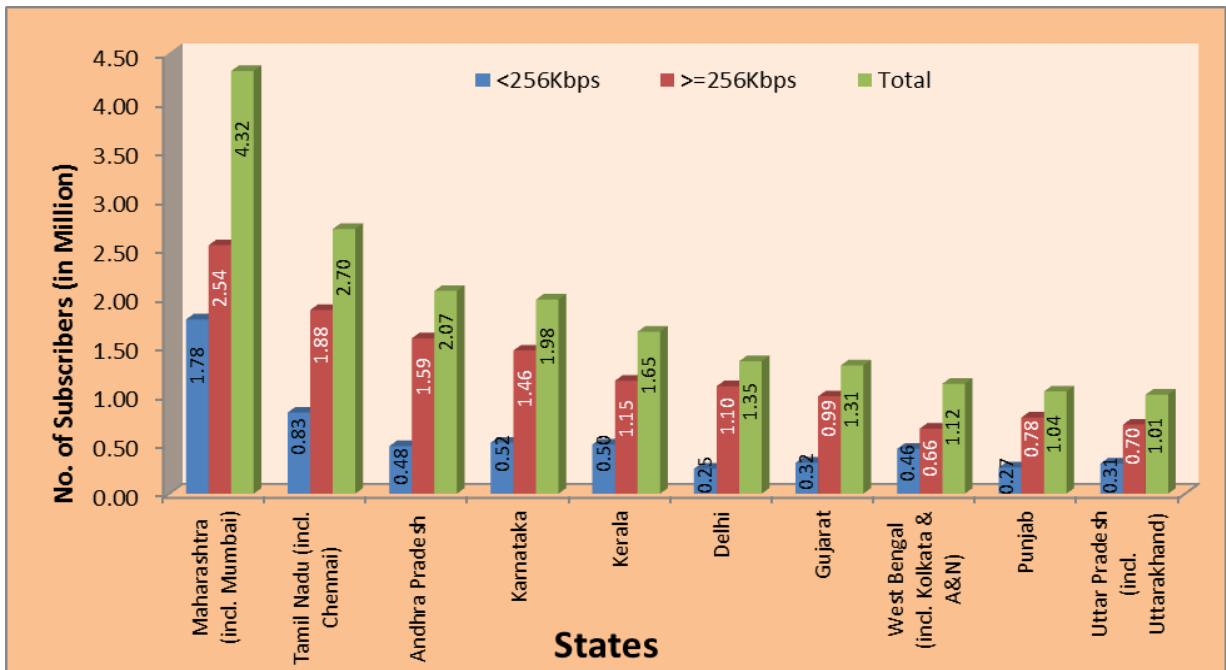


**Chart 1.17 : Composition of Broadband subscribers (except internet access by mobile devices) - Technology wise**



1.41 DSL (Digital Subscriber Line) is the most preferred technology used by the Service Providers to provide Broadband Services and it constitutes 84.38% of total broadband subscribers, followed by Ethernet LAN (6.54%) and Cable Modem (5.28%).

**Chart 1.18: Speed Category wise data on Internet/broadband subscribers (except internet access by mobile devices) for top 10 States**



1.42 Maharashtra is having largest Internet (<256 Kbps) and Broadband (>=256 Kbps) subscriber base in the country. Tamil Nadu is at second place in internet and broadband subscriber base.

### **Part-II : Internet Access through Mobile Devices**

1.43 13 service providers are providing internet services through mobile devices. Out of these 13 service providers, 12 service providers have submitted their performance monitoring report. BSNL has not provided their reports.

1.44 In the month of Jun-13, 176.50 million subscribers accessed internet through mobile devices as per the information received from 12 service providers (except BSNL).

**Table 1.213 : Service Provider wise Subscriber base and Market Share of internet access by wireless phone subscribers**

<b>Sl. No.</b>	<b>Service Providers</b>	<b>Total No. of subscribers</b>	<b>Market Share (%)</b>
1	Bharti	46172333	26.16
2	Vodafone	41198337	23.34
3	Idea Cellular	33425870	18.94
4	Reliance	28678982	16.25
5	Aircel	13422309	7.60
6	MTNL	3491430	1.98
7	Unitech Wireless	2968076	1.68
8	Tata	2871162	1.63
9	Loop Mobile	2592665	1.47
10	Sistema Shyam	1142733	0.65
11	Videocon Telecommunications Ltd.	374148	0.21
12	Quadrant	165313	0.09
	<b>Total</b>	<b>176,503,358</b>	

**Note :** BSNL has not provided their reports.

1.45 Bharti Airtel is a leading service provider with market share of 26.16%, followed by Vodafone i.e. 23.34% and Idea Cellular (18.94%) in internet access by mobile devices subscribers at the end of Jun-13.

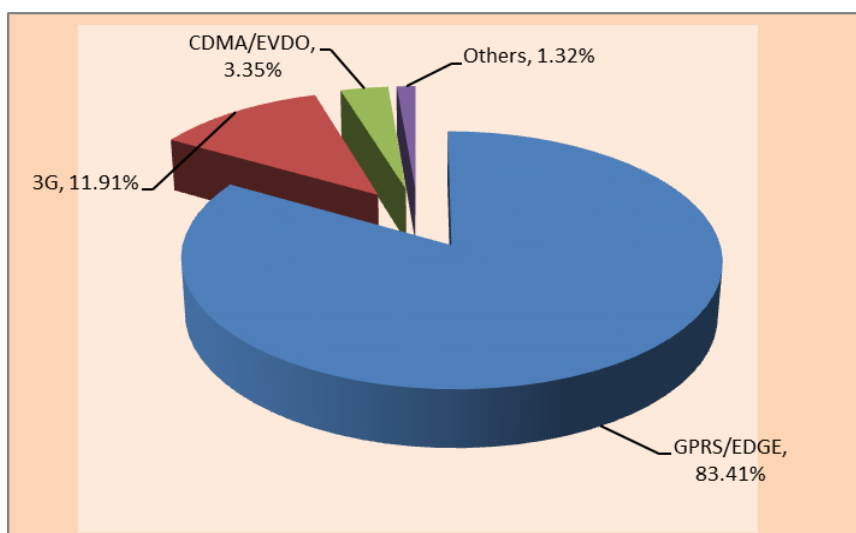


**Table 1.24 : Service Area wise Subscriber base of internet access by mobile devices**

S. No.	State	Subscriber base
1	Uttar Pradesh (including UP(E), UP(W) & Uttaranchal)	18766202
2	Maharashtra (including Goa)	14839918
3	Delhi	14048926
4	Andhra Pradesh	12408885
5	Gujarat (including Dadar and Nagar Haveli)	11460037
6	Mumbai	12001378
7	Tamilnadu (including Pondicherry)	10854642
8	Bihar (including Jharkhand)	9743150
9	Madhya Pradesh (including Chhattisgarh)	9825587
10	Karnataka	9631010
11	Rajasthan	9034834
12	Kerala	7366370
13	Punjab (including Chandigarh)	7186837
14	West Bengal (including Sikkim & A&N)	6159098
15	Kolkata	4125124
16	Haryana	3946566
17	Chennai	3356437
18	Orissa	3159996
19	Assam	3125896
20	North East (including Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Manipur and Tripura)	2157661
21	J & K	1914871
22	Himachal Pradesh	1389933
	<b>Total</b>	<b>176503358</b>
	<b>In Million</b>	<b>176.50</b>

**Note:** BSNL has not provided its report.

**Chart 1.19 : Technology Trend for internet access by mobile devices.**



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

### Public Mobile Radio Trunk Services (PMRTS)

**Table 1.25 : PMRTS Subscriber base - Service Provider wise**

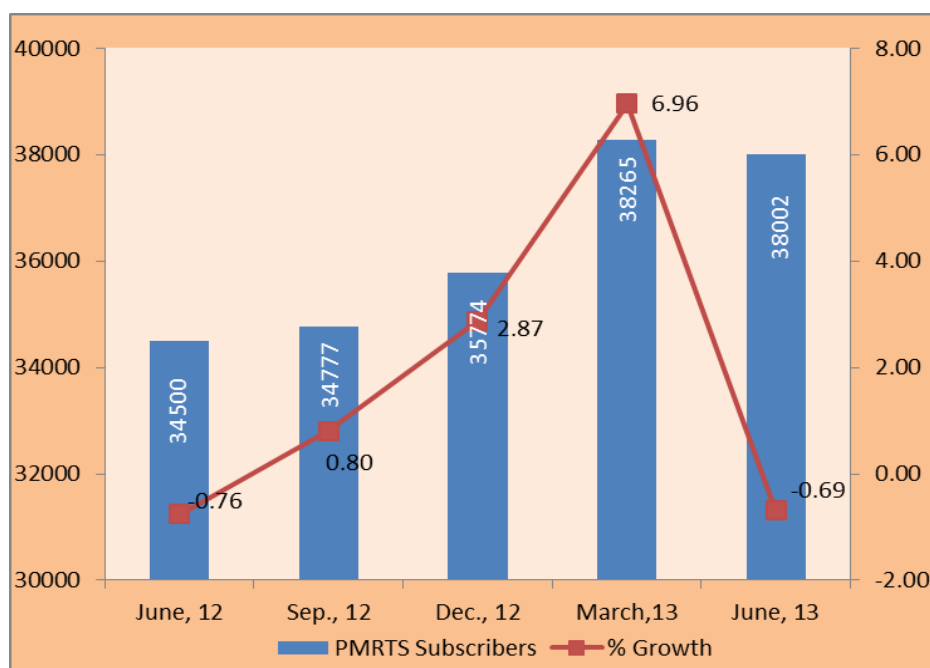
Sr. No.	Name of the Service Provider	Subscriber Base as on 31.03.13	Subscriber Base as on 30.06.13	%age Growth in Subscribers	%age in Market Share
1	<b>Arya Omnitalk Radio Trunking Services Pvt.Ltd.</b>	32397	31006	-4.29	81.59
2	<b>Procall Ltd.</b>	3489	3880	11.21	10.21
3	<b>Smartalk Pvt Ltd.</b>	306	469	53.27	1.23
4	<b>QuickCall</b>	1474	1939	31.55	5.10
5	<b>Bhilwara Telenet Services Pvt.Ltd.</b>	599	708	18.20	1.86
6	<b>India Satcom Ltd.*</b>	0	0	0.00	0.00
	<b>Total</b>	<b>38265</b>	<b>38002</b>	<b>-0.69</b>	

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

1.46 The subscriber base of PMRTS decreased from 38,265 at the end of Mar-13 to 38,002 at the end of Jun-13 with quarterly decline rate of 0.69%.

1.47 Detailed table on Service Area wise subscriber base of PMRTS is at Annexure-1.8.

**Chart 1.20: Number of PMRTS subscribers & Rate of Growth (%)**



**Very Small Aperture Terminal (VSAT)**

**Table 1.26: VSAT Service Providers currently providing service & their subscriber base**

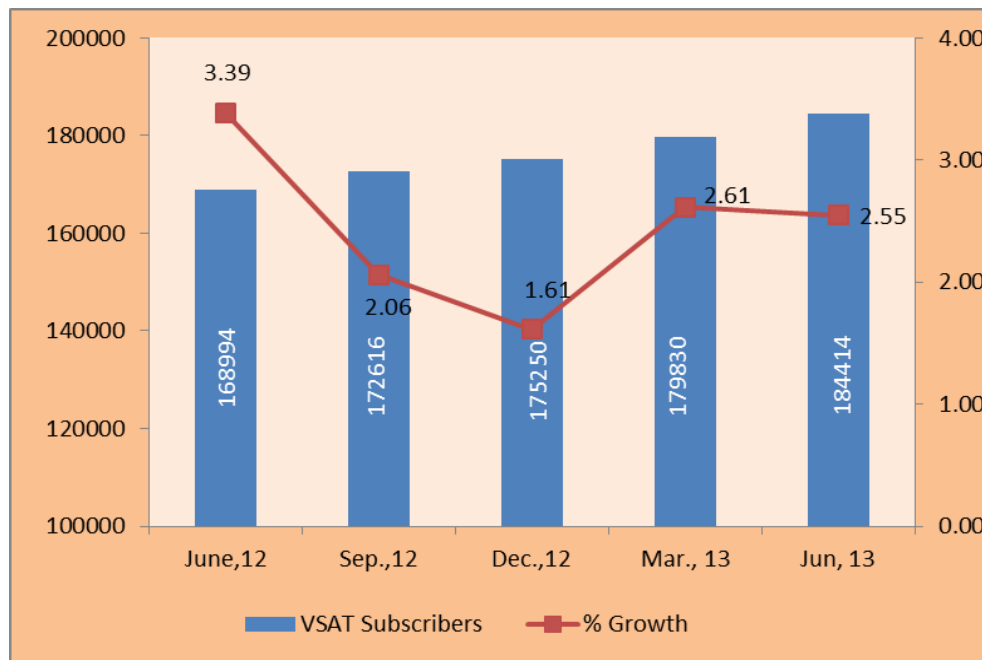
Sr. No	Name of Service Providers	Subscriber base at the Quarter ending		%age Growth	Market Share (%)
		Mar-13	Jun-13		
1	<b>Hughes Communications Ltd.</b>	68108	73045	7.25	39.6
2	<b>Bharti Airtel Limited</b>	48405	49088	1.41	26.6
3	<b>Tatanet Services</b>	22498	22842	1.53	12.4
4	<b>HCL Comnet</b>	22350	22202	-0.66	12.0
5	<b>BSNL</b>	12573	12660	0.69	6.9
6	<b>Essel Shyam</b>	2728	2728	0.00	1.5
7	<b>Infotel Satcom</b>	1661	1713	3.13	0.9
8	<b>Infinium India Ltd.</b>	1377	7	-99.49	0.0
9	<b>Bharti Broadband</b>	130	129	-0.77	0.1
	<b>Total</b>	<b>179830</b>	<b>184414</b>	<b>2.55</b>	

1.48 The total number of VSAT subscribers increased from 1,79,830 at the end of Mar-13 to 1,84,414 at the end of Jun-13. Net additions during the quarter has been 4,584 and the quarterly growth rate is 2.55%.

1.49 Hughes Communication Limited with subscriber base of 73,045 continues to be the market leader.

1.50 Infinium India Ltd, HCL Commet and Bharti Broadband have registered decline in VSAT subscribers in this quarter.

**Chart 1.21: Number of VSAT Subscribers & Rate of Growth (%)**



# **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 charges
  - The data contained in the section A & B covers the licensees, who have been providing service during the entire period from 1st April, 2013 to 30<sup>th</sup> June, 2013 in the various service areas.

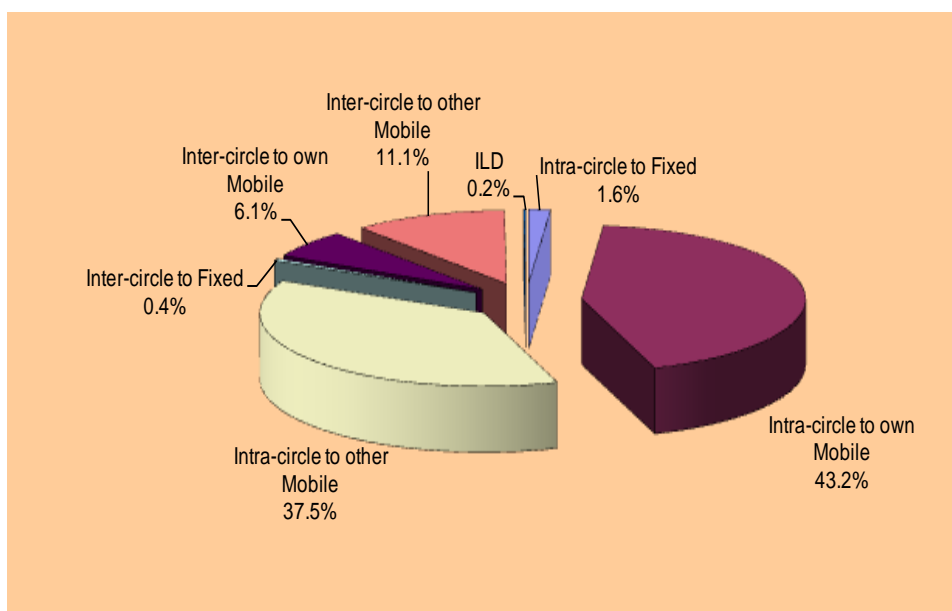
## Section A: GSM Service

**Table 2.1: Key Indicators - GSM Service**

Parameter	Q.E. Jun-13	Q.E. Mar-13	Q.E. Jun-12	QoQ %age change over Mar-13	YoY %age change over Jun-12
Subscriber Base (million)	801.62	793.69	831.02	1.00	-3.54
Share of Prepaid (%)	96.21	96.34	96.84	-0.13	-0.65
Incoming MOU* per sub. per month	199	197	178	0.75	11.58
Outgoing MOU* per sub. per month	189	185	167	1.95	12.83
Outgoing SMS per sub. per month	27	30	38	-7.73	-28.19
Average Revenue Per User (ARPU) per month	111	105	95	6.14	16.73

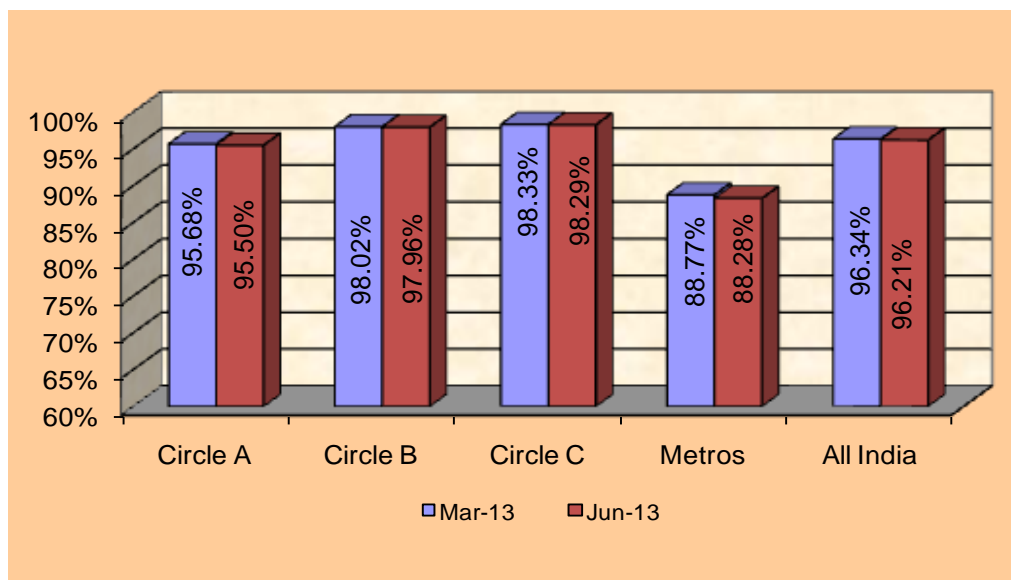
\* Minutes of Usage

**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**



Note: Subscriber figures are closing figures as on the last day of the respective quarters

2.2 Market share of prepaid segment slightly declined from 96.34% at the end of Mar-13 to 96.21% at the end of Jun-13.

2.3 The ARPU per month (all India, blended) increased from Rs. 105 in Q.E. Mar-13 to Rs. 111 in Q.E. Jun-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**

(₹ per month)

Circle category	Postpaid	Prepaid	Blended
Circle A	459	102	117
Circle B	445	94	101
Circle C	460	97	103
Metro	542	94	145
<b>All India</b>	<b>480</b>	<b>97</b>	<b>111</b>
All private SPs	491	101	116
BSNL/MTNL	403	69	81

2.4 The ARPU per month for pre-paid segment increased from Rs. 89 to Rs. 97 while the ARPU per month for post-paid segment decreased from Rs. 519 to Rs. 480. The service providers have started providing split of revenue from inroamers between post-paid and pre-paid (based on some reasonable estimates), which was so far being reported under postpaid by most of the service providers. This has been one of the factors which have resulted in the decline of postpaid ARPU and increase in prepaid ARPU.

2.5 The following table presents the composition of ARPU per month in the Q.E. June 2013.

**Table 2.3: Composition of ARPU per month - GSM Service**

<b>S. No.</b>	<b>Item</b>	<b>Revenue (excl. service tax) per subscriber per month (in Rs.)</b>	<b>% share of total revenue from subscribers</b>
1	Usage from Home Service Area		
1.1.	Rental Revenue	19.54	15.79
1.2.	Revenue from calls	72.53	58.60
1.3.	Revenue from SMS	3.99	3.22
1.4.	Revenue from data usage	10.02	8.10
1.5.	Revenue from other VAS	7.33	5.92
1.6.	Other revenue	2.07	1.67
2	Usage outside Home Service Area		
2.1.	Revenue from outroamers	8.28	6.69
3	<b>Total revenue from subscribers (1+2)</b>	<b>123.77</b>	<b>100</b>
4	Net inter-operator settlement charges receivable *	-12.32	
5	<b>Net Revenue (ARPU) per month (3+4)</b>	<b>111.45</b>	

\* 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. 12.32) accounts for 9.96% of the total revenue from subscribers.



2.7 On an all India average, the overall MOU per subscriber per month increased from 383 in QE Mar-13 to 388 in QE Jun-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**

Circle category	MOU per subscriber per month								
	Postpaid			Prepaid			Blended		
	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU
Circle A	587	430	1017	172	174	346	190	186	376
Circle B	581	406	986	165	193	358	174	197	371
Circle C	530	428	958	186	231	418	192	235	427
<b>Metro</b>	568	392	960	201	176	377	243	201	444
<b>All India</b>	<b>576</b>	<b>414</b>	<b>990</b>	<b>174</b>	<b>191</b>	<b>364</b>	<b>189</b>	<b>199</b>	<b>388</b>

2.8 The overall ratio of incoming MOU and outgoing MOUs was 51:49 during the quarter ending Jun-13 as against 52:48 in the previous quarter.

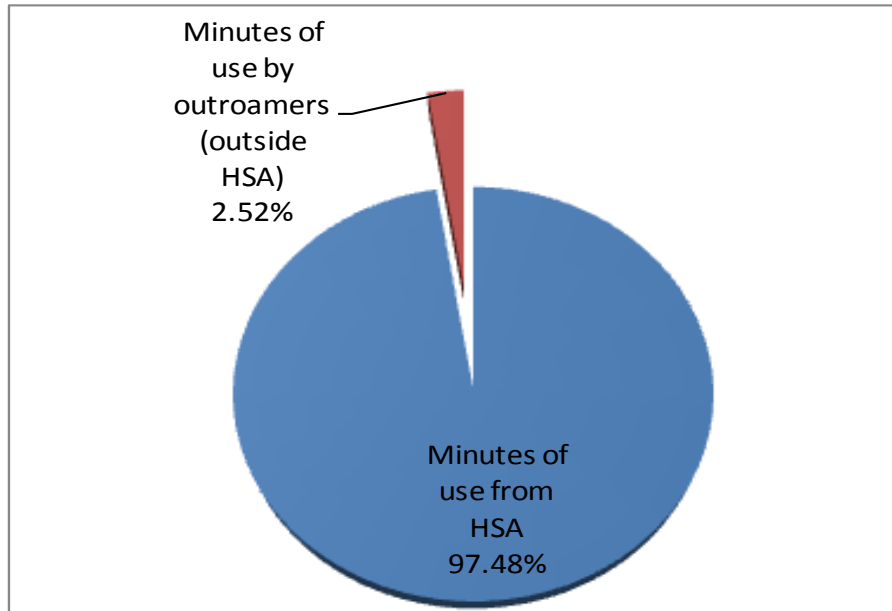
2.9 Outgoing SMS per subscriber per month decreased from 30 in Q.E. Mar-13 to 27 in Q.E. Jun-13. The following table presents the outgoing SMS usage (usage from, and outside, the home service area) per subscriber per month for various categories of circles and various platforms for payment viz. post-paid and pre-paid.

**Table 2.5: Outgoing SMS per subscriber per month - GSM Service**

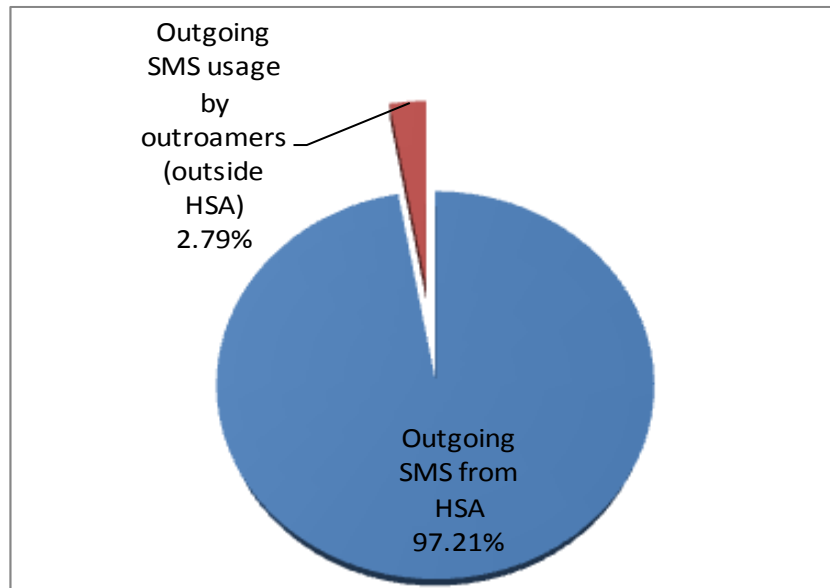
Circle category	Outgoing SMS per subscriber month		
	Postpaid	Prepaid	Blended
Circle A	73	39	40
Circle B	49	16	17
Circle C	43	16	17
<b>Metro</b>	77	34	39
<b>All India</b>	<b>67</b>	<b>26</b>	<b>27</b>

2.10 Beginning Q.E. June 2013, TRAI has started seeking information on usage by outroamers (MOU and outgoing SMS). The charts given below provide the usage by outroamers as a percentage to total usage.

**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**



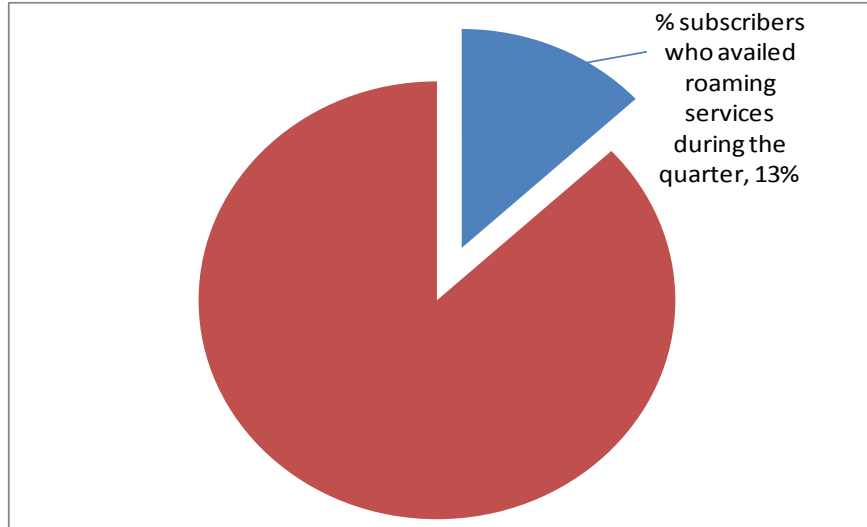
2.11 The following table presents the percentage break-up of outgoing minutes of usage from home service area between various categories of termination networks.

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

Circle category	% Intra-circle to wireline	% Intra-circle to own wireless	% Intra-circle to other wireless	% Inter-circle to wireline	% Inter-circle to own wireless	% Inter-circle to other wireless	% ILD
Circle A	1.69	40.41	42.43	0.37	4.52	10.44	0.15
Circle B	1.24	46.63	36.91	0.30	5.45	9.34	0.13
Circle C	1.22	53.78	30.86	0.58	5.03	8.48	0.06
Metros	2.58	27.20	32.57	0.91	14.69	21.70	0.35
<b>All India</b>	<b>1.56</b>	<b>43.16</b>	<b>37.48</b>	<b>0.44</b>	<b>6.14</b>	<b>11.07</b>	<b>0.15</b>

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

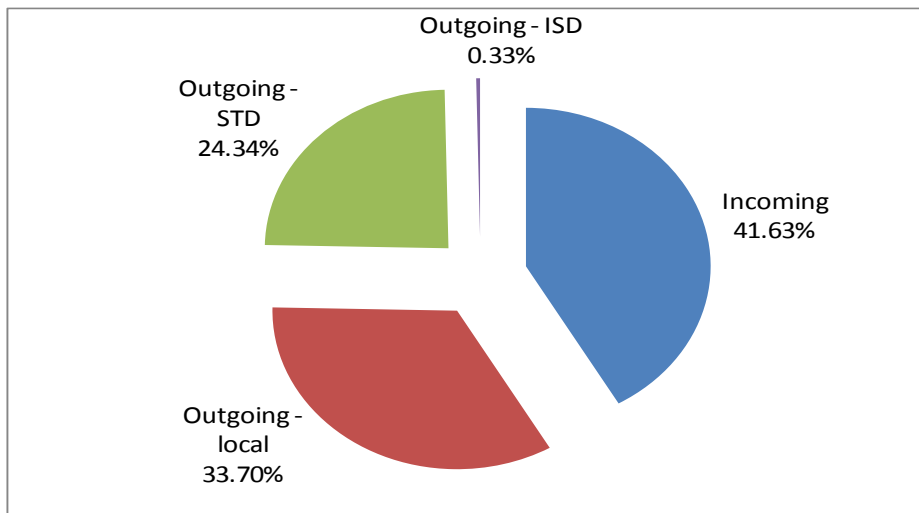
**Chart 2.5: % subscribers who availed roaming services during the quarter**



2.13 The usage pattern of outroamers i.e. usage from outside the home service area shows that incoming minutes accounts for about 42% of the total minutes of usage by outroamers.

2.14 The chart given below presents the break-up of minutes of usage of outroamers during the Q.E. June 2013.

**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)**

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

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

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

(₹ per month)

<b>Circle Category</b>	<b>Postpaid</b>	<b>Prepaid</b>	<b>Blended</b>
Circle A	0.58	0.52	0.52
Circle B	0.58	0.48	0.48
Circle C	0.68	0.44	0.45
Metros	0.65	0.52	0.56
<b>All India</b>	<b>0.61</b>	<b>0.49</b>	<b>0.50</b>

2.9 All India average subscriber outgo per outgoing minute increased from ₹0.48 in QE Mar-13 to ₹0.50 in QE Jun-13.

**Table 2.8: Trends of Key Parameters - GSM Service**

<b>Parameter</b>	<b>Jun-12</b>	<b>Sep-12</b>	<b>Dec-12</b>	<b>Mar-13</b>	<b>Jun-13</b>
<b>1. ARPU (₹ Per month)</b>	95	95	98	105	111
<b>2. MOU per subscriber per month</b>	346	343	360	383	388
<b>3. Outgoing MOU per subscriber per month</b>					
3.1 Local (Intra-circle)	136	133	142	150	154
3.2 NLD (inter-circle)	31	32	33	35	35
3.3 ILD	0.3	0.3	0.3	0.3	0.3
<b>4. Outgoing SMS per subscriber per month SMS</b>	38	36	39	30	27
<b>5. Average subscriber Outgo per outgoing minute from HSA (₹)</b>	0.48	0.48	0.47	0.48	0.50

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

## Section B: CDMA - Full Mobility Service

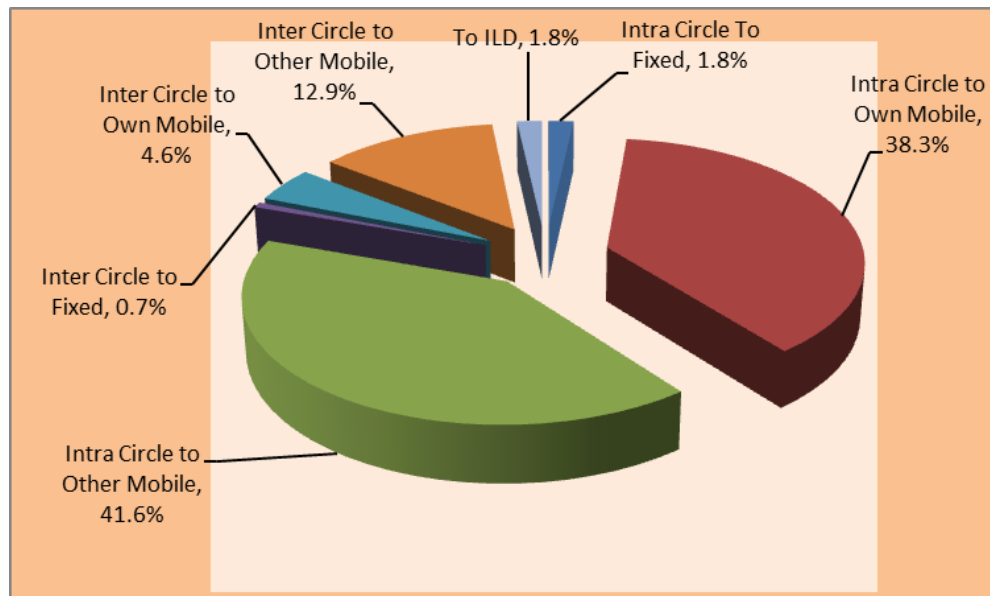
**Table 2.9: Key Indicators - CDMA Full Mobility Service**

Parameter	QE Mar-13	QE Jun-13	% Change
Subscriber Base in millions*	61.5	58.3	-5.1
Share of Prepaid (%)	90.7	90.5	-0.2
Incoming MOUs per subs per month	134	132	-1.8
Outgoing MOUs per subs per month	141	146	4.1
Outgoing SMS per subs per month	18	17	-2.9
ARPU (₹ Per month)	95	98	3.2

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

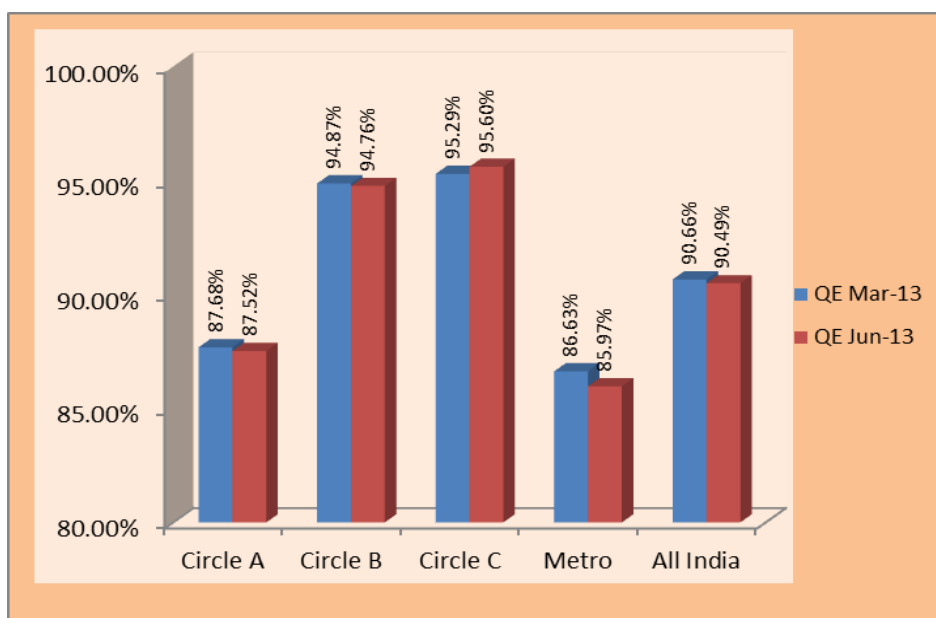
2.11 The following chart depicts % break-up of outgoing minutes from home service area (HSA):

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



2.12 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**



2.13 Market share of Prepaid segment slightly declined from 90.66% in QE Mar-13 to 90.49% in QE Jun-13.

2.14 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 2.10: Monthly ARPU - CDMA Full Mobility Service**  
(₹ per month)

Circle category	Postpaid	Prepaid	Blended ARPU
Circle A	461	66	116
Circle B	388	53	71
Circle C	469	63	82
Metro	480	67	123
<b>All India</b>	<b>453</b>	<b>61</b>	<b>98</b>



2.15 The All India blended Average Revenue Per User (ARPU) per month has shown an increase of 3.26% from Rs.95.25 in QE Mar-13 to Rs.98.35 in QE Jun-13.

2.16 ARPU for Prepaid service increased by 3.64% from Rs.58.92 in QE Mar-13 to Rs.61.06 in QE Jun-13. ARPU for Postpaid service has decreased marginally by 0.04% from Rs.453.28 in QE Mar-13 to Rs.453.08 in QE Jun-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
<b>1</b>	<b>Usage from Home Service Area</b>		
1.1	Rental Revenue	21.45	20.11
1.2	Revenue from Calls	39.07	36.64
1.3	Revenue from SMS	1.64	1.54
1.4	Revenue from data usage	36.28	34.02
1.5	Revenue from other VAS	3.82	3.58
1.6	Other Revenue	0.92	0.87
<b>2</b>	<b>Usage outside Home Service Area</b>		
2.1	Revenue from Roaming	3.44	3.23
<b>3</b>	<b>Total Revenue from Subscribers (1+2)</b>	<b>106.62</b>	<b>100%</b>
<b>4</b>	<b>Net inter-operator settlement receivable*</b>	<b>-8.28</b>	
<b>5</b>	<b>Net Revenue (ARPU) (3+4)</b>	<b>98.35</b>	

\* Includes Interconnect Usage Charges and roaming settlement charges

2.17 The total MOU per subscriber per month increased by 1.24%, from 274.92 in QE Mar-13 to 278.32 in QE Jun-13. The outgoing MOUs increased by 4.11% whereas incoming MOUs decreased by 1.76%.

2.18 The total MOU per subscriber per month increased by 1.24%, from 274.92 in QE Mar-13 to 278.32 in QE Jun-13. The outgoing MOUs increased by 4.11% whereas incoming MOUs decreased by 1.76%.

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

<b>MOU per subscriber per month</b>									
<b>Circle category</b>	<b>Postpaid</b>			<b>Prepaid</b>			<b>Blended</b>		
	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU	Outgoing MOU	Incoming MOU	Total MOU
Circle A	291	151	443	110	117	227	133	121	254
Circle B	456	214	670	124	129	253	141	134	275
Circle C	675	356	1031	166	166	332	190	174	364
Metro	311	154	464	132	125	257	157	129	286
<b>All India</b>	<b>347</b>	<b>173</b>	<b>520</b>	<b>125</b>	<b>128</b>	<b>253</b>	<b>146</b>	<b>132</b>	<b>278</b>

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

2.19 Prepaid and postpaid MOUs increased by 0.32% and 4.07% respectively in this quarter.

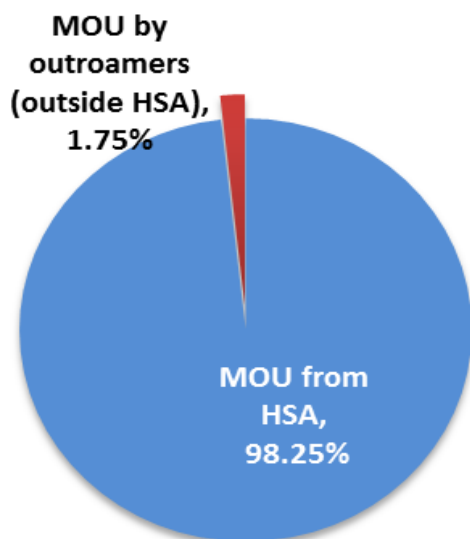
2.20 Outgoing SMS per subscriber per month declined from 18 in QE Mar-13 to 17 in QE Jun-13.

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

<b>Circle category</b>	<b>Outgoing SMS per subscriber month</b>		
	Postpaid	Prepaid	Blended
Circle A	14	20	20
Circle B	14	14	14
Circle C	13	10	10
<b>Metro</b>	18	22	21
<b>All India</b>	<b>16</b>	<b>17</b>	<b>17</b>

*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**

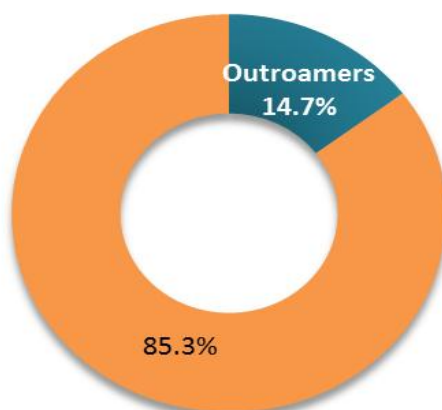


**Table 2.14: %Break-up of Outgoing minutes from Home Service Area (HSA) - CDMA Full Mobility Service**

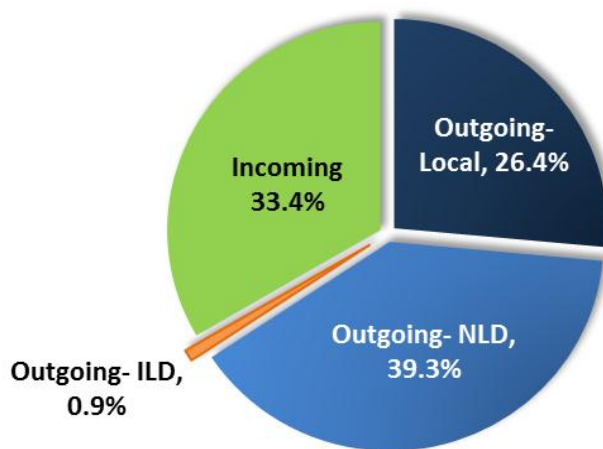
Circle	Intra Circle To Wireline (%)	Intra Circle to Own Wireless (%)	Intra Circle to Other Wireless (%)	Inter Circle to Wireline (%)	Inter Circle to Own Wireless (%)	Inter Circle to Other Wireless (%)	ILD (%)
<b>Circle A</b>	2.4	33.2	51.1	0.7	3.3	9.0	2.4
<b>Circle B</b>	1.2	44.4	41.2	0.6	4.1	8.5	1.2
<b>Circle C</b>	1.3	47.8	34.4	0.7	5.9	9.9	1.3
<b>Metro</b>	2.4	31.3	34.7	0.6	6.3	24.5	2.4
<b>All India</b>	<b>1.8</b>	<b>38.3</b>	<b>41.6</b>	<b>0.7</b>	<b>4.6</b>	<b>12.9</b>	<b>1.8</b>

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

**Chart 2.10: Percentage of subscribers who availed roaming service during the quarter**



**Chart 2.11: 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]

<b>Circle Category</b>	<b>Postpaid</b>	<b>Prepaid</b>	<b>Blended</b>
Circle A	0.80	0.35	0.47
Circle B	0.57	0.29	0.34
Circle C	0.51	0.31	0.34
Metros	0.80	0.42	0.52
<b>All India</b>	<b>0.71</b>	<b>0.34</b>	<b>0.42</b>

Average Subscriber Outgo per Outgoing Minute for usage from HSA

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

2.22 All India average subscriber outgo per outgoing minute decreased from Re. 0.49 in Q.E. Mar-13 to Re. 0.42 in Q.E. Jun-13. This decline is majorly on effect of the fact that one of the service provider, which was earlier reporting revenue from data services under the head of 'Call revenue', has started reporting the revenue from data services separately w.e.f. QE June 2013. This has resulted in decline in Call revenue component of the total call revenue from outgoing calls from HSA which has been used for calculating the average subscriber outgo per outgoing minute.

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

Parameter	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13
<b>1. ARPU (₹ Per month)</b>	75	78	80	95	98
<b>2. MOU per subscriber per month</b>	229	225	230	275	278
<b>3. Outgoing MOU per subscriber per month</b>					
3.1 Local (Intra-circle)	96	93	96	114	117
3.2 NLD (inter-circle)	19	20	21	26	26
3.3 ILD	0.15	0.16	0.17	0.23	0.24
<b>4. Outgoing SMS per subscriber per month SMS</b>	22	25	21	18	17
<b>5. Average subscriber Outgo per outgoing minute from HSA (₹)</b>	0.47	0.49	0.49	0.49	0.42

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

## Section C: Internet Service

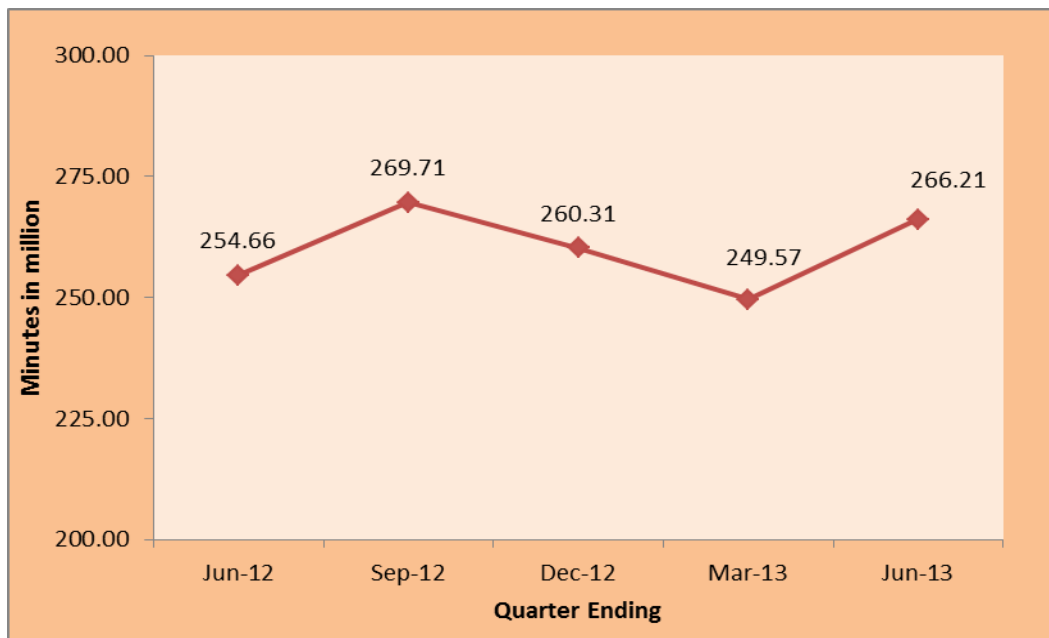
### Revenue of SPs

2.24 The Revenue of the Internet Services (except internet access by mobile devices) as reported by SPs is ₹3443.90 crores for the quarter ending Jun-13 as compared to ₹3083.62 crores for the quarter ending Mar-13, showing an increase of 11.68% over the previous quarter.

### Internet Telephony

2.25 As per report submitted to TRAI, 32 SPs are providing Internet Telephony service presently. Total Minutes of Usage (MOU) for Internet Telephony increased from 249.57 million in QE Mar-13 to 266.21 million registering a growth of 6.67% in QE Jun-13.

**Chart 2.12: Trends in MOU for Internet Telephony**



# **Chapter 3 :**

## **Financial Data of Telecom Service Sector**

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

Particulars	QE Jun-12 (₹ in Crore)	QE Mar-13 (₹ in Crore)	QE Jun-13 (₹ in Crore)	Q-O-Q % Change Over Mar-13	Y-O-Y % Change over Jun-12
Gross Revenue (GR)	52512.10	54283.78	57260.98	5.48	9.04
Adjusted Gross Revenue (AGR)	35499.01	35279.50	38640.30	9.53	8.85
Pass Through (GR-AGR)	17013.08	19004.28	18620.68	-2.02	9.45
License Fee	2941.02	2860.76	3092.14	8.09	5.14
Spectrum Charges	1292.06	1340.55	1469.67	9.63	13.75

- 3.1 Gross Revenue(GR) and Adjusted Gross Revenue(AGR) increased by 5.48% and 9.53% respectively in the QE Jun-13.
- 3.2 Pass through decreased by 2.02% in the QE Jun-13, whereas on annual basis it has increased by 9.45%.
- 3.3 Pass-through charges as % Gross Revenue: 32.52% in QE Jun-13 as against 35.01% in the previous quarter.

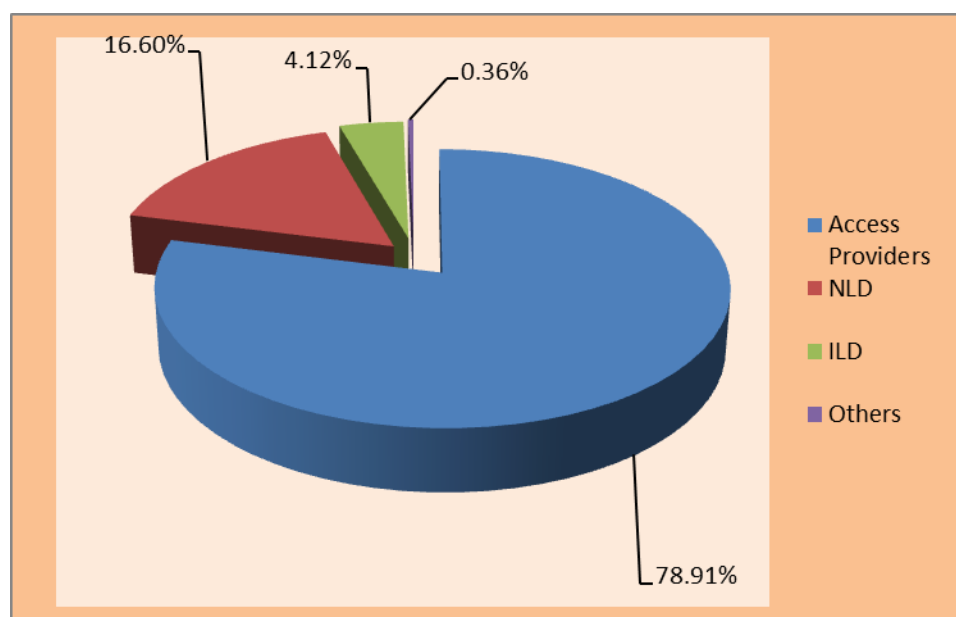
**Table 3.2: Service-wise Gross Revenue, Adjusted Gross Revenue, License Fee and Spectrum Charges**

(₹ in Crore)

Service	GR	AGR	LF	Spectrum Charges
<b>Access Providers</b>	43209.50	30492.88	2439.52	1467.23
<b>NLD</b>	8391.06	6415.75	513.25	-
<b>ILD</b>	3419.87	1593.67	127.49	-
<b>Others</b>	2240.55	138.00	11.88	2.44
<b>Total</b>	<b>57260.98</b>	<b>38640.30</b>	<b>3092.14</b>	<b>1469.67</b>



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



3.4 Access services contributed 78.91% to the total Adjusted Gross Revenue (AGR) of telecom services. In Access services, Gross Revenue, AGR, License Fee and Spectrum Charges increased by 5.75%, 9.68%, 4.39% and 9.86% respectively whereas Pass Through charges decreased by 2.62% in QE Jun-13.

3.5 Public Sector Undertakings' share in the Access AGR of telecom services is 12.83%.

3.6 Monthly ARPU based on AGR for Access services is ₹113 for the Q.E. Jun-13. Chart below shows the trend in ARPU.

**Chart 3.2: Trend in ARPU per month for Access Services****Table 3.3: Access Services - Service Provider wise Adjusted Gross Revenue**

(₹ in Crore)

Service Providers	QE Jun-13	QE Mar-13	% Change
Bharti	8814.94	8036.21	9.69
Vodafone	6614.25	6015.54	9.95
Idea	4747.39	4234.12	12.12
BSNL	3278.73	2977.00	10.14
Tata	2081.97	1712.51	21.57
Reliance	2076.43	1966.50	5.59
Aircel	1497.85	1396.31	7.27
MTNL	632.69	592.45	6.79
Unitech	457.38	442.09	3.46
Sistema Shyam	219.82	264.68	-16.95
Quadrant Televentures	39.82	39.18	1.63
Videocon	31.60	*	-
Loop	*	125.35	-
<b>Grand Total (Access)</b>	<b>30492.88</b>	<b>27801.94</b>	<b>9.68</b>

\*Data not received.

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

<b>Category</b>	<b>Access AGR for QE Jun-13 (₹ in Crore)</b>	<b>%age share of AGR</b>
Metro	4634.82	15.20
A	11690.44	38.34
B	10498.20	34.43
C	3669.41	12.03
<b>Total</b>	<b>30492.88</b>	<b>100.00</b>

**Notes :**

1. *Source: Figures are un-audited and as submitted by the Operators.*
2. *The figures have been regrouped wherever considered necessary for analysis purpose.*
3. *The Spectrum 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**

Sl. No.	Parameters	Benchmark	No. of CMTS Licensees not Meeting the Benchmarks			
			Quarter Ending March, 2013		Quarter Ending June, 2013	
			Out Of 218 (Nos.)	Out of 218 (%)	Out Of 187 (Nos.)	Out of 187 (%)
<b>I.</b>	<b>Network Related Parameters</b>					
<b>1</b>	<b>Network Availability</b>					
(i)	BTSs Accumulated downtime (not available for service)	≤ 2%	3	1.38%	2	1.07%
(ii)	Worst affected BTSs due to downtime	≤ 2%	9	4.13%	8	4.28%
<b>2</b>	<b>Connection Establishment (Accessibility)</b>					
(i)	Call Set-up Success Rate (within licensee's own network)	≥ 95%	0	0	0	0
(ii)	SDCCH/ Paging Chl. Congestion	≤ 1%	0	0	0	0
(iii)	TCH Congestion	≤ 2%	1	0.46%	0	0
<b>3</b>	<b>Connection Maintenance (Retain ability)</b>					
(i)	Call Drop Rate	≤ 2%	1	0.46%	1	0.53%
(ii)	Worst affected cells having more than 3% TCH drop (call drop) rate	≤ 3%	6	2.75%	4	2.14%
(iii)	Connection with good voice quality	≥ 95%	1	0.46%	0	0
<b>4</b>	<b>Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark) (Averaged over a period of quarter)</b>	≤ 0.5%	5	2.29%	2	1.07%

S. No.	Parameters	Benchmark	No. of CMTS Licensees not Meeting the Benchmarks			
			Quarter Ending, March, 2013		Quarter Ending, June, 2013	
			Out Of 218 (Nos.)	Out Of 218 (%)	Out Of 187 (Nos.)	Out Of 187 (%)
<b>II.</b>	<b>Customer Service Quality Parameters</b>					
<b>5</b>	<b>Metering and Billing</b>					
(i)	Metering and billing credibility - post paid	≤ 0.1%	7	3.21%	13	6.95%
(ii)	Metering and billing credibility - pre paid	≤ 0.1%	5	2.29%	9	4.81%
(iii)	Resolution of billing/charging/validity complaints	<b>100% within 4 weeks</b>	10	4.59%	6	3.21%
(iv)	Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints	<b>within 1 week of resolution of complaint</b>	1	0.46%	3	1.60%
<b>6</b>	<b>Response time to the customer for assistance</b>					
(i)	Accessibility of call centre/ customer care	≥ 95%	9	4.13%	6	3.21%
(ii)	%age of calls answered by the operators (voice to voice) within 60 seconds	≥ 90%	66	30.28%	63	33.69%
<b>7</b>	<b>Termination / closure of service</b>					
(i)	%age requests for Termination / Closure of service complied within 7 days	<b>100% within 7 days</b>	9	4.13%	6	3.21%
(ii)	Time taken for refund of deposits after closures	<b>100% within 60 days</b>	6	2.75%	7	3.74%

- 4.1 The performance has improved in this quarter as compared to the previous quarter in respect of the following parameters :-
- a. BTSs Accumulated downtime (not available for service)
  - b. TCH Congestion
  - c. Worst affected cells having more than 3% TCH drop (call drop) rate
  - d. Connection with good voice quality
  - e. Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark)
  - f. Resolution of billing/ charging/ validity complaints.
  - g. Accessibility of call centre/ customer care
  - h. %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. Metering and billing credibility - post paid
- b. Metering and billing credibility - pre paid
- c. Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints
- d. %age of calls answered by the operators (voice to voice) within 60 sec
- e. Time taken for refund of deposits after closures.

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

Parameter	Benchmark	Service Provider	Service Area	Performance
<b>BTSs Accumulated downtime (not available for service) (%age)</b>	≤ 2%	BSNL	ASM	2.67
		Idea	MP	4.87
<b>Worst affected BTSs due to downtime (%age)</b>	≤ 2%	Aircel	ASM	2.41
			DLI	2.30
			NE	2.58
		BSNL	ASM	4.37
			NE	3.90
			UPW	6.70
		Idea	MP	11.34
Vodafone	UPE	2.37		
<b>Call Drop Rate (%age)</b>	≤ 2%	BSNL	NE	2.20
<b>Worst affected cells having more than 3% TCH drop</b>	≤ 3%	Aircel	ASM	3.33
			NE	3.20
		BSNL	UPW	3.17
			WB	3.12
<b>Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark)</b>	≤ 0.5%	Aircel	KOL	0.67
		BSNL	GUJ	2.00
<b>Metering and billing credibility - post paid</b>	≤ 0.1%	Aircel	MH	0.16
			MBI	0.21
		BSNL	ASM	NR
			KOL	0.00
			MH	NR
		Idea	MP	0.15
			TN	0.13
			UP(E)	0.12
		MTS	UP West	0.21
		Vodafone	J&K	0.17
OR	0.54			
PB	0.14			
UPE	0.11			
<b>Metering and billing credibility - pre paid</b>	≤ 0.1%	Aircel	MH	0.70
			MBI	0.63
		BSNL	ASM	NR
			KOL	0.00
			MH	NR
		Uninor	GUJ	0.33



Parameter	Benchmark	Service Provider	Service Area	Performance
		Vodafone	BH	0.13
			KOL	0.13
			UPE	0.11
<b>Resolution of billing/charging/ validity complaints</b>	100% within 4 weeks	Aircel	CHN	99.90
			MH	99.99
			MBI	99.99
		BSNL	ASM	NR
			KOL	0.00
			MH	NR
<b>Period of applying credit/ waiver/ adjustment to customer's account from the date of resolution of complaints</b>	within 1 week of resolution of complaint	BSNL	ASM	NR
			KOL	0.00
			MH	NR
<b>Accessibility of call centre/ customer care</b>	≥ 95%	Airtel	J&K	92.00
			PB	86.00
		BSNL	ASM	NR
			KOL	0.00
			MH	NR
			NE	48.50
<b>Percentage of calls answered by the operators (voice to voice) within 60 seconds</b>	≥ 90%	Aircel	AP	62.37
			CHN	79.26
			DLI	45.64
			HP	74.14
			KOL	84.06
			KR	19.08
			KTK	75.85
			MH	72.18
			MBI	85.67
			PB	70.64
			RAJ	82.55
			TN	71.93
			UPE	60.85
		UPW	13.06	
		Airtel	DLI	86.00
			KOL	84.00
			MBI	89.00
			OR	89.00
		BSNL	WB	83.00
			ASM	NR
			HR	86.70
			KOL	0.00

Parameter	Benchmark	Service Provider	Service Area	Performance		
<b>Percentage of calls answered by the operators (voice to voice) within 60 seconds</b>	≥ 90%		MH	NR		
			NE	46.30		
		MTS	RJ	84.32		
				RCOM CDMA	AP	83.83
					CHN	86.15
					HP	88.81
					KTK	85.18
					MH	66.80
					MP	70.59
					MBI	71.10
				RCOM CDMA	PB	81.42
					RAJ	77.46
					TN	86.15
					UPE	76.05
				RCOM GSM	AP	76.28
					DLI	60.59
					GUJ	68.19
					HR	75.10
					KR	83.18
					KTK	79.53
					MH	52.03
					MBI	72.87
					PB	78.83
					RAJ	41.82
					TN	80.16
					UPE	55.48
				RTL	ASM	88.83
					BH	89.24
					HP	77.53
					MP	84.71
		TATA CDMA	AP	88.09		
			WB	83.80		
		TATA GSM	KOL	86.92		
			KTK	88.50		
		Uninor	AP	78.20		
			GUJ	88.33		
			MH	69.48		
			UPE	89.60		

Parameter	Benchmark	Service Provider	Service Area	Performance
		Vodafone	ASM	84.59
			DLI	88.59
			NE	75.30
<b>%age requests for Termination / Closure of service</b>	100% within 7 days	Aircel	CHN	99.94
			PB	99.25
		BSNL	ASM	NR
			KOL	0.00
			MH	NR
		Idea	AP	99.63
<b>Time taken for refund of deposits after closures</b>	100% within 60 days	Aircel	KOL	99.00
			KTK	99.67
		Idea	RJ	94.47
			UP(W)	92.98
		BSNL	ASM	NR
			KOL	0.00
			MH	NR

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**

S. No.	Parameters		Bench mark	No. of CMTS Licensees not Meeting the Benchmarks			
				QE March 2013		QE June 2013	
				Out Of 72 (Nos.)	Out of 72 (in %)	Out Of 72 (Nos.)	Out of 72 (in %)
1	<b>Network Availability</b>	Node-B's Accumulated downtime (not available for service) (%age)	≤ 2%	2	2.78%	1	1.39%
		Worst affected Node-B's due to downtime (%age)	≤ 2%	4	5.56%	1	1.39%
2	<b>Connection Establishment (Accessibility)</b>	Call Set-up Success Rate (within licensee's own network)	≥ 95%	1	1.39%	0	0
		SDCCH/Paging Channel and RRC Congestion (%age)	≤ 1%	0	0	0	0
		TCH and Circuit Switched RAB Congestion (%age)	≤ 2%	2	2.78%	0	0
3	<b>Connection Maintenance (Retainability)</b>	Call Drop and Circuit Switched Voice Drop Rate: (%age)	≤ 2%	0	0	0	0
		Worst affected cells having more than 3% TCH drop (call drop) and Circuit Switched Voice Drop Rate:-CBBH	≤ 3%	1	1.39%	7	9.72%
		Connections with good voice quality and Circuit Switch Voice Quality (CSV quality)	≥ 95%	0	0.00%	0	0
4	<b>Point of Inter-connection</b>	Point of Interconnection (POI) Congestion	≤ 0.5%	2	2.78%	1	1.39%

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

<b>Parameter</b>	<b>Service Provider</b>	<b>Benchmark</b>	<b>Service Area</b>	<b>Performance</b>
Node-B's Accumulated downtime (not available for service) (%age)	Aircel	≤ 2%	CHN	2.41
Worst affected Node-B's due to downtime (%age)	Aircel	≤ 2%	BH	3.56
Worst affected cells having more than 3% TCH drop (call drop) and Circuit Switched Voice Drop Rate:- CBBH	Aircel	≤ 3%	BH	12.13
	Aircel	≤ 3%	CHN	12.04
	Aircel	≤ 3%	J&K	5.37
	Aircel	≤ 3%	OR	12.97
	Aircel	≤ 3%	PB	11.58
	Aircel	≤ 3%	TN	11.30
	Vodafone	≤ 3%	DL	3.58
Point of Interconnection (POI) Congestion	Aircel	≤ 0.5%	KOL	1

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

## Section B: Quality of Service Performance of Wireline Service Providers

**Table 4.5: QoS Summary - Wireline Service**

S. No.	Parameters	Benchmark	No. of license operators not meeting the benchmarks			
			March, 2013		June, 2013	
			Out of 103 In Nos.	Out of 103 In %age	Out of 111 In Nos.	Out of 111 In %age
(i)	<b>Fault incidences per 100 subs/month</b>	<b>≤ 5</b>	10	9.71%	12	10.81%
(ii) a	<b>% Fault repaired by next working day</b>	<b>≥ 90%</b>	13	12.62%	15	13.51%
(ii) b	<b>% Fault repaired within 3 days (for urban areas)</b>	<b>100%</b>	19	18.45%	20	18.02%
(ii) c	<b>% Fault repaired within 5 days (for rural &amp; hilly areas)</b>	<b>100%</b>	15	14.56%	15	13.51%
(iii)	<b>MTTR</b>	<b>&lt;8Hrs</b>	8	7.77%	10	9.01%
(iv) a	<b>Call Completion Rate (in local network)</b>	<b>≥ 55%</b>	1	0.97%	0	0.00%
(iv) b	<b>Answer to Seizure Ratio (ASR)</b>	<b>≥ 75 %</b>	0	0.00%	0	0.00%
(v)	<b>Point of Interconnection (POI) Congestion (No. of POIs not meeting benchmark)</b>	<b>≤ 0.5%</b>	0	0.00%	0	0.00%
(vi)	<b>Metering &amp; billing credibility</b> □ Post-paid	<b>≤ 0.1%</b>	4	3.88%	0	0.00%
(vii)	<b>Metering &amp; billing credibility</b> □ Pre-paid	<b>≤ 0.1%</b>	2	1.94%	0	0.00%
(viii)	<b>Resolution of billing/charging/Credit &amp; validity complaints</b>	<b>100% within 4 weeks</b>	1	0.97%	2	1.80%
(ix)	<b>Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints</b>	<b>Within 1 week of resolution of complaint</b>	0	0.00%	0	0.00%
(x)	<b>Response time to the customer for assistance</b>	-	-	-		
(x) a	<b>Accessibility of call centre/customer care</b>	<b>≥ 95%</b>	1	0.97%	6	5.41%

S. No.	Parameters	Benchmark	No of license operators not meeting the benchmarks			
			March, 2013		June,2013	
			Out of 103 In Nos.	Out of 103 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%	0	0.00%	24	21.62%
(xi)	Termination / closure of service	100% within 7 days	16	15.53%	9	8.11%
(xii)	Time taken for refund of deposits after closures	100% within 60 days	0	0.00%	1	0.90%

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 pre-paid service in Basic (Wireline) service.

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

- a. % of faults repaired within 3 days (for urban area)
- b. % of faults repaired within 5 days (for rural & hilly areas)
- c. Call Completion Rate (CCR)
- d. Metering and billing credibility - post paid
- e. Metering and billing credibility - pre paid
- f. %age requests for Termination / Closure of service complied within 7 days.

4.7 The performance has deteriorated 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. Mean Time to Repair (MTTR).
- d. Resolution of billing/ charging/ validity complaints
- e. Accessibility of call centre/ customer care
- f. % of calls answered by the operators (Voice to Voice) within 60 Sec.
- g. Time Taken for refund of deposits after closures

**Table 4.6: QoS Parameters not reported by the service providers - Wireline**

S.No	Service Provider	Parameters
1	<b>BSNL</b>	<ul style="list-style-type: none"> <li>• Point of Interconnection (POI) Congestion- (All Service areas)</li> <li>• Metering and billing credibility □ postpaid (UPW, Uttaranchal)</li> <li>• Metering and billing credibility □ prepaid (ASM, J&amp;K,KTK, UPE, Uttaranchal)</li> <li>• Resolution of billing/ charging/ validity complaints (ASM &amp; Uttaranchal)</li> <li>• Period of applying credit/waiver/ adjustment to customer's account from the date of resolution of complaints (A&amp;N, ASM, NE-II)</li> <li>• Accessibility of call centre/ customer care (ASM, BH, Chhattisgarh, GUJ, J&amp;K, JHAR, KER, NE-I,OR, RAJ, UPE, Uttaranchal, WB)</li> <li>• %age of calls answered by the operators (voice to voice) within 60 seconds (ASM, BH, GUJ, J&amp;K, JHAR, NE-I, OR, RAJ, UPE, Uttaranchal, WB )</li> </ul>



**Table 4.7: Parameter wise Analysis of Non-compliance of QoS  
Benchmarks for Wireline Service Providers**

Service Providers	Parameters and Benchmark	Service Area	Parameters not met
<b>BSNL</b>	Faults incidences ( No. of faults/100 Subs./month) (Benchmark ≤5 )	CN	7.85
		J&K	6.72
		KER	8.06
		KOL	12.59
		KTK	8.65
		MH	6.55
		TN	5.16
		UPW	5.07
		Uttaranchal	5.87
		WB	6.40
		% of faults repaired by next working day (Benchmark ≥ 90% )	A & N
	AP		78.33%
	CN		66.81%
	J&K		65.76%
	KER		48.06%
	KOL		31.64%
	KTK		63.10%
	MH		39.93%
	NE-II		89.52%
	TN		65.76%
	WB		86.86%
	% of faults repaired within 3 days (Benchmark - For urban areas: 100% )	A & N	95.16%
		AP	88.79%
		Chhattisgarh	96.85%
		CN	71.95%
		HP	98.77%
		J&K	77.76%
		KER	72.88%
		KOL	45.86%
		KTK	75.82%
		MH	65.45%
		NE-I	98.42%
	NE-II	99.61%	
PB	97.23%		
TN	79.09%		
UPW	99.46%		
Uttaranchal	97.13%		
WB	90.10%		

Service Providers	Parameters and Benchmark	Service Area	Parameters not met
BSNL	% of faults repaired within 5 days (Benchmark - For rural and hilly areas : 100% )	A & N	97.94%
		AP	99.54%
		Chhattisgarh	95.86%
		CN	78.08%
		HP	99.52%
		J&K	88.30%
		KER	72.25%
		KTK	95.46%
		MH	87.88%
		NE-I	99.73%
		PB	99.85%
		TN	94.52%
		UPW	99.68%
		Uttaranchal	99.93%
		WB	96.04%
		Mean Time to Repair (MTTR) (Benchmark ≤ 8 Hrs )	Chhattisgarh
	CN		78.06
	KER		119.14
	KOL		42.94
	KTK		86.22
	MH		13.05
	TN		25.82
	Resolution of Billing/charging/ validity complaints (Benchmark - 100% within 4 weeks)	MH	90.00%
	Accessibility of call centre/ customer care (Benchmark ≥ 95%)	HP	94.11%
		HR	94.10%
		MP	94.14%
		PB	93.90%
		UPW	94.23%
	Percentage of calls answered by the operators (voice to voice) within 60 seconds (Benchmark ≥ 90%)	AP	63.00%
		Chhattisgarh	56.00%
		CN	63.67%
		HP	82.33%
		HR	36.33%
KOL		79.00%	
KTK		58.00%	
MH	60.00%		

<b>Service Providers</b>	<b>Parameters and Benchmark</b>	<b>Service Area</b>	<b>Parameters not met</b>
<b>BSNL</b>	Percentage of calls answered by the operators (voice to voice) within 60 seconds (Benchmark $\geq 90\%$ )	MP	76.67%
		PB	73.67%
		TN	45.00%
		UPW	18.00%
	%age requests for Termination / Closure of service complied within 7 days (Benchmark - 100% )	AP	97.39%
		CN	69.95%
		KER	91.41%
		KOL	55.36%
		MH	93.55%
		MP	95.93%
Time taken for refund of deposits after closures (Benchmark 100% within 60 days )	NE-I	99.68%	
	CN	76.59%	
<b>Bharti</b>	Accessibility of call centre/customer care (Benchmark $\geq 95\%$ )	DEL	94.00%
	Percentage of calls answered by the operators (voice to voice) within 60 seconds (Benchmark $\geq 90\%$ )	DEL	79.00%
		GUJ	86.00%
		HR	79.00%
		KOL	81.00%
		KTK	89.00%
		MH	88.00%
		MP	82.00%
		MUM	88.00%
		PB	82.00%
		RAJ	84.00%
		UPE	79.00%
UPW	82.00%		
<b>Vodafone</b>	% of faults repaired by next working day (Benchmark $\geq 90\%$ )	MP	80.00%
	Metering and Billing credibility- Postpaid (Benchmark $<0.1\%$ )	MH	2.50%
		KOL	1.00%
<b>MTNL</b>	Faults incidences (No. of faults/100 Subs./month) (Benchmark $\leq 5$ )	DEL	8.35
		MUM	5.44
	% of faults repaired by next working day (Benchmark $\geq 90\%$ )	DEL	87.37%
		MUM	88.79%

<b>Service Providers</b>	<b>Parameters and Benchmark</b>	<b>Service Area</b>	<b>Parameters not met</b>
<b>MTNL</b>	% of faults repaired within 3 days (Benchmark - For urban areas : 100% )	DEL	95.56%
		MUM	94.62%
	Resolution of billing/charging/validity complaints (Benchmark $\geq$ 90% )	DEL	95.97%
		%age requests for Termination / Closure of service complied within 7 days (Benchmark 100% )	DEL
	MUM		95.35%
<b>HFCL</b>	% of faults repaired by next working day (Benchmark $\geq$ 90% )	PB	81.00%
	% of faults repaired within 3 days (Benchmark - For urban areas : 100%)	PB	98.00%
	Mean Time to Repair (MTTR) (Benchmark $\leq$ 8 Hrs )	PB	12.56
<b>Reliance</b>	Mean Time to Repair (MTTR) (Benchmark $\leq$ 8 Hrs )	RAJ	8.13

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

## Section C : Quality of Service Performance of Dial-up/ Broadband Service

### A. Dial-up service

4.9 Out of 186 Internet Service Provider (ISP), who are providing internet service, only 14 ISPs are providing Dial-up service. However, out of the 14 ISPs only 09 ISPs come under the purview of top twenty internet service providers. The following Dial-up Access service providers that come under top twenty have been taken into account for the analysis in the quarter ending June, 2013.


**Table 4.8: Performance on ISPs Quality of Service**

Performance of Internet Service Providers on Quality of Service Parameters									
Sr. No	Name of the Service Provider	Dial-up access							Mean time to Restore of faults resulting as per subscriber complaints
		Service Activation time	Service Accessibility					GOS on the link connecting to PSTN node to ISP	
			Time to Access	Probability of accessing the ISP node (%)			ISP node unavailability in a month		
				1st Attempt	2nd Attempt	3rd Attempt			
		6 hrs	30 Sec	80.00%	90.00%	99.00%	30 Min	1 in 100	3 days
1	BHARAT SANCHAR NIGAM LTD.	Same day	34 Sec	99.00%	99.90%	99.90%	1%	99.90%	7 hrs
2	RELIANCE COMM. INFRASTRUCTURE LTD.	Online	<20 Sec	98.00%	100.00%	-	Nil	<1%	8 hrs
3	MTNL, MUMBAI	Immediate	26 Sec	100.00%	-	-	Nil	0.005	15 Min
	MTNL, DELHI	Instantaneous	30 Sec	99.79%	99.99%	-	Nil	0.01	5 Min
4	BHARTI AIRTEL LTD.	Online	30-40 Sec	99.80%	100.00%	100.00%	<0.015 % (DNF)	>0.01	3.59 hrs

Performance of Internet Service Providers on Quality of Service Parameters									
Sr. No.	Name of the Service Provider	Dial-up access							Mean time to Restore of faults resulting as per subscriber complaints
		Service Activation time	Service Accessibility					GOS on the link connecting to PSTN node to ISP	
			Time to Access	Probability of accessing the ISP node (%)			ISP node unavailability in a month		
				1 <sup>st</sup> Attempt	2 <sup>nd</sup> Attempt	3 <sup>rd</sup> Attempt			
6 hrs	30 Sec	80.00%	90.00%	99.00%	30 Min	1 in 100	3 days		
5	QUADRANT TELEVENTURES LTD.	NA	30 Sec	99.99%	100.00%	-	NA	0.002	3.33 hrs
6	TATA COMMUNICATIONS LTD.	Online	30 Sec	80.00%	90.00%	99.00%	<b>32 Minutes</b>	<1%	2.18 hrs
07	TATA TELESERVICES (MH) LTD.	Online Immediate	15 Sec	99.99%	100.00%	-	100.00%	0.001	6.95 hrs
08	GUJRAT TELELINK PVT. LTD.	2-3 Minutes	15 Sec	99.00%	100.00%	-	20 Minutes	<1%	<24 hrs
09	BROADBAND PACENET INDIA PVT. LTD.	99.50%	30 Sec	>80.00%	99.00%	100.00%	<b>&lt;2%</b>	<b>&gt;98%</b>	24 hrs

**Note:-**

NR= Not Reported  
DNF-Data Not in Format

 Not meeting the benchmark

**Service Activation Time**

4.10 All the ISPs who have reported the data have met the TRAI benchmark of 6 hrs.

**Time to Access**

4.11 All the ISPs except M/s Bharti Airtel Ltd. and M/s BSNL have met the TRAI benchmark of 30 sec.

### **Probability of Accessing the ISP Node**

4.12 All the Internet Service Providers have met this benchmark of 80% for first attempt, 90% for second attempt and 99% for third attempt in this quarter.

### **ISP Node unavailability**

4.13 All the ISPs except M/s BSNL, M/s Tata Communications and M/s Broadband Pacenet have met the TRAI benchmark for the parameter “ISP node unavailability in a month (30 Minutes)”.

### **Grade of Service**

4.14 All the ISPs except M/s Broadband Pacenet, who have reported the data met the benchmark for this parameter.

### **Mean Time to Restore (MTTR)**

4.15 All ISPs have met the TRAI benchmark.

## B. Broadband Service

4.16 Out of 161 Broadband Service providers, 35 Service Providers are having subscriber base >10,000 and these 35 Service providers share the 99.08% of total subscriber base. This report covers performance of 31 broadband Service Providers vis-à-vis the QoS benchmarks prescribed by TRAI, as the remaining 4 service providers viz. Zylog Systems, Chandranet Pvt Ltd, Home Systems and Ankhnet Informations have not submitted their report for the QE June, 2013.

**Table 4.9 : Summary of Performance of Service Providers against identified parameters**

S. No.	Parameters	Benchmark	No. of Licensees not Meeting the Benchmarks			
			Quarter Ending, March, 2013		Quarter Ending, June, 2013	
			Out of 94 (in Nos.)	Out of 94 (in %)	Out of 114 (in Nos.)	Out of 114 (in %)
<b>1</b>	<b>Service Provisioning/ Activation Time</b>	100% in =< 15 working days				
1.2	%age of connections provided within 15 days of registration of demand	100%	14	<b>14.89%</b>	16	<b>14.0%</b>
<b>2</b>	<b>Faults Repair/ Restoration Time</b>					
2.2	% of faults repaired by next working day	>90%	15	<b>15.95%</b>	20	<b>17.54%</b>
2.3	% of faults repaired within 3 working day	=>99%	17	<b>18.08%</b>	22	<b>19.29%</b>
2.4	No. of customers to whom rent rebate is given in minimum monthly charges or equivalent usage allowance for delay in fault repair					
<b>3</b>	<b>Billing Performance</b>					
3.3	%age of bills disputed	<2%	0	<b>0</b>	0	<b>0</b>
3.4	%age of complaints resolved within 4 weeks	100% within 4 weeks	1	<b>1.06%</b>	4	<b>3.50%</b>
3.5	%age of cases to whom refund of deposits is made within 60 days of closures	100% within 60 days	0	<b>0</b>	10	<b>8.77%</b>



S. No.	Parameters	Benchmark	No. of Licensees not Meeting the Benchmarks			
			Quarter Ending, March, 2013		Quarter Ending, June, 2013	
			Out of 94 (in Nos.)	Out of 94 (in %)	Out of 114 (in Nos.)	Out of 114 (in %)
<b>4</b>	<b>Response Time to the Customer for assistance</b>					
4.2	%age of calls answered by operator (Voice to voice) within 60 sec	>60%	0	<b>0</b>	19	<b>16.66%</b>
4.3	%age of calls answered by operator (Voice to voice) within 90 sec	>80%	2	<b>2.12%</b>	22	<b>19.29%</b>
<b>5</b>	<b>Bandwidth utilisation/ throughput</b>					
5.2	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)		3	<b>3.19%</b>	4	<b>3.50%</b>
5.4	No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)		29	<b>30.85%</b>	25	<b>21.92%</b>
5.7	% International bandwidth utilization during peak hours (TCBH) (Enclose MRTG)		0	<b>0</b>	2	<b>1.75%</b>
5.8	Broadband Connection Speed available (download) from ISP node to user	>80%	1	<b>1.06%</b>	1	<b>0.87%</b>
<b>6</b>	<b>Service Availability/ Uptime (for all users) in %age</b>	>98%				
6.3	Service availability/uptime (for all users) in %age	>98%	3	<b>3.19%</b>	3	<b>2.63%</b>
<b>7</b>	<b>Packet loss (for wired broadband access) in %</b>	<1%	26	<b>28.72%</b>	21	<b>18.42%</b>
<b>8</b>	<b>Network latency (for wired broadband access)</b>					
8.1	User reference point at POP/ISP Gateway node to IGSP/NIXI	<120 ms	0	<b>0</b>	0	<b>0</b>
8.2	User reference point at ISP Gateway node to International nearest NAP port abroad (terrestrial)	<350 ms	0	<b>0</b>	0	<b>0</b>
8.3	User reference point at ISP Gateway node to International nearest NAP port abroad (satellite)	<800 ms	0	<b>0</b>	0	<b>0</b>

**Table 4.10: Parameter-wise Analysis of non-compliance of QoS benchmarks for Broadband Service Providers**

Sl. No.	Parameters	Benchmarks	Name of Service Provider not Meeting the Benchmark
1	<b>Service Provisioning/ Activation Time</b> • %age of connections provided within 15 days of registration of demand	100% in =< 15 working days	<b>BSNL-</b> Andhra Pradesh(99.70%), Assam(94.50%), Chennai(85.30%), Jharkhand(90.10%), KTK(96.60%), Kerala(84.00%), TN(98.70%), WB(90.50%), A&N(96.60%) <b>MTNL</b> □ Delhi(98.00%), Mumbai(84.98%) <b>Sify-</b> All India (75.00%) <b>You Broadband-</b> KTK(94.00%), AP(99.00%) <b>Quadrant Televentures</b> □ Punjab(99.93%) <b>Atria Convergence</b> □ All India (93.00%)
2	<b>Faults Repair /Restoration Time</b>		
	% of faults repaired by next working day	>90%	<b>BSNL-</b> Andhra Pradesh(77.70%), Assam(72.10%), Chennai(83.00%), J&K(76.80%) Jharkhand(82.00%), Kerala(62.23%), TN(75.30%), WB(75.60%), A&N(78.70%) <b>MTNL</b> □ Delhi (84.12%), Mumbai(85.35%) <b>Hathway-</b> Guj(87.00%) <b>Sify-</b> All India (37.00%) <b>Beam Cables-</b> Hyd(68.66%) <b>Tata Communications</b> - HP(66.67%) <b>You Broadband</b> - All India(89.00%), KTK(77.00%), TN(80.00%), AP(83.00%) <b>Atria Convergence-</b> All India(42.00%)
	% of faults repaired within 3 working day	= >99%	<b>BSNL-</b> Andhra Pradesh(89.60%), Assam(83.80%), Chennai(95.00%), J&K(88.70%) Jharkhand(87.40%), Kerala(80.03%), TN(88.20%), WB(92.30%), A&N(90.70%) <b>MTNL</b> □ Delhi(95.92%), Mumbai(92.56%) <b>Hathway-</b> Goa(97.67%) <b>Sify-</b> All India (22.00%) <b>Beam Cables-</b> Hyd (96.00%) <b>Tata Communications</b> - HP(66.67%), Kerala & Lakshwdeep(98.00%), MH&Goa(98.67%), Bihar & Jharkhand(33.33%) <b>You Broadband-</b> KTK(97.00%), TN(97.00%), AP(97.00%) <b>Atria Convergence-</b> All India (83.00%)

Sl. No.	Parameters	Benchmarks	Name of Service Provider not Meeting the Benchmark
<b>3</b>	<b>Billing Performance</b>		
	%age of billing complaints resolved within 4 weeks	100% within 4 weeks	<b>BSNL</b> - J&K (97.67%), Orissa (98.82%) <b>MTNL</b> - Delhi (99.51%) <b>D-Vois</b> - All India(1.29%)
	%age of cases to whom refund of deposits is made within 60 days of closures	100% within 60 days	<b>BSNL</b> - Chennai (94.00%), J&K(97.13%), Orissa (99.68%) <b>You Broadband</b> - All India(32.00%), MH(34.00%), Guj(34.00%), KTK(23.00%), TN(36.00%), HR(43.00%), AP(54.00%)
<b>4</b>	<b>Response Time to the Customer for assistance</b>		
	%age of calls answered by operator (Voice to voice) within 60 sec	Benchmark 100%	<b>BSNL</b> - AP(39.91%), Bihar(17.06%), Chhatisgarh(26.51%), Chennai(14.95%), Guj(19.26%), HR(14.36%), HP (26.86%), KTK(2.77%), Kol(49.00%), MH(10.66%), MP(57.33%), Pun(45.67%), Raj(0.54%), TN(24.03%), UP(W)(5.69%) <b>MTNL</b> □ Mumbai(44.74%) <b>You Broadband</b> - MH(43.00%), Guj(41.00%), AP(43.00%)
	%age of calls answered by operator (Voice to voice) within 90 sec	Benchmark >80%	<b>BSNL</b> - AP(46.56%), Bihar(21.95%), Chhatisgarh(19.91%), Chennai(20.07%), Guj(20.64%), HR(20.15%), HP (30.55%), KTK(3.71%), Kol(67.67%), MH(13.58%), MP(64.00%), Pun(53.33%), Raj(0.67%), TN(27.95%), UP(W)(8.35%) <b>MTNL</b> □ Mumbai (49.19%) <b>You Broadband</b> - All India (68.00%), MH (49.00%), Guj(48.00%), KTK(76.00%), AP(50.00%) <b>Atria Convergence</b> - All India (78.00%)

Sl. No.	Parameters	Benchmarks	Name of Service Provider not Meeting the Benchmark
<b>5</b>	<b>Bandwidth utilisation/throughput</b>		
	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	Benchmark 0	<b>Tikona Digital</b> - All India (1 Link) <b>Rajesh Multichannel-</b> All India (91 links) <b>Five Networks-</b> All India (1 link) <b>Noida Software</b> □ All India (215 links)
	No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	Benchmark 0	<b>BSNL-</b> All 26 Service areas (25 Links) <b>Syscon Infoway- Mumbai</b> (7 links) <b>Five Networks -</b> All India (4 Links) <b>Citycom Networks</b> □ All India (3 links) <b>Southern Online Bio technologies-</b> AP(30 links)
	%age of International Bandwidth utilization during peak hours (TCBH) (Enclose MRTG)	Benchmark <90%	<b>Bharti Airtel</b> □ AP (92.38%) <b>Gujarat Telelink</b> - Gujarat (93.00%)
	Broadband Connection Speed available(download) from ISP node to user	Benchmark > 80%	<b>BSNL</b> - A&N (43.30%)
	Service availability/uptime (for all users) in %age	Benchmark >98%	<b>Indusland Media &amp; Communications Ltd</b> - All India (96.00%) <b>Syscon Infoway-</b> Mumbai (96.00%) <b>Tata Communications</b> □ Kerala & Lakshwdeep (96.29%)
<b>6.</b>	<b>Packet Loss</b>		
	Packet loss (for wired broadband access ) in %age	Benchmark <1%	<b>BSNL</b> □ All 26 Service areas (1.90%)

4.17 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**

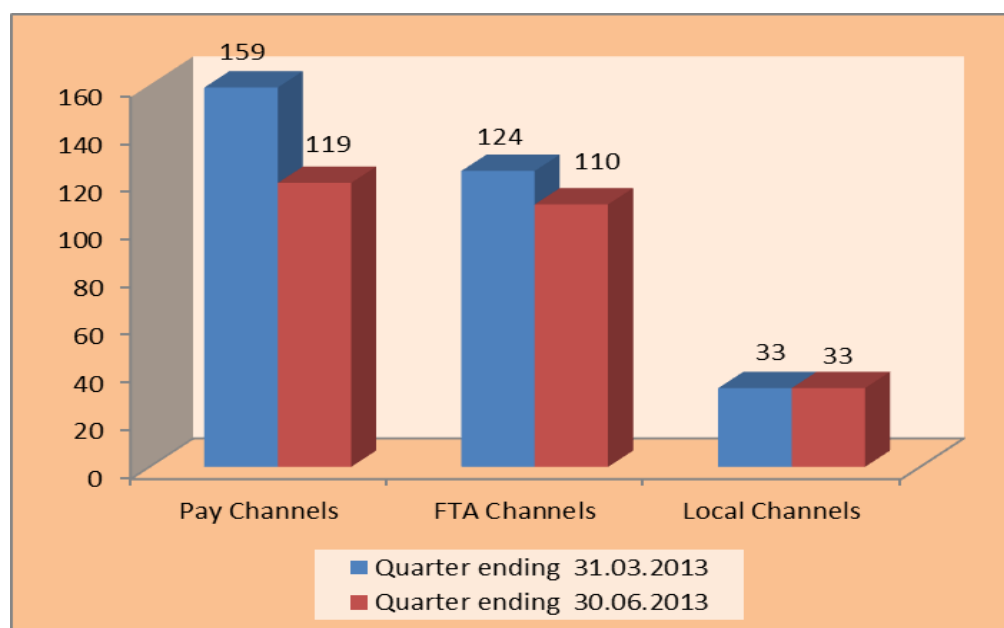
<b>S.No</b>	<b>Parameter</b>	<b>QE Mar-13</b>	<b>QE Jun-13</b>
1	Number of private satellite TV channels registered with Ministry of I&B	828	795
2	Maximum number of Pay TV Channels carried by certain cable operator in non-CAS areas	159	119
3	Maximum number of Free to Air (FTA) TV Channels carried by certain cable operator in non-CAS areas	124	110
4	Private FM Radio stations in operation	242	242
5	Private DTH Operators	6	6
6	Licensees of community radio stations	189	192
7	Operational community radio station	148	150

### **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 110 and 119 respectively in the QE Jun-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.

**Chart 5.1: Maximum number of TV Channels being carried by certain Cable operators in their networks**



5.3 Maximum number of TV channels (Pay, FTA and Local) being carried by any of the reported MSOs is 228 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**

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

### **Satellite TV Channels**

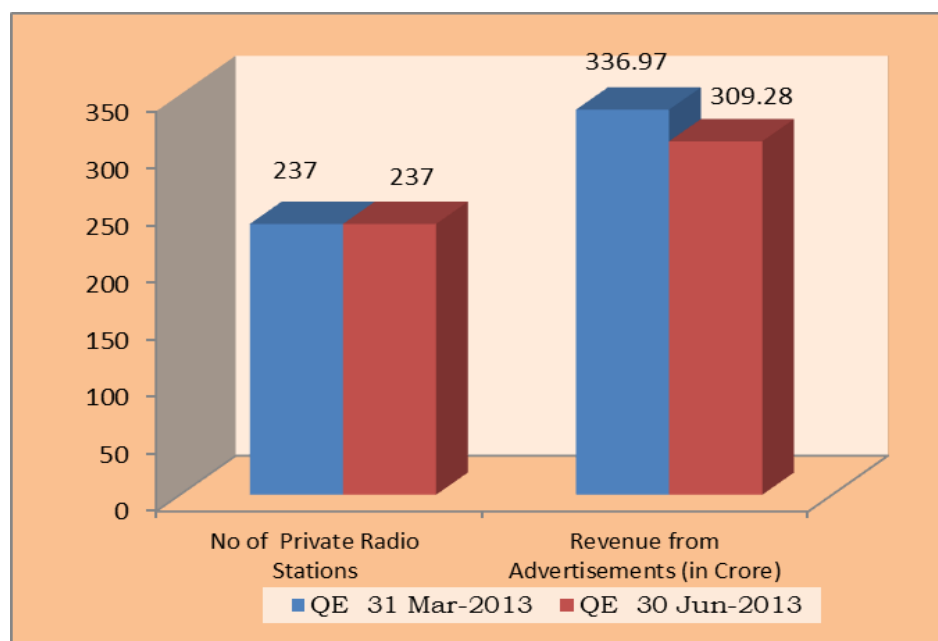
- 5.5 The total number of private satellite TV channels permitted by the Ministry of Information & Broadcasting, as obtained from its website, is 795 at the QE Jun-13.
- 5.6 There are a total of 187 pay as reported by broadcasters / distributors for which rates have been taken on records. The list of broadcasters/ distributors of pay TV channels along with the reported rates of pay channels for Non-CAS areas is at Annexure-5.1.

### **FM Radio Services**

- 5.7 Apart from All India Radio of Prasar Bharti - a public broadcaster, there are 242 FM Radio stations in operation at the end of Jun-13. The list of 242 private FM Radio stations is at Annexure-5.2.
- 5.8 The total Advertisement Revenue during the quarter ending Mar-13 in respect of 237 private FM Radio stations was ₹336.97 crore and for quarter ending Jun-13 in respect of 237 private FM Radio stations, the total Advertisement Revenue was ₹309.28 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

5.9 At the quarter ending Mar-13, out of 189 licensees of community radio stations, 148 stations were in operation. During the QE Jun-13, 03(three) licenses were issued. At the end of Jun-13, out of 192 licensees, 150 Community Radio Station 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**

	<b>As on 30.06.2013</b>
Total No. of Applications Received	1226
No. of Licenses issued	192
No. of Letters of Intent Issued	436
No. of Applications rejected	495
No. of stations operational	150

**Source:** Ministry of Information & Broadcasting

### **DTH Services**

5.10 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 30.06.2013, their reported registered subscriber base is 58.89 million. The list of DTH licensees is at Annexure-5.3.

### **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

Sl. 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 Gommunications	All India (except Assam & NE) (20)	All	
4	Reliance Telecom	Kolkata, MP, WB, HP, Bihar, OR, Assam & NE (8)	All	
5	Vodafone	All India (23)	All	
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	Unitech Group	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) 145  
CMTSs 37  
Total 182

## Annexure 1.2: Wireless Subscriber Base

Service Area	Vodafone (GSM)		Bharti (GSM)		Idea (GSM)		Aircel/Dishnet (GSM)		Reliance (GSM)		Reliance (CDMA)	
	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13
Andhra Pradesh	5,865,618	5,872,710	18,251,864	18,521,564	11,193,280	11,569,388	1,762,191	1,798,359	3,732,540	3,700,237	3,287,453	3,307,703
Assam	2,329,915	2,506,043	3,967,502	4,101,733	394,272	440,032	3,507,159	3,547,608	2,952,654	2,921,103	-	-
Bihar	6,769,349	6,910,292	19,372,211	20,275,101	6,040,383	6,275,862	4,659,654	4,711,600	6,611,623	6,980,085	2,927,105	3,016,011
Delhi	8,534,062	8,561,135	9,292,512	9,407,812	4,895,910	4,944,716	2,942,096	2,956,149	4,315,861	4,367,837	3,369,966	3,426,675
Gujarat	16,061,726	16,285,515	7,110,570	7,057,857	8,510,202	8,466,824	185,773	35,773	5,070,814	5,183,277	1,950,811	2,010,632
Haryana	4,633,056	4,697,629	2,333,743	2,314,192	3,782,688	3,846,587	36,092	11,092	1,682,679	1,830,190	589,791	610,355
Himachal Pradesh	497,021	523,069	1,978,395	2,035,958	472,124	492,266	714,843	682,129	1,335,794	1,360,711	205,491	207,443
Jammu & Kashmir	625,770	660,662	2,382,558	2,473,706	224,253	249,095	1,827,610	1,922,242	624,877	645,870	36	49
Karnataka	6,838,275	6,780,471	16,230,170	16,355,229	6,245,950	6,342,955	1,683,304	1,918,124	4,276,092	4,276,035	2,517,136	2,541,496
Kerala	6,202,153	6,385,292	3,502,337	3,547,360	7,921,428	8,161,641	104,883	29,883	1,115,920	1,102,725	1,824,791	1,874,574
Madhya Pradesh	4,308,262	4,230,893	10,119,919	10,232,522	15,558,619	16,070,788	97,694	22,694	9,488,494	9,946,637	2,774,405	2,863,803
Maharashtra	13,447,847	13,644,766	10,092,142	10,033,460	16,386,735	16,786,007	1,189,688	1,246,495	5,529,040	5,642,039	2,450,574	2,465,662
Mumbai	6,413,152	6,567,520	3,828,755	3,868,834	3,109,952	3,099,398	1,548,230	1,560,725	2,754,511	2,745,736	3,370,312	3,328,246
North East	997,941	1,064,436	2,730,003	2,808,177	294,709	315,123	2,324,164	2,308,267	857,127	934,206	-	-
Orissa	3,048,204	3,163,939	6,929,384	7,159,241	1,096,141	1,067,884	2,930,796	2,883,004	3,538,550	3,530,446	458,376	478,228
Punjab	4,448,199	4,483,340	7,023,854	7,034,838	5,791,458	5,842,432	939,369	943,240	2,590,849	2,760,838	457,207	479,722
Rajasthan	8,962,083	9,198,787	14,739,111	14,720,751	5,144,489	5,558,442	2,965,515	3,360,486	4,528,541	4,692,083	1,179,332	1,201,240
Tamil Nadu (incl. Chennai)	12,225,471	12,431,155	13,489,792	13,653,229	2,308,196	2,352,639	21,207,751	21,586,984	4,467,556	4,262,414	2,561,439	2,550,281
UP(E)	14,874,457	15,290,748	15,238,226	15,578,792	7,411,646	7,930,109	3,998,723	4,219,738	5,712,274	5,789,052	4,059,546	4,178,908
UP(W)	9,486,340	9,604,292	6,625,510	6,621,579	10,792,314	10,972,813	559,150	109,150	4,388,749	4,474,719	2,310,312	2,364,997
Kolkata	4,183,689	4,334,706	3,685,291	3,692,150	1,372,181	1,371,401	1,876,027	1,939,653	2,826,099	2,992,884	1,280,323	1,305,011
West Bengal	11,601,064	11,836,468	9,272,222	9,418,336	2,660,460	2,811,705	3,011,255	3,176,579	5,886,656	6,252,512	1,111,011	1,129,977
<b>Total</b>	<b>152,353,654</b>	<b>155,033,868</b>	<b>188,196,071</b>	<b>190,912,421</b>	<b>121,607,390</b>	<b>124,968,107</b>	<b>60,071,967</b>	<b>60,969,974</b>	<b>84,287,300</b>	<b>86,391,636</b>	<b>38,685,417</b>	<b>39,341,013</b>

**Annexure 1.2 (contd.)**

Service Area	Tata (GSM)		Tata (CDMA)		BSNL (GSM)		BSNL (CDMA)		MTNL (GSM)		MTNL (CDMA)	
	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13
Andhra Pradesh	4,792,137	4,644,411	1,793,689	1,773,231	9,290,023	9,362,687	90,141	87,786	-	-	-	-
Assam	-	-	-	-	1,144,499	1,131,452	91,663	92,361	-	-	-	-
Bihar	2,380,368	2,224,573	1,265,615	1,280,241	5,690,559	3,607,702	216,532	213,878	-	-	-	-
Delhi	-	-	3,564,544	3,032,124	-	-	-	-	2,509,030	2,518,770	84,866	82,874
Gujarat	2,070,644	2,052,280	720,916	569,066	4,179,707	4,197,018	119,315	115,359	-	-	-	-
Haryana	1,795,706	1,830,508	845,212	837,962	3,089,520	3,063,076	20,731	19,446	-	-	-	-
Himachal Pradesh	91,884	81,681	85,628	85,249	1,576,204	1,487,825	57,959	55,806	-	-	-	-
Jammu & Kashmir	-	-	-	-	1,089,835	1,131,018	69,668	67,095	-	-	-	-
Karnataka	5,241,490	5,101,035	728,015	715,276	6,951,224	6,933,599	175,759	154,283	-	-	-	-
Kerala	1,523,997	1,431,282	293,835	274,236	7,435,687	7,604,817	287,469	277,872	-	-	-	-
Madhya Pradesh	3,146,663	3,199,201	740,701	732,300	5,030,875	4,852,356	213,995	207,293	-	-	-	-
Maharashtra	3,464,096	3,380,565	2,765,647	2,800,231	6,723,903	6,454,945	151,694	143,676	-	-	-	-
Mumbai	2,087,351	2,098,095	1,422,120	1,428,240	-	-	-	-	2,310,912	1,816,276	94,543	93,073
North East	-	-	-	-	1,609,217	1,619,133	147,381	150,329	-	-	-	-
Orissa	1,793,322	1,755,574	293,800	280,609	4,443,021	4,456,782	70,341	64,785	-	-	-	-
Punjab	1,480,362	1,535,387	933,016	914,706	4,391,890	4,364,839	40,433	38,592	-	-	-	-
Rajasthan	1,447,385	1,209,840	1,448,421	1,451,769	5,788,422	5,785,794	178,030	175,212	-	-	-	-
Tamil Nadu (incl. Chennai)	4,877,907	4,764,997	485,945	465,424	9,481,726	9,485,081	116,172	112,338	-	-	-	-
UP(E)	3,329,818	3,490,478	683,804	709,398	10,014,585	10,008,618	420,339	419,011	-	-	-	-
UP(W)	2,694,756	2,672,943	1,147,338	1,098,100	4,768,705	4,663,137	134,031	91,293	-	-	-	-
Kolkata	2,163,959	2,166,875	732,943	673,266	2,271,492	2,272,562	24,387	22,784	-	-	-	-
West Bengal	1,752,024	1,623,196	331,080	241,666	3,533,718	2,930,108	75,773	68,972	-	-	-	-
<b>Total</b>	<b>46,133,869</b>	<b>45,262,921</b>	<b>20,282,269</b>	<b>19,363,094</b>	<b>98,504,812</b>	<b>95,412,549</b>	<b>2,701,813</b>	<b>2,578,171</b>	<b>4,819,942</b>	<b>4,335,046</b>	<b>179,409</b>	<b>175,947</b>

## Annexure 1.2 (contd.)

Service Area	Sistema (CDMA)		Quadrant (HFCL) (GSM)		Quadrant (HFCL) (CDMA)		Loop (GSM)		Unitech (GSM)		Videocon (GSM)		Total		Net Additions
	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	
Andhra Pradesh	-	-	-	-	-	-	-	-	4,304,686	4,450,683	-	-	64,363,622	65,088,759	725,137
Assam	-	-	-	-	-	-	-	-	-	-	-	-	14,387,664	14,740,332	352,668
Bihar	-	-	-	-	-	-	-	-	4,349,864	4,517,009	18,596	-	60,301,859	60,012,354	(289,505)
Delhi	917,353	881,544	-	-	-	-	-	-	-	-	-	-	40,426,200	40,179,636	(246,564)
Gujarat	211,480	200,654	-	-	-	-	-	-	4,947,807	5,084,389	553,599	702,642	51,693,364	51,961,286	267,922
Haryana	-	-	-	-	-	-	-	-	-	-	734,371	852,520	19,543,589	19,913,557	369,968
Himachal Pradesh	-	-	-	-	-	-	-	-	-	-	-	-	7,015,343	7,012,137	(3,206)
Jammu & Kashmir	-	-	-	-	-	-	-	-	-	-	-	-	6,844,607	7,149,737	305,130
Karnataka	2,027,374	1,983,518	-	-	-	-	-	-	-	-	-	-	52,914,789	53,102,021	187,232
Kerala	480,168	450,599	-	-	-	-	-	-	-	-	-	-	30,692,668	31,140,281	447,613
Madhya Pradesh	-	-	-	-	-	-	-	-	-	-	684,665	862,831	52,164,292	53,221,318	1,057,026
Maharashtra	616,917	-	-	-	-	-	-	-	5,582,082	5,541,113	-	-	68,400,365	68,138,959	(261,406)
Mumbai	424,603	-	-	-	-	-	3,008,352	2,716,568	-	-	-	-	30,372,793	29,322,711	(1,050,082)
North East	-	-	-	-	-	-	-	-	-	-	-	-	8,960,542	9,199,671	239,129
Orissa	-	-	-	-	-	-	-	-	-	-	-	-	24,601,935	24,840,492	238,557
Punjab	-	-	1,349,431	1,401,781	16,803	16,246	-	-	-	-	-	-	29,462,871	29,815,961	353,090
Rajasthan	2,219,801	2,163,347	-	-	-	-	-	-	-	-	-	-	48,601,130	49,517,751	916,621
Tamil Nadu (incl. Chennai)	1,190,437	1,161,453	-	-	-	-	-	-	-	-	-	-	72,412,392	72,825,995	413,603
UP(E)	520,553	-	-	-	-	-	-	-	7,545,557	7,440,256	14,622	-	73,824,150	75,055,108	1,230,958
UP(W)	535,055	379,458	-	-	-	-	-	-	4,953,604	5,262,422	3,621	-	48,399,485	48,314,903	(84,582)
Kolkata	843,673	778,263	-	-	-	-	-	-	-	-	-	-	21,260,064	21,549,555	289,491
West Bengal	1,924,596	1,770,490	-	-	-	-	-	-	-	-	-	-	41,159,859	41,260,009	100,150
<b>Total</b>	<b>11,912,010</b>	<b>9,769,326</b>	<b>1,349,431</b>	<b>1,401,781</b>	<b>16,803</b>	<b>16,246</b>	<b>3,008,352</b>	<b>2,716,568</b>	<b>31,683,600</b>	<b>32,295,872</b>	<b>2,009,474</b>	<b>2,417,993</b>	<b>867,803,583</b>	<b>873,362,533</b>	<b>5,558,950</b>

### Annexure 1.3: Wireline Subscriber Base

Service Area	Bharti		Reliance		Quadrant (HFCL)		Sistema		Tata	
	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13
Andhra Pradesh	125,844	126,070	89,345	89,120	-	-	-	-	170,204	164,413
Assam	-	-	-	-	-	-	-	-	-	-
Bihar	-	-	5,004	5,492	-	-	-	-	10,691	10,662
Delhi	1,083,699	1,085,845	182,876	183,362	-	-	-	-	91,674	91,516
Gujarat	55,473	55,573	99,236	98,027	-	-	-	-	71,204	71,490
Haryana	23,959	23,989	5,093	5,370	-	-	-	-	27,365	25,095
Himachal Pradesh	-	-	4,485	4,578	-	-	-	-	2,243	2,425
Jammu & Kashmir	-	-	-	-	-	-	-	-	-	-
Karnataka	492,441	493,328	113,082	114,433	-	-	-	-	142,998	144,208
Kerala	55,971	56,059	54,014	53,565	-	-	-	-	11,328	11,513
Madhya Pradesh	242,099	242,513	26,956	26,291	-	-	-	-	15,964	16,225
Maharashtra	70,409	70,533	100,784	100,107	-	-	-	-	246,523	242,966
Mumbai	332,197	332,811	231,364	232,478	-	-	-	-	547,888	524,879
North East	-	-	-	-	-	-	-	-	-	-
Orissa	-	-	3,501	3,622	-	-	-	-	6,554	6,458
Punjab	106,051	106,221	25,527	25,069	187,642	195,889	-	-	16,989	16,793
Rajasthan	39,412	39,477	24,540	24,361	-	-	52,474	53,628	7,129	7,003
Tamil Nadu (incl. Chennai)	486,503	480,261	147,515	147,459	-	-	-	-	74,811	73,229
U.P.(E)	50,622	50,714	40,515	40,362	-	-	-	-	13,520	13,548
U.P.(W)	24,339	24,378	5,473	5,874	-	-	-	-	8,507	8,095
Kolkata	94,051	94,240	81,241	81,165	-	-	-	-	36,579	36,533
West Bengal	-	-	2,075	2,099	-	-	-	-	3,828	3,762
<b>Total</b>	<b>3,283,070</b>	<b>3,282,012</b>	<b>1,242,626</b>	<b>1,242,834</b>	<b>187,642</b>	<b>195,889</b>	<b>52,474</b>	<b>53,628</b>	<b>1,505,999</b>	<b>1,470,813</b>



**Annexure 1.3 (contd.)**

Service Area	MTNL		BSNL		Vodafone		Total		Net Additions
	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	Mar-13	Jun-13	
Andhra Pradesh	-	-	1,848,510	1,800,852	5,460	5,850	2,239,363	2,186,305	-53,058
Assam	-	-	193,915	192,684	480	660	194,395	193,344	-1,051
Bihar	-	-	378,374	374,935	60	210	394,129	391,299	-2,830
Delhi	1,593,551	1,599,376			10,800	13,050	2,962,600	2,973,149	10,549
Gujarat	-	-	1,565,727	1,520,502	390	540	1,792,030	1,746,132	-45,898
Haryana	-	-	504,057	485,272			560,474	539,726	-20,748
Himachal Pradesh	-	-	273,941	262,945			280,669	269,948	-10,721
Jammu & Kashmir	-	-	196,811	193,864			196,811	193,864	-2,947
Karnataka	-	-	1,691,273	1,649,152	3,600	4,290	2,443,394	2,405,411	-37,983
Kerala	-	-	2,943,505	2,912,288			3,064,818	3,033,425	-31,393
Madhya Pradesh	-	-	835,271	830,182	60	150	1,120,350	1,115,361	-4,989
Maharashtra	-	-	2,046,050	1,983,732	2,730	3,000	2,466,496	2,400,338	-66,158
Mumbai	1,866,498	1,950,514			7,110	7,740	2,985,057	3,048,422	63,365
North East	-	-	189,884	168,172			189,884	168,172	-21,712
Orissa	-	-	364,132	357,007	240	300	374,427	367,387	-7,040
Punjab	-	-	983,646	957,611	330	390	1,320,185	1,301,973	-18,212
Rajasthan	-	-	887,216	870,498	270	360	1,011,041	995,327	-15,714
Tamil Nadu (incl. Chennai)	-	-	2,398,676	2,358,845	2,190	3,180	3,109,695	3,062,974	-46,721
U.P.(E)	-	-	943,196	904,190	450	480	1,048,303	1,009,294	-39,009
U.P.(W)	-	-	728,589	628,187	210	240	767,118	666,774	-100,344
Kolkata	-	-	930,944	906,311	1,440	1,560	1,144,255	1,119,809	-24,446
West Bengal	-	-	542,345	533,067			548,248	538,928	-9,320
<b>Total</b>	<b>3,460,049</b>	<b>3,549,890</b>	<b>20,446,062</b>	<b>19,890,296</b>	<b>35,820</b>	<b>42,000</b>	<b>30,213,742</b>	<b>29,727,362</b>	<b>-486,380</b>

**Annexure 1.4: Service Area and Operator wise details of PCOs**

<b>S. No.</b>	<b>Name of the Circle/Service Area</b>	<b>Service Provider</b>	<b>31<sup>st</sup> March, 2013</b>	<b>30<sup>th</sup> June, 2013</b>	<b>Net PCO added/ decreased during the Q.E. June' 13</b>	<b>Percentage Growth/ Decline for the Q.E. 30.06.2013</b>
1	Andaman & Nicobar	<b>BSNL</b>	236	230	-6	-2.54%
2	Andhra Pradesh	<b>BSNL</b>	82,935	78,778	-4,157	-5.01%
		<b>Bharti</b>	422	345	-77	-18.25%
		<b>TATA</b>	14,793	12,251	-2,542	-17.18%
		<b>Reliance</b>	36,694	31,981	-4,713	-12.84%
3	Assam	<b>BSNL</b>	11,929	11,695	-234	-1.96%
		<b>TATA</b>	-	-	0	0.00%
4	Bihar(including Jharkhand)	<b>BSNL</b>	8,987	8,769	-218	-2.43%
		<b>Reliance</b>	1,713	1,433	-280	-16.35%
		<b>TATA</b>	992	697	-295	-29.74%
5	Delhi	<b>Bharti</b>	2,512	2,212	-300	-11.94%
		<b>MTNL</b>	59,646	59,331	-315	-0.53%
		<b>Reliance</b>	1,610	1,286	-324	-20.12%
		<b>TATA</b>	6,928	6,080	-848	-12.24%
6	Gujarat	<b>BSNL</b>	38,731	36,826	-1,905	-4.92%
		<b>Bharti</b>	24	24	0	0.00%
		<b>Reliance</b>	5,274	4,363	-911	-17.27%
		<b>TATA</b>	10,496	8,842	-1,654	-15.76%
7	Haryana	<b>BSNL</b>	9,372	9,061	-311	-3.32%
		<b>Bharti</b>	294	278	-16	-5.44%
		<b>Reliance</b>	234	201	-33	-14.10%
		<b>TATA</b>	348	300	-48	-13.79%
8	Himachal Pradesh	<b>BSNL</b>	6,271	6,113	-158	-2.52%
		<b>Reliance</b>	851	905	54	6.35%
		<b>TATA</b>	169	143	-26	-15.38%
9	Jammu & Kashmir	<b>BSNL</b>	8,788	8,675	-113	-1.29%
		<b>TATA</b>	-	-	0	0.00%
10	Karnataka	<b>BSNL</b>	1,15,847	1,09,217	-6,630	-5.72%
		<b>Bharti</b>	9,502	8,883	-619	-6.51%
		<b>Reliance</b>	13,126	11,401	-1,725	-13.14%
		<b>TATA</b>	12,324	10,341	-1,983	-16.09%
11	Kerala	<b>BSNL</b>	46,775	44,622	-2,153	-4.60%
		<b>Bharti</b>	907	877	-30	-3.31%
		<b>Reliance</b>	3,038	2,507	-531	-17.48%
		<b>TATA</b>	743	614	-129	-17.36%
12	Madhya Pradesh (Including Chattisgarh)	<b>BSNL</b>	32,510	32,362	-148	-0.46%
		<b>Bharti</b>	5,775	5,301	-474	-8.21%
		<b>Reliance</b>	3,453	3,117	-336	-9.73%
		<b>TATA</b>	4,074	3,507	-567	-13.92%

**Annexure 1.4 (Contd.)**

<b>S. No.</b>	<b>Name of the Circle/ Service Area</b>	<b>Service Provider</b>	<b>31st March, 2013</b>	<b>30th June, 2013</b>	<b>Net PCO added/ decreased during the Q.E. June' 13</b>	<b>Percentage Growth/ Decline for the Q.E. 30.06.2013</b>
13	<b>Maharashtra (including Mumbai)</b>	<b>BSNL &amp; MTNL</b>	<b>2,07,590</b>	<b>1,95,527</b>	<b>-12,063</b>	<b>-5.81%</b>
		<b>Bharti</b>	<b>60</b>	<b>59</b>	<b>-1</b>	<b>-1.67%</b>
		<b>Reliance</b>	<b>24,191</b>	<b>21,233</b>	<b>-2,958</b>	<b>-12.23%</b>
		<b>TATA</b>	<b>64,142</b>	<b>54,399</b>	<b>-9,743</b>	<b>-15.19%</b>
	Mumbai	<b>Bharti</b>	53	52	-1	-1.89%
		<b>MTNL</b>	90,649	89,559	-1,090	-1.20%
		<b>Reliance</b>	11,485	10,321	-1,164	-10.13%
		<b>TATA</b>	12,978	11,945	-1,033	-7.96%
	Maharashtra excluding Mumbai	<b>BSNL</b>	1,16,941	1,05,968	-10,973	-9.38%
		<b>Bharti</b>	7	7	0	0.00%
		<b>Reliance</b>	12,706	10,912	-1,794	-14.12%
14	North East	<b>Tata</b>	51,164	42,454	-8,710	-17.02%
		<b>BSNL</b>	11,567	8,567	-3,000	-25.94%
15	Orissa	<b>TATA</b>	-	-	0	0.00%
		<b>BSNL</b>	11,442	9,941	-1,501	-13.12%
		<b>Reliance</b>	408	370	-38	-9.31%
16	Punjab	<b>TATA</b>	857	718	-139	-16.22%
		<b>BSNL</b>	13,273	12,400	-873	-6.58%
		<b>Bharti</b>	261	233	-28	-10.73%
		<b>Quadrant</b>	3,977	3,784	-193	-4.85%
		<b>Reliance</b>	1,557	1,360	-197	-12.65%
17	Rajasthan	<b>TATA</b>	2,413	2,156	-257	-10.65%
		<b>BSNL</b>	22,881	20,782	-2,099	-9.17%
		<b>Bharti</b>	261	255	-6	-2.30%
		<b>Sistema Shyam</b>	12,914	12,718	-196	-1.52%
		<b>Reliance</b>	2,771	2,313	-458	-16.53%
18	<b>Tamil Nadu (including Chennai)</b>	<b>TATA</b>	1,625	1,276	-349	-21.48%
		<b>BSNL</b>	<b>1,20,760</b>	<b>1,16,248</b>	<b>-4,512</b>	<b>-3.74%</b>
		<b>Bharti</b>	<b>14,876</b>	<b>13,952</b>	<b>-924</b>	<b>-6.21%</b>
		<b>Reliance</b>	<b>18,688</b>	<b>16,592</b>	<b>-2,096</b>	<b>-11.22%</b>
	Chennai	<b>TATA</b>	<b>12,600</b>	<b>10,528</b>	<b>-2,072</b>	<b>-16.44%</b>
		<b>BSNL</b>	17,462	17,079	-383	-2.19%
	Tamil nadu (excluding Chennai)	<b>Reliance</b>	4,818	4,349	-469	-9.73%
		<b>BSNL</b>	1,03,298	99,169	-4,129	-4.00%
		<b>Bharti</b>	14,876	13,952	-924	-6.21%
		<b>Reliance</b>	13,870	12,243	-1,627	-11.73%
		<b>TATA</b>	12,600	10,528	-2,072	-16.44%

**Annexure 1.4 (Contd.)**

<b>S. No.</b>	<b>Name of the Circle/Service Area</b>	<b>Service Provider</b>	<b>31st March, 2013</b>	<b>30th June, 2013</b>	<b>Net PCO added/ decreased during the Q.E. June' 13</b>	<b>Percentage Growth/ Decline for the Q.E. 30.06.2013</b>
19	Uttar Pradesh (East)	<b>BSNL</b>	77,090	59,781	-17,309	-22.45%
		<b>Bharti</b>	335	312	-23	-6.87%
		<b>Reliance</b>	1,864	1,571	-293	-15.72%
		<b>TATA</b>	1,294	1,138	-156	-12.06%
20	Uttar Pradesh (West) (including Uttranchal)	<b>BSNL</b>	22,120	20,192	-1,928	-8.72%
		<b>Bharti</b>	278	258	-20	-7.19%
		<b>Reliance</b>	1,407	1,166	-241	-17.13%
		<b>TATA</b>	1,922	1,651	-271	-14.10%
21	<b>West Bengal (including Kolkata)</b>	<b>BSNL</b>	<b>37,716</b>	<b>36,833</b>	<b>-883</b>	<b>-2.34%</b>
		<b>Bharti</b>	<b>99</b>	<b>91</b>	<b>-8</b>	<b>-8.08%</b>
		<b>Reliance</b>	<b>3,974</b>	<b>3,483</b>	<b>-491</b>	<b>-12.36%</b>
		<b>TATA</b>	<b>6,410</b>	<b>5,399</b>	<b>-1,011</b>	<b>-15.77%</b>
	Kolkata	<b>BSNL</b>	10,463	9,566	-897	-8.57%
		<b>Bharti</b>	99	91	-8	-8.08%
		<b>Reliance</b>	1,842	1,640	-202	-10.97%
		<b>TATA</b>	4,075	3,596	-479	-11.75%
	West Bengal (excluding Kolkata)	<b>BSNL</b>	27,253	27,267	14	0.05%
		<b>Reliance</b>	2,132	1,843	-289	-13.56%
		<b>TATA</b>	2,335	1,803	-532	-22.78%
	<b>TOTAL</b>			<b>12,61,946</b>	<b>11,60,854</b>	<b>-1,01,092</b>

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

S. No.	Name of the Circle/Service Area	Service Provider	31 <sup>st</sup> March, 2013	30 <sup>th</sup> June, 2013	Net VPT added/ decreased during the Q.E. June'13	Percentage Growth/ Decline for the Q.E. 30.06.2013
1	Andaman & Nicobar	BSNL	352	352	0	0.00%
2	Andhra Pradesh	BSNL	26102	25105	-997	-3.82%
		Bharti	0	0	0	0.00%
		TATA	1358	1358	0	0.00%
		Reliance	0	0	0	0.00%
		Vodafone	0	0	0	0.00%
3	Assam	BSNL	24688	24688	0	0.00%
		TATA	0	0	0	0.00%
4	Bihar(including Jharkhand)	Vodafone	0	0	0	0.00%
		BSNL	67748	67748	0	0.00%
		Reliance	0	0	0	0.00%
5	Delhi	TATA	0	0	0	0.00%
		Vodafone	0	0	0	0.00%
		Bharti	0	0	0	0.00%
		MTNL	0	0	0	0.00%
		TATA	0	0	0	0.00%
6	Gujarat	Reliance	0	0	0	0.00%
		Vodafone	0	0	0	0.00%
		BSNL	18051	18051	0	0.00%
		Bharti	0	0	0	0.00%
		TATA	0	0	0	0.00%
7	Haryana	Reliance	0	0	0	0.00%
		Vodafone	0	0	0	0.00%
		BSNL	6678	6678	0	0.00%
		Bharti	0	0	0	0.00%
8	Himachal Pradesh	Reliance	0	0	0	0.00%
		TATA	0	0	0	0.00%
		BSNL	17408	17408	0	0.00%
9	Jammu & Kashmir	Reliance	0	0	0	0.00%
10	Karnataka	TATA	0	0	0	0.00%
		BSNL	6384	6384	0	0.00%
		BSNL	27449	27449	0	0.00%
		Bharti	0	0	0	0.00%
		TATA	0	0	0	0.00%
11	Kerala	Reliance	0	0	0	0.00%
		Vodafone	0	0	0	0.00%
		BSNL	1372	1372	0	0.00%
		Bharti	0	0	0	0.00%

**Annexure 1.5 (contd.)**

S. No.	Name of the Circle/Service Area	Service Provider	31 <sup>st</sup> March, 2013	30 <sup>th</sup> June, 2013	Net VPT added/ decreased during the Q.E. June'13	Percentage Growth/ Decline for the Q.E. 30.06.2013
12	Madhya Pradesh (Including Chattisgarh)	Reliance	0	0	0	0.00%
		TATA	0	0	0	0.00%
		BSNL	70180	70330	150	0.21%
		Bharti	0	0	0	0.00%
		Reliance	0	0	0	0.00%
13	<b>Maharashtra (including Mumbai)</b>	BSNL& MTNL	<b>40650</b>	<b>40654</b>	<b>4</b>	<b>0.01%</b>
		Bharti	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
		TATA	<b>2267</b>	<b>2595</b>	<b>328</b>	<b>14.47%</b>
		Reliance	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
		Vodafone	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
	Mumbai	MTNL	0	0	0	0.00%
		Bharti	0	0	0	0.00%
		Reliance	0	0	0	0.00%
		TATA	0	0	0	0.00%
		Vodafone	0	0	0	0.00%
	Maharashtra Excluding Mumbai	BSNL	40650	40654	4	0.01%
		Bharti	0	0	0	0.00%
		Reliance	0	0	0	0.00%
		TATA	2267	2595	328	14.47%
		Vodafone	0	0	0	0.00%
14	North East	BSNL	12876	13017	141	1.10%
15	Orissa	BSNL	45216	45215	-1	0.00%
		Reliance	0	0	0	0.00%
		TATA	0	0	0	0.00%
		Vodafone	0	0	0	0.00%
16	Punjab	BSNL	12065	12065	0	0.00%
		Quadrant Televentures Ltd.	27	27	0	0.00%
		Bharti	0	0	0	0.00%
		Reliance	0	0	0	0.00%
		TATA	0	0	0	0.00%
		Vodafone	0	0	0	0.00%
17	Rajasthan	BSNL	39568	39568	0	0.00%
		Bharti	0	0	0	0.00%
		Sistema Shyam	3010	3010	0	0.00%
		Reliance	0	0	0	0.00%
		TATA	0	0	0	0.00%
		Vodafone	0	0	0	0.00%

**Annexure 1.5 (contd.)**

S. No.	Name of the Circle/Service Area	Service Provider	31 <sup>st</sup> March, 2013	30 <sup>th</sup> June, 2013	Net VPT added/ decreased during the Q.E. June'13	Percentage Growth/ Decline for the Q.E. 30.06.2013
18	<b>Tamil Nadu(including Chennai)</b>	BSNL	<b>15492</b>	<b>15492</b>	<b>0</b>	<b>0.00%</b>
		Bharti	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
		TATA	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
		Vodafone	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
		Reliance	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
	Chennai	BSNL	1655	1655	0	0.00%
		Vodafone	0	0	0	0.00%
		Reliance	0	0	0	0.00%
	Tamil Nadu (excluding Chennai)	BSNL	13837	13837	0	0.00%
		TATA	0	0	0	0.00%
		Reliance	0	0	0	0.00%
		Bharti	0	0	0	0.00%
19	U P (East)	BSNL	74145	74145	0	0.00%
		Bharti	0	0	0	0.00%
		Reliance	0	0	0	0.00%
		TATA	0	0	0	0.00%
20	UP (West) (incl. Uttaranchal)	BSNL	39022	39038	16	0.04%
		Reliance	0	0	0	0.00%
		Bharti	0	0	0	0.00%
		TATA	0	0	0	0.00%
21	<b>West Bengal (including Kolkata)</b>	BSNL	<b>37523</b>	<b>37523</b>	<b>0</b>	<b>0.00%</b>
		Bharti	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
		Reliance	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
		TATA	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00%</b>
	Kolkata	BSNL	613	613	0	0.00%
		Bharti	0	0	0	0.00%
		Reliance	0	0	0	0.00%
		TATA	0	0	0	0.00%
	West Bengal (excluding Kolkata)	BSNL	36910	36910	0	0.00%
		Reliance	0	0	0	0.00%
		TATA	0	0	0	0.00%
	<b>Total</b>		<b>5,89,631</b>	<b>5,89,272</b>	<b>-359</b>	<b>-0.06%</b>

**Annexure 1.6: List of Internet Service Providers Providing Internet Telephony Service**

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



**Annexure 1.7 : Internet Service Provider(ISP) wise Internet Subscriber base  
(except subscribers accessing internet by mobile devices)**

Sl. No	Name of ISP	Mar-13	Jun-13		
		No. of Internet Subscribers (Including Broadband & Narrowband)	No. of Narrowband Connection (<256 Kbps speed)	No. of Broadband Connection (> 256 Kbps speed)	No. of Total Internet Subscribers (Including Broadband & Narrowband)
1	Bharat Sanchar Nigam Ltd.	13124483	3191449	9967382	13158831
2	Reliance Communications Infrastructure Limited	2491792	2412900	183264	2596164
3	Mahanagar Telephone Nigam Ltd.	1958023	879467	1098160	1977627
4	Bharti Airtel Ltd.	1398682	624	1413305	1413929
5	Hathway Cable & Datacom Pvt. Ltd.	365361	69	368366	368435
6	You Broadband & Cable India Private Limited	351278	45354	315898	361252
7	Beam Telecom Pvt. Ltd.	271708	0	294211	294211
8	Tikona Digital Networks Pvt Ltd	276175	0	269196	269196
9	Quadrant Televentures Ltd.(HFCL Infotel Ltd.)	113460	4402	114965	119367
10	Tata Communications Limited	125535	34363	81182	115545
11	Asianet Satellite Communications Ltd.	116381	0	114137	114137
12	Syscon Infoway Pvt Ltd	88586	15994	77178	93172
13	Tata Teleservices(Maharashtra) Ltd.	84428	0	85996	85996
14	D-Vois Broadband Private Limited	62402	0	57768	57768
15	Five Network Solution (India) Ltd.	57116	0	55831	55831
16	Ortel Communication Ltd.	50630	0	51296	51296
17	Gujarat Telelink Pvt Ltd	28820	13592	37610	51202
18	Atria Convergence Technologies Pvt. Ltd.	39592	0	47781	47781
19	Broadband Pacenet (I) Pvt. Ltd.	37715	0	41726	41726
20	Alliance Broadband Services Pvt. Ltd.	31927	0	38859	38859
21	Zylog Systems(India) Ltd.)	37649	7997	29883	37880
22	Citycom Networks Pvt. Ltd.	28539	212	33544	33756
23	Sify Technologies Ltd.	37119	13766	18492	32258
24	Wish Net Pvt. Ltd.	15596	16056	15857	31913
25	Ankhnet Informations Pvt. Ltd	31819	0	31819	31819
26	Chandra Net Pvt. Limited	28906	105	28465	28570

**Annexure 1.7 (contd.)**

Sl. No	Name of ISP	Mar-13	Jun-13		
		No. of Internet Subscribers (Including Broadband & Narrowband)	No. of Narrowband Connection (<256 Kbps speed)	No. of Broadband Connection (> 256 Kbps speed)	No. of Total Internet Subscribers (Including Broadband & Narrowband)
27	Indusind Media & Communications Limited (In2cable (I) Ltd.)	28337	543	27741	28284
28	Meghbela Cable & Broadband Servies (P) Ltd	25007	9201	18449	27650
29	Tata Teleservices Limited	25787	0	25789	25789
30	Honesty Net Solutions (I) Pvt Ltd	23940	7657	17882	25539
31	Shyam Internet Services Ltd	20717	15985	4368	20353
32	Noida Software Technology Park Ltd.	16161	0	16955	16955
33	Home Systems Pvt. Ltd.	14783	0	16825	16825
34	Rajesh Multi Channel Pvt. Ltd.	15313	0	15914	15914
35	Southern Online Bio Technologies Ltd.	13010	2814	10459	13273
36	Digital Network associates Pvt. Ltd	10123	0	12644	12644
37	Vasai Cable Pvt. Ltd.	11769	0	12162	12162
38	R.K. Infratel Limited		301	11165	11466
39	IOL Netcom Limited	9973	0	9973	9973
40	Nivyah Infrastructure & Telecom Services Ltd. (Softeng Computers Pvt. Ltd.)	10224	0	9489	9489
41	Blazenet Ltd.	6480	3790	2844	6634
42	City Online Services Ltd	6439	0	6439	6439
43	Swiftmail Communications Ltd.	5591	864	5423	6287
44	Apna Telelink Ltd.	4102	0	5248	5248
45	DEN Networks Ltd	4690	371	4649	5020
46	Nettlinx Ltd.	4502	0	4906	4906
47	Spacenet Internet Services Pvt Ltd	4171	0	4167	4167
48	Quest Consultancy Pvt. Ltd.	3115	0	3627	3627
49	Narmada Cyberzone Pvt Ltd	3387	1850	1704	3554
50	Hathway Bhawani Cabletel & Datacom Pvt. Ltd.	3608	29	3497	3526
51	HCL Comnet Systems & Services Ltd.	3421	7	3414	3421
52	Descon Ltd	3329	0	3329	3329
53	Dishnet Wireless Ltd	3383	4	3105	3109
54	F/X Wireless Technology Services Pvt. Ltd.	2957	8	3090	3098
55	Kappa Internet Services Pvt Ltd.	1559	0	3090	3090

**Annexure 1.7 (contd.)**

S.No	Name of ISP	Mar-13	Jun-13		
		No. of Internet Subscribers (Including Broadband & Narrowband)	No. of Narrowband Connection (<256 Kbps speed)	No. of Broadband Connection (> 256 Kbps speed)	No. of Total Internet Subscribers (Including Broadband & Narrowband)
56	Geocity Network Solutions Pvt. Ltd.	2975	0	3069	3069
57	Bhupati Hotels Pvt. Ltd	2807	0	2807	2807
58	Symbois Creations Pvt. Ltd.	2571	0	2648	2648
59	Rajesh Patel Net Services Pvt. Ltd.	2426	0	2611	2611
60	Kaizen Infonet Pvt Ltd	2315	193	2352	2545
61	CJ Online Pvt. Ltd.	1328	155	2341	2496
62	Nextra Teleservices Pvt. Ltd.	1207	2	2237	2239
63	Siliguri Internet & Cable TV Pvt. Ltd.	3484	0	2233	2233
64	IKF Technologies Ltd	2143	1181	962	2143
65	Ishan Netsol Pvt Ltd	2135	1965	165	2130
66	Intermedia Cable Communication Pvt Ltd	1820	20	2100	2120
67	Shri Omkar Infocom Pvt. Ltd.	2134	0	2111	2111
68	Yashash Cable Network Pvt Ltd	1747	0	1996	1996
69	CJM Consultancy Services Pvt. Ltd.	2154	0	1995	1995
70	Value Healthcare Ltd.	1941	0	1941	1941
71	North East Dataa Network Pvt Ltd.	1594	0	1845	1845
72	Sanchar Telenetwork Pvt Ltd	1640	0	1705	1705
73	Tikona Infinet Ltd.(HCL Infinet Ltd.)	1754	849	846	1695
74	Wan and Lan Internet Pvt. Ltd.	1311	0	1602	1602
75	Capture Network Systems Pvt. Ltd.	1509	0	1546	1546
76	Digital2Virtual ISP Pvt. Ltd.	1296	255	1263	1518
77	Hughes Communications India Ltd.	4498	0	1433	1433
78	Touch Net India Pvt. Ltd.	1250	17	1274	1291
79	Star Broadband Services (I) Pvt Ltd	1240	0	1274	1274
80	Speed Online.net Pvt. Ltd.	1070	521	619	1140
81	Vodafone Spacetel Ltd	881	0	1131	1131
82	Data Infosys Ltd.	1057	225	817	1042
83	Cordia LT Communications Pvt Ltd	983	0	983	983
84	Readylink Internet Services Pvt Ltd	805	510	413	923
85	Idea Cellular Limited	0	0	849	849
86	Pipetel Communications Pvt. Ltd.	633	4	632	636
87	United Telecoms Ltd.	535	0	593	593

**Annexure 1.7 (contd.)**

S.No	Name of ISP	Mar-13	Jun-13		
		No. of Internet Subscribers (Including Broadband & Narrowband)	No. of Narrowband Connection (<256 Kbps speed)	No. of Broadband Connection (> 256 Kbps speed)	No. of Total Internet Subscribers (Including Broadband & Narrowband)
88	delDSL Internet Pvt Ltd	526	5	528	533
89	Software Technology Park of India(STPI)	448	0	448	448
90	Rajdhani Telecom Pvt. Ltd.	716	0	442	442
91	ERNET India	433	154	265	419
92	Multinet (Udaipur) Pvt. Ltd.	166	206	213	419
93	S.S.Netcom Pvt Ltd	364	41	326	367
94	Sikka Broadband(P) Ltd.(Gomti Cable Network Pvt. Ltd.)	337	39	311	350
95	Pacific Internet India Pvt. Ltd.	483	327	0	327
96	Nihar Internet Services (P) Ltd	122	82	214	296
97	Rida Communication Pvt. Ltd.	246	248	0	248
98	RailTel Corporation of India Ltd.	2840	0	245	245
99	World Phone Internet Services Pvt Ltd	238	0	242	242
100	Primenet Global Ltd.	237	0	237	237
101	Tatanet Services Ltd	245	0	229	229
102	Vainavi Industries Ltd.	200	0	200	200
103	Rainbow Communications (India) Pvt Ltd	197	0	197	197
104	Sab Infotech (Sab Industries)	188	75	122	197
105	Microsense Pvt. Ltd.	182	0	189	189
106	Bhiwani Communications Pvt. Ltd.	175	100	86	186
107	Infonet Comm Services Enterprises Private Limited (earlier Mynet Services India Pvt. Ltd.)	173	0	179	179
108	Bohra Pratisthan Pvt. Ltd	175	0	175	175
109	QBC Infotech Pvt. Ltd.	169	0	163	163
110	Sanyog Networks Pvt Ltd	152	152	2	154
111	Amber Online Services Ltd.	182	0	152	152
112	Conjoinix Technologies Pvt Ltd	126	0	139	139
113	Karuturi Telecom Private Limited(Estel Communications Pvt. Ltd).	107	0	137	137
114	Trans Virtual Pvt. Ltd.	116	0	116	116
115	Netcom Online Solutions India Pvt Ltd.	115	0	115	115
116	Verizon Communications India Pvt. Ltd. (Worldcom Communications ).	105	0	104	104

**Annexure 1.7 (contd.)**

S. No	Name of ISP	Mar-13	Jun-13		
		No. of Internet Subscribers (Including Broadband & Narrowband)	No. of Narrowband Connection (<256 Kbps speed)	No. of Broadband Connection (> 256 Kbps speed)	No. of Total Internet Subscribers (Including Broadband & Narrowband)
117	Tarang Communications Pvt. Ltd.	82	0	82	82
118	ISP Solutions India Pvt. Ltd.	81	0	81	81
119	Micky Online Pvt Ltd	70	70	0	70
120	Eronet Broadband Service India Pvt. Ltd.	69	0	69	69
121	Aeroway Networks Pvt Ltd.	57	0	65	65
122	Shri Vinayagaa Internet Pvt Ltd	65	49	16	65
123	NetMagic Solutions(P) Ltd.	62	0	64	64
124	iCAN Solutions Private Limited	63	0	63	63
125	Guj Info Petro Ltd. (GIPL)	58	0	58	58
126	Khetan Cable Network (P) Ltd	46	0	58	58
127	Limras Eronet Broadband Service Pvt Ltd	58	0	58	58
128	RS Broadband Service India Pvt Ltd.	56	0	56	56
129	Harisree CableNet Pvt. Ltd.	56	0	55	55
130	Oasis Cable Pvt Ltd.	83	15	39	54
131	Pulse Telesystems Pvt. Ltd.	47	0	52	52
132	Wire and Wireless India Ltd.	44	0	44	44
133	Essel Shyam Communications Limited	43	42	1	43
134	Nelco Ltd.	27	0	43	43
135	Konark Infocomm Pvt Ltd	42	0	42	42
136	STN Communication & Advertising Pvt Ltd.	43	0	41	41
137	AT&T Global Network Services India Private Limited	36	0	36	36
138	Dreamzcraft Info Solutions Pvt Ltd	29	9	27	36
139	Novanet Ltd.	36	0	36	36
140	Kelnet Communication Services Pvt. Ltd	44	0	35	35
141	Adya Tech One Services Pvt Ltd	35	0	33	33
142	Reach Network India Pvt. Ltd.	31	2	26	28
143	Power Grid Corporation of India Ltd.	27	0	27	27
144	West Bengal Electronics Industry Development Corp. Ltd.	27	0	27	27
145	ISP Services (India) Pvt. Ltd.	24	0	24	24
146	Tulip Telecom Limited (Tulip IT Services Ltd.)	53	0	19	19

**Annexure 1.7 (contd.)**

S. No	Name of ISP	Mar-13	Jun-13		
		No. of Internet Subscribers (Including Broadband & Narrowband)	No. of Narrowband Connection (<256 Kbps speed)	No. of Broadband Connection (> 256 Kbps speed)	No. of Total Internet Subscribers (Including Broadband & Narrowband)
147	Chemical And Metallurgical Design Co. Ltd	18	0	18	18
148	Financial Technologies Communications Ltd.	18	0	16	16
149	Vcare Call Centres India Pvt. Ltd.	14	0	14	14
150	Nextgen Communications Ltd (RPG Infotech Ltd).	10	0	10	10
151	Dream Plus Multi Services Pvt Ltd	9	0	9	9
152	ABT Ltd.	5	0	5	5
153	Vishwashakti Technologies Pvt Ltd	5	0	5	5
154	Godrej Infotech Ltd.	5	2	2	4
155	Opto Network Pvt. Ltd.	4	0	4	4
156	VIVA Communications Pvt Ltd (Mylai Karpagambal Information Systems (P) Ltd)	14	0	4	4
157	Astro Network India Pvt. Ltd.	3	0	3	3
158	Centre for Development of Advanced Computing, C-DAC	2	0	2	2
159	Compucom (I) Pvt. Ltd.	2	2	0	2
160	Devas Multimedia Pvt.Ltd.	11	0	2	2
161	Equant Network Services India Pvt. Ltd.	2	0	2	2
162	Maple PC & Peripherals Pvt Ltd	2	0	2	2
163	L&T Finance Ltd.(L&T Netcom Ltd.)	1	0	1	1
164	Reliance Jio Infocomm Ltd (Infotel Broadband Services Limited)	1	0	1	1
165	Spectrum Softech Solutions Pvt. Ltd.	1	0	1	1
166	Virgo Global Media Ltd (Online Media Solutions Ltd).	1	0	1	1
167	Advanced Financial Services Pvt Ltd	0	0	0	0
168	Broadlane Networks Pvt. Ltd.	0	0	0	0
169	Gujarat Narmada Valley Fertilizer Co. Ltd.	0	0	0	0
170	Karuturi Global Ltd.	0	0	0	0
171	Kerala State Electronics Development Corp Ltd.(Keltron)	0	0	0	0
172	Madura Cable Net Pvt. Ltd.	0	0	0	0
173	Manipal Ecommerce Ltd.	0	0	0	0
174	My Own Infotech Pvt. Ltd	0	0	0	0

**Annexure 1.7 (contd.)**

S. No	Name of ISP	Mar-13	Jun-13		
		No. of Internet Subscribers (Including Broadband & Narrowband)	No. of Narrowband Connection (<256 Kbps speed)	No. of Broadband Connection (> 256 Kbps speed)	No. of Total Internet Subscribers (Including Broadband & Narrowband)
175	Oistel Telecom Pvt. Ltd.	0	0	0	0
176	Pan India Network Infravest Pvt. Ltd.	0	0	0	0
177	Quick Online Pvt. Ltd.	0	0	0	0
178	Reliance Wimax Limited (Gateway Systems)	0	0	0	0
179	Sisam Technologies Pvt. Ltd.	0	0	0	0
180	SmartLink Broadband Services	0	0	0	0
181	Spectra ISP Network Pvt. Ltd.(Punj Lloyd)	455	0	0	0
182	Swastik Netvision Telecom P.Ltd	0	0	0	0
183	Tata Internet Services Ltd.	0	0	0	0
184	Trak Online Net India Pvt.Ltd	0	0	0	0
185	Trikon Electronics Pvt. Ltd.	0	0	0	0
186	Urban Communications Infrastructure Pvt.	0	0	0	0
	<b>Total</b>	<b>21606683</b>	<b>6687291</b>	<b>15198066</b>	<b>21885357</b>
	<b>Total (in Million)</b>	<b>21.61</b>	<b>6.69</b>	<b>15.20</b>	<b>21.89</b>

Note: \* Service Providers, who have not submitted their report for the quarter ending June, 2013, data from the previous report has been retained.

**Annexure 1.8: Service Area wise PMRTS subscriber Base**

<b>Service Area wise Comparative Subscriber Base of PMRTS Service Operators</b>				
<b>Sl No</b>	<b>Operative Area</b>	<b>Service Providers</b>	<b>Subscriber Base</b>	
			<b>31.3.2013</b>	<b>30.6.2013</b>
1	Delhi(Faridabad/ Gurgaon)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	5002	4198
		Procall(Delhi)	2119	2104
		Procall (Faridabad)	442	452
		Procall (Gurgaon)	431	820
		<b>Total</b>	<b>7994</b>	<b>7574</b>
2	Mumbai(Navi Mumbai/Vashi)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	5972	5734
		Smartalk (Mumbai)	115	217
		Smartalk (Vashi)	69	65
		Bhilwara Telenet(Mumbai)	599	708
		<b>Total</b>	<b>6755</b>	<b>6724</b>
3	Kolkata	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	1901	1811
		<b>Total</b>	<b>1901</b>	<b>1811</b>
4	TN(Chennai)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	4976	4796
		Quick Calls	88	127
		<b>Total</b>	<b>5064</b>	<b>4923</b>
5	Karnataka (Bangalore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	5612	5400
		Quick Calls	31	148
		India Satcom	0	0
		<b>Total</b>	<b>5643</b>	<b>5548</b>
6	Andhra Pradesh (Vishakhapatnam)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	2733	2832
		Quick Calls	1355	1664
		<b>Total</b>	<b>4088</b>	<b>4496</b>
7	Madhya Pradesh ( Indore)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	777	776
		<b>Total</b>	<b>777</b>	<b>776</b>
8	Rajasthan (Jaipur)	Procall	497	504
		<b>Total</b>	<b>497</b>	<b>504</b>
9	Gujrat(Ahmedabad/S urat/Baroda/ Bharuch)	Arya Omnitalk Radio Trunking Services Pvt.Ltd.	3841	3955
		<b>Total</b>	<b>3841</b>	<b>3955</b>
10	Maharashtra (Pune)	Smartalk	122	187
		Trunking Services Pvt.Ltd.	1583	1504
		<b>Total</b>	<b>1705</b>	<b>1691</b>
		<b>Grand Total</b>	<b>38265</b>	<b>38002</b>



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

### Category: Circle A

Service Area	% of prepaid in total subscribers	ARPU (Rs. per month)	Total usage ( from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
AP	96.66	122	28	199	206	406
Gujarat	95.18	103	25	186	164	350
Karnataka	95.20	125	53	205	193	397
MH	95.06	117	33	182	170	352
TN (incl. Chennai)	95.33	119	60	183	193	376

### Category: Circle B

Service Area	% of prepaid in total subscribers	ARPU (Rs. per month)	Total usage ( from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Haryana	97.26	100	21	190	178	369
Kerala	96.60	150	27	200	230	431
MP	98.11	95	18	163	163	326
Punjab	94.37	117	27	202	201	403
Rajasthan	98.22	106	13	164	183	348
UP(E)	98.92	94	12	170	228	397
UP(W)	98.32	90	19	173	192	365
WB	99.31	80	9	157	192	348

### Category: Circle C

Service Area	% of prepaid in total subscribers	ARPU (Rs. per month)	Total usage ( from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Assam	96.20	125	31	224	233	457
Bihar	99.54	92	8	166	241	406
HP	98.21	101	22	194	213	407
J&K	92.07	177	1	317	297	614
NE	97.12	133	68	211	198	409
Orissa	98.94	85	12	190	224	414

### Category: Metro

Service Area	% of prepaid in total subscribers	ARPU (Rs. per month)	Total usage ( from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Kolkata	93.89	99	30	204	207	412
Delhi	87.43	163	40	243	203	445
Mumbai	85.12	157	45	272	194	466

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

**Category A**

Service Area	% of Prepaid in total subscribers	ARPU (Rs. per month)	Total usage ( from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
MH	89%	120	22	166	131	297
Gujarat	85%	110	33	128	100	228
TN (incl. Chennai)	84%	130	17	111	104	214
Karnataka	89%	109	10	111	120	231
AP	89%	112	22	142	137	280

**Category B**

Service Area	% of Prepaid in total subscribers	ARPU (Rs. per month)	Total usage ( from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
WB	99%	60	5	157	162	319
Rajasthan	95%	70	13	195	164	360
UP(E)	97%	60	16	93	108	201
MP	96%	77	14	170	147	318
Kerala	90%	82	11	74	77	151
UP(W)	96%	64	18	107	122	229
Haryana	91%	79	20	173	147	320
Punjab	81%	126	18	185	117	302

**Category C**

Service Area	% of Prepaid in total subscribers	ARPU (Rs. per month)	Total usage ( from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Orissa	93%	85	9	160	168	329
Bihar	97%	79	10	196	178	374
HP	87%	131	8	160	123	283
J&K	60%	114	9	166	137	303
North East			NA			
Assam			NA			

**Category Metro**

Service Area	% of Prepaid in total subscribers	ARPU (Rs. per month)	Total usage ( from & outside HSA) per subscriber per month			
			Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU
Kolkata	90%	97	9	151	157	305
Delhi	87%	119	23	185	136	304
Mumbai	82%	146	26	115	101	213

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

Performance Monitoring Report on Quality of Service of Cellular Mobile Service Providers for quarter ending, June , 2013																			
S.No.	Name of Service Area	Name of Service Provider	Network Related Parameters										Customer Service Quality Parameters						
			Network Availability		Connection Establishment			Connection			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	Response time to the		Termination /		Time taken for refund of deposits after closures
			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					per hour or 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 seconds	%age requests for Termination / Closure of service complied 1.00	
			≤ 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
1	AP	Aircel	0.07	0.02	99.06	0.07	0.19	0.85	1.35	98.26	0	0.03	0.00	100.00	100.00	100.00	62.37	100.00	100.00
2		Airtel	0.01	0.01	99.82	0.06	0.06	0.49	0.63	99.83	0	0.01	0.00	100.00	100.00	100.00	92.00	100.00	100.00
3		BSNL	1.97	2.00	98.00	0.83	1.90	0.97	2.27	96.33	0	0.00	0.00	100.00	100.00	96.00	91.00	100.00	100.00
4		Idea	0.02	0.00	99.99	0.78	0.66	0.79	2.94	96.78	0	0.05	0.00	100.00	100.00	99.53	94.43	99.63	100.00
5		RCOM CDMA	0.23	0.26	99.15	0.00	0.03	0.09	0.05	99.70	0	0.10	0.04	100.00	100.00	98.73	83.83	100.00	100.00
		RCOM GSM	0.23	0.16	99.66	0.02	0.09	0.04	0.07	99.48	0	0.09	0.10	100.00	100.00	98.88	76.28	100.00	100.00
6		TATA CDMA	0.04	0.00	99.23	0.00	0.00	0.44	0.70	98.69	0	0.00	0.00	100.00	100.00	99.26	88.09	100.00	100.00
		TATA GSM	0.08	0.43	98.56	0.06	0.26	0.64	2.44	98.61	0	0.00	0.00	100.00	100.00	99.54	94.14	100.00	100.00
7	Uninor	0.06	0.00	99.06	0.16	0.15	1.17	1.42	98.14	0	NA	0.00	100.00	NA	95.84	78.20	NA	NA	
8	Vodafone	0.08	0.48	99.60	0.12	0.40	0.54	2.11	98.86	0	0.05	0.05	100.00	100.00	100.00	97.11	100.00	100.00	
9	ASM	Aircel	0.53	2.41	96.79	0.55	1.65	1.15	3.33	95.21	0	0.04	0.04	100.00	100.00	100.00	94.37	100.00	100.00
10		Airtel	0.12	0.28	98.93	0.08	0.17	1.06	1.00	99.39	0	0.00	0.01	100.00	100.00	100.00	93.00	100.00	100.00
11		BSNL	2.67	4.37	97.00	0.87	1.70	1.83	3.00	96.37	0	NR	NR	NR	NR	NR	NR	NR	NR
12		Idea	1.35	0.55	98.18	0.14	1.44	1.20	2.27	95.86	0	0.00	0.00	100.00	100.00	96.64	97.15	100.00	100.00
13		RTL	0.40	0.59	99.14	0.04	0.13	0.12	0.18	99.17	0	0.10	0.10	100.00	100.00	98.99	88.83	100.00	100.00
14		Vodafone	1.95	1.84	98.44	0.28	0.68	0.86	2.72	96.87	0	0.05	0.02	100.00	100.00	99.74	84.59	100.00	100.00
15		Aircel	1.15	1.96	97.54	0.79	1.84	0.87	1.62	95.24	0	0.00	0.00	100.00	100.00	100.00	90.34	100.00	100.00
16		Airtel	0.12	0.41	98.61	0.13	0.09	0.17	1.26	99.29	0	0.00	0.00	100.00	100.00	100.00	91.00	100.00	100.00
17	BH	BSNL	1.37	1.85	97.17	0.50	1.00	1.50	2.42	95.98	0	0.00	0.10	100.00	100.00	100.00	98.10	100.00	100.00
18		Idea	0.88	1.73	97.74	0.67	1.63	1.26	2.63	97.12	0	0.03	0.00	100.00	100.00	97.12	95.40	100.00	100.00
19		RCOM CDMA	0.42	1.13	98.98	0.00	0.02	0.08	0.05	99.80	0	0.09	0.10	100.00	100.00	98.72	92.62	100.00	100.00
20		RTL	0.11	0.41	99.02	0.07	0.08	0.19	0.16	99.07	0	0.09	0.10	100.00	100.00	97.16	89.24	100.00	100.00
21		TATA CDMA	0.05	0.00	98.44	0.00	0.12	0.34	2.23	99.49	0	0.00	0.00	100.00	100.00	99.70	91.00	100.00	100.00
		TATA GSM	0.01	0.04	98.87	0.12	0.23	0.51	0.29	98.15	0	0.00	0.00	100.00	100.00	96.20	92.31	100.00	100.00
22		Uninor	0.17	0.22	97.36	0.34	1.83	1.25	1.65	95.27	0	NA	0.00	100.00	NA	96.30	92.66	NA	NA
23		Vodafone	0.14	0.00	98.97	0.28	0.00	0.00	0.00	97.34	0	NA	0.00	100.00	100.00	100.00	NA	NA	NA
24	Aircel	0.56	1.87	99.40	0.32	0.60	0.99	2.09	96.84	0	0.07	0.13	100.00	100.00	100.00	92.79	100.00	100.00	
25	CHN	Airtel	1.33	0.00	98.08	0.36	0.81	0.52	0.71	98.34	0	0.06	0.01	99.90	100.00	100.00	79.26	99.94	100.00
26		Airtel	0.02	0.00	99.92	0.02	0.01	0.13	0.07	99.69	0	0.01	0.01	100.00	100.00	100.00	94.00	100.00	100.00
27		BSNL	0.33	1.20	99.00	0.30	0.63	0.73	1.20	100.00	0	0.10	0.10	100.00	100.00	100.00	99.30	100.00	100.00
28		Idea	0.01	0.00	99.66	0.08	0.09	0.59	0.28	97.05	0	included in Tamil Nadu.							
29		RCOM CDMA	incl. In TN										0.10	0.04	100.00	100.00	99.10	86.15	100.00
	RCOM GSM	incl. In TN										included in Tamil Nadu.							
30	TATA CDMA	0.02	0.00	99.30	0.00	0.07	0.08	0.07	99.24	0	included in Tamil Nadu.								
	TATA GSM	0.07	0.13	98.32	0.02	0.02	0.83	1.16	98.41	0	included in Tamil Nadu								
31	Vodafone	0.06	0.38	99.41	0.13	0.59	0.49	0.74	98.69	0	0.01	0.01	100.00	100.00	100.00	96.52	100.00	100.00	

### Annexure 4.1 (Contd.)

32	DLI	Airtel	0.35	2.30	97.34	0.43	0.49	0.90	2.68	97.46	0	0.00	0.00	100.00	100.00	100.00	45.64	100.00	100.00
33		Airtel	0.01	0.00	99.88	0.03	0.05	0.62	0.89	99.03	0	0.04	0.03	100.00	100.00	100.00	86.00	100.00	100.00
34		Idea	0.02	0.00	99.96	0.37	0.87	0.53	1.46	98.40	0	0.10	0.02	100.00	100.00	99.61	95.73	100.00	100.00
35		MTNL CDMA	1.67	1.20	98.68	0.31	0.31	1.69	1.20	99.00	0	0.02	0.00	100.00	100.00	95.55	95.50	100.00	100.00
		MTNL GSM	0.33	1.55	97.13	0.33	1.78	1.82	2.67	97.60	0	0.04	0.01	100.00	100.00	97.12	97.61	100.00	100.00
36		MTS	0.14	0.23	99.33	0.00	0.68	0.55	1.69	99.96	0	0.09	0.08	100.00	100.00	100.00	95.44	100.00	100.00
37		RCOM CDMA	0.15	0.00	99.44	0.00	0.03	0.34	0.03	99.80	0	0.10	0.07	100.00	100.00	98.51	91.15	100.00	100.00
		RCOM GSM	0.27	0.17	99.60	0.02	0.06	0.06	0.07	99.13	0	0.09	0.10	100.00	100.00	98.37	60.59	100.00	100.00
38		TATA CDMA	0.03	0.00	99.06	0.00	0.10	0.51	0.59	97.71	0	0.00	0.00	100.00	100.00	98.97	94.44	100.00	100.00
39	Vodafone	0.02	0.00	99.73	0.12	0.31	0.80	2.45	97.51	0	0.07	0.05	100.00	100.00	100.00	88.59	100.00	100.00	
40	GUJ	Airtel	0.04	0.00	99.57	0.01	0.00	0.41	1.84	98.81	0	0.00	0.00	100.00	100.00	100.00	94.08	100.00	100.00
41		Airtel	0.06	0.04	99.61	0.05	0.18	0.74	0.44	98.37	0	0.01	0.01	100.00	100.00	99.00	90.00	100.00	100.00
42		BSNL	1.30	1.57	99.00	0.17	1.13	1.60	1.80	100.00	2	0.03	0.00	100.00	100.00	97.00	92.00	100.00	100.00
43		Idea	0.03	0.00	99.32	0.25	0.27	0.93	1.03	95.55	0	0.06	0.02	100.00	100.00	99.39	96.79	100.00	100.00
44		MTS	0.05	0.00	99.35	0.00	0.00	0.36	1.29	99.91	0	0.01	0.00	100.00	100.00	95.00	95.44	100.00	NA
45		RCOM CDMA	0.19	0.10	99.36	0.00	0.00	0.12	0.01	99.86	0	0.10	0.08	100.00	100.00	97.70	91.28	100.00	100.00
		RCOM GSM	0.16	0.15	99.53	0.02	0.09	0.08	0.07	99.29	0	0.09	0.10	100.00	100.00	98.83	68.19	100.00	100.00
46		TATA CDMA	0.01	0.00	97.76	0.00	1.21	0.59	1.30	99.13	0	0.00	0.00	100.00	100.00	96.49	92.69	100.00	100.00
		TATA GSM	0.01	0.00	98.36	0.01	0.00	0.73	1.49	98.61	0	0.00	0.00	100.00	100.00	99.44	93.38	100.00	100.00
47		Uninor	0.09	0.31	97.76	0.10	0.42	1.22	1.16	98.28	0	NA	0.33	100.00	NA	96.50	88.33	NA	NA
48	Videocon	0.09	0.11	99.41	0.02	0.02	0.40	0.91	99.29	0	NA	0.07	100.00	100.00	99.68	94.09	NA	NA	
49	Vodafone	0.02	0.01	99.78	0.13	0.22	0.71	0.33	97.49	0	0.06	0.01	100.00	100.00	100.00	94.14	100.00	100.00	
50	HP	Airtel	0.20	1.16	97.50	0.08	1.00	0.70	1.46	95.32	0	0.00	0.00	100.00	100.00	100.00	74.14	100.00	100.00
51		Airtel	0.00	0.00	99.26	0.09	0.10	0.73	1.98	98.91	0	0.02	0.01	100.00	100.00	99.00	94.00	100.00	100.00
52		BSNL	1.77	1.57	96.67	0.80	1.57	1.83	2.73	95.53	0	0.10	0.00	100.00	100.00	100.00	97.00	100.00	100.00
53		Idea	0.22	0.00	98.90	0.12	0.54	0.92	2.73	95.39	0	0.00	0.00	100.00	100.00	98.26	98.07	100.00	100.00
54		RCOM CDMA	0.12	0.00	99.33	0.00	0.00	0.04	0.08	99.78	0	0.08	0.05	100.00	100.00	97.48	88.81	100.00	100.00
55		RTL	0.21	0.44	99.27	0.04	0.13	0.15	0.10	99.39	0	0.07	0.10	100.00	100.00	98.97	77.53	100.00	100.00
56		TATA CDMA	0.02	0.00	98.80	0.00	0.11	0.10	0.00	98.52	0	0.00	0.00	100.00	100.00	97.22	97.03	100.00	100.00
		TATA GSM	0.00	0.00	98.76	0.00	0.00	1.53	0.00	97.38	0	0.00	0.00	100.00	100.00	99.37	95.70	100.00	100.00
57	Vodafone	0.03	0.02	99.83	0.05	0.17	0.67	1.41	97.59	0	0.00	0.04	100.00	100.00	100.00	99.28	100.00	100.00	
58	HR	Airtel	0.21	0.00	96.84	0.23	0.00	1.93	2.38	98.94	0	0.00	0.00	100.00	100.00	100.00	92.89	100.00	100.00
59		Airtel	0.05	0.00	99.39	0.07	0.08	0.44	0.55	99.14	0	0.04	0.04	100.00	100.00	100.00	95.00	100.00	100.00
60		BSNL	1.53	1.27	98.00	0.13	0.47	1.27	2.30	97.17	0	0.10	0.10	100.00	100.00	100.00	86.70	100.00	100.00
61		Idea	0.01	0.00	99.98	0.37	0.35	0.54	1.64	98.24	0	0.10	0.01	100.00	100.00	99.99	96.30	100.00	100.00
62		RCOM CDMA	0.15	0.17	99.14	0.00	0.02	0.02	0.16	99.77	0	0.10	0.05	100.00	100.00	99.20	90.98	100.00	100.00
		RCOM GSM	0.13	0.06	99.78	0.02	0.04	0.15	0.09	99.16	0	0.08	0.09	100.00	100.00	98.84	75.10	100.00	100.00
63		TATA CDMA	0.02	0.00	98.46	0.00	0.17	0.31	1.09	99.20	0	0.00	0.00	100.00	100.00	97.06	96.10	100.00	100.00
		TATA GSM	0.05	0.00	98.87	0.03	0.39	0.44	0.34	98.09	0	0.00	0.00	100.00	100.00	99.30	90.46	100.00	100.00
64	Videocon	0.13	0.22	98.53	0.09	0.17	0.62	1.55	98.42	0	NA	0.08	100.00	100.00	96.75	91.00	NA	NA	
65	Vodafone	0.08	0.35	99.81	0.08	0.19	0.70	0.98	97.68	0	0.04	0.00	100.00	100.00	100.00	91.45	100.00	100.00	
66	J&K	Airtel	0.46	1.94	95.22	0.44	1.91	0.85	2.81	95.36	0	0.01	0.01	100.00	100.00	100.00	94.91	100.00	100.00
67		Airtel	0.05	0.12	99.18	0.08	0.11	0.73	1.17	98.90	0	0.03	0.03	100.00	100.00	92.00	91.00	100.00	100.00
68		BSNL	1.93	1.83	98.33	0.67	1.67	1.77	2.80	97.00	0	0.00	0.00	100.00	100.00	100.00	94.00	100.00	100.00
69		Idea	0.37	1.85	99.50	0.11	0.21	1.02	2.70	95.17	0	0.02	0.02	100.00	100.00	95.83	96.88	100.00	100.00
70		RCOM GSM	0.37	0.68	99.52	0.02	0.10	0.11	0.14	99.08	0	0.09	0.10	100.00	100.00	98.83	92.52	100.00	100.00
71	Vodafone	0.07	0.42	99.64	0.03	0.36	0.73	2.76	98.03	0	0.17	0.05	100.00	100.00	100.00	97.94	100.00	100.00	

### Annexure 4.1 (Contd.)

72	KOL	Aircel	0.51	1.87	96.82	0.72	0.37	0.94	1.83	96.91	1	0.04	0.00	100.00	100.00	100.00	84.06	100.00	99.00	
73		Airtel	0.02	0.00	99.85	0.03	0.03	0.52	0.09	99.04	0	0.02	0.00	100.00	100.00	100.00	84.00	100.00	100.00	
74		BSNL	1.13	1.90	99.00	0.57	0.70	0.87	2.97	99.80	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
75		Idea	0.45	0.88	99.15	0.13	0.13	0.65	0.38	97.96	0	0.05	0.01	100.00	100.00	99.51	95.63	100.00	100.00	
76		MTS	0.00	0.00	99.75	0.00	0.03	0.53	0.76	99.62	0	0.00	0.06	100.00	100.00	100.00	91.26	100.00	100.00	
77		RCOM CDMA	0.13	0.14	99.24	0.00	0.01	0.06	0.09	99.74	0	0.10	0.10	100.00	100.00	99.17	91.18	100.00	100.00	
78		RTL	0.15	0.22	99.31	0.01	0.02	0.05	0.05	99.35	0	0.09	0.10	100.00	100.00	98.94	96.05	100.00	100.00	
79		TATA CDMA	0.07	0.00	98.50	0.00	0.06	0.65	2.49	98.01	0	0.00	0.00	100.00	100.00	99.63	93.73	100.00	100.00	
		TATA GSM	0.06	0.08	98.54	0.06	0.17	0.90	1.23	97.80	0	0.00	0.00	100.00	100.00	99.39	86.92	100.00	100.00	
80	Vodafone	0.08	0.39	99.60	0.11	0.40	0.74	1.91	98.11	0	0.07	0.13	100.00	100.00	100.00	95.62	100.00	100.00		
81	KR	Aircel	0.61	0.94	99.66	0.09	0.02	0.95	1.95	98.61	0	0.00	0.00	100.00	100.00	100.00	19.08	100.00	100.00	
82		Airtel	0.02	0.00	99.89	0.01	0.01	0.15	0.54	99.90	0	0.02	0.05	100.00	100.00	100.00	90.00	100.00	100.00	
83		BSNL	1.07	1.13	98.00	0.47	1.97	0.63	2.30	99.27	0	0.00	0.00	100.00	100.00	100.00	97.60	100.00	100.00	
84		Idea	0.26	0.76	99.93	0.25	0.69	0.52	1.18	96.57	0	0.10	0.07	100.00	100.00	98.70	92.91	100.00	100.00	
85		MTS	0.05	0.00	99.37	0.00	0.00	0.31	2.33	100.00	0	0.00	0.03	100.00	100.00	95.00	98.92	NA	NA	
86		RCOM CDMA	0.07	0.00	99.39	0.00	0.00	0.00	0.01	99.74	0	0.08	0.01	100.00	100.00	99.36	91.71	100.00	100.00	
			RCOM GSM	0.07	0.05	99.81	0.00	0.02	0.12	0.07	99.39	0	0.09	0.10	100.00	100.00	99.04	83.18	100.00	100.00
87		TATA CDMA	0.01	0.00	98.90	0.00	0.19	0.44	1.34	99.13	0	0.00	0.00	100.00	100.00	99.44	95.95	100.00	100.00	
		TATA GSM	0.01	0.03	98.95	0.01	0.04	0.57	0.87	98.14	0	0.00	0.00	100.00	100.00	98.54	93.91	100.00	100.00	
88	Vodafone	0.04	0.08	99.40	0.16	0.60	0.68	0.69	96.66	0	0.09	0.00	100.00	100.00	100.00	95.54	100.00	100.00		
89	KTK	Aircel	0.08	0.09	99.35	0.03	0.05	0.93	2.31	98.13	0	0.02	0.00	100.00	100.00	100.00	75.85	100.00	99.67	
90		Airtel	0.30	0.89	99.48	0.15	0.12	0.22	0.92	99.42	0	0.03	0.07	100.00	100.00	100.00	91.00	100.00	100.00	
91		BSNL	1.50	1.93	97.33	0.23	1.30	1.23	2.37	96.47	0	0.10	0.10	100.00	100.00	99.00	91.80	100.00	100.00	
92		Idea	0.09	0.36	98.19	0.22	0.71	0.82	2.16	97.25	0	0.09	0.02	100.00	100.00	99.44	99.20	100.00	100.00	
93		MTS	0.05	0.00	99.08	0.00	0.39	0.26	0.68	98.26	0	0.09	0.01	100.00	100.00	95.99	91.63	100.00	100.00	
94		RCOM CDMA	0.36	0.62	99.37	0.00	0.01	0.01	0.03	99.77	0	0.10	0.04	100.00	100.00	98.79	85.18	100.00	100.00	
			RCOM GSM	0.32	0.29	99.69	0.03	0.05	0.08	0.09	99.14	0	0.10	0.10	100.00	100.00	98.77	79.53	100.00	100.00
95		TATA CDMA	0.04	0.00	99.17	0.00	0.02	0.14	0.06	98.38	0	0.00	0.00	100.00	100.00	99.67	95.92	100.00	100.00	
		TATA GSM	0.06	0.06	98.84	0.02	0.10	0.64	2.39	98.41	0	0.00	0.00	100.00	100.00	99.57	88.50	100.00	100.00	
96	Vodafone	0.23	1.34	99.59	0.16	0.41	0.74	2.48	98.27	0	0.09	0.08	100.00	100.00	100.00	91.26	100.00	100.00		
97	MBI	Aircel	0.09	0.44	98.38	0.08	0.08	0.81	1.59	98.03	0	0.21	0.63	99.99	100.00	100.00	85.67	100.00	100.00	
98		Airtel	0.00	0.00	99.99	0.00	0.00	0.31	0.00	99.96	0	0.02	0.01	100.00	100.00	100.00	89.00	100.00	100.00	
99		Idea	0.02	0.00	99.27	0.13	0.22	1.76	2.57	98.79	0	0.04	0.03	100.00	100.00	99.99	98.08	100.00	100.00	
100		Loop Mobile	0.01	0.00	98.84	0.03	0.03	0.57	0.72	98.04	0	0.01	0.01	100.00	100.00	99.40	98.87	100.00	100.00	
101		MTNL CDMA	0.03	0.54	98.32	0.74	0.01	1.27	1.28	97.50	0	0.08	0.04	100.00	100.00	98.10	92.76	100.00	100.00	
			MTNL GSM	0.60	1.40	97.77	0.04	0.03	0.96	1.93	96.93	0	0.08	0.01	100.00	100.00	95.76	95.32	100.00	100.00
102		RCOM CDMA	0.34	0.30	99.35	0.00	0.01	0.29	0.04	99.49	0	0.10	0.05	100.00	100.00	99.09	71.10	100.00	100.00	
			RCOM GSM	0.32	0.48	99.67	0.02	0.06	0.10	0.28	99.37	0	0.09	0.10	100.00	100.00	99.08	72.87	100.00	100.00
103	TATA CDMA	0.14	0.45	99.22	0.00	0.02	0.55	0.53	97.73	0	0.00	0.00	100.00	100.00	99.62	93.85	100.00	100.00		
		TATA GSM	0.01	0.00	99.62	0.08	0.13	0.84	1.63	98.10	0	0.00	0.00	100.00	100.00	99.49	91.46	100.00	100.00	
104	Vodafone	0.02	0.00	99.58	0.06	0.42	0.85	2.17	97.78	0	0.10	0.03	100.00	100.00	99.89	94.37	100.00	100.00		
105	MH	Aircel	0.03	0.00	99.67	0.02	0.03	0.60	1.92	98.20	0	0.16	0.70	99.99	100.00	100.00	72.18	100.00	100.00	
106		Airtel	0.02	0.02	99.86	0.03	0.03	0.45	0.60	99.30	0	0.02	0.01	100.00	100.00	100.00	90.00	100.00	100.00	
107		BSNL	2.00	1.87	95.33	0.70	2.00	1.93	2.93	96.90	0	NR	NR	NR	NR	NR	NR	NR	NR	
108		Idea	0.33	1.88	98.56	0.57	0.84	1.00	2.29	97.14	0	0.05	0.00	100.00	100.00	98.41	99.57	100.00	100.00	
109		RCOM CDMA	0.40	0.66	99.25	0.00	0.05	0.26	0.02	99.62	0	0.10	0.05	100.00	100.00	98.95	66.80	100.00	100.00	
			RCOM GSM	0.45	0.98	99.52	0.04	0.07	0.14	0.10	99.18	0	0.09	0.10	100.00	100.00	98.88	52.03	100.00	100.00
110		TATA CDMA	0.03	0.05	97.75	0.00	0.79	1.03	2.30	97.11	0	0.00	0.00	100.00	100.00	99.10	94.16	100.00	100.00	
			TATA GSM	0.01	0.00	99.40	0.09	0.20	0.66	2.57	97.56	0	0.00	0.00	100.00	100.00	99.28	94.35	100.00	100.00
111	Uninor	0.23	1.31	98.45	0.12	0.38	0.98	1.41	98.26	0	NA	0.02	100.00	NA	95.85	69.48	NA	NA		
112	Vodafone	0.19	0.89	99.34	0.35	0.66	0.77	2.54	97.43	0	0.03	0.05	100.00	100.00	99.98	96.11	100.00	100.00		

### Annexure 4.1 (Contd.)

113	MP	Aircel	0.77	1.30	98.94	0.08	0.01	0.68	2.34	99.24	0	0.00	0.00	100.00	100.00	100.00	94.12	100.00	100.00
114		Airtel	0.17	0.38	99.42	0.08	0.09	0.52	1.02	98.69	0	0.02	0.00	100.00	100.00	100.00	92.00	100.00	100.00
115		BSNL	1.23	1.77	96.17	0.53	1.18	1.92	2.97	98.65	0	0.05	0.05	100.00	100.00	99.00	94.35	100.00	100.00
116		Idea	<b>4.87</b>	<b>11.34</b>	99.17	0.09	0.23	0.41	2.33	99.08	0	<b>0.15</b>	0.01	100.00	100.00	99.23	94.75	100.00	100.00
117		RCOM CDMA	0.42	0.93	99.23	0.00	0.01	0.06	0.05	99.78	0	0.10	0.07	100.00	100.00	98.70	<b>70.59</b>	100.00	100.00
118		RTL	0.26	0.67	99.22	0.03	0.09	0.11	0.22	99.21	0	0.09	0.10	100.00	100.00	98.71	<b>84.71</b>	100.00	100.00
119		TATA CDMA	0.01	0.00	98.48	0.00	0.17	0.61	1.75	99.18	0	0.00	0.00	100.00	100.00	98.60	95.29	100.00	100.00
		TATA GSM	0.00	0.00	98.47	0.06	0.05	0.67	1.48	98.46	0	0.00	0.00	100.00	100.00	99.41	93.55	100.00	100.00
120		Videocon	0.40	1.37	98.81	0.13	0.30	0.71	1.41	98.60	0	NA	0.01	100.00	100.00	96.29	92.00	NA	NA
121	Vodafone	0.03	0.00	99.57	0.14	0.43	0.84	1.68	98.13	0	0.08	0.04	100.00	100.00	100.00	95.43	100.00	100.00	
122	NE	Aircel	0.77	<b>2.58</b>	97.50	0.50	1.61	1.25	<b>3.20</b>	95.67	0	0.02	0.06	100.00	100.00	100.00	92.19	100.00	100.00
123		Airtel	0.29	0.43	98.87	0.13	0.37	1.06	0.80	98.88	0	0.00	0.01	100.00	100.00	100.00	94.00	100.00	100.00
124		BSNL	1.47	<b>3.90</b>	97.50	0.97	1.92	<b>2.20</b>	2.87	96.62	0	0.05	0.05	100.00	100.00	<b>48.50</b>	<b>46.30</b>	100.00	100.00
125		Idea	1.76	0.95	95.64	0.63	1.87	1.76	2.86	95.17	0	0.00	0.00	100.00	100.00	97.43	96.66	100.00	100.00
126		RTL	0.40	0.60	99.18	0.04	0.13	0.16	0.45	99.18	0	0.09	0.09	100.00	100.00	98.80	92.93	100.00	100.00
127		Vodafone	1.78	1.81	99.35	0.23	0.65	0.83	2.82	97.10	0	0.02	0.03	100.00	100.00	99.94	<b>75.30</b>	100.00	100.00
128	OR	Aircel	0.11	0.76	98.14	0.44	1.33	1.09	2.86	95.47	0	0.01	0.00	100.00	100.00	100.00	95.84	100.00	100.00
129		Airtel	0.11	0.73	99.49	0.06	0.14	0.52	0.82	99.00	0	0.00	0.01	100.00	100.00	100.00	<b>89.00</b>	100.00	100.00
130		BSNL	0.70	0.30	98.00	0.87	1.83	1.97	2.73	98.00	0	0.00	0.00	100.00	100.00	0.00	0.00	100.00	100.00
131		Idea	0.23	0.66	98.89	0.16	0.14	0.27	1.18	95.91	0	0.03	0.00	100.00	100.00	98.76	99.81	100.00	100.00
132		RCOM CDMA	0.32	0.13	99.44	0.00	0.01	0.04	0.03	99.80	0	0.09	0.07	100.00	100.00	98.39	93.61	100.00	100.00
133		RTL	0.05	0.00	99.29	0.14	0.12	0.11	0.26	99.21	0	0.09	0.09	100.00	100.00	98.93	92.29	100.00	100.00
134		TATA CDMA	0.05	0.00	98.29	0.00	0.13	0.38	0.67	99.13	0	0.00	0.00	100.00	100.00	99.83	94.76	100.00	100.00
		TATA GSM	0.03	0.14	99.34	0.03	0.12	0.41	0.11	97.96	0	0.00	0.00	100.00	100.00	96.68	94.76	100.00	100.00
135		Vodafone	0.10	0.17	98.79	0.19	1.21	0.91	2.18	98.06	0	<b>0.54</b>	0.08	100.00	100.00	99.99	96.28	100.00	100.00
136	PB	Aircel	0.17	0.00	98.35	0.02	0.11	0.64	1.47	98.01	0	0.00	0.00	100.00	100.00	100.00	<b>70.64</b>	<b>99.25</b>	100.00
137		Airtel	0.04	0.04	99.32	0.04	0.11	0.55	0.90	99.01	0	0.04	0.02	100.00	100.00	<b>86.00</b>	94.00	100.00	100.00
138		BSNL	0.25	1.60	98.36	0.77	1.11	1.92	2.90	95.00	0	0.00	0.10	100.00	100.00	100.00	<b>87.00</b>	100.00	100.00
139		Idea	0.07	0.06	98.47	0.14	0.44	0.63	0.78	98.02	0	0.02	0.01	100.00	100.00	99.90	98.58	100.00	100.00
140		QTL GSM	0.11	0.18	98.54	0.08	0.11	0.86	1.40	97.91	0	0.00	0.03	100.00	100.00	95.08	90.00	NA	NA
		QTL CDMA	0.67	0.00	98.07	0.78	1.38	1.52	0.79	97.63	0	0.00	0.00	100.00	100.00	100.00	95.00	100.00	100.00
141		RCOM CDMA	0.10	0.00	99.21	0.00	0.01	0.01	0.01	99.70	0	0.10	0.04	100.00	100.00	99.11	<b>81.42</b>	100.00	100.00
		RCOM GSM	0.10	0.12	99.57	0.02	0.07	0.11	0.18	99.40	0	0.09	0.09	100.00	100.00	99.04	<b>78.83</b>	100.00	100.00
142		TATA CDMA	0.04	0.00	98.73	0.00	0.10	0.58	0.72	99.21	0	0.00	0.00	100.00	100.00	99.46	96.43	100.00	100.00
	TATA GSM	0.07	0.10	99.32	0.00	0.02	0.47	0.76	97.93	0	0.00	0.00	100.00	100.00	99.43	95.75	100.00	100.00	
143	Vodafone	0.07	0.14	99.81	0.07	0.19	0.64	1.47	97.79	0	<b>0.14</b>	0.01	100.00	100.00	100.00	99.35	100.00	100.00	
144	RAJ	Aircel	0.08	0.10	96.97	0.11	0.68	0.69	0.52	97.47	0	0.01	0.00	100.00	100.00	100.00	<b>82.55</b>	100.00	100.00
145		Airtel	0.13	0.27	99.21	0.21	0.48	1.25	2.51	98.93	0	0.01	0.01	100.00	100.00	100.00	92.00	100.00	100.00
146		BSNL	1.97	1.97	99.00	0.37	1.33	1.70	2.93	98.37	0	0.00	0.10	100.00	100.00	99.00	93.00	100.00	100.00
147		Idea	0.13	0.12	98.72	0.45	0.83	1.18	2.23	95.96	0	0.09	0.05	100.00	100.00	98.73	98.86	100.00	<b>94.47</b>
148		MTS	0.10	0.00	98.90	0.00	0.38	0.85	1.47	98.52	0	0.04	0.01	100.00	100.00	99.60	<b>84.32</b>	100.00	100.00
149		RCOM CDMA	0.44	0.84	99.28	0.00	0.00	0.04	0.04	99.72	0	0.10	0.06	100.00	100.00	98.54	<b>77.46</b>	100.00	100.00
		RCOM GSM	0.30	0.79	99.60	0.03	0.09	0.12	0.12	99.33	0	0.09	0.10	100.00	100.00	98.98	<b>41.82</b>	100.00	100.00
150		TATA CDMA	0.04	0.00	98.65	0.00	0.33	0.51	2.16	99.58	0	0.00	0.00	100.00	100.00	99.62	96.44	100.00	100.00
		TATA GSM	0.04	0.02	98.34	0.02	0.02	0.63	0.81	98.84	0	0.00	0.00	100.00	100.00	99.41	97.18	100.00	100.00
151	Vodafone	0.41	1.79	99.86	0.12	0.14	0.70	0.75	97.29	0	0.09	0.06	100.00	100.00	100.00	94.78	100.00	100.00	

### Annexure 4.1 (Contd.)

152	TN	Aircel	0.78	0.28	98.61	0.75	0.97	0.50	1.15	95.05	0	0.01	0.00	100.00	100.00	100.00	71.93	100.00	100.00
153		Airtel	0.01	0.01	99.89	0.02	0.01	0.13	0.16	99.53	0	0.02	0.00	100.00	100.00	100.00	94.00	100.00	100.00
154		BSNL	0.50	1.60	98.00	0.10	0.27	0.60	1.80	99.00	0	0.00	0.00	100.00	100.00	100.00	97.00	100.00	100.00
155		Idea	0.02	0.00	99.74	0.05	0.08	0.44	0.56	97.17	0	0.13	0.02	100.00	100.00	99.49	99.15	100.00	100.00
156		MTS	0.05	0.00	99.31	0.00	0.00	0.40	1.97	99.50	0	0.00	0.01	100.00	100.00	98.51	91.95	NA	NA
157		RCOM CDMA	0.27	0.27	99.32	0.00	0.00	0.02	0.02	99.78	0	0.09	0.03	100.00	100.00	97.50	86.15	100.00	100.00
		RCOM GSM	0.28	0.28	99.65	0.03	0.07	0.04	0.04	99.35	0	0.09	0.10	100.00	100.00	98.83	80.16	100.00	100.00
158		TATA CDMA	0.03	0.00	98.53	0.00	0.29	0.52	1.74	98.95	0	0.00	0.00	100.00	100.00	99.34	95.65	100.00	100.00
		TATA GSM	0.09	0.27	98.64	0.04	0.02	0.53	0.67	98.53	0	0.00	0.00	100.00	100.00	99.31	91.30	100.00	100.00
159	Vodafone	0.08	0.41	99.66	0.13	0.34	0.68	1.08	97.78	0	0.01	0.00	100.00	100.00	100.00	95.49	100.00	100.00	
160	UPE	Aircel	0.50	1.86	98.94	0.78	0.53	0.48	0.58	96.10	0	0.03	0.00	100.00	100.00	100.00	60.85	100.00	100.00
161		Airtel	1.71	0.38	99.57	0.07	0.20	0.77	2.66	98.61	0	0.02	0.01	100.00	100.00	99.00	95.00	100.00	100.00
162		BSNL	0.96	1.74	97.00	0.70	1.57	1.63	2.70	96.67	0	0.08	0.07	100.00	100.00	97.00	98.00	100.00	100.00
163		Idea	0.13	0.56	99.97	0.86	1.92	1.00	2.95	96.51	0	0.12	0.01	100.00	100.00	99.72	95.69	100.00	100.00
164		RCOM CDMA	0.46	0.90	99.12	0.00	0.02	0.06	0.02	99.78	0	0.10	0.10	100.00	100.00	97.54	76.05	100.00	100.00
		RCOM GSM	0.33	0.85	99.25	0.06	0.08	0.15	0.17	99.28	0	0.09	0.10	100.00	100.00	99.08	55.48	100.00	100.00
165		TATA CDMA	0.03	0.00	98.68	0.00	0.11	0.34	2.64	98.85	0	0.00	0.00	100.00	100.00	98.99	95.70	100.00	100.00
		TATA GSM	0.03	0.00	98.02	0.11	0.78	0.73	1.42	97.51	0	0.00	0.00	100.00	100.00	99.37	92.66	100.00	100.00
166		Uninor	0.34	1.32	95.72	0.50	1.92	1.23	2.11	96.24	0	NA	0.00	100.00	NA	96.72	89.60	NA	NA
167	Vodafone	0.44	2.37	99.27	0.31	0.73	1.11	1.68	96.62	0	0.11	0.11	100.00	100.00	100.00	90.81	100.00	100.00	
168	Videocon	0.06	0.00	99.71	0.73	0.00	0.26	0.00	99.21	0	NA	0.00	100.00	100.00	100.00	NA	NA	NA	
169	UPW	Aircel	0.24	0.57	98.91	0.21	0.61	0.44	2.79	97.59	0	0.00	0.00	100.00	100.00	100.00	13.06	100.00	100.00
170		Airtel	0.15	0.69	99.50	0.10	0.24	0.49	0.54	99.55	0	0.03	0.01	100.00	100.00	100.00	92.00	100.00	100.00
171		BSNL	1.53	6.70	96.83	0.93	1.48	1.90	3.17	96.75	0	0.00	0.00	100.00	100.00	97.50	95.00	100.00	100.00
172		Idea	0.10	0.53	99.87	0.67	0.87	0.87	2.90	99.91	0	0.05	0.00	100.00	100.00	99.45	94.20	100.00	92.98
173		MTS	0.27	0.00	99.18	0.00	0.00	0.52	1.45	99.23	0	0.21	0.01	100.00	100.00	100.00	98.34	100.00	100.00
174		RCOM CDMA	0.41	0.85	99.05	0.00	0.03	0.07	0.04	99.79	0	0.10	0.10	100.00	100.00	97.81	93.03	100.00	100.00
		RCOM GSM	0.33	0.80	99.52	0.04	0.06	0.11	0.19	99.10	0	0.09	0.10	100.00	100.00	98.87	92.97	100.00	100.00
175		TATA CDMA	0.03	0.00	98.97	0.00	0.13	0.53	0.30	97.84	0	0.00	0.00	100.00	100.00	99.12	96.65	100.00	100.00
		TATA GSM	0.07	0.02	98.91	0.06	0.19	0.61	1.66	98.05	0	0.00	0.00	100.00	100.00	99.49	93.25	100.00	100.00
176	Uninor	0.26	1.19	96.19	0.49	1.95	1.21	1.64	95.20	0	NA	0.03	100.00	NA	96.94	96.67	NA	NA	
177	Videocon	0.41	1.11	99.73	0.11	0.81	0.39	0.00	98.53	0	NA	0.00	100.00	100.00	100.00	NA	NA	NA	
178	Vodafone	0.19	0.99	99.35	0.22	0.65	0.83	1.73	97.36	0	0.04	0.00	100.00	100.00	100.00	94.63	100.00	100.00	
179	WB	Aircel	1.13	1.82	95.85	0.79	1.94	1.81	2.98	95.08	0	0.00	0.01	100.00	100.00	100.00	90.59	100.00	100.00
180		Airtel	0.07	0.15	99.54	0.05	0.07	0.55	0.85	99.56	0	0.01	0.00	100.00	100.00	100.00	83.00	100.00	100.00
181		BSNL	1.70	1.90	98.33	0.57	1.10	1.10	3.12	97.32	0	0.10	0.10	100.00	100.00	0.00	0.00	100.00	100.00
182		Idea	0.14	0.55	97.61	0.09	0.63	0.82	2.21	95.84	0	0.03	0.01	100.00	100.00	99.47	96.71	100.00	100.00
183		MTS	0.18	0.51	99.29	0.00	0.31	0.92	2.52	99.41	0	0.00	0.05	100.00	100.00	100.00	91.51	100.00	100.00
184		RCOM CDMA	0.30	0.64	99.25	0.00	0.02	0.08	0.08	99.68	0	0.08	0.10	100.00	100.00	98.82	91.18	100.00	100.00
185		RTL	0.29	0.38	99.31	0.02	0.11	0.09	0.15	99.26	0	0.08	0.10	100.00	100.00	98.93	93.15	100.00	100.00
186		TATA CDMA	0.05	0.00	97.93	0.00	0.35	0.44	1.27	99.01	0	0.00	0.00	100.00	100.00	95.98	83.80	100.00	100.00
		TATA GSM	0.01	0.00	98.46	0.06	0.40	0.68	1.60	98.00	0	0.00	0.00	100.00	100.00	96.44	93.19	100.00	100.00
187	Vodafone	0.04	0.11	98.98	0.56	1.02	0.97	1.35	95.64	0	0.04	0.07	100.00	100.00	100.00	93.76	100.00	100.00	

Notes:

NA-Not Applicable

NR- Not Reported

RCOM CDMA & RCOM GSM- Chennai included in Tamilnadu for network related parameters only.

RCOM GSM- Percentage of calls answered by the operators has been reported combined for Tamilnadu and Chennai for customer related parameters only.

RCOM CDMA-Percentage of calls answered by the operators has been reported combined for TN and CH for customer related parameters only.

Percentage of calls answered by the operators has been reported combined for WB and KOL for customer related parameters only.

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

Performance Monitoring Report on Quality of Service of Cellular Mobile Service Providers for quarter ending, June , 2013

Name of the Service Provider	Name of Service Area / City	Network Availability		Connection Establishment (Accessibility)			Connection Maintenance (Retainability)			POI
		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
	<b>Benchmark</b>	≤ 2%	≤ 2%	≥ 95%	≤ 1%	≤ 2%	≤ 2%	≤ 3%	≥ 95%	≤ 0.5%
AP	<b>Aircel</b>	0.07	0.15	99.17	0.58	0.24	0.43	2.52	99.76	0
	<b>Airtel</b>	0.17	0.21	98.97	0.26	0.00	0.60	2.44	99.17	0
	<b>Idea</b>	0.02	0.00	98.68	0.08	0.61	0.43	2.95	99.42	0
ASM	<b>Aircel</b>	0.56	1.84	99.19	0.17	0.03	1.10	2.39	99.31	0
	<b>Airtel</b>	0.31	1.32	98.63	0.44	0.35	0.66	1.41	99.18	0
	<b>RTL</b>	1.39	1.21	98.45	0.02	0.02	0.60	1.64	99.86	0
BH	<b>Aircel</b>	1.61	<b>3.56</b>	99.06	0.28	0.09	1.15	<b>12.13</b>	99.16	0
	<b>Airtel</b>	0.01	0.24	99.34	0.02	0.23	0.41	0.13	99.63	0
	<b>RTL</b>	1.44	1.13	98.00	0.04	0.35	0.57	1.65	99.86	0
CHN	<b>Airtel</b>	<b>2.41</b>	0.00	98.35	0.83	0.35	1.11	<b>12.04</b>	98.25	0
	<b>Airtel</b>	0.02	0.00	99.88	0.01	0.03	0.16	0.03	99.74	0
	<b>Vodafone</b>	0.08	0.32	99.80	0.11	0.03	0.28	0.55	99.00	0
DLI	<b>Airtel</b>	0.24	1.24	98.76	0.14	0.04	0.65	2.49	99.10	0
	<b>MTNL</b>	0.84	1.82	95.82	0.34	1.74	1.54	2.45	96.33	0
	<b>RCOM</b>	1.01	0.85	99.21	0.18	0.17	0.74	1.05	99.80	0
	<b>Vodafone</b>	0.05	0.00	97.49	0.01	0.00	0.93	<b>3.58</b>	99.11	0
GJ	<b>Idea</b>	0.04	0.00	99.88	0.02	0.01	0.59	1.43	99.14	0
	<b>Tata</b>	0.01	0.00	99.49	0.02	0.13	0.64	1.09	99.78	0
	<b>Vodafone</b>	0.03	0.09	99.85	0.01	0.00	0.21	0.12	99.07	0
HP	<b>Airtel</b>	0.01	0.00	99.03	0.01	0.00	0.88	2.21	99.09	0
	<b>Idea</b>	0.34	0.00	99.68	0.53	0.12	1.08	2.10	99.03	0
	<b>RTL</b>	0.88	0.58	98.80	0.00	0.00	0.54	1.12	99.57	0
HR	<b>Idea</b>	0.01	0.00	99.76	0.04	0.00	0.30	2.01	99.01	0
	<b>Tata</b>	0.05	0.00	99.70	0.11	0.09	0.19	0.00	99.28	0
	<b>Vodafone</b>	0.20	0.73	99.90	0.01	0.00	0.24	0.18	99.06	0
J&K	<b>Aircel</b>	0.10	0.94	98.70	0.43	0.09	1.33	<b>5.37</b>	99.10	0
	<b>Airtel</b>	0.19	0.14	98.94	0.00	0.00	1.10	1.65	99.07	0
	<b>RCOM</b>	1.26	1.08	99.44	0.05	0.07	0.75	1.56	99.75	0
	<b>Idea</b>	0.32	1.18	99.84	0.12	0.03	1.42	1.51	99.09	0
KOL	<b>Aircel</b>	0.67	1.88	99.59	0.12	0.00	0.24	0.36	99.22	<b>1</b>
	<b>RTL</b>	0.67	0.95	98.74	0.10	0.02	0.59	0.96	99.88	0
	<b>Vodafone</b>	0.06	0.08	99.82	0.06	0.03	0.53	1.22	99.11	0
KR	<b>Aircel</b>	0.00	0.00	100.00	0.00	0.01	0.08	0.02	99.93	0
	<b>Tata</b>	0.01	0.00	99.70	0.01	0.02	0.41	0.58	99.78	0
	<b>Idea</b>	0.16	0.30	99.85	0.04	0.08	0.17	1.47	99.99	0



**Annexure 4.2 (Contd.)**

KTK	<b>Aircel</b>	0.18	0.17	99.27	0.37	0.36	0.62	2.46	99.24	0
	<b>Airtel</b>	0.07	0.03	98.61	0.10	0.32	0.37	2.07	99.73	0
	<b>Tata</b>	0.06	0.08	99.31	0.35	0.07	0.37	0.72	99.21	0
MBI	<b>Airtel</b>	0.03	0.00	99.88	0.00	0.01	0.26	0.68	99.84	0
	<b>MTNL</b>	0.77	1.63	98.50	0.01	0.21	1.22	2.06	98.40	0
	<b>RCOM</b>	0.82	0.84	99.45	0.03	0.07	0.83	0.91	99.77	0
	<b>Vodafone</b>	0.03	0.02	99.58	0.01	0.00	0.79	2.53	99.09	0
MH	<b>Idea</b>	0.12	0.16	99.79	0.18	0.06	1.04	2.91	98.81	0
	<b>Tata</b>	0.01	0.00	98.23	0.00	0.13	0.42	2.78	99.92	0
	<b>Vodafone</b>	0.18	0.37	99.80	0.03	0.00	0.45	1.16	99.02	0
MP	<b>Idea</b>	0.08	0.08	99.85	0.05	0.03	0.60	1.75	99.16	0
	<b>RTL</b>	0.77	1.15	98.77	0.02	0.04	0.52	1.72	99.88	0
	<b>Tata</b>	0.01	0.00	99.60	0.06	0.01	0.68	2.57	99.84	0
NE	<b>Aircel</b>	0.68	1.65	98.75	0.32	0.04	1.90	2.45	99.16	0
	<b>Airtel</b>	1.14	1.26	97.42	0.55	1.02	1.59	1.21	98.93	0
	<b>RTL</b>	1.55	1.23	98.41	0.00	0.20	1.30	1.73	99.81	0
OR	<b>Aircel</b>	0.15	0.69	99.15	0.13	0.03	1.10	<b>12.97</b>	99.43	0
	<b>RTL</b>	0.87	1.05	98.61	0.00	0.00	0.52	1.18	99.89	0
PB	<b>Aircel</b>	0.15	0.43	99.59	0.15	0.00	0.59	<b>11.58</b>	98.05	0
	<b>RCOM</b>	0.44	0.79	99.39	0.11	0.13	0.69	1.00	99.80	0
	<b>Tata</b>	0.10	0.15	99.72	0.12	0.04	0.24	0.10	99.25	0
RAJ	<b>Airtel</b>	0.11	0.23	99.48	0.10	0.10	0.39	2.07	99.17	0
	<b>RCOM</b>	0.45	0.63	99.57	0.07	0.08	0.55	0.81	99.78	0
	<b>Tata</b>	0.00	0.00	99.77	0.00	0.01	0.48	1.42	99.83	0
TN	<b>Aircel</b>	1.39	0.00	98.94	0.37	0.51	1.02	<b>11.30</b>	98.56	0
	<b>Airtel</b>	0.01	0.00	99.93	0.01	0.01	0.13	0.05	99.77	0
	<b>Vodafone</b>	0.05	0.06	99.63	0.02	0.00	0.27	1.02	99.16	0
UPE	<b>Aircel</b>	0.69	1.61	99.11	0.08	0.00	0.38	1.83	99.63	0
	<b>Idea</b>	0.28	1.50	99.72	0.11	0.03	0.24	2.92	99.21	0
	<b>Vodafone</b>	0.17	0.54	99.89	0.01	0.00	0.19	0.39	99.07	0
UPW	<b>Airtel</b>	0.34	0.97	99.33	0.14	0.00	0.77	1.44	99.06	0
	<b>Idea</b>	0.09	0.24	99.68	0.17	0.07	0.21	2.17	99.26	0
	<b>Tata</b>	0.07	0.00	99.71	0.20	0.05	0.22	0.38	99.29	0
WB	<b>Aircel</b>	0.95	1.44	99.10	0.07	0.00	0.37	1.55	99.03	0
	<b>Airtel</b>	0.33	1.16	99.56	0.03	0.29	0.42	2.83	99.62	0
	<b>RTL</b>	0.95	0.98	98.49	0.09	0.05	0.64	1.59	99.88	0
	<b>Vodafone</b>	0.25	1.66	99.85	0.00	0.00	0.35	1.66	99.03	0

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

Performance Monitoring Report of Basic Service (Wireline) for Quarter Ending June, 2013																		
Sl. No.	Name of Service Area	Name of Service Provider	Faults incidences (No. of faults/100 Subs./month)	Fault Repair			Mean Time to Repair (MTTR)	Call Completion Rate (CCR)	Answer to Seizure Ratio	POI Point of Interconnection (POI) Congestion (No. of POIs not meeting the benchmark)	Metering and Billing				Response time to the customer for Assistance		Termination / closure of service	
				% of faults repaired by next working day	% of faults repaired within 3 days	% of faults repaired within 5 days					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 seconds	%age requests for Termination / Closure of service complied within 7 days	Time taken for refund of deposits after closures
				≤ 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	<b>A &amp; N</b>	BSNL	3.33	<b>78.62%</b>	<b>95.16%</b>	<b>97.94%</b>	7.75	66.36%	NA	NR	0.00%	0.00%	100.00%	NR	100.00%	93.67%	100.00%	100.00%
2	<b>AP</b>	Bharti	2.51	94.02%	100.00%	NA	3.06	94.46%	NA	0.00	0.02%	NA	100.00%	100.00%	99.00%	91.00%	100.00%	100.00%
3		TTSL	4.18	99.01%	100.00%	100.00%	5.46	92.95%	NA	NA	0.05%	NA	100.00%	NA	98.86%	91.47%	100.00%	100.00%
4		Reliance	0.29	100.00%	100.00%	NA	1.29	NA	88.09%	0.00%	0.02%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
5		BSNL	4.94	<b>78.33%</b>	<b>88.79%</b>	<b>99.54%</b>	5.59	68.34%	NA	NR	0.00%	0.00%	NIL	100.00%	98.25%	<b>63.00%</b>	<b>97.39%</b>	100.00%
6		Vodafone	0.18	96.77%	NA	NA	2.52	91.71%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	100.00%	NA
7	<b>ASM</b>	TTSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
8		BSNL	3.67	96.89%	100.00%	100.00%	3.18	69.58%	NA	NR	0.02%	NR	NR	NR	NR	NR	100.00%	100.00%
9		Vodafone	2.14	97.62%	NA	NA	2.58	98.12%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	NA	NA
10	<b>BH</b>	BSNL	2.62	94.75%	100.00%	100.00%	5.48	56.27%	NA	NR	0.00%	0.00%	100.00%	100.00%	NR	NR	100.00%	100.00%
11		Vodafone	1.51	100.00%	NA	NA	2.47	92.17%	NA	0.00%	0.00%	NA	NA	100.00%	97.00%	100.00%	NA	
12		TTSL	0.87	96.67%	100.00%	100.00%	2.72	90.82%	NA	NA	NA	NA	NA	NA	99.20%	91.85%	100.00%	NA
13		Reliance	NIL	NA	NA	NA	NA	NA	97.10%	0.00%	NIL	NA	NIL	NIL	97.00%	92.95%	100.00%	100.00%
14	<b>Chhattisgarh</b>	BSNL	3.97	96.71%	<b>96.85%</b>	<b>95.86%</b>	<b>11.29</b>	70.22%	NA	NR	0.15%	0.02%	100.00%	100.00%	NR	<b>56.00%</b>	100.00%	100.00%
15	<b>CN</b>	TTSL	0.41	100.00%	100.00%	100.00%	5.94	99.48%	NA	NA	0.03%	NA	100.00%	NA	98.78%	91.28%	100.00%	NA
16		Reliance	0.15	100.00%	100.00%	NA	2.48	NA	86.76%	0.00%	0.03%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
17		BSNL	<b>7.85</b>	<b>66.81%</b>	<b>71.95%</b>	<b>78.08%</b>	<b>78.06</b>	85.84%	NA	NR	0.02%	0.00%	100.00%	100.00%	98.60%	<b>63.67%</b>	<b>69.95%</b>	<b>76.59%</b>
18		Vodafone	0.78	98.28%	NA	NA	3.23	94.32%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	NA	NA
19	<b>DEL</b>	Bharti	2.97	94.78%	100.00%	NA	4.93	94.40%	NA	0.00	0.00	NA	100.00%	100.00%	<b>94.00%</b>	<b>79.00%</b>	100.00%	100.00%
20		Vodafone	0.22	100.00%	NA	NA	1.01	100.00%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	100.00%	NA
21	<b>DEL</b>	MTNL	<b>8.35</b>	<b>87.37%</b>	<b>95.56%</b>	NA	3.83	55.57%	NA	0.00%	0.04%	NA	<b>95.97%</b>	<b>DNF</b>	99.82%	98.96%	<b>90.63%</b>	100.00%
22		TTSL	1.55	100.00%	100.00%	100.00%	3.73	98.22%	NA	NA	0.08%	NA	100.00%	NA	99.56%	91.94%	100.00%	NA
23		Reliance	0.16	100.00%	100.00%	NA	1.17	NA	92.54%	0.00%	0.02%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
24	<b>GUJ</b>	Bharti	1.12	96.89%	100.00%	NA	3.29	90.34%	NA	0.00	0.01%	NA	100.00%	100.00%	100.00%	<b>86.00%</b>	100.00%	100.00%
25		TTSL	2.22	98.22%	100.00%	100.00%	6.01	58.93%	NA	NA	0.05%	NA	100.00%	NA	99.06%	90.95%	100.00%	100.00%
26		Reliance	0.75	100.00%	100.00%	NA	0.25	NA	85.86%	0.00%	0.03%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
27		BSNL	4.87	94.54%	100.00%	100.00%	5.75	70.13%	NA	NR	0.02%	0.00%	100.00%	100.00%	NR	NR	100.00%	100.00%
28		Vodafone	0.60	100.00%	NA	NA	3.06	98.67%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	100.00%	NA

### Annexure 4.3 (Contd.)

29	HP	TTSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
30		Reliance	NIL	NA	NA	NA	NA	79.68%	0.00%	NA	NA	NIL	NIL	97.00%	92.95%	100.00%	100.00%	
31		BSNL	4.87	94.14%	<b>98.77%</b>	<b>99.52%</b>	6.07	70.57%	NA	NR	0.00%	0.00%	100.00%	100.00%	<b>94.11%</b>	<b>82.33%</b>	100.00%	100.00%
32		Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	97.00%	100.00%	NA	NA	
33	HR	Bharti	4.39	98.37%	100.00%	NA	3.53	95.29%	NA	0.00	0.01%	NA	100.00%	100.00%	100.00%	<b>79.00%</b>	100.00%	100.00%
34		TTSL	0.26	100.00%	100.00%	100.00%	5.28	99.98%	NA	NA	0.05%	NA	100.00%	NA	98.88%	90.49%	NA	NA
35		Reliance	NIL	NA	NA	NA	NA	NA	84.71%	0.00%	NIL	NA	NIL	NIL	97.00%	92.95%	100.00%	100.00%
36		BSNL	4.59	97.90%	100.00%	100.00%	6.14	78.97%	NA	NR	0.11%	NIL	100.00%	100.00%	<b>94.10%</b>	<b>36.33%</b>	100.00%	100.00%
37		Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	97.00%	NA	NA	
38	J&K	TTSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
39		BSNL	<b>6.72</b>	<b>65.76%</b>	<b>77.76%</b>	<b>88.30%</b>	7.41	70.27%	NA	NR	0.00%	NR	0.00%	NIL	NR	NR	100.00%	100.00%
40		Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	97.00%	NA	NA	NA
41	JHAR	BSNL	2.31	96.16%	100.00%	100.00%	5.85	73.60%	NA	NR	0.04%	0.00%	DNF	100.00%	NR	NR	100.00%	100.00%
42	KER	BSNL	<b>8.06</b>	<b>48.06%</b>	<b>72.88%</b>	<b>72.25%</b>	<b>119.14</b>	72.21%	NA	NR	0.03%	0.00%	100.00%	100.00%	NR	96.33%	<b>91.41%</b>	100.00%
43		Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	97.00%	NA	NA	NA
44		Bharti	0.99	96.36%	100.00%	NA	2.34	92.70%	NA	0.00	0.03%	NA	100.00%	100.00%	99.00%	95.00%	100.00%	100.00%
45		TTSL	0.16	100.00%	100.00%	100.00%	5.48	96.82%	NA	NA	0.03%	NA	100.00%	NA	99.40%	92.25%	100.00%	NA
46		Reliance	0.31	100.00%	100.00%	NA	2.23	NA	82.20%	0.00%	0.03%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
47	KOL	Bharti	2.60	93.68%	100.00%	NA	5.67	98.69%	NA	0.00	0.01%	NA	100.00%	100.00%	100.00%	<b>81.00%</b>	100.00%	100.00%
48		TTSL	1.62	100.00%	100.00%	100.00%	2.59	92.73%	NA	NA	0.02%	NA	100.00%	NA	99.11%	90.94%	100.00%	NA
49		Reliance	0.61	100.00%	100.00%	NA	0.44	NA	89.58%	0.00%	0.06%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
50		BSNL	<b>12.59</b>	<b>31.64%</b>	<b>45.86%</b>	0.00%	<b>42.94</b>	60.94%	NA	NR	0.00%	0.01%	100.00%	100.00%	98.94%	<b>79.00%</b>	<b>55.36%</b>	100.00%
51		Vodafone	0.95	97.67%	NA	NA	2.44	75.43%	NA	0.00%	<b>1.00%</b>	NA	100.00%	100.00%	100.00%	97.00%	NA	NA
52	KTK	Bharti	2.74	93.13%	100.00%	NA	3.26	93.07%	NA	0.00	0.06%	NA	100.00%	100.00%	100.00%	<b>89.00%</b>	100.00%	100.00%
53		TTSL	0.50	99.16%	100.00%	100.00%	3.77	84.94%	NA	NA	0.04%	NA	100.00%	NA	99.32%	91.89%	100.00%	100.00%
54		Reliance	0.07	100.00%	100.00%	NA	5.16	NA	81.77%	0.00%	0.02%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
55	KTK	BSNL	<b>8.65</b>	<b>63.10%</b>	<b>75.82%</b>	<b>95.46%</b>	<b>86.22</b>	69.81%	NA	NR	0.01%	NR	100.00%	100.00%	97.14%	<b>58.00%</b>	100.00%	No Refund
56		Vodafone	0.57	100.00%	NA	NA	1.39	89.34%	NA	0.00%	0.00%	NA	NA	100.00%	97.00%	NA	NA	NA
57	MH	Bharti	1.09	98.66%	100.00%	NA	2.62	84.44%	NA	0.00	0.01%	NA	100.00%	100.00%	100.00%	<b>88.00%</b>	100.00%	100.00%
58		TTSL	0.31	99.47%	100.00%	100.00%	4.98	98.10%	NA	NA	0.06%	NA	100.00%	NA	99.17%	90.67%	100.00%	100.00%
59		Reliance	0.25	100.00%	100.00%	NA	1.13	NA	85.04%	0.00%	0.03%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
60		BSNL	<b>6.55</b>	<b>39.93%</b>	<b>65.45%</b>	<b>87.88%</b>	<b>13.05</b>	65.60%	NA	NR	0.00%	0.01%	<b>90.00%</b>	100.00%	95.44%	<b>60.00%</b>	<b>93.55%</b>	100.00%
61		Vodafone	0.46	100.00%	NA	NA	1.25	91.13%	NA	0.00%	<b>2.50%</b>	NA	100.00%	100.00%	100.00%	97.00%	NA	NA
62	MP	Bharti	4.78	97.05%	100.00%	NA	3.48	88.60%	NA	0.00	0.04%	NA	100.00%	100.00%	99.00%	<b>82.00%</b>	100.00%	100.00%
63		TTSL	2.83	100.00%	100.00%	100.00%	6.29	100.00%	NA	NA	0.08%	NA	100.00%	NA	99.17%	91.56%	100.00%	NA
64		Reliance	0.63	100.00%	100.00%	NA	1.30	NA	85.70%	0.00%	0.03%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
65		BSNL	3.40	95.30%	100.00%	100.00%	3.19	71.76%	NA	NR	0.06%	0.00%	100.00%	100.00%	<b>94.14%</b>	<b>76.67%</b>	<b>95.93%</b>	100.00%
66		Vodafone	0.94	<b>80.00%</b>	NA	NA	6.50	92.76%	NA	0.00%	0.00%	NA	NA	100.00%	97.00%	NA	NA	
67	MUM	Bharti	0.52	98.06%	100.00%	NA	3.26	83.96%	NA	0.00	0.00%	NA	100.00%	100.00%	97.00%	<b>88.00%</b>	100.00%	100.00%
68		TTSL	0.28	98.53%	100.00%	100.00%	6.50	98.88%	NA	NA	0.07%	NA	100.00%	NA	99.09%	90.10%	100.00%	100.00%
69		Reliance	0.09	100.00%	100.00%	NA	2.03	NA	87.21%	0.00%	0.05%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
70		Vodafone	0.17	100.00%	NA	NA	1.26	94.60%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	100.00%	NA
71		MTNL	<b>5.44</b>	<b>88.79%</b>	<b>94.62%</b>	NA	7.54	56.93%	79.48%	0.00%	0.02%	NIL	100.00%	NA	98.00%	95.95%	<b>95.35%</b>	100.00%

### Annexure 4.3 (Contd.)

72	NE	Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	97.00%	NA	NA
73	NE	TTSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
74	NE-I	BSNL	4.05	94.87%	98.42%	99.73%	7.21	69.61%	NA	NR	0.02%	0.00%	100.00%	100.00%	NR	NR	99.68%	100.00%
75	NE-II	BSNL	3.14	89.52%	99.61%	100.00%	6.14	60.61%	NA	NR	0.00%	0.00%	100.00%	NR	97.89%	94.00%	100.00%	100.00%
76	OR	TTSL	1.28	100.00%	100.00%	100.00%	2.21	99.98%	NA	NA	NA	NA	NA	NA	98.91%	92.06%	100.00%	NA
77		Reliance	NIL	NA	NA	NA	NA	NA	85.50%	0.00%	NIL	NA	NIL	NIL	97.00%	92.95%	100.00%	100.00%
78		BSNL	4.00	95.71%	100.00%	100.00%	6.67	68.86%	NA	NR	0.04%	0.00%	0.00%	100.00%	NR	NR	100.00%	100.00%
79		Vodafone	1.65	100.00%	NA	NA	2.03	98.31%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	NA	NA
80	PB	Bharti	2.72	98.47%	100.00%	NA	3.56	96.57%	NA	0.00	0.01%	NA	100.00%	100.00%	100.00%	82.00%	100.00%	100.00%
81		TTSL	0.79	100.00%	100.00%	100.00%	3.44	73.50%	NA	NA	0.03%	NA	100.00%	NA	99.14%	91.32%	100.00%	NA
82		Reliance	0.42	100.00%	100.00%	NA	3.35	NA	94.31%	0.00%	0.03%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
83	PB	BSNL	4.87	90.44%	97.23%	99.85%	5.84	74.80%	NA	NR	0.00%	0.00%	100.00%	100.00%	93.90%	73.67%	100.00%	100.00%
84		Vodafone	2.35	100.00%	NA	NA	0.15	99.07%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	NA	NA
85		HFCL	3.57	81.00%	98.00%	0.00%	12.56	55.71%	NA	0.00%	0.01%	NA	100.00%	100.00%	100.00%	94.00%	100.00%	100.00%
86	RAJ	Bharti	1.30	99.06%	100.00%	NA	2.87	92.81%	NA	0.00	0.00%	NA	100.00%	100.00%	100.00%	84.00%	100.00%	100.00%
87		Reliance	0.20	100.00%	100.00%	NA	8.13	NA	91.75%	0.00%	0.04%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
88		BSNL	4.37	97.22%	100.00%	100.00%	5.46	72.64%	NA	NR	0.00%	0.00%	100.00%	100.00%	NR	NR	100.00%	100.00%
89		Vodafone	1.16	100.00%	NA	NA	2.28	96.83%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	NA	NA
90		Sistema	1.98	99.30%	100.00%	100.00%	6.33	NA	NA	NA	0.04%	0.00%	100.00%	100.00%	99.68%	92.00%	100.00%	100.00%
91		TTSL	NA	NA	NA	NA	NA	60.13%	NA	NA	NA	NA	NA	99.35%	93.33%	NA	NA	
92	TN	Bharti	2.60	93.69%	100.00%	NA	3.63	90.36%	NA	0.00	0.05%	NA	100.00%	100.00%	99.00%	91.00%	100.00%	100.00%
93		TTSL	0.10	100.00%	100.00%	100.00%	4.04	99.48%	NA	NA	NA	NA	NA	NA	98.00%	93.00%	NA	NA
94		Reliance	0.30	100.00%	100.00%	NA	2.12	NA	90.17%	0.00%	0.03%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
95		BSNL	5.16	65.76%	79.09%	94.52%	25.82	83.39%	NA	NR	0.00%	NIL	100.00%	100.00%	98.27%	45.00%	100.00%	100.00%
96		Vodafone	0.58	100.00%	NA	NA	4.35	91.41%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	NA	NA
97	UPE	Bharti	4.31	96.36%	100.00%	NA	4.91	94.55%	NA	0.00	0.02%	NA	100.00%	100.00%	100.00%	79.00%	100.00%	100.00%
98		TTSL	3.63	100.00%	100.00%	100.00%	2.97	86.40%	NA	NA	NA	NA	NA	NA	98.77%	92.30%	100.00%	NA
99		Reliance	0.46	100.00%	100.00%	NA	2.02	NA	92.70%	0.00%	0.06%	NA	100.00%	100.00%	97.00%	92.95%	100.00%	100.00%
100		BSNL	3.24	95.29%	100.00%	100.00%	5.88	75.15%	NA	NR	0.03%	NR	DNF	100.00%	NR	NR	100.00%	100.00%
101		Vodafone	3.76	96.67%	NA	NA	7.44	92.88%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	100.00%	NA
102	UPW	Bharti	3.21	97.85%	100.00%	NA	3.34	97.20%	NA	0.00	0.01%	NA	100.00%	100.00%	100.00%	82.00%	100.00%	100.00%
103		TTSL	NA	NA	NA	NA	NA	100.0%	NA	NA	NA	NA	NA	NA	99.04%	91.76%	NA	NA
104	UPW	Reliance	NIL	NA	NA	NA	NA	89.81%	0.00%	NIL	NA	NIL	NIL	97.00%	92.95%	100.00%	100.00%	
105		BSNL	5.07	94.62%	99.46%	99.68%	5.56	74.01%	NA	NR	NR	0.02%	100.00%	100.00%	94.23%	18.00%	100.00%	100.00%
106		Vodafone	0.00	NA	NA	NA	NA	96.92%	NA	0.00%	0.00%	NA	NA	NA	100.00%	97.00%	NA	NA
107	Uttara nchal WB	BSNL	5.87	91.59%	97.13%	99.93%	4.95	68.24%	NA	NR	NR	NR	NR	100.00%	NR	NR	100.00%	100.00%
108		TTSL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
109		Reliance	NIL	NA	NA	NA	NA	NA	81.93%	0.00%	NIL	NA	NIL	NIL	97.00%	92.95%	100.00%	100.00%
110		BSNL	6.40	86.86%	90.10%	96.04%	10.46	63.85%	NA	NR	0.04%	0.00%	100.00%	100.00%	NR	NR	100.00%	100.00%
111		Vodafone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100.00%	97.00%	NA	NA

■ Benchmark not met

NR - Data Not Reported

NA - Not Applicable

## Annexure 4.4: Quality of Service Performance of Broadband Service Providers

Performance Monitoring Report on Quality of Service of Broad band Service Providers for Quarter Ending June, 2013																						
Sl. No.	Service Operators/Service area	Service Provisioning			Faults Repair			Billing Performance				Response Time to the Customer for assistance		Bandwidth utilisation/throughput				Service availability /uptime (for all users) in %age	Packet Loss (for wired broadband access) in %age	Network latency (for wired broadband access)		
		%age of connections provided within 15 days of registration of demand	% of faults repaired by next working day (>90%)	% of faults repaired within 3 working day	Rent Rebate	%age of bills disputed	%age of billing complaints resolved within 4 weeks	%age of cases to whom refund of deposits is made within 60 days of closures	%age of calls answered by operator (Voice to voice) within 60 sec	%age of calls answered by operator (Voice to voice) within 90 sec	No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH)	No. of Upstream links for International connectivity having bandwidth utilisation >90% during peak hours (TCBH)	% International bandwidth utilization during peak hours (TCBH) (Enclose MRTG) <90%	Broadband Connection Speed available (download) from ISP node to user	Packet loss (for wired broadband access) in %age	User reference point at POP/ISP Gateway node to 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%
<b>1</b>	<b>BSNL</b>																					
1.1	Andhra Pradesh	99.70%	77.70%	89.60%	27	0.00%	100.00%	100.00%	39.91%	46.56%												
1.2	Assam	94.50%	72.10%	83.80%	12	NR	100.00%	100.00%	0.00%	0.00%												
1.3	Bihar	100.00%	90.51%	99.13%	0	0.00%	100.00%	100.00%	17.06%	21.95%												
	Jharkhand	90.10%	82.00%	87.40%	76	0.00%	100.00%	100.00%	0.00%	0.00%												
1.4	Chennai	85.30%	83.00%	95.00%	0	0.00%	100.00%	94.00%	14.95%	20.07%												
1.5	Gujarat	100.00%	94.10%	99.50%	216	0.00%	100.00%	100.00%	19.26%	20.64%												
1.6	Haryana	100.00%	94.80%	100.00%	194	0.00%	100.00%	100.00%	14.36%	20.15%												
1.7	Himachal Pradesh	100.00%	92.20%	99.90%	4	0.00%	100.00%	100.00%	26.86%	30.55%												
1.8	Jammu & Kashmir	100.00%	76.80%	88.70%	11	0.00%	97.67%	97.13%	0.00%	0.00%												
1.9	Karnataka	96.60%	95.65%	99.41%	0	0.00%	100.00%	100.00%	2.77%	3.71%												
1.1	Kerala	84.00%	62.23%	80.03%	19	0.00%	100.00%	100.00%	80.30%	86.67%												
1.11	Kolkata	100.00%	94.20%	99.20%	0	2.00%	100.00%	100.00%	49.00%	67.67%												
1.12	Maharashtra	100.00%	96.80%	100.00%	57	0.00%	100.00%	100.00%	10.66%	13.58%												
1.13	Madhya Pradesh	100.00%	93.60%	100.00%	0	0.00%	100.00%	100.00%	57.33%	64.00%	0	25	87.80%									
	Chhattisgarh	100.00%	94.40%	99.30%	71	0.00%	100.00%	100.00%	26.51%	19.91%												
1.14	North East I	100.00%	92.40%	99.00%	8	0.00%	100.00%	100.00%	94.67%	97.33%												
	North East II	100.00%	94.50%	100.00%	0	0.00%	100.00%	100.00%	87.56%	96.94%												
1.15	Orissa	100.00%	90.30%	99.90%	513253	0.00%	98.82%	99.68%	0.00%	0.00%												
1.16	Punjab	100.00%	96.20%	99.50%	135	0.00%	100.00%	100.00%	45.67%	53.33%												
1.17	Rajasthan	100.00%	97.70%	100.00%	0	0.00%	100.00%	100.00%	0.54%	0.67%												
1.18	Tamil Nadu	98.70%	75.30%	88.20%	2	0.00%	100.00%	100.00%	24.03%	27.95%												
1.19	UP East	100.00%	93.60%	99.90%	12	0.00%	100.00%	100.00%	0.00%	0.00%												
	UP West	100.00%	92.20%	99.60%	35	0.00%	100.00%	100.00%	5.69%	8.35%												
	Uttaranchal	100.00%	92.80%	100.00%	0	0.00%	100.00%	100.00%	89.62%	95.98%												
1.21	West Bengal	90.50%	75.60%	92.30%	133	0.00%	100.00%	100.00%	0.00%	0.00%												
	A&N	96.60%	78.70%	90.70%	0	0.00%	100.00%	100.00%	93.67%	100.00%												
<b>2</b>	<b>MTNL</b>																					
2.1	Delhi	98.00%	84.12%	95.92%	10202	0.090%	99.51%	100.00%	99.83%	99.88%	Nil	0	84.26%	95.00%	99.79%	C/DNF	C/DNF	C/DNF				
2.2	Mumbai	84.98%	85.35%	92.56%	35122	0.01%	100.00%	NA	44.74%	49.19%	0	0	86.91%	80.00%	98.00%	1.00%	70	350				
<b>3</b>	<b>Bharti Airtel Ltd.</b>																					
3.1	Andhra Pradesh	100.00%	91.21%	100.00%	0	0.01%	100.00%	100.00%	90.00%	93.00%	0	0	92.38%	107.00%	100.00%	0.00%	37	47.33				
3.2	Delhi	100.00%	95.34%	99.57%	335	0.01%	100.00%	100.00%	85.00%	90.00%	0	0	75.20%	108.00%	99.97%	0.00%	32	79.92				
3.3	Gujarat	100.00%	95.73%	99.27%	19	0.01%	100.00%	100.00%	88.00%	92.00%	0	NA	NA	100.00%	100.00%	0.00%	42	61.03				
3.4	Haryana	100.00%	97.73%	99.76%	3	0.01%	100.00%	100.00%	76.00%	84.00%	0	NA	NA	105.00%	99.87%	0.00%	24	79.72				
3.5	Karnataka	100.00%	90.71%	100.00%	0	0.04%	100.00%	100.00%	87.00%	91.00%	0	0	77.56%	84.00%	99.99%	0.00%	28	39				
3.6	Kerala	100.00%	97.17%	100.00%	0	0.01%	100.00%	100.00%	94.00%	95.00%	0	NA	NA	102.00%	100.00%	0.00%	55	32.33				
3.7	Kolkata	100.00%	93.50%	99.68%	18	0.00%	100.00%	100.00%	83.00%	88.00%	0	0	64.90%	108.00%	99.95%	0.00%	28	79.72				
3.8	Madhya Pradesh &	100.00%	97.11%	99.63%	65	0.02%	100.00%	100.00%	80.00%	86.00%	0	0	74.70%	98.67%	99.96%	0.00%	78	65.33				
3.9	Maharashtra	100.00%	95.93%	99.40%	15	0.01%	100.00%	100.00%	90.00%	94.00%	0	NA	NA	97.38%	99.95%	0.00%	50	61.03				
3.10	Mumbai	100.00%	98.47%	99.76%	13	0.00%	100.00%	100.00%	89.00%	93.00%	0	0	66.57%	100.00%	99.90%	0.00%	34	61.03				
3.11	Punjab	100.00%	98.16%	99.70%	14	0.01%	100.00%	100.00%	81.00%	87.00%	0	0	56.93%	100.00%	99.99%	0.00%	47	87.3				
3.12	Rajasthan	100.00%	99.46%	100.00%	0	0.00%	100.00%	100.00%	85.00%	90.00%	0	NA	NA	100.00%	100.00%	0.00%	27	80.3				
3.13	Tamilnadu	100.00%	95.42%	99.99%	1	0.03%	100.00%	100.00%	93.00%	96.00%	0	0	89.60%	98.00%	99.99%	0.00%	22	32.33				
3.14	UP - East	100.00%	97.03%	99.91%	4	0.01%	100.00%	100.00%	80.00%	86.00%	0	NA	NA	108.00%	99.99%	0.00%	37	79.72				
3.15	UP - West	100.00%	96.85%	99.74%	3	0.01%	100.00%	100.00%	87.00%	91.00%	0	NA	NA	100.00%	100.00%	0.00%	30	79.72				

### Annexure 4.4 (Contd.)

<b>4</b>	<b>Hathway</b>																		
4.1	Andhra Pradesh	100.00%	98.00%	100.00%	61	1.90%	100.00%	100.00%	93.00%	98.00%	0	0	87.00%	85.00%	100.00%	1.00%	75	320	NA
4.2	Delhi	100.00%	98.00%	99.00%	62	1.46%	100.00%	100.00%	69.00%	84.00%	NR	NR	48.00%	85.00%	99.08%	1.00%	5	290	NA
4.3	Gujarat	100.00%	87.00%	99.00%	0	0.00%	NA	NA	79.00%	94.00%	0	0	88.00%	85.00%	99.00%	1.00%	100	270	NA
4.4	Haryana	100.00%	NA	NA	0	0.00%	NA	NA	DNF	DNF	0	DNF	NA	85.00%	100.00%	1.00%	2	328	NA
4.5	Karnataka	100.00%	97.00%	100.00%	88	1.94%	100.00%	100.00%	81.00%	87.00%	0	0	87.00%	85.00%	100.00%	1.00%	75	350	NA
4.6	Maharashtra	100.00%	97.00%	99.45%	451	0.80%	100.00%	100.00%	79.00%	87.00%	0	0	86.00%	85.00%	99.00%	1.00%	100	280	NA
4.7	Punjab	100.00%	95.00%	99.00%	3	1.95%	100.00%	100.00%	95.00%	99.00%	NR	0	72.00%	85.00%	99.95%	1.00%	2	295	NA
4.8	Goa	100.00%	94.00%	97.67%	0	0.00%	NA	NA	82.00%	93.00%	0	0	88.00%	85.00%	98.87%	1.00%	95	250	NA
4.9	Uttar Pradesh	100.00%	98.00%	99.00%	0	0.94%	100.00%	100.00%	DNF	DNF	NR	NA	53.00%	85.00%	100.00%	1.00%	6	287	NA
4.10	Chhatisgarh	100.00%	99.00%	100.00%	0	1.20%	100.00%	100.00%	99.00%	99.00%	0	0	73.00%	85.00%	99.04%	1.00%	5	323	NA
<b>5</b>	<b>SIFY</b>																		
	All India	75.00%	37.00%	22.00%	16	NA	NA	NA	94.93%	97.51%	Nil	Nil	84.00%	NR	100.00%	0.00%	45	259	NR
<b>6</b>	<b>Quadrant Televentures Ltd. ( HFCL Infotel Ltd.)</b>																		
	Punjab	99.93%	93.51%	99.33%	42	0.01%	100.00%	100.00%	71.00%	84.00%	Nil	Nil	81.00%	100.00%	99.90%	0.00%	51	283	NA
<b>7</b>	<b>Tata Teleservices (Maharashtra) Ltd.</b>																		
	Maharashtra & Goa	100.00%	91.89%	100.00%	Nil	0.16%	100.00%	NA	91.00%	97.00%	0	0	77.33%	94.00%	99.72%	0.00%	31	232	NA
<b>8</b>	<b>Beam Cables</b>																		
	Hyderabad	100.00%	68.66%	96.00%	NR	2.00%	100.00%	NA	76.66%	83.33%	0	0	55.56%	80.00%	99.00%	1.00%	50	317	NA
<b>9</b>	<b>Alliance Broadband</b>																		
	Kolkata	100.00%	99.00%	100.00%	0	0.10%	100.00%	NA	98.00%	99.00%	0	0	0.00%	DNF	99.00%	1.00%	NA	NA	NA
<b>10</b>	<b>Broadband Pacenet India Private Ltd.</b>																		
10.1	Mumbai	100.00%	90.00%	99.00%	48	0.00%	100.00%	NA	63.00%	85.00%	0	0	81.00%	DNF	99.00%	1.00%	50	280	NA
10.2	Mumbai-Pune	100.00%	91.00%	100.00%	NR	NR	100.00%	NA	68.00%	85.00%	0	0	79.00%	DNF	99.00%	1.00%	50	280	NA
10.3	All India	100.00%	91.00%	99.00%	29	0.00%	NA	NA	72.00%	88.00%	0	0	82.00%	DNF	99.00%	1.00%	75	310	NA
10.4	Madhya Pradesh	100.00%	93.00%	100.00%	0	0.00%	100.00%	NA	69.00%	93.00%	0	0	60.00%	DNF	99.00%	1.00%	50	280	NA
10.5	Gujarat	100.00%	91.00%	100.00%	10	1.00%	100.00%	NA	70.00%	88.00%	0	0	80.00%	DNF	99.00%	1.00%	50	280	NA
10.6	Rajasthan	100.00%	92.00%	100.00%	0	0.00%	NA	NA	82.00%	92.00%	0	0	70.00%	DNF	99.00%	1.00%	50	280	NA
10.7	Andhra Pradesh	100.00%	91.00%	99.00%	0	2.00%	100.00%	NA	73.00%	85.00%	0	0	76.83%	DNF	99.00%	1.00%	50	280	NA
<b>11</b>	<b>Tikona Digital Networks</b>																		
	All India	100.00%	96.40%	99.37%	592	0.05%	100.00%	100.00%	62.00%	81.00%	1	0	60.46%	99.07%	99.55%	NA	NA	NA	NA
<b>12</b>	<b>Asianet Satellite Communications Ltd.</b>																		
	Kerala	100.00%	90.99%	99.42%	NR	1.38%	100.00%	100.00%	NR	NR	Nil	0	62.36%	90.00%	99.60%	1.00%	50	270	NA
<b>13</b>	<b>IndusInd Media &amp; Communications Ltd. (Broadband Division)</b>																		
	All India	100.00%	97.00%	99.00%	31	0.00%	100.00%	DNF	100.00%	100.00%	0	0	73.50%	80.00%	96.00%	1.00%	45	260	NA
<b>14</b>	<b>Rajesh Multichannel Pvt. Ltd.</b>																		
	Mumbai	100.00%	98.00%	NR	Nil	Nil	100.00%	Nil	92.00%	87.00%	91	NR	86.00%	NR	99.00%	NR	NR	NR	NR
<b>15</b>	<b>Gujarat Telelink Pvt.</b>																		
	Gujarat	100.00%	96.00%	99.00%	88	0.47%	100.00%	NA	97.00%	99.00%	NA	0	93.00%	93.00%	99.84%	0.00%	11	300	NA
<b>16</b>	<b>Syscon Infoway Pvt Ltd.</b>																		
	Mumbai	100.00%	97.00%	100.00%	Nil	Nil	100.00%	Nil	78.30%	92.00%	0	7	83.60%	100.00%	96.00%	0.00%	10	250	NR
<b>17</b>	<b>D-Vois Broadband</b>																		
	All India	100.00%	96.61%	99.01%	NR	1.29%	1.29%	NR	96.00%	98.00%	0	0	Nil	90.00%	99.99%	0.10%	100	100	100
<b>18</b>	<b>Wish Net Private Ltd</b>																		
18.1	West Bengal	100.00%	98.92%	100.00%	0	0.40%	100.00%	NA	80.67%	97.33%	0	0	71.57%	DNF	99.00%	1.00%	NA	NA	NA
18.2	Kolkata	100.00%	98.92%	100.00%	0	0.05%	100.00%	NA	81.00%	97.67%	0	0	76.99%	DNF	99.00%	1.00%	NA	NA	NA

**Annexure 4.4 (Contd.)**

<b>19</b>	<b>Tata Communications</b>																		
19.1	Andhra Pradesh	100.00%	97.33%	99.67%		0.06%	100.00%	100.00%											99.59%
19.2	Assam	NA	0.00%	0.00%		NA	NA	NA											99.96%
19.3	Delhi & NCR	NA	100.00%	100.00%		0.02%	100.00%	100.00%											99.62%
19.4	Gujarat & Daman & Du	100.00%	99.00%	99.67%		0.06%	100.00%	100.00%											98.76%
19.5	Haryana	NA	100.00%	100.00%		0.00%	100.00%	NA											99.97%
19.6	Himachal Pradesh	NA	66.67%	66.67%		0.00%	100.00%	NA											99.96%
19.7	Jammu & Kashmir	NA	0.00%	0.00%		NA	NA	NA											100.00%
19.8	Karnataka	100.00%	98.33%	100.00%		0.11%	100.00%	100.00%											99.82%
19.9	Kerala & Lakshadweep	100.00%	92.00%	98.00%		0.03%	100.00%	100.00%											96.29%
19.10	Madhya Pradesh & Chhattisgarh	100.00%	93.67%	99.33%		0.00%	100.00%	100.00%											98.10%
19.11	Maharashtra & Goa	100.00%	95.67%	98.67%	549	0.06%	100.00%	100.00%	78.00%	88.00%	Nil	Nil	53.98%	80.00%		0.00%	50	245	NA
19.12	Mumbai	100.00%	97.67%	99.67%		0.03%	100.00%	100.00%											98.32%
19.13	North Eastern	NA	0.00%	0.00%		NA	NA	NA											99.50%
19.14	Orissa	NA	0.00%	0.00%		0.00%	100.00%	NA											99.93%
19.15	Punjab	NA	100.00%	100.00%		0.00%	100.00%	NA											99.97%
19.16	Rajasthan	NA	99.33%	100.00%		0.29%	100.00%	NA											99.98%
19.17	Tamil Nadu &	100.00%	96.33%	99.00%		0.10%	100.00%	100.00%											98.02%
19.18	Uttar Pradesh - East	NA	100.00%	100.00%		0.44%	100.00%	NA											99.98%
19.19	Uttar Pradesh -West	NA	0.00%	0.00%		NA	NA	NA											99.99%
19.20	West Bengal	NA	0.00%	0.00%		NA	NA	NA											99.99%
19.21	Kolkata	100.00%	98.33%	99.67%		0.06%	100.00%	100.00%											98.86%
19.22	Bihar & Jharkhand	NA	0.00%	33.33%		0.00%	100.00%	NA											99.99%
<b>20</b>	<b>Ortel Communications</b>																		
	Orissa	100.00%	91.00%	100.00%	Nil	0.00%	0.00%	0.00%	100.00%	100.00%	0	0	75.33%	96.33%	99.12%	0.00%	68	238	NA
<b>21</b>	<b>Reliance Communications</b>																		
	All India	100.00%	100.00%	100.00%	NA	0.16%	100.00%	100.00%	83.00%	89.00%	0	0	48.00%	90.00%	99.58%	0.43%	C/DNF	C/DNF	DNF
<b>22</b>	<b>You Broadband</b>																		
22.1	All India	100.00%	89.00%	99.00%	552	1.00%	100.00%	32.00%	63.00%	68.00%	NA	0	74.22%	86.11%	98.77%	0.00%	12	258	NA
22.2	Maharashtra	100.00%	97.00%	100.00%	12	1.59%	100.00%	34.00%	43.00%	49.00%	NA	0	73.89%	86.34%	98.59%	0.00%	18	266	NA
22.3	Gujarat	100.00%	90.00%	99.00%	156	1.00%	100.00%	34.00%	41.00%	48.00%	NA	0	74.21%	86.07%	98.89%	0.00%	12	253	NA
22.4	Karnataka	94.00%	77.00%	97.00%	81	1.95%	100.00%	23.00%	72.00%	76.00%	NA	0	73.10%	85.73%	98.56%	0.00%	7	244	NA
22.5	Tamilnadu	100.00%	80.00%	97.00%	91	0.49%	100.00%	36.00%	91.00%	94.00%	NA	0	76.52%	86.26%	98.61%	0.00%	8	251	NA
22.6	Haryana	100.00%	90.00%	99.00%	1600	NA	NA	43.00%	87.00%	90.00%	NA	0	70.00%	85.00%	99.00%	0.00%	4	252	NA
22.7	Andhra Pradesh	99.00%	83.00%	97.00%	196	0.77%	100.00%	54.00%	43.00%	50.00%	NA	0	75.62%	86.43%	98.83%	0.00%	14	270	NA
<b>23</b>	<b>Five Networks</b>																		
	All India	100.00%	99.50%	100.00%	NA	NR	100.00%	100.00%	NA	NA	1	4	NA	85.75%	99.00%	1.00%	NA	350	NA
<b>24</b>	<b>Noida Software Technology</b>																		
	All India	100.00%	100.00%	NA	Nil	NA	NA	NA	80.00%	100.00%	215	NA	NA	98.00%	99.30%	1.00%	30	250	NA
<b>25</b>	<b>Meghbela Cable &amp; Broadband</b>																		
	All India	100.00%	99.90%	100.00%	0	0.00%	100.00%	100.00%	100.00%	100.00%	0	0	0.00%	100.00%	99.90%	0.00%	60	NR	NR
<b>26</b>	<b>Atria Convergence Tech</b>																		
	All India	93.00%	42.00%	83.00%	1183	0.16%	100.00%	NA	73.00%	78.00%	Nil	Nil	87.00%	95.00%	99.10%	1.00%	28	282	Nil
<b>27</b>	<b>Honesty Net Solutions</b>																		
	Mumbai	100.00%	91.00%	99.10%	NA	Nil	100.00%	NA	83.00%	100.00%	NA	0	88.00%	87.00%	98.00%	0.00%	69	311	NA
<b>28</b>	<b>Citycom Networks Pvt. Ltd.</b>																		
	All India	100.00%	94.45%	99.49%	0	0.47%	100.00%	100.00%	85.00%	89.00%	0	3	50.00%	86.98%	99.60%	1.00%	39	162	NA
<b>29</b>	<b>Digital Network associates</b>																		
	MH & Goa	100.00%	92.03%	99.28%	None	0.67%	100.00%	NA	61.34%	81.49%	None	0	80.00%	80.00%	99.04%	1.00%	4	255	NR
<b>30</b>	<b>Southern Online Bio technologies Ltd.</b>																		
	Andhra Pradesh	100.00%	90.00%	99.00%	None	NA	NA	NA	NA	NA	0	30	85.00%	90.00%	99.00%	1.00%	120	350	NA
<b>31</b>	<b>Vasai Cable Pvt Ltd.</b>																		
	Mumbai	100.00%	92.38%	99.60%	None	0.57%	100.00%	NA	70.93%	85.97%	0	0	80.00%	80.00%	99.54%	1.00%	4	255	NR
		<b>DNF</b> = Data not as per Format				<b>NR</b> = Data not reported by the Service Provider						<b>NA</b> = Not Applicable			<b>C/DNF</b> = Completed the parameter but Data is not in the required format				

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

<i>S.No</i>	<i>Name of the channel</i>	<i>Reported Rates( in INR)</i>
1	Zee TV	13.88
2	Zee Cinema	13.88
3	Cartoon Network	13.37
4	Zee Marathi	08.56
5	Zee News	08.02
6	CNN	01.60
7	Zee Café	08.56
8	Zee Studios	07.49
9	Zee Bangla	08.67
10	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	01.07
40	Life Ok	21.94
41	The MGM	06.42



**Annexure 5.1 (contd.)**

<b>S.No</b>	<b>Name of the channel</b>	<b>Reported Rates( in INR)</b>
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
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

**Annexure 5.1 (contd.)**

<b>S.No</b>	<b>Name of the channel</b>	<b>Reported Rates( in INR)</b>
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
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

**Annexure 5.1 (contd.)**

<b>S.No</b>	<b>Name of the channel</b>	<b>Reported Rates( in INR)</b>
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	ESPN	35.45
144	Star Sports	35.45
145	Star Cricket	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
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

**Annexure 5.1 (contd.)**

<i>S.No</i>	<i>Name of the channel</i>	<i>Reported Rates( in INR)</i>
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	NAME OF THE COMPANY	CHANNEL IDENTITY	DATE OF OPERATIONALISATION
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 BROADCAST NETWORK LTD.	BIG-FM	24-09-2006
9	MUMBAI	RELIANCE BROADCAST NETWORK LTD.	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 BROADCAST NETWORK LTD.	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 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.	CHENNAI LIVE	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
33	AGARTALA	POSITIVE RADIO	OOLALA FM	07.08.2007
34	AGRA	RELIANCE 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

**Annexure 5.2 (Contd.)**

<b>S.NO.</b>	<b>CITY</b>	<b>NAME OF THE COMPANY</b>	<b>CHANNEL IDENTITY</b>	<b>DATE OF OPERATIONALISATION</b>
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 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 BROADCAST NETWORK LTD.	BIG-FM	08.12.2006
47	ALLAHABAD	RELIANCE BROADCAST NETWORK LTD.	BIG-FM	29.10.2007
48	ALLAHABAD	SOUTH ASIA	S. FM	18.03.2008
49	AMRITSAR	RELIANCE 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 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 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 BROADCAST NETWORK LTD.	BIG-FM	30.03.2007
64	BAREILLY	SHRI PURAN MULTIMEDIA	MANTRA FM	09.04.2007
65	BHOPAL	RELIANCE BROADCAST NETWORK LTD.	BIG-FM	20.05.2007
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 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 BROADCAST NETWORK LTD.	BIG-FM	19.01.2007
73	BILASPUR	D. B. CORP.	MY-FM	27.09.2007
74	CHANDIGARH	RELIANCE BROADCAST NETWORK LTD.	BIG-FM	12.02.2007
75	CHANDIGARH	D. B. CORP.	MY-FM	19.02.2007

**Annexure 5.2 (Contd.)**

<b>S.NO.</b>	<b>CITY</b>	<b>NAME OF THE COMPANY</b>	<b>CHANNEL IDENTITY</b>	<b>DATE OF OPERATIONALISATION</b>
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 CEMENTS	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 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 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 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 BROADCAST NETWORK LTD.	BIG-FM	25.09.2006
97	HYDERABAD	E.N.I.L.	RADIO- MIRCHI	19.04.2006
98	HYDERABAD	KAL RADIO	S. FM	06.11.2006
99	HYDERABAD	M.B.P.L.	RADIO-CITY	30.05.2006
100	INDORE	RELIANCE 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 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

**Annexure 5.2 (Contd.)**

<b>S.NO.</b>	<b>CITY</b>	<b>NAME OF THE COMPANY</b>	<b>CHANNEL IDENTITY</b>	<b>DATE OF OPERATIONALISATION</b>
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 BROADCAST NETWORK LTD.	BIG-FM	07.12.2006
121	JAMSHED PUR	RELIANCE 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 BROADCAST NETWORK LTD.	BIG-FM	19.01.2007
125	JODHPUR	RELIANCE 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
132	KANPUR	RELIANCE 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	18.09.2007
141	KOLHAPUR	PUDHARI PUBLICATION	TOMOTO FM	21.09.2007
142	KOTA	RELIANCE 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 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 BROADCAST NETWORK LTD.	BIG-FM	14.10.2007



**Annexure 5.2 (Contd.)**

<b>S.NO.</b>	<b>CITY</b>	<b>NAME OF THE COMPANY</b>	<b>CHANNEL IDENTITY</b>	<b>DATE OF OPERATIONALISATION</b>
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 BROADCAST NETWORK LTD.	BIG-FM	22.05.2007
167	PANAJI	E.N.I.L.	RADIO- MIRCHI	22.05.2007
168	PANAJI	INDIA RADIO VENTURES	RADIO INDIGO	25.06.2007
169	PATIALA	RELIANCE BROADCAST NETWORK LTD.	BIG-FM	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 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 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 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 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 BROADCAST NETWORK LTD.	BIG-FM	25.06.2009

**Annexure 5.2 (Contd.)**

<b>S.NO.</b>	<b>CITY</b>	<b>NAME OF THE COMPANY</b>	<b>CHANNEL IDENTITY</b>	<b>DATE OF OPERATIONALISATION</b>
198	SHIMLA	T.V. TODAY BROADCASTING LTD	RADIO- MEOW	01.10.2009
199	SHIMLA	B.A.G. INFOTAINMENT	RADIO- DHAMAL	30.11.2009
200	SHOLAPUR	RELIANCE BROADCAST NETWORK LTD.	BIG-FM	08.11.2007
201	SHOLAPUR	M.B.P.L.	RADIO-CITY	14.11.2007
202	SILIGURI	PCM CEMENTS	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 BROADCAST NETWORK LTD.	BIG-FM	10.12.2006
206	SURAT	RELIANCE 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	THIRUVANANTHA-PURAM	RELIANCE BROADCAST NETWORK LTD.	BIG-FM	29.01.2008
211	THIRUVANANTHA-PURAM	E.N.I.L.	RADIO- MIRCHI	29.01.2008
212	THIRUVANANTHA-PURAM	KAL RADIO	S. FM	06.02.2008
213	THIRUVANANTHA-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 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 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 BROADCAST NETWORK LTD.	BIG-FM	05.06.2007
230	VADODARA	E.N.I.L.	RADIO- MIRCHI	05.06.2007
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

**Annexure 5.2 (Contd.)**

<b>S.NO.</b>	<b>CITY</b>	<b>NAME OF THE COMPANY</b>	<b>CHANNEL IDENTITY</b>	<b>DATE OF OPERATIONALISATION</b>
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	VISHAKAPATNAM	RELIANCE 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.,**  
3<sup>rd</sup> 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: 0124-4222222
  
- 5. Reliance Big TV Pvt. Ltd.**  
3<sup>rd</sup> Floor, B-Wing,  
Reliance 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.No	Name of Teleport	Address	Location	Date of 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

**Annexure 5.4 (Contd.)**

<b>Sr.No</b>	<b>Name of Teleport</b>	<b>Address</b>	<b>Location</b>	<b>Date of Permission</b>
19	TELEVISION INDIA EIGHTEEN LIMITED	EMPIRE COMPLEX, 414, SENAPATI BAPAT MARG, LOWER PAREL, MUMBAI-400013	MUMBAI	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

**Annexure 5.4 (Contd.)**

<b>Sr.No</b>	<b>Name of Teleport</b>	<b>Address</b>	<b>Location</b>	<b>Date of Permission</b>
35	TELEVISION INDIA EIGHTEEN LIMITED	VIDEOCON TOWER, E-1 RANI JHANSI ROAD, JHANDEWALAN EXTN., NEW DELHI-110055	NOIDA	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	HYDERABAD	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

**Annexure 5.4 (Contd.)**

<b>Sr.No</b>	<b>Name of Teleport</b>	<b>Address</b>	<b>Location</b>	<b>Date of Permission</b>
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 SALT LAKE 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 <sup>TH</sup> 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.	POSITIVE 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



**Annexure 5.4 (Contd.)**

<b>Sr.No</b>	<b>Name of Teleport</b>	<b>Address</b>	<b>Location</b>	<b>Date of Permission</b>
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	AASTHA BHAWAN, A-105, SECTOR-5, NOIDA-201301	NOIDA	2-May-11
85	MAHUA 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

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