

# Telecom Regulatory Authority of India



## The Indian Telecom Services Performance Indicators October – December 2005

**10<sup>th</sup> April 2006**

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## **(i) INTRODUCTION**

- 1.1 This report provides an update on the growth trends for the telecom services for the period **October – December 2005**. It presents a broad perspective on the Telecom Services to serve as a reference document for various stakeholders, research agencies and analysts as an update over the previous reports. Due to the Unified Access Service Regime, the details under mobile services combine both GSM & CDMA. The Fixed Service details also include WLL (F) and Village Public Telephones (VPT). This report also covers the performance of Cable TV, DTH & Radio Broadband services. The summary of the growth pattern of Fixed, Mobile and Internet and Broadband services in form of ‘Quarterly results at a Glance’ is given at the beginning of this compilation.
- 1.2 The information for this report has been collected from various telecom operators and service providers. TRAI collects performance-oriented data from various service providers on a quarterly basis to monitor the growth trend in the sector and to decide upon pro-active and suo motto measures to fuel the growth of the telecom services in the country. The data provided in this report is purely provisional and subject to change. TRAI regularly conducts review of its data collection programme to ensure that its processes remains appropriate/relevant in the rapidly growing telecom sector and are consistent with changing regulatory framework.
- 1.3 This quarterly report is available on the TRAI website ([www.trai.gov.in](http://www.trai.gov.in)) and is updated on quarterly basis. Any suggestions pertaining to this may please be addressed to S. N. Gupta, Pr. Advisor (CN), TRAI; Tel. 26167914, Fax. 26191998 and e-mail: [trai09@bol.net.in](mailto:trai09@bol.net.in).

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**(ii) Quarterly Results at a Glance**

**Performance Indicators of Telecom Services for QE Dec 2005**

**A. Growth of Fixed & Mobile Services:-**

	QE Dec 2004	QE Mar 2005 (FY 2004-05)	QE Jun 2005	QE Sept 2005	QE Dec 2005	%age growth over Dec 2004 (12 months)	%age growth over Mar 2005 (9 months)	%age growth over Jun 2005 (6 months)	%age growth over Sept 2005 (3 months)
<b>1) Subscriber's Base (in millions)</b>									
i) Fixed Line including WLL(F)	44.87	46.19	46.85	48.00	48.84	8.85	5.74	4.25	1.75
ii) Mobile (GSM + CDMA)	48.01	52.22	57.37	65.07	75.94	58.17	45.43	32.37	16.71
<b>Gross Total</b>	<b>92.88</b>	<b>98.41</b>	<b>104.22</b>	<b>113.07</b>	<b>124.78</b>	<b>34.34</b>	<b>26.80</b>	<b>19.73</b>	<b>10.36</b>
<b>2) Traffic (MOU) (minutes of use/ sub/month) (combined for GSM &amp; CDMA)</b>									
i) Mobile (GSM & CDMA)	327	344	358	367	<b>GSM - 393</b>				
					<b>CDMA - 462</b>				
<b>3) ARPU (Rs./sub/ month) (combined for GSM &amp; CDMA)</b>									
i) Mobile (GSM & CDMA)	399	394	381	374	<b>GSM - 362</b>				
					<b>CDMA - 256</b>				
<b>4) Teledensity</b>									
Population in million (Estimated)	1077	1080	1085	1088	1092				
i) Fixed including WLL(F)	4.17	4.28	4.32	4.41	4.47	7.35	4.58	3.58	1.38
ii) Mobile (GSM + CDMA)	4.46	4.84	5.29	5.98	6.95	56.00	43.83	31.52	16.28
<b>Gross Total</b>	<b>8.62</b>	<b>9.11</b>	<b>9.61</b>	<b>10.39</b>	<b>11.43</b>	<b>32.50</b>	<b>25.40</b>	<b>18.96</b>	<b>9.95</b>

**B. Growth of Internet & Broadband Services:-**

	QE Dec 2004	QE Mar 2005 (FY 2004-05)	QE Jun 2005	QE Sept 2005	QE Dec 2005	%age growth over Dec 2004 (12 months)	%age growth over Mar 2005 (9 months)	%age growth over Jun 2005 (6 months)	%age growth over Sept 2005 (3 months)
<b>1) Subscriber's Base (in million)</b>									
i) Internet	5.45	5.55	5.89	6.13	6.70	22.94	20.72	13.75	9.30
ii) <b>Broadband Connections</b> (>=256 Kbps download speed)	0.047	0.183	0.399	0.612	0.903	1821.28	393.44	126.32	47.55
<b>2) Minutes of Use (MOU/ subs/month)</b>	275	305	300	315	189	-31.27	-38.03	-37.00	-40.00
<b>3) ARPU (Dialup Internet) (Rs./subs/month)</b>	167	220	200	190	210	25.75	-4.55	5.00	10.53

**C. Performance of service providers during the quarter: -**

**(I) Fixed Line including WLL(F) Subscribers Base(in Million)**

1) Basic Service Providers	QE Dec 2004	QE Mar 2005 (FY 2004-05)	QE Jun 2005	QE Sept 2005	QE Dec 2005	%age growth over Dec 2004 (12 months)	%age growth over Mar 2005 (9 months)	%age growth over Jun 2005 (6 months)	%age growth over Sept 2005 (3 months)
BSNL	36.49	37.04	36.80	36.80	36.76	0.73	-0.76	-0.11	-0.11
MTNL	4.08	4.06	3.95	4.05	3.86	-5.35	-5.00	-2.35	-4.77
Tata/ Hughes	2.00	2.58	3.07	3.62	4.04	101.60	56.59	31.60	11.60
Bharti	0.80	0.86	0.93	1.06	1.20	49.13	39.42	28.92	13.11
Reliance	1.18	1.31	1.72	2.09	2.57	117.43	96.18	49.42	22.97
HFCL	0.18	0.19	0.21	0.22	0.24	31.87	26.32	14.29	9.09
Shyam	0.13	0.15	0.17	0.16	0.17	30.77	13.33	0.00	6.25
<b>Total</b>	<b>44.87</b>	<b>46.19</b>	<b>46.85</b>	<b>48.00</b>	<b>48.84</b>	<b>8.84</b>	<b>5.73</b>	<b>4.24</b>	<b>1.74</b>

**(II) Mobile Services Subscriber Base (in Million)**

Service Providers	QE Dec 2004	QE Mar 2005 (FY 2004-05)	QE Jun 2005	QE Sept 2005	QE Dec 2005	%age growth over Dec 2004 (12 months)	%age growth over Mar 2005 (9 months)	%age growth over Jun 2005 (6 months)	%age growth over Sept 2005 (3 months)
Reliance	10.15	10.45	11.65	12.99	14.68	44.69	40.48	26.01	13.01
Bharti	9.83	10.98	12.26	14.07	16.33	66.19	48.72	33.20	16.06
BSNL	8.90	9.90	10.69	12.38	14.83	66.72	49.81	38.73	19.79
Hutch	7.18	7.79	8.44	9.71	11.41	58.94	46.47	35.19	17.51
Idea	4.70	5.07	5.55	5.94	6.47	37.78	27.61	16.58	8.92
BPL Group	2.47	2.58	2.63	2.81	2.89	17.10	12.02	9.89	2.85
Others	1.65	1.76	1.87	2.09	2.28	38.43	29.55	21.93	9.09
Spice	1.50	1.44	1.47	1.49	1.63	8.88	13.19	10.88	9.40
Tata/ Hughes	0.81	1.09	1.43	2.06	3.68	356.58	237.61	157.34	78.64
MTNL	0.78	1.08	1.29	1.44	1.65	112.63	52.78	27.91	14.58
HFCL	0.05	0.05	0.06	0.06	0.06	22.45	20.00	0.00	0.00
Shyam	0.03	0.03	0.03	0.03	0.03	15.38	0.00	0.00	0.00
<b>Total</b>	<b>48.01</b>	<b>52.22</b>	<b>57.37</b>	<b>65.07</b>	<b>75.94</b>	<b>58.17</b>	<b>45.43</b>	<b>32.37</b>	<b>16.71</b>

## Chapter One

### PERFORMANCE OF FIXED SERVICES

Subscribers Base nears 49 million

#### 1.1 Subscribers Base: -

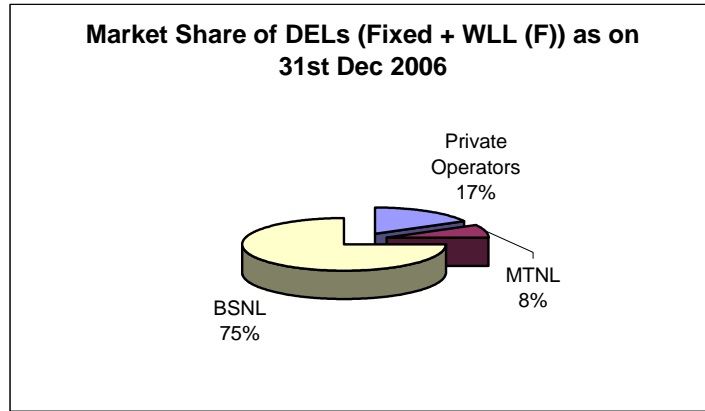
1.1.1 As on 31<sup>st</sup> December 2005 and the Fixed lines were provided by 5 licensed private operators in addition to incumbents BSNL and MTNL. List of Fixed Service provider's along with their area of operation is given in Table 1:

**Table 1**

S.No.	Name of the Service Provider	Area of Operation
1	BSNL	All India
2	MTNL	Delhi & Mumbai
3	Bharti Telesonic Ltd	AP, MP, Delhi, Haryana, Tamil Nadu, Chennai, Karnataka, Kerala, Gujarat, Punjab, Maharashtra, Mumbai, UP(E),UP(W) including Uttaranchal, West Bengal and Kolkata
4	Tata Teleservices (Maharashtra) Ltd	Maharashtra, Mumbai
5	Tata Teleservices Ltd	AP, Tamil Nadu, Chennai, Karnataka, Gujarat, Delhi, Bihar, Orissa, Rajasthan, Punjab, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, U.P. (E), U.P (W) including Uttaranchal, West Bengal and Kolkata
6	HFCL Infotel Ltd	Punjab
7	Shyam Telelink Ltd	Rajasthan
8	Reliance Infocomm.Ltd.	AP, Bihar, Delhi, Gujarat, Haryana, HP, Karnataka, Kerala, MP, Maharashtra, Mumbai Orissa, Punjab, Rajasthan, Tamil Nadu, Chennai, UP (E), UP (W), West Bengal, Kolkata

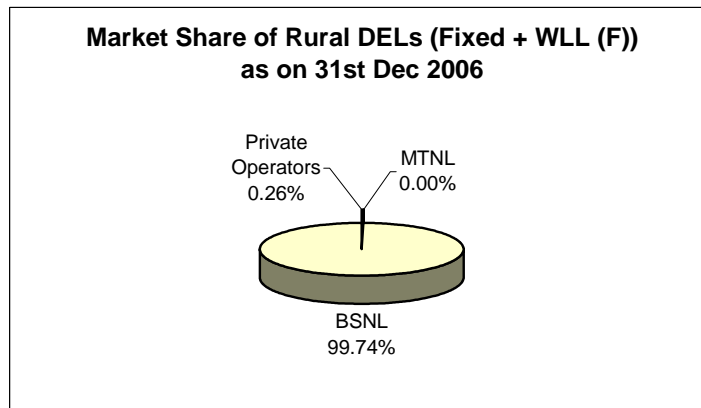
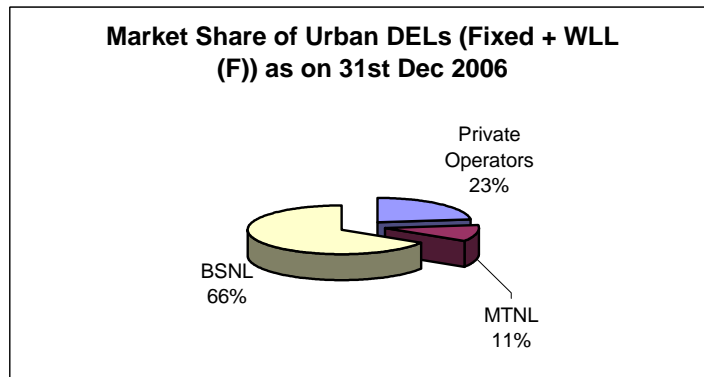
The information in this report is based on the data provided by the Fixed Service Providers. The operator-wise subscriber base is given in Table 1.1.

### 1.1.2 Market Share of DELs



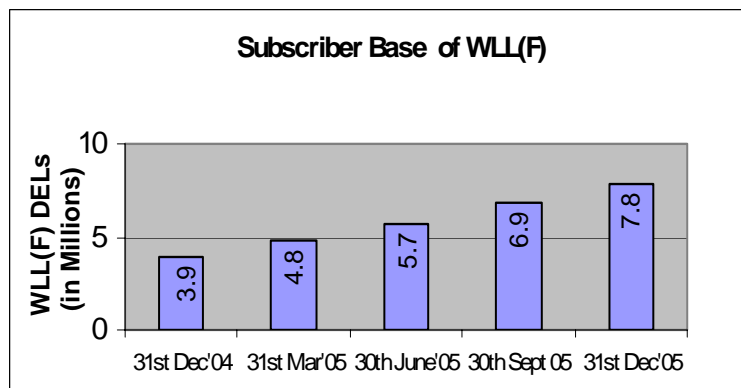
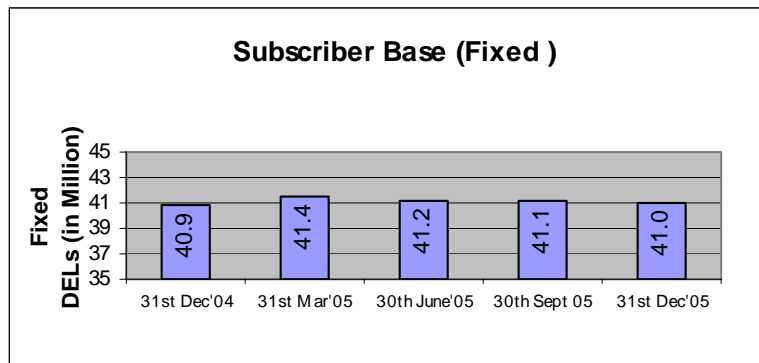
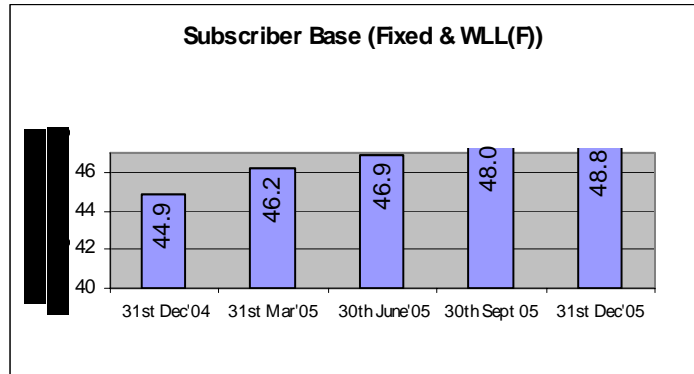
As on 31st December 2005, the total subscriber base of Fixed lines including WLL (F) stood at 48.84 million. The incumbents BSNL and MTNL have 75% and 8% market share respectively in the subscriber base, while all the five private operators have 17% share. In the current quarter the share of private operators have increased by 2% and the share of BSNL has declined by 2% whereas the share of MTNL remains the same.

As on 31st December 2005 total urban DELs are 34.86 million and rural DELs are 13.98 million. The market share of Fixed Service Providers in Urban DELs and Rural DELs is depicted in the charts below:



### 1.1.3 Subscriber Base of Fixed & WLL(F) for last five quarters

The subscriber base of the Fixed service sector for last five quarters is depicted in the bar chart below:

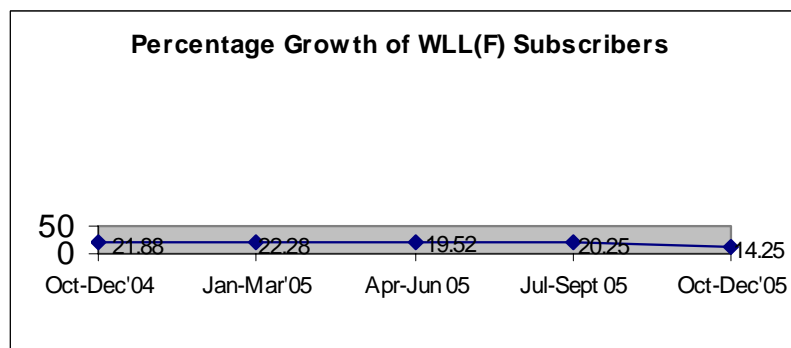
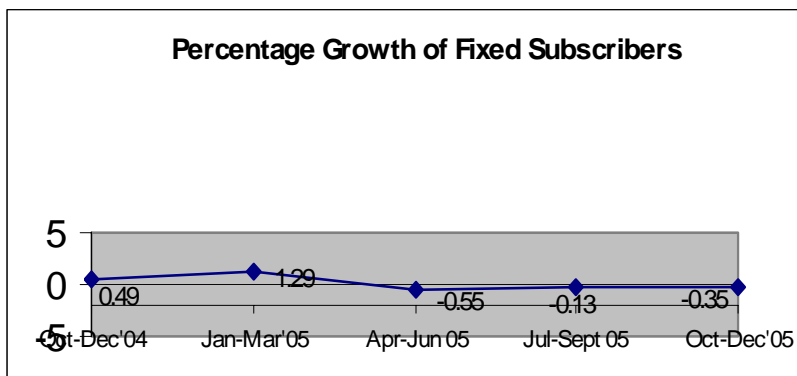
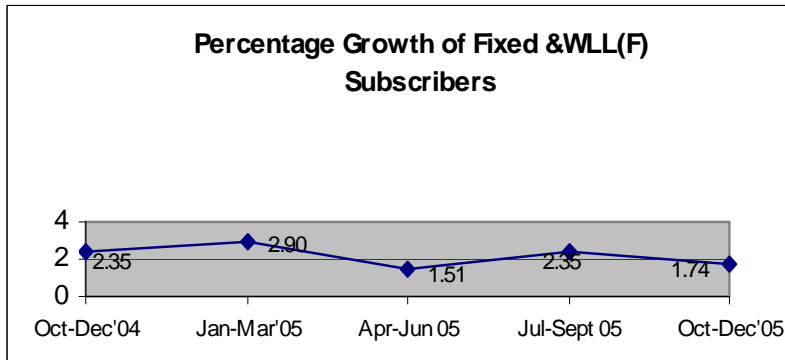




### 1.1.4 Growth of DELs

The Fixed Service sector has registered a growth of 8,34,081 lines during the quarter from 1<sup>st</sup> October 2005 to 31<sup>st</sup> December 2005. The actual number of DELs has increased from 4,80,01,992 as on 30<sup>th</sup> September 2005 to 4,88,36,073 as on 31<sup>st</sup> December 2005. The overall percentage of growth in subscriber base during the Quarter is 1.74%.

#### ***Average percentage growth rate of Total, Fixed Wireline and WLL(F) Subscribers***

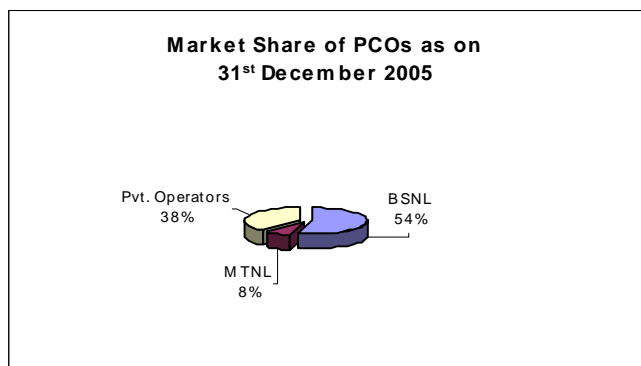


## 1.2 Other Performance Indicators: -

### 1.2.1 Public Call Offices:

During the current quarter 82,945 new PCOs have been added. Total number of PCOs in the country as on 31st December 2005 is 37,34,687. The contribution of BSNL is 20,23,673 i.e. 54% of the total PCOs. The contribution of MTNL and other private operators is 2,81,876 (8%) and 14,29,138 (38%) respectively.

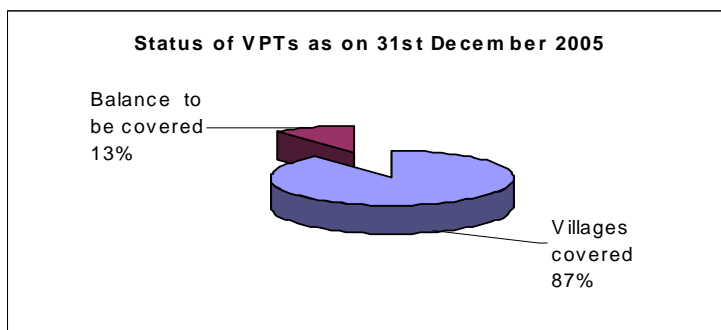
Operator-wise (BSNL/MTNL/Other Private Operators) market share of PCO is depicted in the chart below. Operator-wise details of PCOs is available at Table 1.2.



### 1.2.2 Village Public Telephones:

There are 6,07,491 villages in India. During the quarter ending 30<sup>th</sup> Sept 2005 there were 5,35,048 VPTs in the country whereas by the end of this quarter, the total number of VPTs has marginally increased to 5,39,356. Thus 4,308 VPTs have been added during the current quarter. The total number of villages left uncovered, as on 31st December 2005 are 68,135. BSNL has added 4,329 VPTs during the quarter. Among the five private operators there was a decrease of 6 VPTs in TATA (MH) and 15 VPTs in HFCL respectively, during this quarter.

Circle-wise and Operator-wise details of village public telephones as on 31st December 2005 and achievement during the quarter are available at Table 1.3.



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## Chapter Two

### PERFORMANCE OF MOBILE SERVICES

Subscriber Base crosses 75 million mark
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#### PART A

**2.0 Details of service providers:** - The list of all the mobile service providers along with their licensed service area is following: -

SLNO	Service Provider	Area for which licensed with No.	Area for which not licensed	UASL Service Licensed
1	BSNL/MTNL	All India (23)		
2	Bharti	All India (23)		All India except Raj, NE
3	Reliance Telecom/Infocomm/Reliable Internet Services Ltd	All India (23)		All India except NE & AS
		Reliance Infocomm (21)	Assam & NE	
		Reliance Telecom. (7) MP, WB, HP, Bihar, Orissa, Assam & NE	Delhi, Mumbai, Chennai, Kolkata, Maharashtra, Gujarat, AP, Karnataka, Tamil Nadu, Kerala, PB, Haryana, UP (W), UP (E), Rajasthan & J&K	
		Reliable Internet Services Ltd (1) Kolkata	All India except Kolkata	
4	Tata Teleservices	All India (20) except (Assam, NE & J&K)	Assam, NE & J&K	All India except (Assam, NE & J&K)
5	Hutch	Delhi, Mumbai, Chennai, Kolkata, Guj, AP, KTK, Punjab, HR, UP-W, UP-E, Raj & WB (13)	Maharashtra, Kerala, Tamil Nadu, MP, HP, BR, OR, AS, NE & J&K	UP-W, WB
6	Aircel	Chennai, TN WB, HP, BR, OR, AS, NE & J&K (9)	Delhi, Mumbai, Kolkata, Maharashtra, Gujrat, AP, Karnataka, Kerala, Punjab, Haryana, UP (W), UP (E), Rajasthan. & MP (14)	WB, HP, BR, OR, AS, NE & J&K
7	IDEA	Delhi, MH, Guj, AP, KR, HR, UP-W, MP (8)	Mumbai, Chennai, Kolkata, Karnataka, Tamil Nadu, Punjab, UP-E, Rajasthan, WB, HP, Bihar, Orissa, Assam, NE & J&K	--
8	BPL	Mumbai, MH, TN, KR (4)	All India except (Mumbai, Maharashtra, Tamil Nadu, Kerala)	--
9	Spice Communications	KTK, Punjab (2)	All India except (Karnataka, Punjab)	KTK, Punjab
10	HFCL	Punjab (1)	All India except Punjab	Punjab
11	Shyam Telelink	Rajasthan (1)	All India except Rajasthan	Rajasthan
12	Escorts Communications	UP-E, Raj, HP (3)	All India except (UP-E, Rajasthan, HP)	---

Note: 1. Reliance Telecom for all his circles has applied for Unified Licence.

Note: 2 Reliance Infocomm in J&K, Escorts Communications & Aircel (Dishnet Wireless Ltd) in HP, Bihar & J&K is yet to start his services.

Circle-wise details of Cellular, Fixed & Unified Access Service providers at the end of the quarter are given at Annex 2.1. All the service areas of the country have mobile operators ranging from 3 to 7.

## 2.1 **Growth of Subscribers Base: -**

### 2.1.1 Subscribers Base

The Mobile (GSM and CDMA) Industry has reached the 75.94 million subscribers mark (GSM 58.49 million & CDMA 17.45 million) for the quarter ending 31.12.2005.

### 2.1.2 Addition in Subscribers Base

The subscriber's base stood at 75.94 million as against 65.07 million for the quarter ending 30.9.2005. Around 10.87 million subscribers were added in this quarter.

### 2.1.3 Growth Rate

The growth rate for this quarter is 16.72% (15.03% in GSM and 22.79% in CDMA) as against 13.42% (13.16% in GSM and 14.37% in CDMA) for the quarter ending September 2005. In this quarter M/s BSNL has crossed the subscribers base of M/s Reliance and has captured the second position. M/s Bharti remains the largest mobile operator followed by M/s BSNL and M/s Reliance.

### 2.1.4 Company wise Market Share:

- a) The Subscriber Base of different Mobile operators is given in Table 2.1. The top five Mobile operators on the basis of market share are as under: -

<b>Mobile Group</b>	<b>Subscribers as on December, 05 (in Millions)</b>	<b>Market Share (in %age)</b>	<b>Technology Used</b>
Bharti	16.33	21.50	GSM
BSNL	14.83	19.53	GSM & CDMA
Reliance	14.68	19.33	GSM & CDMA
Hutchison	11.41	15.02	GSM
IDEA	6.47	8.52	GSM

The details of operator-wise subscribers of GSM and CDMA are given in Table 2.2.

- b) Distribution of Subscriber Base and market share of Mobile service as on December 2005 among Metros, Circles A to C is given in Table 2.3.

### 2.1.5 Change in Market Structure

The name M/s Hutchison Max Telecom Limited has been changed to M/s Hutchison Essar Limited. M/s Spice Communications in Karnataka has migrated to

UASL License from CMTS License. M/s Bharti, M/s Reliance and BSNL/MTNL have license to offer mobile services in all 23 service area. The largest operator, M/s Bharti is offering services in all the 23 service areas. M/s Reliance is presently offering services in all service areas except J&K circle. BSNL is also offering services in 21 circles. M/s Tata Teleservices is offering services in all its licensed 20 service areas.<sup>1</sup> Para 2.0 shows the list of the mobile service providers along with their respective licensed service area.

During this quarter, M/s Dishnet wireless Services started its services in Orissa and West Bengal Circles. In this quarter, the subscribers' base of M/s Bharti in Maharashtra and M/s BSNL in Karnataka, Tamil Nadu & Kerala circle had crossed one Million. In all 22 (19 GSM and 3 CDMA) service providers have crossed one million subscribers mark. The service areas are Delhi (3), Mumbai (4), Maharashtra (3), Gujarat (1), Andhra Pradesh (2), Karnataka (2), Tamil Nadu (2), Kerala (1), Punjab (2) and UP (E) (2).

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<sup>1</sup> M/s Tata does not have license to offer access services in J&K, Assam & North East.

## **PART B**

### **2.2 Mobile [GSM & CDMA] Service trends:**

#### **2.2.1 Summary findings for GSM Operators:**

- Share of prepaid subscribers in total subscriber base is up from 76% at the end of Sept 2005 to 78% at the end of December 2005.
- All India ARPU declined by 3.2%, from Rs.374 per month to Rs.362 per month.
- The Postpaid ARPU decreased from Rs. 646 to Rs.621 whereas prepaid ARPU increased from Rs. 284 to Rs.286.
- Average MOU per subscriber per month for the quarter is 393, showing an increase of around 7% from 368 per month during the quarter ending Sept-05.
- Outgoing MOUs increased by 9% while the incoming MOUs increased by 5% between the two quarters.
- The ratio of incoming – outgoing traffic continues to be 60:40 in the quarter.
- The all India blended RPM (Revenue per Minute) for the quarter has declined by 8.9%, from Rs. 1.01 in Sept- 05 to Rs. 0.92 in Dec-05.
- 81% of the Local (Intra-circle) outgoing traffic is accounted by Mobile terminating traffic.
- Proportion of On- network traffic is also growing. The percentage of the on network (Mobile) traffic terminated within the service area increased from 45% to 53%.
- Trend indicates that the proportion of local calls (MOU) to total outgoing MOU is increasing and that of long distance is falling.

#### **2.2.2 Summary findings for CDMA Operators:**

- Share of prepaid subscribers in total subscriber base is 82% at the end of December 2005, as compared to 80% at the end of September 2005.
- All India ARPU for the quarter ending December 2005 is Rs. 256 showing an increase of 4.92% from Rs.244 (Sep-2005).
- All India postpaid ARPU at Rs. 511 per month is about 2.5 times than that of all India prepaid ARPU of Rs. 207 per month.
- Average MOU per subscriber per month for the quarter is 462, showing a decline of 1.6% from 470 per month during the quarter ending Sep-2005.
- The ratio of incoming – outgoing traffic is estimated to be 56:44 in the quarter ending December 2005 as against 58:42 in September quarter.
- The All India blended RPM (Revenue per Minute) for the quarter has increase by 5.76% from Re. 0.52 in Sep-2005 to Re. 0.55 in Dec-05.
- Mobile-to-Mobile Local (Intra-circle) traffic accounts for 87% of the Local (Intra-circle) traffic.
- On an average 60% of the total Intra-circle traffic terminates within own network (Mobile).

## **2.2.3 ARPU**

### **2.2.3.1 For GSM:**

This implies a growth rate of 10.62%. Growth in average subscriber base in the corresponding period has been 15.62%.

- There has been a decrease in all India blended ARPU per month by about 3.2% from Rs. 381 in the quarter ending Sept-05 to Rs.362 in Dec-05 (Annex 2.2 Table (c)).
- Monthly ARPU in postpaid segment has declined from Rs. 646 in Sept-05 to Rs.621. On the other hand, prepaid segment has shown a marginal increase in ARPU per month from Rs. 284 in Sept-05 to Rs.286.
- Gap between postpaid and prepaid ARPU is narrowing. Postpaid ARPU was 2.27 times that of prepaid ARPU in the quarter ending Sept-05, and this has narrowed down to 2.17 times in this quarter.
- There has been a decline of about 9.04% in ARPU since last year i.e. between Dec-04 to Dec-05.

### **2.2.3.2 For CDMA:**

- The All India blended ARPU has increased by about 5% from Rs. 244 in the quarter ending Sep-05 to Rs. 256 in the quarter ending Dec-05.
- Monthly ARPU in postpaid segment has increased from Rs. 440 in the quarter ending Sep-05 to Rs. 511 in Dec-05.
- ARPU in, prepaid segment has also increased from Rs. 194 in Sep-05 to Rs. 207 in Dec-05.
- There is a huge difference between postpaid and prepaid ARPU. Postpaid ARPU has been 2.47 times that of prepaid ARPU.
- Blended Revenue from Usage (Call Revenue adjusted for interconnect Payments) accounts for 56% showing a decline of 3% from 59% (Sep-2005).

## **2.2.4 Usage Pattern**

### **2.2.4.1 For GSM**

- MOU per subscriber increased from 368 in quarter ending Sept-05, to 393 in Dec-05, thereby showing an increase of about 6.79%. Outgoing MOUs alone increased by 9.15% (from 142 to 155) and incoming MOUs by 4.87% (226 to 237) (Annex 2.4 Table (b)).
- In Postpaid, total MOUs increased by 5.27% from 645 in Sept-05. to 679 in Dec-05. Increase in prepaid service for the same period has been 10.43% (from 278 307).
- The incoming-outgoing minutes ratio is 61:39. For postpaid, ratio of incoming-outgoing minutes is 55:45 and for prepaid segment, it is 65:35.
- The outgoing MOU per subscriber has been highest in Circle C at 197 per month and highest incoming MOU per subscriber has been in Metros at 256 per month. Lowest per subscriber usage for both outgoing and incoming has been in Circle B, for outgoing (144 per month) and incoming (212 per month).

#### **2.2.4.2 For CDMA**

- Average MOU per subscriber per month for the quarter is 462, showing a decline of 1.6% from 470 per month during the quarter ending Sep-2005.
- On an average a CDMA subscriber makes 205 minutes of outgoing calls, sends 15 SMS and receives incoming calls for 257 minutes in a month.
- The ratio of incoming – outgoing traffic is 56:44.
- Circle C at 417 per month has recorded Lowest per subscriber usage for both outgoing and incoming calls followed by Circle A at 428 per month.
- Circle A at 178 per month has recorded the Lowest per subscriber usage for Outgoing calls followed by Metro at 216 per month (Annex 2.3 Table (a)).
- Circle C at 167 per month has recorded the Lowest per subscriber usage for Incoming calls followed by Circle A at 251 per month (Annex 2.3 Table (a)).
- The number of SMS has been highest in Circle B & Metro (16 per subscriber month), and lowest in Circle C (13).

#### **2.2.5 Revenue Per Minute (RPM)**

##### **2.2.5.1 For GSM**

- The all India blended RPM (Revenue per Minute) for the quarter has declined by 8.9%, from Rs. 1.01 in Sept- 05 to Rs. 0.92 in Dec-05 (Annex 2.5 Table (b)).
- The RPMs for postpaid and prepaid are almost at the same level.

##### **2.2.5.2 For CDMA**

- The all India blended RPM for the quarter is Re. 0.55. For postpaid alone, RPM is Re. 0.77 as against Re. 0.49 for prepaid service (Annex 2.5 Table (a)).
- The all India blended RPM (Revenue per Minute) for the quarter has increased by 5.76% from Re. 0.52 in Sep-2005 to Re. 0.55 in Dec-05 (Annex 2.5 Table (a)).

#### **2.2.6 Tariff Trends**

##### **2.2.6.1 For GSM**

- Lowest Tariffs available in the market (for local outgoing usage) as of December-05 for GSM services

Effective charge represents the actual payout by a user with a defined traffic pattern. Total outgoing traffic have been distributed between fixed and mobile with further break up into on-net and off-net, based on the information furnished by the GSM Service providers in the quarterly report.

- Postpaid Service

Effective charge has been calculated for a monthly local usage of 250 outgoing minutes. Around 570 postpaid tariff plans in the country were



analyzed to arrive at the lowest effective charge per minute. The lowest available effective charge per minute is Rs. 1.20

○ Prepaid Service

Majority of the prepaid subscribers are using the Rs.300 or lower recharge coupon and hence the tariffs applicable for these recharge coupons (or its minor variants) have been taken as the representative tariffs for the pre-paid service. On an analysis of about 160 prepaid tariff plans, it is found that the lowest effective charge per minute is Rs. 1.27.

## **2.2.6.2 For CDMA**

➤ Lowest Tariffs available in the market (for local outgoing usage) as of Dec-05 for Basic & CDMA services

Effective charge represents the actual payout by a user with a defined traffic pattern. Total outgoing traffic have been distributed between fixed and mobile with further break up into on-net and off-net, based on the information furnished by the CDMA Mobile in the quarterly report.

○ Fixed (Wireline + Wireless)

Effective charge has been calculated for a monthly local usage of 250 outgoing minutes. All the Postpaid tariff plans in the country were analyzed to arrive at the lowest effective charge per minute. The lowest available effective charge per minute is Re. 0.71

○ CDMA Mobile Postpaid

Effective charge has been calculated for a monthly local usage of 250 outgoing minutes. All the Postpaid tariff plans in the country were analyzed to arrive at the lowest effective charge per minute. The lowest available effective charge per minute is Rs. 1.31

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## Chapter Three

### PERFORMANCE OF INTERNET SERVICES

Subscribers base crosses 6.7 million – Meets the Broadband policy target

#### 3.1 Service Providers & Subscribers Base: -

For the quarter ending December 2005, 163 Internet Service Providers were operational. Bharat Sanchar Nigam Ltd (BSNL) has retained its top position and reported a subscriber base of 25.97 Lakhs against 22.62 Lakhs during the last quarter. Mahanagar Telephone Nigam Limited (MTNL) has retained second position with a subscriber's base of 13.14 Lakhs against 12.07 Lakhs subscribers during the last quarter. M/s Sify Limited is on the third position with a subscriber base of 8.77 lakhs as against 8.56 lakhs. M/s Videsh Sanchar Nigam Limited is at fourth position with subscriber base of 4.67 lakhs. Reliance Communications Infrastructure Ltd. reported a subscriber base of 3.40 Lakhs and remained at fifth place during the quarter ending 31st December, 2005. (Ref Table 3.1).

At the end of quarter ending 31st December,2005 number of Internet subscribers stood at 67.03 lakhs as compared to 61.25 lakhs during the preceding quarter registering an increase of 9.44% during the quarter. The annual growth rate w.r.t 31st December,2004 is 23%. In terms of subscribers the number was 67.03 lakhs at the end of 31st December,2005 as against 54.50 lakhs reported at the end of 31st December,2004.

#### 3.2 Internet Telephony: -

The Internet Telephony was permitted to Internet service providers w.e.f 1st April'02. DOT has given permission to 121 ISPs to offer Internet Telephony services as on March 2005, and as per the report submitted to TRAI, 51 ISPs have started Internet Telephony services, the list of which is enclosed at Annex 3.2. Total minutes of the use for Internet Telephony during the quarter were 58.66 million, as compared to 47.31 million for the last quarter, thus indicates a growth of 23% during the quarter.

#### 3.3 Market Share: -

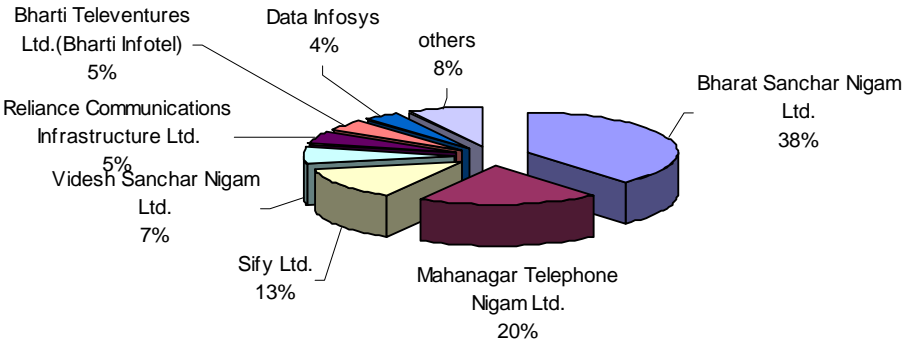
The growth trend indicates a considerable growth in market share of PSU owned ISPs. During the quarter PSU owned ISPs have captured 58% market share.

The market share of top 5 ISPs is as under:

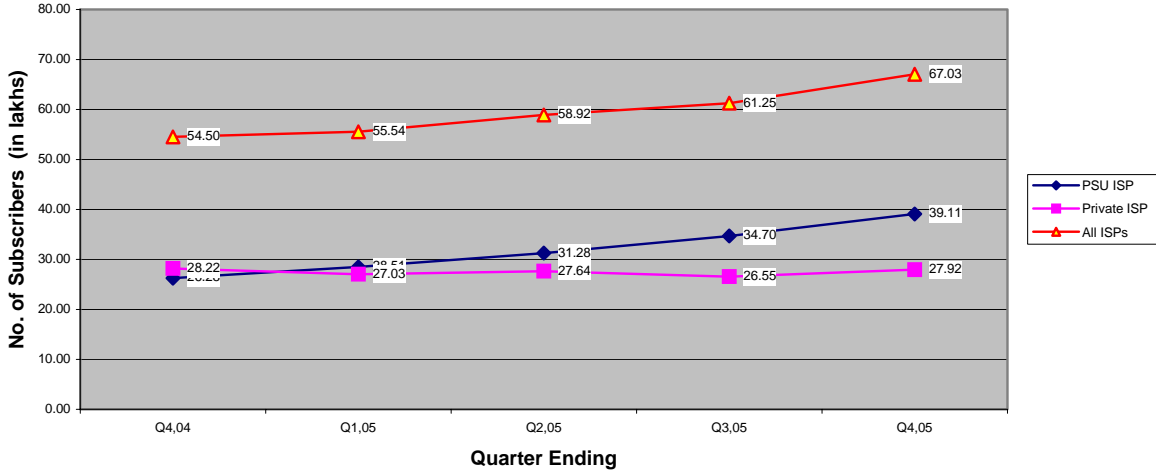
ISP	Share in %
Bharat Sanchar Nigam Ltd.	38.74
Mahanagar Telephone Nigam Ltd.	19.60
Sify Ltd.	13.09
Videsh Sanchar Nigam Ltd.	6.97
Reliance Communications Infrastructure Ltd.	5.08

Among PSU owned ISPs; M/s BSNL has reported a subscriber's base of 25.97 Lakhs during the quarter ending 31<sup>st</sup> December, 2005 as against 22.62 Lakhs during the previous quarter registering an increase of 14.80%. M/s MTNL has reported a subscriber base of 13.14 Lakhs against the subscriber base of 12.07 Lakhs reported during the previous quarter, registering an increase of 8.80 %.

**Chart 1- Subscriber Base**



**Chart 4 - Growth Trends**



### **3.4 Leased Lines Connectivity: -**

The numbers of Leased Line Internet connections remained at 14,364 during the quarter ending December,2005.

### **3.5 Broadband Connectivity (>=256 Kbps): -**

The number of Broadband subscribers as reported by ISPs was 9.03 Lakhs at the end 31<sup>st</sup> December,2005 as compared to 6.10 Lakhs of 30<sup>th</sup> September, 2005, thus registering a growth of 48% over the previous quarter

### **3.6 Minutes Of Use (MOU) per subscriber for Dialup Internet access: -**

As reported by 34 ISPs for the dialup Internet the average minutes of use per subscriber/ month was approximately 189 minutes.

### **3.7 Average Revenue Per User (ARPU) for ISPs: -**

A total of approx. Rs 424 crores revenue has been reported during the quarter. The average revenue per user (ARPU) per month for dialup Internet usage was of the order of Rs 210.

### **3.8 International connectivity: -**

The bandwidth owned by various IGSP for their ISP operations and Internet Leased lines is reported to be 10.45 GB for downlinking and 10.36 GB for uplinking.

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## Chapter Four

### PERFORMANCE OF OTHER VALUE ADDED SERVICES

VSAT services accelerate growth

#### 4.1 Public Mobile Radio Trunked Service (PMRTS): -

12 service providers of Public Mobile Radio Trunked Services have submitted their reports in this quarter.

##### 4.1.1 Performance during the Quarter Ending 31<sup>st</sup> December 2005:

- The subscriber base of PMRTS increased from 27867 in Sept, 2005 to 28025 in Dec., 2005 registering a growth rate of 0.57%.
- Delhi, Mumbai, Bangalore and Chennai together account for 71.93% of market share of the total subscribers. Delhi leads the tally with the market share of 8901 subscribers followed by Bangalore, Mumbai and Chennai with the market share of 4659, 3829 and 2769 subscribers respectively.
- M/s. Procall Private Limited leads the tally of subscribers with a subscriber base of 8288 followed by The Arvind Mills Ltd. and M/s. QuickCalls India Pvt. Ltd. with a subscriber base of 7013 and 4109 respectively. M/s Aryadoot Transport Pvt. Ltd. has increased their subscriber base with the highest growth rate of 8.94% followed by M/s. Arya Offshore Services Pvt. Ltd. with 5.63% growth rate in this quarter. Five Service Providers viz. M/s. German Express Shipping Agency (India) Pvt. Ltd., M/s. United Liner Agencies of India (Pvt.) Ltd., M/s. Procall Private Ltd., M/s. The Arvind Mills Ltd., M/s. Smartalk Private Ltd. have registered a negative growth of -2.15%, -3.65%, -0.46%, -0.96% and -2.85% respectively in this quarter.

The subscriber base of service providers of PMRTS is given in Table 4.1.

#### 4.2 VSAT services: -

VSAT services are being provided by 9 VSAT service providers.

##### 4.2.1 Performance during the quarter ending 31<sup>st</sup> December 2005:

- VSAT services are being provided by 9 VSAT service providers.
- M/s Telstra Vishesh has not submitted their report for the last quarter.
- In the present quarter, there was an addition of 3494 new subscribers. The total number of subscribers increased from 43083 in September, 2005 to 46577 in December, 2005, registering a growth of 8.11% as against the growth rate of 6.23% in quarter ended September, 2005. HCL Comnet remained the market leader with 16192 VSAT subscribers followed by Hughes Escorts Communications Ltd. (HECL) with 14267, Bharti BT with 6929 and Comsat Max with 4661 VSAT subscribers respectively.
- M/s HCL Comnet added the maximum number of new connections 1310 with a percentage growth rate of 8.80.

The number of subscribers of each service providers along with the Market Share in terms of Percentage of Subscribers as on 31<sup>st</sup> December 2005 is given in Table 4.2.

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## Chapter Five

### QUALITY OF SERVICE (QOS) PERFORMANCE

#### 5.1 Quality of Service performance of Basic Service Operators for the quarter ending 31<sup>st</sup> December 2005: -

Based on Quality of Service Parameters reported by all the Basic Service Operators for the quarter ending December 2005, the information on QoS performance is attached to this report as Annex 5.1.

From perusal of the report (Annex 5.1) following points emerge: -

(1) **Provision of telephone within 7 days for exchange areas declared “On Demand” (100% in <7days).**

60 out of 71 Licensees have not met the QoS benchmark for this parameter. The performance of M/s BSNL (Bihar, Assam, Jharkhand, J & K, NE-I & WB), Reliance (Delhi, MH, Punjab, KTK, Chennai, Mumbai, UP-E, UP-W & WB) and Bharti Tele- ventures (MH, Kolkatta & UP-W) is (28.33%, 39.86%, 36.96%, 16.38%, 40.00% & 33.28%), (22.65%, 15.31%, 48.24%, 12.44%, 48.64%, 40.93%, 37.26% 43.48% & 0.00%) and (18%, 9.01%, 34.27% & 9.95%) respectively, which is way below the TRAI stipulated benchmark of 100%.

(2) **Fault incidences per month per 100 telephones (should be less than 5 Faults per 100 phones per month)**

Bharat Sanchar Nigam Limited (except Tamilnadu & Kolkatta) and MTNL (Mumbai & Delhi) have not met the stipulated QoS benchmark for this parameter.

Among the Private Operators only Bharti Tele-ventures (AP, DL, GJ, MH, PB, KR, Kolkata, UP(W)), Reliance Infocom (GJ, PB, Raj, TN, UP-E & WB) have not met the TRAI stipulated benchmark of <5 for this parameter.

(3) **Percentage of faults repaired by next working day (should be >90%)**

M/s Bharat Sanchar Nigam Limited has not submitted their performance for this parameter whereas M/s MTNL have not met this benchmark in their Delhi circle and data not reported for Mumbai circle.

Among the private operators M/s Tata Tele-services (AP, TN, KTK, Mumbai), Reliance Infocom (AP, BR, Delhi, GJ, MH, HR, KTK, KR, Kolkata, WB) and Bharti Tele-ventures Limited (AP,GJ, MH, PB, Mumbai) have not met the benchmark for this parameter whereas, M/s Reliance (KR, AP, Delhi, GJ, KTK), Bharti Tele-ventures (AP, MH) and Tata (TN) have submitted their performance in this quarter as (3.23%, 2.87%, 2.92%, 2.80%, 3.47%), (1.72%, 16.00%) and 0.00% respectively, which is the worst performance against the TRAI stipulated QoS benchmark of >90%

(4) **Mean Time to repair (MTTR) (should be <8hrs.)**

M/s BSNL, in only 8 out of 26 circles have met the benchmark whereas MTNL (Delhi & Mumbai) have not met this benchmark. The performance of M/s Tata Tele-services (TN), Bharti Tele-ventures (MH), BSNL (Chennai, NE-I) and MTNL (Mumbai) is (27.00 hrs), (612.60 hrs.), (20.00 hrs., 31.00 hrs.) and (25.10 hrs.) respectively, which is way below the TRAI benchmark of <8 hrs.

**(5) Call Completion Rate in local network (should be >55%)**

M/s BSNL in 05 out of 26 circles has not met the OoS benchmark and MTNL Delhi and Mumbai have not achieved the benchmark. Among the private Operators only Tata (AP, Delhi, KTK, Chennai), and Bharti Tele-ventures (AP, KR, Kolkatta, UP-W, PB, HR) have not achieved the desired QoS benchmark of TRAI. Reliance Infocom has not reported the data for this parameter.

**(6) Metering and Billing credibility (Not more than 0.1% of bills should be disputed over a billing cycle)**

Only 01 (NE-II) out of 26 service areas of BSNL and M/s MTNL, Mumbai have not met the benchmark for this parameter. Among the Private Operators M/s Tata Teleservices (GJ, MH, Mumbai), Bharti (AP, GJ, PB, KTK, KR, Kolkatta, Mumbai, UP-W), M/s Reliance (AP, MH, Raj, KTK, KR, Mumbai, Orissa UP-E, West Bengal) and Shyam Tele-link (Raj) have not achieved the TRAI's QoS benchmark of <0.1%.

**(7) Customer Care: Promptness in attending 95% of customers requests (Benchmarks for Shifts, Closures and providing additional facilities are <3 days, <24 hours and <24hours respectively)**

**(i) Shifts:-**

M/s BSNL have met the QoS benchmark for this parameter in Only 12 out of 26 circles. Whereas, MTNL (Delhi, Mumbai) have failed to meet the requirement on "Customer care – Shifts".

Among the private operators only Shyam Telelink (Rajasthan), Tata (Chennai, Delhi & Gujarat), Reliance (KR, UP-W, AP) and Bharti (Kolkatta & PB) have met the QOS benchmark on Customer Care (Shifts).

**(ii) Closures:-**

Only 7 out of 26 service areas of M/s BSNL have met the TRAI QoS Benchmarks whereas M/s MTNL (Delhi and Mumbai) have also failed to meet the benchmarks.

Among the private operators only Tata (Chennai, AP, GJ, MH), Bharti (Kolkata, UP-E, MP), Reliance Infocom (Orissa), HFCL, Punjab and Shyam Telelink, Rajasthan have met the stipulated benchmark.

**5.2 Quality of Service performance of Cellular Mobile Service Providers for quarter ending 31<sup>st</sup> December 2005: -**

- a) This report covers performance of 87 GSM Cellular Mobile operators and 41 CDMA service operators vis-à-vis the QoS benchmarks prescribed by TRAI.
- b) M/s Dishnet Wireless Limited (West Bengal, Assam, North East and Orissa) and M/s HFCL Punjab have submitted their first performance monitoring reports in this quarter. Thus, the number of service providers who have reported their QOS performance has increased from 123 to 128 in this quarter.

The summary of status of the service providers who have met the benchmarks in this quarter as compared to previous quarter is given in the following table:



Sr. No.	Parameters	Bench- marks	No. of operators Meeting the benchmarks			
			Quarter ending Sept, 2005		Quarter ending Dec, 2005	
			Out of 123 (Nos.)	Out of 123 (%)	Out of 128 (Nos.)	Out of 128 (%)
1	Accumulated down time of community isolation	<24 hrs	<b>99</b>	<b>80.49%</b>	<b>123</b>	96.09%
2	Call Set-up Rate (within licensee's own network)	>95%	<b>119</b>	<b>96.75%</b>	<b>127</b>	99.22%
3	Service Access Delay	Between 9 to 20 Sec	<b>112</b>	<b>91.06%</b>	<b>128</b>	100.00 %
4	Blocked Call Rate <b>(i) SDDCH Paging Channel Congestion</b>	<1%	<b>105</b>	<b>85.36%</b>	<b>117</b>	91.41%
	<b>(II) TCH Congestion</b>	<2%	<b>99</b>	<b>80.49%</b>	<b>109</b>	85.16%
5	Call Drop Rate	<3.0%	<b>121</b>	<b>98.37%</b>	<b>126</b>	98.44%
6	% of connection with good voice quality	>95%	<b>121</b>	<b>98.37%</b>	<b>126</b>	98.44%
7	Response Time to the customer for assistance <b>(i) age of calls answered (electronically) within 20 seconds = 80%</b>	80%	<b>113</b>	<b>91.87%</b>	<b>125</b>	97.66%
	<b>%age of calls answered (electronically) within 40 seconds = 95%</b>	95%	<b>104</b>	<b>84.55%</b>	<b>125</b>	97.66%
	<b>%age of calls answered by operator (voice to voice); within 60 seconds = 80%</b>	80%	<b>99</b>	<b>80.49%</b>	<b>99</b>	77.34%
	<b>(ii) %age of calls answered by operator (voice to voice); within 90 seconds = 95%</b>	95%	<b>88</b>	<b>71.54%</b>	<b>89</b>	69.53%
8	Complaints per 100 bills issued	<0.1%	<b>93</b>	<b>75.61%</b>	<b>107</b>	83.59%
9	% of complaints resolved with 4 weeks	100%	<b>118</b>	<b>95.93%</b>	<b>128</b>	100.00 %
10	Period of all refunds/payment due to customers from the date of resolution of complaints as in (9) above	<4 weeks	<b>119</b>	<b>96.75%</b>	<b>126</b>	98.44%

**5.2.1 The analysis of PMR of 128 Cellular licensees in 23 service areas is as under: -**

**(A) Network Performance**

- i. **Accumulated down time of community isolation:-** M/s BSNL (MH, OR), Bharti (AP), Reliance-GSM (AS) and BPL (TN) are not meeting the benchmark of <24 hrs. for this parameter. However, the performance of M/s Bharti Tele-ventures, in respect of this

parameter is 177.67 hrs which is way beyond the benchmark of <24 hrs.

- ii. **Call Set-up Success Rate** – Only M/s Bharat Sanchar Nigam Limited, Orissa has not met the TRAI stipulated benchmark of >95%.
- iii. **Service access delay** – All the operators have met this benchmark of 9 to 20 seconds.
- iv. **Blocked Call Rate**

**1. SDCCH/Paging Channel Congestion** – Only 11 service providers namely, M/s BSNL (MH, KTK, Raj, BR, OR), M/s Bharti Televentures (Raj), Idea Cellular (MP), Reliance GSM (WB, BR, NE) and Aircel (Chennai) have not met the benchmark of <1%. The performance of M/s BSNL (RJ) is 7.90% which is much beyond the benchmark of <1%.

**2. TCH Congestion** – M/s BSNL (AP, KTK, RAJ, BR, OR, AS), Idea Cellular-MP, Reliance Telecom (MP, WB, BR, OR, NE) and Aircel Cellular Limited, Chennai reported their performance for this parameter as (4.90%, 5.80%, 7.90%, 4.50%, 8.20%, 4.64%), (12.28%), (8.90%, 8.26%, 9.80%, 6.83%, 8.45%) and 7.63% respectively, which is much above the benchmark of <2.00%.

**iv) Call Drop Rate** - All the service providers have met the benchmark of this parameter except BSNL (BR – 3.20%) and Reliance GSM (NE – 4.60%) against the benchmark of <3%.

**v) %age of good voice quality-** All the Service Operators have met the benchmark for this parameter except BSNL (BR and OR).

#### **(B) Customer Help Line - Response time to the customer for assistance**

- (i) **%age of call answered (electronically) within 20 sec:-** The performance of M/s Idea Cellular (HR), Tata CDMA (Mumbai) and BPL (Mumbai) is 40.00%, 0.00% and 77.87% respectively. M/s Tata, Mumbai with performance of 0.00% is the worst one.
- (ii) **%age of call answered (electronically) within 40 sec:-** M/s Tata-CDMA (Mumbai) is having the worst performance as **0.00%** for this parameter against the TRAI benchmark of 95%.
- (iii) **%age of call answered by operator (voice to voice) within 60 sec:-** The performance of M/s Reliance-CDMA (AP, KTK, UP-W, UP-E, MP, WB, BR, Orissa, Delhi, Kolkata) and BSNL (KTK) is (36.21%, 54.91%, 35.27%, 35.27%, 56.17%, 49.76, 49.76%, 56.17%, 56.11%, 49.76%) and (53.00%) respectively for this parameter which is way below the TRAI benchmark of 80%.
- (iv) **%age of call answered by operator (voice to voice) within 90 sec:-** The performance of Reliance CDMA (AP, UP-W, UP-E, WB, BR, Kolkata), Idea Cellular (Delhi) and BSNL (KTK) is (50.37%, 48.45%, 48.45%, 69.19%, 69.19%, 69.19%), (15.00%) and (58.00%%) respectively, which is way below the TRAI benchmark of 95%.

#### **(C) Billing Complaints**

- (i) **No. of Complaints per 100 bills issued** the performance of M/s Tata Teleservices CDMA, Mumbai is 1.04% against the TRAI benchmark <0.1%.

### **5.2.2 Details of Quality of service:**

Detail of performance related to Network Performance, Customer help line and billing complaints are available at Annex 5.2.

### **5.3 Quality of Service Performance of Internet Service Providers: -**

5.3.1 The annex 5.3 indicates the Quality of Service achieved by Top 20 ISPs during the quarter: It is observed that most of the ISPs are able to meet the benchmarks, barring one or two cases.

#### **5.3.2 The observations on QOS Benchmarks are as follows:**

##### **5.3.2.1 Service Activation Time :**

All the ISPs have met the benchmark of 6 hrs. ISPs Hathway Cable & Datacom Pvt. Ltd., Tata Teleservices Maharashtra Ltd., HFCL Infotel Ltd., Fascel, Hughes, Broadband Pacenet (I) Pvt. Ltd. and Webel ISP have not provided the data.

##### **5.3.2.2 Time to Access :**

ISPs are required to achieve the benchmark 30 sec. The ISPs Hathway Cable & Datacom Pvt. Ltd., Fascel, Hughes, Broadband Pacenet (I) Pvt. Ltd. and Webel ISP have not provided the data, rest others have met this benchmarks.

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

ISPs are required to maintain the parameter of 80% for the first attempt, 90% for the second attempt and 99% for the third attempt. All the ISPs are able to meet this benchmark.

Hathway Cable & Datacom Pvt. Ltd., Fascel Ltd., Hughes, Broadband Pacenet (I) Pvt. Ltd. and Webel ISP have not provided us the data.

##### **5.3.2.4 ISP Node Unavailability :**

ISP Nodes unavailability should not exceed 30 minutes in a month. Except Asianet Sattelite Communication Ltd. and WWW communications Ltd., other ISPs are able to achieve this benchmark.

MTNL, Hathway Cable & Datacom Pvt. Ltd., Tata Teleservices (Maharashtra) Ltd., Fascel Ltd., Hughes, Broadband Pacenet (I) Pvt. Ltd. and Webel have not provided us the data.

### **5.3.2.5 Grade of Service :**

ISPs are required to maintain the Grade of Service on the link connecting PSTN node to the ISP node as 1 in 100. Two ISPs (VSNL and BG Broadband India Pvt. Ltd.) have informed that the information regarding the above mentioned benchmark can not be provided as the BSO has not given the information to them.

Reliance Communications Infrastructure, Hathway Cable & Datacom Pvt. Ltd., Fascel, WWW Communications, Hughes, Broadband Pacenet (I) Pvt. Ltd. and Webel ISP have not provided us the data.

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

As per clause 1.9 Schedule 'C' of ISP license, ISPs are required to rectify 90% of faults resulting due to subscriber complaints within 24 hours and 99% within three days.

All the ISPs have been rectifying the fault within stipulated period of three days. Hathway Cable & Datacom Pvt. Ltd. and Fascel have not provided us the data

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## Chapter Six

### PERFORMANCE OF CABLE TV, DTH AND RADIO BROADCASTING SERVICES

6.1 This is the report in respect of Broadcasting and Cable Service and this contains:

- a) Total No of Cable and Satellite TV Households as per the estimates in the Report of Media Partners Asia Limited on Asia Pacific Pay TV and Broadband Markets 2006 ( Media Partners Research Estimates) for year ending Dec 2005 is 64.85 Million. The figures as per two surveys, one done by the National Readership Survey and Indian Readership Survey are also given alongside in Table 6.1. **(Table 6.1)**
- b) Relative genre wise % share of viewership Vs Advertisement Revenue during 2004 and 2005. **(Table 6.2)**
- c) Relative % share of viewing pattern of channels (Pay Vs FTA Vs local) in four Metros during 2004 and 2005. **(Table 6.3)**
- d) Range of number of channels carried regularly carried across cable Network(s) and cities where digital services are offered. The data is in respect of the quarters ending Sept 2005 and Dec 2005. **(Table 6.4 (a) &(b))**
- e) Details of new pay channels / FTA Channels converted to Pay after 26.12.2003 on the basis reports received from broadcasters / distributors of TV Channels under clause 4 of the Tariff Order of 1.10.2004. **(Table 6.5)**
- f) Details of no of applications, received, no of Licenses issues for DTH services. **(Table 6.6)**
- g) Information on total Advertisement Revenue of FM Radio Stations who have given their reports.
- h) Status of Community Radio Stations in the country as on 30.11.2005 **(Table 6.7)**

6.2 This above information has been given in 8 tables appended to this report. Brief Highlights in respect of data contained in these tables are indicated below:

#### A. Cable Television

- a) Table 6.2 indicates that the relative % share in total advertisement revenue in respect of General Entertainment Channel and Regional Language channel have not moved in the same direction as the relative % f share in total viewership of these two genre of channels between the years of 2004 and 2005. In the case of genre of General Entertainment Channel there is a small % increase in relative viewer ship share from 33% from 2004 to 33.6% in 2005 but its relative share in % advertisement revenue has gone down from 47% in 2004 to 39.5%. In the case of genre of Regional Language Channel though there is a fall

(around 4.5 %) in relative viewer ship % share in 2005 over 2004 the relative Advertisement Revenue share % has increased (around 4.4%) in 2005 over 2004.

- b) It may be seen from Table 6.3 indicate that the % share of FTA channels in Delhi and Kolkata have gone up in the quarter ending Dec 05 over the previous quarter ending Sept 05. There is no perceptible change in relative % ages of share between pay, FTA and local channels Chennai and Mumbai in the two quarters.
- c) As per the Media Partner's Asia Limited report on Asia Pacific Pay TV and Broadband Markets 2006 (Media Partners Research Estimates) the total Cable Industry Revenue is estimated at US\$3530 Million (INR 15490 crores approx)) for the Year ending December' 2005. The estimated figure for 2004 was at US \$ 2675 Million. (Table 6.1)
- d) Table 6.4 (a) & (b) gives an indication of maximum and minimum of range of number of FTA, Pay and Local channels, in Analogue and/or Digital mode, regularly carried during the quarter ending Dec 05 on cable TV networks which have been reported. Figures for the previous quarter as available (without any break up of analogue/digital) have also been given in the table. The gap between the ranges of maximum and minimum in a particular quarter may be due to different sizes of reporting networks operating in different areas and in different economic clusters and variations between the quarters may be partly due to different networks reporting and the number of agencies reporting for the quarters. The maximum and minimum figures may not be of the same network or area reporting as the range indicated is based on overall figures reported across different networks operating in different areas of different service providers.
- e) Table 6.5 giving information on names of New Pay Channels and Free to Air (FTA) channels converted into Pay Channels after 26.12.2003 indicates that there have been 30 new pay channels/ converted FTA Channels to pay that have been launched since 26.12.2003. This is based on information reported by broadcasters in terms of clause of 4 of the TRAI's Tariff Order of 1.10.2004 on broadcasting and cable services.

## **B. DTH Services**

6.3 It can be seen from table 6.6 that besides the existing DTH player there could be four more players who may come into the market in the future. The entry of more number of DTH operators may signify effective competition to cable TV platform.

**C. Radio**

6.4 The total Advertisement Revenue up to the quarter ending with Sept 05 and Dec 05 of 7 FM Radio Service Providers who have given their reports are summarized below:

No of Service providers Reporting	No of Radio Stations Reported for	Revenue from Advertisement /Air Time Sale (Rs in crores)			
		For Qtr Ending Sept 05	For Qtr Ending Dec 05	For year ending Mar 05	For year ending Mar 04
7	18	56.28	111.33	133.29	101.09

6.5 Table 6.7 gives the status on Community Radio Stations in the country.

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**Table 1.1****Subscriber Base of Fixed Services**

Sr. No.	Fixed Service Operators	Area of Operation	31st Dec 2005		
			Urban	Rural	Total
1	BSNL	All India	22820644	13940496	36761140
2	MTNL	Delhi & Mumbai	3856868	0	3856868
3	Bharti Telesonic Ltd	AP, MP, Delhi, Haryana, TN , Chennai, Karnataka, Kerala, Gujarat, Punjab, Maharashtra, Mumbai, U.P. (W) including Uttaranchal, West Bengal and Kolkata	1199513	0	1199513
4	Tata Teleservices (Maharashtra) Ltd	Maharashtra & Mumbai	1024759	5957	1030716
5	Tata Teleservices Ltd	AP, TN, Chennai, Karnataka, Gujarat, Delhi, Bihar, Orissa, Rajasthan, Punjab, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, U.P. (E), U.P (W) including Uttaranchal, West Bengal and Kolkata	3003381	8870	3012251
6	HFCL Infotel Ltd	Punjab	238737	630	239367
7	Shyam Telelink Ltd	Rajasthan	159619	8892	168511
8	Reliance Infocomm. Ltd	AP, Bihar, Delhi, Gujarat, Haryana, HP, KN, Kerala, MP, MH, Mumbai, Orissa, Punjab, Rajasthan, TN Chennai UP(E), UP(W), WB, Kolkata	2556183	11524	2567707
<b>Grand Total</b>			<b>34859704</b>	<b>13976369</b>	<b>48836073</b>



**Table 1.2****Details of Public Call Offices (PCO)**

<b>S.No</b>	<b>Service Providers</b>	<b>Area of Operation</b>	<b>PCOs as on 31.12.05</b>	<b>PCOs added during the quarter ending 31.12.05</b>
1	BSNL	All India	2023673	37350
2	MTNL	Delhi & Mumbai	281876	-1373
3	Bharti	AP,MP, Delhi, Haryana, TN , Chennai, Kerala,Karnataka, Gujarat, Punjab, Maharashtra, Mumbai, U.P. (W) including Uttaranchal, West Bengal and Kolkata	184445	-173479
4	HFCL	Punjab	40874	3074
5	TATA	Maharashtra, Mumbai ,AP, TN, Chennai, Karnataka, Gujarat, Delhi, Bihar, Orissa, Rajasthan, Punjab, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, U.P. (E), U.P (W) including Uttaranchal, West Bengal and Kolkata	489366	61659
6	Reliance	Karnataka, Gujarat, Delhi, Bihar, Orissa, Rajasthan, Punjab, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, U.P. (E), U.P (W) including Uttaranchal, West Bengal and Kolkata	688308	155714
7	Shyam Telelink	Rajasthan	26145	0
	<b>TOTAL</b>		<b>3734687</b>	<b>82945</b>

\* Source - Operators

**Table 1.3****Details of Village Public Telephones (VPT)**

<b>S.No</b>	<b>Service Providers</b>	<b>Area of Operation</b>	<b>VPTs as on 31.12.05</b>	<b>Achievement during the Qtr. ending 31.12.05</b>
1	BSNL	All India	527595	4329
2	MTNL	Delhi & Mumbai	0	0
3	Bharti	MP, Delhi, Haryana, TN , Chennai, Karnataka, Gujarat, Punjab, Maharashtra, Mumbai, U.P. (W) including Uttaranchal, West Bengal and Kolkata	0	0
4	HFCL	Punjab	630	-15
5	TATA	Maharastra	2648	-6
6	TTL	AP, TN, Chennai, Karnataka, Gujarat, Delhi, Bihar, Orissa, Rajasthan, Punjab, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, U.P. (E), U.P (W) including Uttaranchal, West Bengal and Kolkata	1358	0
7	Reliance	AP,Bihar,Delhi,Gujarat,Haryana,HP,KN,Kerala,MP,Maharashtra,Mumbai Orissa,Punjab,Rajasthan,TN,Chennai, UP(E),UP(W),WB,Kolkata	4115	0
8	STL	Rajasthan	3010	0
<b>TOTAL</b>			<b>539356</b>	<b>4308</b>

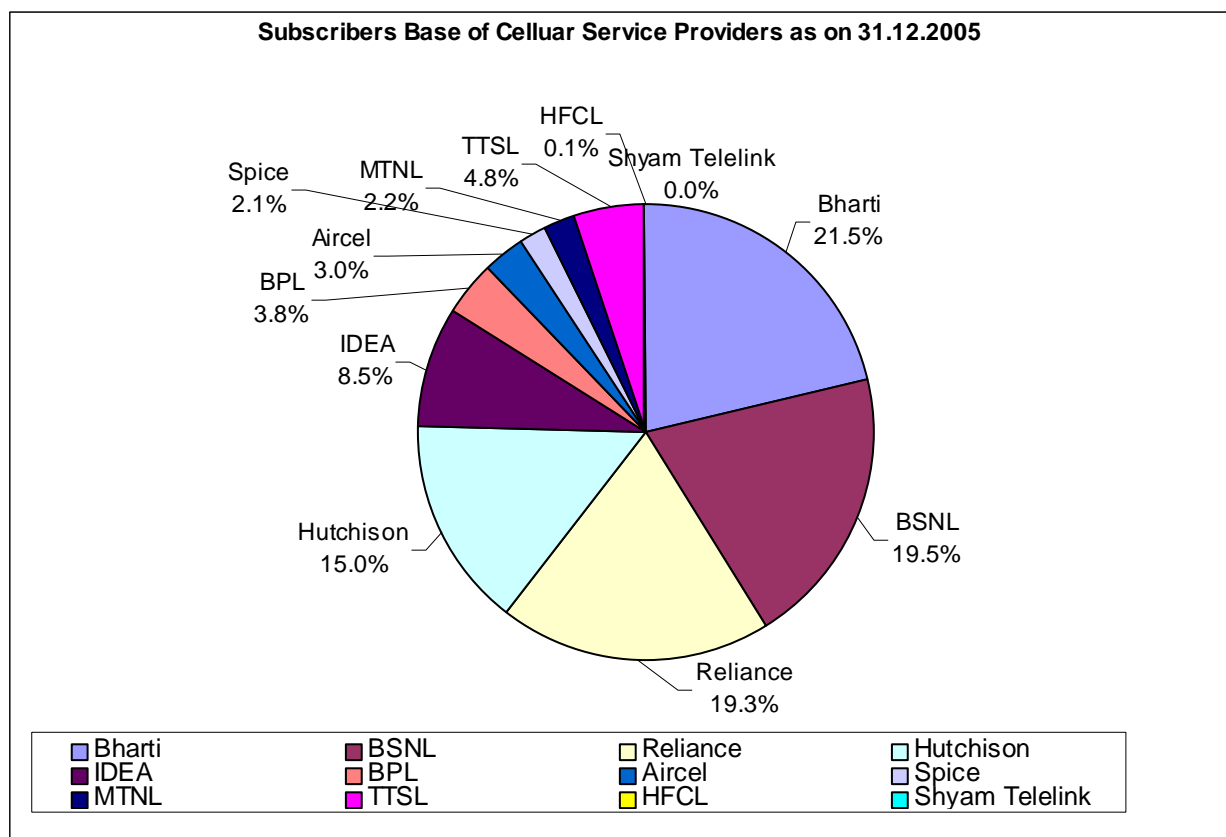
\* Source – Operators

**Table 2.1**

**Subscriber Base of Mobile operators**

<b>Mobile Groups and their market share</b>			
<b>Mobile Group</b>	<b>Subscribers as on December, 05 (in Millions)</b>	<b>Market Share (in %age)</b>	<b>Technology Used</b>
Bharti	16.33	21.50	GSM
BSNL	14.83	19.53	GSM & CDMA
Reliance	14.68	19.33	GSM & CDMA
Hutchison	11.41	15.02	GSM
IDEA	6.47	8.52	GSM
BPL	2.89	3.81	GSM
Aircel	2.28	3.00	GSM
Spice	1.63	2.15	GSM
MTNL	1.65	2.18	GSM & CDMA
TTSL	3.68	4.85	CDMA
HFCL	0.06	0.08	CDMA
Shyam Telelink	0.03	0.04	CDMA
<b>Total Subscribers</b>	<b>75.94</b>		

\* Source - Operators



**Table 2.2**

**Market Share of Mobile (GSM + CDMA) Service Providers**

a) The market share of different GSM operators is given below:

<b>GSM Group</b>	<b>No of Subscribers (in Millions)</b>	<b>Market Share (in %age)</b>
Bharti	16.33	27.92
BSNL	14.29	24.43
Hutchison	11.41	19.51
Idea	6.47	11.06
BPL	2.89	4.94
Aircel	2.28	3.90
Reliance	1.66	2.84
Spice	1.63	2.79
MTNL	1.53	2.62
<b>Total</b>	<b>58.49</b>	<b>100</b>

b) The market share of different CDMA operators is given below:

<b>CDMA Group</b>	<b>No of Subscribers (in Millions)</b>	<b>Market Share (in %age)</b>
Reliance Infocomm	13.01	74.56
Tata Teleservices	3.68	21.09
BSNL	0.54	3.09
MTNL	0.13	0.74
HFCL	0.06	0.34
Shyam Telelink	0.03	0.17
<b>Total</b>	<b>17.45</b>	<b>100</b>

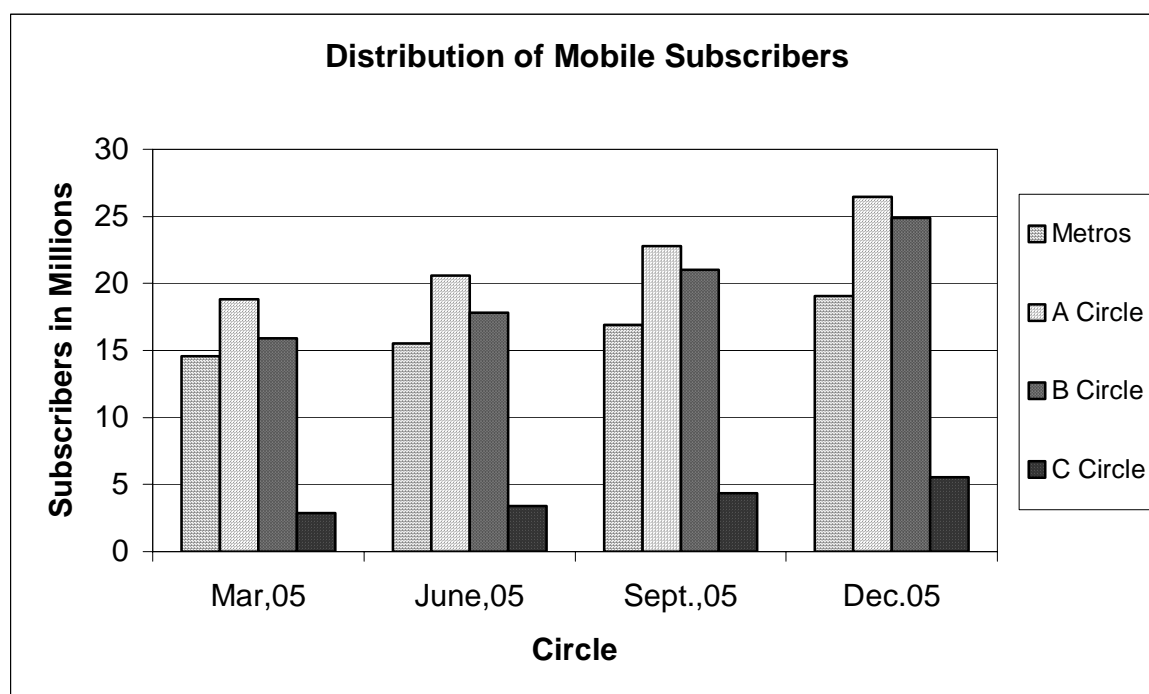
**Table 2.3****Growth Pattern in Mobile Subscriber Base**Mobile Subscribers Base

The market share distribution among Metros & Circles A to C is given below:

<u>Circle</u>	<u>No. of Subscribers</u>	<u>Market Share</u>
Metros	19.04 million	25.98%
Circles 'A'	26.46 million	35.05%
Circles 'B'	24.88 million	32.29%
Circles 'C'	5.56 million	6.68%

The details of subscriber base in various categories of service areas for the last four quarters are given below:

	In Million			
	Mar, 05	June, 05	Sept., 05	Dec.05
Metros	14.59	15.54	16.91	19.04
A' Circle	18.84	20.58	22.81	26.46
B' Circle	15.91	17.83	21.01	24.88
C' Circle	2.87	3.41	4.34	5.56



**Table 3.1****Subscribers Base of Internet Services**

<b>S. NO.</b>	<b>Name of ISP</b>	<b>Category</b>	<b>Area of Operation</b>	<b>Sep-05</b>	<b>Dec-05</b>	<b>%Growth</b>
1	Bharat Sanchar Nigam Ltd.	A	All India	2262349	2597159	14.80
2	Mahanagar Telephone Nigam Ltd.	B	Mumbai & Delhi	1207476	1313690	8.80
3	Sify Ltd.	A	All India	855690	877134	2.51
4	Videsh Sanchar Nigam Ltd.	A	All India	509411	467073	-8.31
5	Reliance Communications Infrastructure Ltd.	A	All India	309951	340326	9.80
6	Bharti Televentures Ltd.(Bharti Infotel)	A	All India	192996	313317	62.34
7	Data Infosys	A	All India	245560	245336	-0.09
8	Iqara Telecom India Pvt. Ltd. (BG Broadband)	A	All India	104281	111062	6.50
9	Hathway Cable & Data Pvt Ltd.	A	All India	49929	56502	13.16
10	HCL Infinet Ltd.	A	All India	42818	42581	-0.55
11	ICENET.NET Ltd.	B	Gujrat	27720	29776	7.42
12	Asianet Sattelite Communications Ltd.	B	Kerala	23147	26206	13.22
13	Tata Teleservices (Maharashtra) Ltd. (Hughes Telecom)	A	All India	23955	24322	1.53
14	Shyam Internet Service Pvt. Ltd.	A	All India	50028	23887	-52.25
15	HFCL Infotel Ltd.	B	Punjab	18409	20796	12.97
16	Fascel Ltd.	B	Gujarat	18001	18001	0.00
17	WWW Communications Ltd.	B	Delhi	14680	15257	3.93
18	Hughes Escorts Communications Ltd.	A	All India	11192	12070	7.84
19	Broadband Pacenet (I) Pvt. Ltd.	B	Mumbai	10229	11237	9.85
20	West Bengal Electronics Industry Development Corporation Ltd.	B	Calcutta	9437	10756	13.98
21	Seven Star Dot Com Pvt. Ltd.	B	Khar(w), Jogeshwari (w)	9013	9013	0.00
22	S. S. net Com Pvt Ltd.	B	North East	7748	7952	2.63
23	Spectra Net Ltd	A	All India	6671	7053	5.73
24	Primus Telecommunications India Ltd.	A	All India	6557	6557	0.00
25	Tulip IT Service Ltd.	B	Kerala	450	6000	1233.33
26	Rolta India Ltd.	B	Mumbai	6387	5527	-13.46
27	Ortel Communications Ltd.	C	Cuttack, Bhubaneshwar, Rourkela	5461	5461	0.00
28	RPG Infotech Ltd. (Sprint RPG India)	A	All India	5430	5430	0.00

29	In 2 Cable.com(India) Pvt. Ltd.	A	All India	5341	5181	-3.00
30	Digital 2 Virtual ISP Private Ltd.	C	vadodara	5156	5156	0.00
31	Forum Infotech (P) Ltd.	C	Srinagar SSA	5050	5050	0.00
32	Trak Online Net India	A	All India	3587	4829	34.63
33	Space Online (P) Ltd.	B	Gujarat	4788	4788	0.00
34	Trikon Electronics	B	Mumbai	3295	3973	20.58
35	E-Comm Opportunities Pvt. Ltd.	B	Gujrat	3912	3912	0.00
36	Southern Online Bio Technologies Ltd.	B	Andhra Pradesh	3184	3322	4.33
37	Narmada Cyberzone Pvt. Ltd.	B	Gujrat		3262	
38	Blazenet Pvt. Ltd.	B	Gujrat	3209	3249	1.25
39	Sixth Sense Informatics Pvt. Ltd.	B	Mumbai	2600	2600	0.00
40	Vasnet Communications Pvt. Ltd.	C	Mangalore SSA	2374	2502	5.39
41	Geocity Network Solutions Pvt. Ltd.	B	Delhi	2249	2339	4.00
42	Siti Cable Network (Zee Interactive Multimedia Ltd.)	A	All India	2700	2336	-13.48
43	Value Heathcare Ltd.	B	Mumbai	2229	1817	-18.48
44	Descon Ltd.	B&C	Kolkata, West Bengal	1695	1778	4.90
45	City Online Services Pvt. Ltd.	B	Andhra Pradesh & Karnataka	1558	1775	13.93
46	Hathway Bhawani Cable & Datacom	B	Mumbai	1704	1769	3.81
47	Sab Industires Ltd. (Sab Infotech)	B	Punjab, Karnal& Dharamshala	1195	1585	32.64
48	Ankhnet Information Pvt. Ltd.	B	Mumbai	1555	1555	0.00
49	Swiftmail Communications Ltd.	A	All India	1089	1449	33.06
50	Jain Info net Pvt Ltd.	B	Rajasthan	1431	1431	0.00
51	Dishnet Wireless Ltd.	A	All India	1270	1320	3.94
52	Spectrum softech Solutions	C	Ernakulam SSA	1273	1277	0.31
53	ERNET India Ltd.	A	All India	1130	1157	2.39
54	iPath India Pvt. Ltd.	C	Ernakulam	1151	1140	-0.96
55	Jindal Online.com Ltd.	B	Gujrat	1025	1025	0.00
56	Mylai Karpagamba Information System Pvt. Ltd.	B	Chennai	964	964	0.00
57	Pacific Internet India	A	All India	975	958	-1.74
58	Broadlyne Infoservices Pvt. Ltd.	B	Mumbai	900	900	0.00
59	Comsat Max Ltd.	A	All India	873	873	0.00
60	Websurf Pvt. Ltd.	C	Kalyan SSA	791	791	0.00
61	Ice Network (P) Ltd.	B	Bangalore	785	785	0.00
62	Broadlane Network Pvt. Ltd.	C	Kalyan SSA	989	695	-29.73
63	Kappa Infotech Pvt Ltd.	C	Kota SSA	593	593	0.00
64	Sanchar Telenetwork Pvt. Ltd.	C	Bhavnagar SSA	575	575	0.00
65	Bohra Prastisthan Pvt. Ltd.	C	Udaipur SSA	535	538	0.56
66	Bhasinsoft India Ltd.	B	Karnataka	532	532	0.00

67	Quest Consultancy Pvt. Ltd.	C	Valsad	340	526	54.71
68	Speed Online.net Pvt. Ltd.	C	Rajkot	564	525	-6.91
69	Uclix Computer's Pvt. Ltd.	C	Jodhpur	525	525	0.00
70	Primenet Global Ltd.	A	All India	524	514	-1.91
71	My Guru Online	B	Andhra Pradesh	495	495	0.00
72	Tata Internet Services Ltd.	A	All India	661	484	-26.78
73	Bhaskar Multinet Pvt. Ltd.	C	Jaipur SSA	454	454	0.00
74	Micky Online Pvt. Ltd.	C	Moradabad, Nainital	497	450	-9.46
75	Growth Compusoft Exports Ltd.	B	Gujrat	444	444	0.00
76	deLaila Industry Pvt. Ltd.	C	Srinagar SSA	440	440	0.00
77	Silicon Mountains (I) Ltd.	B	Maharashtra	425	425	0.00
78	C-Tel Solutions Pvt. Ltd.	C	Gurgaon SSA	422	422	0.00
79	Bhupati Hotels Pvt. Ltd.	C	Visakhapatnam	213	413	93.90
80	ISP Solutions India pvt. Ltd.	C	Coimbatore SSA	355	367	3.38
81	SpaceCom Broadband Network Ltd.	B	Delhi	366	366	0.00
82	Rajasthan Telematics Ltd.	B	Rajasthan	350	350	0.00
83	Rida Communications Pvt. Ltd.	C	Aligarh	261	330	26.44
84	Emtici Engineering ltd.	C	Khera SSA	305	305	0.00
85	Lee & Nee Softwares (Exports) Ltd.	C	Bhuvaneshwar	303	303	0.00
86	CJM Consultancy Services Pvt. Ltd.	B&C	Delhi, Ghaziabad	59	301	410.17
87	Atria Convergence Technologies Pvt. Ltd.	B	Karnataka	462	298	-35.50
88	Alliance Broadband Services Pvt. Ltd.	B	Kolkata	290	290	0.00
89	CJ Online Pvt. Ltd.	C	Ghaziabad SSA	320	287	-10.31
90	NetMagic Solutions (P) Ltd.	B	Mumbai	256	267	4.30
91	GUJ Info Petro Ltd.(GIPL)	A	All India	262	262	0.00
92	Karuturi Networks Limited	B	Karnataka	200	234	17.00
93	Vainavi Industries Ltd. (MAC Info Pvt. Ltd.)	B	Hydrabad	230	230	0.00
94	Starnet Online Services Ltd.	C	Visakha patnam SSA	216	216	0.00
95	i2i Enterprise Ltd.	A	All India	197	214	8.63
96	Gateway Systems Pvt. Ltd.	A	All India	301	204	-32.23
97	Trans Virtual Pvt. Ltd.	C	Guwahati	196	196	0.00
98	Digital Nagpur Online Pvt. Ltd.	C	Nagpur	186	186	0.00
99	Online Media Solutions Ltd.	B	Andhra Pradesh	175	176	0.57
100	del DSL Internet Pvt. Ltd.	B&C	Delhi, Ghaziabad, Gurgaon	173	173	0.00
101	Planet Internet Satellite Pvt. Ltd.	C	Nadiad SSA	170	154	-9.41
102	Q Tel Comtech Ltd.	C	Gurgaon	154	154	0.00
103	North East Online Services Pvt. Ltd.	C	Guwahati	142	142	0.00



104	Tawi e.com	C	Jammu Tawi	1476	119	-91.94
105	Cable Combine Communication Pvt. Ltd.	C	Siliguri	116	116	0.00
106	Worldcom Communications Pvt. Ltd.	A	All India	110	110	0.00
107	Viraj Telecom Ltd.	B	Karnataka	105	105	0.00
108	Estel Communications Pvt. Ltd.	A	All India	100	99	-1.00
109	Reach Network India Pvt. Ltd.	A	All India	93	93	0.00
110	Czars Oleoresin Pvt. Ltd.	C	Gulbarga	37	83	124.32
111	Sanyog Networks Pvt. Ltd.	C	Tripura	80	80	0.00
112	Mynet Services India Pvt. Ltd.	C	Salem	74	74	0.00
113	Instant Cable Network Pvt. Ltd.	C	Gurgaon SSA	72	72	0.00
114	Saravana Cables Pvt. Ltd.	c	Trichirapalli SSA	68	68	0.00
115	Manipal Ecommerce Ltd. (Manipal Control Data Electronic Commerce Ltd.)	B	Karnataka	72	65	-9.72
116	n-Logue Communications(P) Ltd	A	All India	268	59	-77.99
117	L&T Finance Ltd. (L&T Netcom Ltd.)	A	All India	62	56	-9.68
118	Vebtel Obconic Internet Protocol Pvt. Ltd.	B	Andhra Pradesh	32	55	71.88
119	Direct Internet Pvt. Ltd.	B	Delhi	46	46	0.00
120	VSNL Broadband Ltd. (Tata Power Broadband Company)	B	Mumbai	38	45	18.42
121	Swastik netvision telecom pvt. Ltd.	B	Gujrat	55	38	-30.91
122	Pioneer Online Service Pvt. Ltd.	B	Andhra Pradesh	36	36	0.00
123	Nettlinx Ltd.	B	Andhra Pradesh	27	35	29.63
124	Opto Networks Pvt.Ltd.	C	Ghaziabad, Meerut SSA	32	34	6.25
125	Indian Quotations Systems Pvt. Ltd.	B	Mumbai	32	32	0.00
126	RailTel Corporation of India Ltd.	A	All India	27	27	0.00
127	Chandra net Pvt. Ltd.	B	Gujrat	25	25	0.00
128	PBC Venture Ltd. (earlier Chemical & Metallurgical Design Co. Ltd.)	B	Delhi	21	23	9.52
129	Access Online Pvt. Ltd.	B	Mumbai	22	22	0.00
130	IOL Broadband Ltd. (India Online Network Ltd.)	B	Mumbai	22	22	0.00
131	Gujrat Narmada Valley Fertilizer Co. Ltd. (GNFC)	A	All India	21	21	0.00
132	Aksh Broadband Ltd.	C	Jaipur SSA	45	19	-57.78
133	Essel Shyam Communication Ltd,	A	All India	18	18	0.00
134	Centre for Development of Advanced Computing, C-DAC (Electronics Research and	C	Ghaziabad	17	17	0.00

	Development Centre of India (ER&DC))					
135	Conjoinex Technologies Pvt. Ltd.	C	J&K, Chandigarh	16	17	6.25
136	World Phone Internet services (P) Ltd.	A	All India	17	17	0.00
137	Astro Network India Pvt. Ltd.	A	All India	16	16	0.00
138	Arun Girija Communications Pvt Ltd.	C	Patna SSA	15	15	0.00
139	GTL Ltd.	A	All India	40	15	-62.50
140	Nachiket (I) Management Services (P) Ltd. (Diksha Cyber City)	C	Sri Ganganagar	13	13	0.00
141	Uttar Pradesh Network Pvt. Ltd.	B	Uttar Pradesh (E&W)	10	10	0.00
142	Samkhya Networks (P) Ltd.	C	Gurgaon	9	9	0.00
143	A-Team Information Technology Ltd.	C	Erode	8	8	0.00
144	Cyquator Technologies Ltd.	A	All India	9	8	-11.11
145	Software Technology Park of India (STPI)	A	All India	8	8	0.00
146	Akaansha Infotainment Pvt. Ltd.	C	Kamrup SSA	6	6	0.00
147	Astra Infonets Pvt. Ltd.	B	Hydrabad	8	6	-25.00
148	Godrej Infotech Ltd.	B	Mumbai	5	5	0.00
149	Surana Telecom Ltd.	B	Andhra Pradesh	3	3	0.00
150	Compucom (I) Ltd.	C	Jaipur SSA	2	2	0.00
151	Antriksh Technologies Pvt. Ltd.	C	Jammu SSA	354	0	-100.00
152	Apna Telelink Pvt LTD	C	Jalandhar SSA	0	0	
153	HCL Comnet	A	All India	0	0	
154	Nelco Ltd.	A	All India	0	0	
155	Shreedhar Infosys Ltd.	C	Varanasi SSA	0	0	
	<b>Total</b>			<b>6125010</b>	<b>6703256</b>	<b>9.44</b>

**Table 4.1**

**Subscriber Base of Public Mobile Radio Trunking Service (PMRTS)**

<b>Subscriber base of PMRTS Service Operators for quarter ending September &amp; December, 2005</b>				
<b>Sr. No.</b>	<b>Service Providers</b>	<b>Operative Area</b>	<b>Subscriber Base</b>	
			<b>30-09-2005</b>	<b>31-12-2005</b>
1	Aryadoot Transport Pvt Limited	Vishakhapatnam	1119	1219
2	Jet-Aiu Skyline Transport Pvt Ltd.	Indore	367	380
3	Container Movement (Bombay) Transport Pvt Ltd.	Delhi	5	5
4	Arya Offshore Services Pvt Ltd.	Mumbai	548	568
		Chennai	820	887
	<b>Total</b>		<b>1368</b>	<b>1445</b>
5	German Express Shipping Agency (India) Pvt Ltd. (Hapag Llyod)	Navi Mumbai (Belapur)	645	629
		Delhi	516	507
	<b>Total</b>		<b>1161</b>	<b>1136</b>
6	United Liner Agencies of India (Pvt) Ltd	Delhi	694	665
		Calcutta	1113	1076
	<b>Total</b>		<b>1807</b>	<b>1741</b>
7	Procall Limited	Delhi	6826	7054
		Jaipur	332	339
		Gurgaon	929	653
		Faridabad	239	242
	<b>Total</b>		<b>8326</b>	<b>8288</b>
8	The Arvind Mills Ltd.	Delhi	684	670
		Faridabad	1	1
		Mumbai	1383	1315
		Vashi	46	46
		Ahmedabad	245	271
		Baroda	376	369
		Surat	1042	877
		Chennai	1197	1355
		Bangalore	2107	2109
	<b>Total</b>		<b>7081</b>	<b>7013</b>
9	Smarttalk Pvt. Ltd.	Pune	821	844
		Vashi	260	278

		Mumbai	392	309
	<b>Total</b>		<b>1473</b>	<b>1431</b>
10	Quickcalls India Pvt. Ltd.	Bangalore	2137	2300
		Hyderabad	1193	1282
		Chennai	618	527
	<b>Total</b>		<b>3948</b>	<b>4109</b>
11	Bhilwara Telenet Services Pvt. Ltd.	Mumbai	968	1008
		Delhi	0	0
	<b>Total</b>		<b>968</b>	<b>1008</b>
12	India Satcom Ltd.	Bangalore	244	250
	<b>Grand Total</b>		<b>27867</b>	<b>28025</b>

\* Service Providers have not reported the data so the last quarter figures have been retained.

Table 4.2

### Subscriber Base of VSAT Service Providers

#### (i) Subscriber Base of VSAT Service Operators

Sr. No.	Service Provider	Quarter ending			
		March, 2005	June, 2005	Sep-05	Dec-05
1	<b>Hughes</b>	12012	12454	13269	14267
2	<b>HCL Comnet</b>	13452	14129	14882	16192
3	<b>Comsat Max</b>	4453	4540	4655	4661
4	<b>Bharti BT</b>	5581	6134	6199	6929
5	<b>Essel Shyam</b>	1652	2073	2209	2486
6	<b>Tata Services</b>	949	1024	1669	1969
7	<b>Telstra Vishesh*</b>	127	127	127	Not reported
8	<b>ITI</b>	51	49	49	49
9	<b>GNFC</b>	25	26	24	24
	<b>Total</b>	<b>38302</b>	<b>40556</b>	<b>43083</b>	<b>46577</b>

#### (ii) Growth Rate & Market Share of Subscriber Base

Sr. No.	Name of Service Provider	Quarter ending		%age growth rate	%age Market Share
		Sept, 05	Dec-05		
1	<b>Tata Services</b>	1669	1969	17.97	4.23
2	<b>HCL Comnet</b>	14882	16192	8.80	34.76
3	<b>Essel Shyam</b>	2209	2486	12.54	5.34
4	<b>Hughes</b>	13269	14267	7.52	30.63
5	<b>Bharti BT</b>	6199	6929	11.78	14.88
6	<b>Comsat Max</b>	4655	4661	0.13	10.01
7	<b>Telstra Vishesh*</b>	127	Not reported	0.00	0.00
8	<b>GNFC</b>	24	24	0.00	0.05
9	<b>ITI</b>	49	49	0.00	0.11
	<b>Total</b>	<b>43083</b>	<b>46577</b>	<b>8.11</b>	<b>100.00</b>

\* Service Providers not reported their data in this quarter, the figure of last quarter has been retained.

**Table 6.1****No of Cable and Satellite TV Households**

NRS Survey 2005	60.70 Million (Both Urban + Rural)
MPA Research Estimates) (year ending 31 <sup>st</sup> December' 2005)	64.85 Million (includes 0.75 Million DTH Households)
NRS Survey 2003	42.58 Million
IRS Survey (June 2004)	43 Million
IRS Estimates by end of 2005	46.50 Million

**Source:** Based on Reports quoting NRS / IRS Survey(s) and MPA Research Estimates

**Table 6.2**

**Genrewise % in share of viewership Vs Advertisement Revenue Share for 2004 & 2005**

<b>Channel Category</b>	<b>2004</b>		<b>2005</b>	
	<b>Share of Viewership</b>	<b>Share of Revenue</b>	<b>Share of Viewership</b>	<b>Share of Revenue</b>
GEC (Gen Entertainment Channel)	33.0%	47.0%	33.6%	39.5%
Regional Language	41.0%	20.4%	36.5%	24.8%
News Channels	5.4%	10.3%	6.5%	11.9%
Hindi Film Channels	5.0%	3.7%	7.8%	5.6%
English Entertainment	2.0%	4.4%	1.2%	3.8%
Sports*	9.0%	10.0%	8.3%	8.8 %
Infotainment / Kids	3.0%	2.2%	3.8%	2.6%
Music/ Comedy/ Lifestyle/ Fashion	2.0%	1.5%	2.1%	2.9%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**Source:** TAM (All HHs, 4+ Years), AdEx India, Industry Sources. (4+ years means viewers above the age group of 4)

**Table 6.3**

**Viewing Pattern of FTA Vs Pay Channels (in % terms) (+4 Cable and Satellite viewers) in four metros during the period (July-Sep'05)(Q3) and (Oct-Dec' 05)(Q4)**

Figures in %

<b>Genre</b>	<b>Chennai</b>		<b>Delhi</b>		<b>Kolkata</b>		<b>Mumbai</b>	
	<b>Q3</b>	<b>Q4</b>	<b>Q3</b>	<b>Q4</b>	<b>Q3</b>	<b>Q4</b>	<b>Q3</b>	<b>Q4</b>
Cable Channels	1	0	11	11	13	13	12	11
FTA Channels	95	95	<b>23</b>	<b>28</b>	<b>37</b>	<b>42</b>	27	29
Pay Channels	4	5	66	61	50	45	61	60
<b>Total</b>	100	100	100	100	100	100	100	100

**Source:** TAM consultancy Report to TRAI for the Quarter July – Sept 2005, Oct – Dec 2005

% Figures rounded off to whole numbers  
+4 means viewers of the age above 4



**Table 6.4 (a)**

**Range (Minimum and Maximum) of number of channels Pay, FTA, Local regularly carried on network as at the end of quarter ending September 2005(Q3)and quarter ending December' 2005 (Q4)**

(Figures are number of channels)

	Pay Channels		FTA Channels		Local Channels		Total	
	Q3	Q4	Q3	Q4	Q3	Q4	Q3	Q4
Maximum	54	63	149	149	7	7	183	183
Minimum	26	32	27	34	0	1	55	80
No of Agencies /Service Providers Reporting							4	7
The digital services on the basis of reporting MSOs are offered in the cities of Delhi, Mumbai, Pune, Bangalore, Chennai and Kolkata								
Note : The figures of maximum and minimum are based on no of channels (analogue and / or digital) reported across different networks of different reporting service providers having different combinations of pay, FTA and Local channels. Therefore the sum of number pay/FTA/Local channels column will not add to give figures in the total column.								

**Table 6.4 (b)****Minimum and Maximum) of number of channels Pay, FTA, Local regularly carried under different modes ( Analogue or Digital or Simulcast) during quarter ending 31<sup>st</sup> December' 2005**

(Figures are number of channels)

<b>As Reported for the Quarter Ending Dec 05</b>				
<b>Mode</b>	<b>Range</b>	<b>Pay Channels</b>	<b>FTA Channels</b>	<b>Local Channels</b>
Analogue	Max	57	64	7
	Min	21	34	1
Digital	Max	56	120	1
	Min	33	56	1
Analogue cum Digital (simulcast)	Max	36	40	1
	Min	33	28	1
<p>Note: The figures of maximum and minimum are based on no of channels (analogue and / or digital) reported across different networks of different reporting service providers having different combinations of pay, FTA and Local channels. Therefore figures in various cells above across a particular row as a combination may not give indication of size of network.etc.. Similar information is not available for the previous quarter ending Sept 2005 for all reported networks.</p>				

**Table 6.5**

**Information on New Pay Channels and Free to Air (FTA) channels converted into Pay Channels after 26.12.2003**

S.No	Name of the Channel	Name of Broadcaster /Distributor	Whether New Pay Channel or FTA Channel turned Pay
1	ZOOM	Bennett, Coleman & Co	New Pay Channel
2	Hangama TV	Star India P Ltd	New Pay channel
3	Animax India	Set Discovery P Ltd	New Pay channel
4	Discovery – Travel & Living	Set Discovery P Ltd	New Pay channel
5	Star One	Star India P Ltd	New Pay channel
6	VH 1	Zee Turner Ltd	New Pay channel
7	Pogo \$	Zee Turner Ltd	New Pay channel
8	ESPN Plus	ESPN Software India Private Limited	New Pay channel
9	Toon Disney	Star India P Ltd	New Pay channel
10	Disney Channel	Star India P Ltd	New Pay channel
11	Zee Action (Action Cinema)	Zee Turner Ltd	New Pay channel
12	Zee Premier (Premier Cinema)	Zee Turner Ltd	New Pay channel
13	Zee Classic (Classic Cinema)	Zee Turner Ltd	New Pay channel
14	Zee Select (MX)	Zee Turner Ltd	New Pay channel
15	Awaaz	Zee Turner Ltd	New Pay channel
16	Zee Business News	Zee Turner Ltd	New Pay channel
17	Channel [V] International	Star India P Ltd	New Pay channel
18	UDAYA TV	Sun Network	FTA to Pay
19	Ushe TV	Sun Network	FTA to Pay
20	Udaya News	Sun Network	FTA to Pay
21	MTV	Set Discovery P Ltd	FTA to Pay
22	NDTV Profit	Set Discovery P Ltd	New Pay Channel
23	NDTV 24X7	Set Discovery P Ltd	FTA to Pay
24	ZEE SPORTS	ZEE Turner Ltd	New pay Channel
25	SAB TV	Set Discovery P Ltd	FTA to Pay
26	Adithya Music \$	M/s Channel Plus	New Pay Channel
27	Teja News \$	M/s Channel Plus	New Pay Channel
28	ETV \$	Ms Ushodaya Enterprises Limited	FTA to Pay
29	ETV 2 \$	Ms Ushodaya Enterprises Limited	FTA to Pay
30	Times Now \$	M/s Times Global Broadcasting Company Ltd	Pay Channel

- Note:- 1. The distribution of Nick, Ten Sports and HBO changed hands and were pay channels as on 26.12.03.
2. In respect of S.No's 11-14, the names in brackets are the new names
3. \$ Not as Pay channels in Chennai

**Table 6.6****No. of Applications / Letters of Intent / Licenses Issues in respect of DTH Service Provider**

	<b>Up to 30.9.2005</b>	<b>Up to 31.12.2005</b>
Total No. of Applications Received	6	6
No of Licenses issued	1	1
No of Letters of Intent Issued	2	2
No of Applications rejected	NIL	1
No of Applications under consideration	3	2

**Source:** Ministry of Information & Broadcasting

**Table 6.7****Status of Community Radio Stations in the country as at the end of month ending Nov 2005 (to be updated for Dec 2005)**

S NO	Particulars	Upto 30.9.2005	Upto 30.11.2005
1	No of Applications Received	76	89
2	No of Letter of Intents Issued	41	45
3	Number of Applications Rejected	8	8
4	No of License Issued/License Agreement Signed	24	25
5	No of Stations Operational	13	15

Source : Ministry of Information and Broadcasting

## Annex 1.1

### Details of Fixed Service Licenses issued to private operators

<b>Service Provider</b>	<b>Service Area</b>	<b>DoT. Letter. Reference No.</b>	<b>License No.</b>	<b>Date</b>
<b>Bharti</b>	M P		17-12/95-BS-II	28.02.1997
<b>HFCL</b>	Punjab	10-10-2003-BS-II / Vol-II	17-15/95-BSII/Punjab	07.11.1997
<b>Tata</b>	Maharashtra including Mumbai	10-10-2003-BS-II	17-11/95-BS-II	30.09.1997
<b>Shyam</b>	Rajasthan	10-10-2003-BS-II / Vol-II	17-16/95-BS-II/Rajasthan	04.03.1998
<b>Tata</b>	A P	10-10-2003-BS-II	17-1/95-BS-II/Andra Pradesh	04.11.1997
<b>Tata</b>	TN	10-10-2003-BS-II	18-61/2001-BS-II	31.08.2001
<b>Tata</b>	Karnataka	10-10-2003-BS-II	18-59/2001-BS-II	31.08.2001
<b>Tata</b>	Delhi	10-10-2003-BS-II	18-57/2001-BS-II/Delhi	31.08.2001
<b>Tata</b>	Gujarat	10-10-2003-BS-II	18-58/2001-BS-II	31.08.2001
<b>Reliance</b>	Bihar	10-10-2003-BS-II / Vol-II	18-113/2001-BS-II	20.07.2001
<b>Reliance</b>	Delhi	10-10-2003-BS-II / Vol-II	18-32/2001-BS-II	20.07.2001
<b>Reliance</b>	Gujarat	10-10-2003-BS-II / Vol-II	17-6/95-BS-II	18.03.1997
<b>Reliance</b>	Haryana	10-10-2003-BS-II / Vol-II	18-30/2001-BS-II	20.07.2001
<b>Reliance</b>	HP	10-10-2003-BS-II / Vol-II	18-116/2001-BS-II	20.07.2001
<b>Reliance</b>	Karnataka	10-10-2003-BS-II / Vol-II	18-35/2001-BS-II	20.07.2001
<b>Reliance</b>	Kerala	10-10-2003-BS-II / Vol-II	18-38/2001-BS-II	20.07.2001
<b>Reliance</b>	MP	10-10-2003-BS-II / Vol-II	18-32/2001-BS-II	20.07.2001
<b>Reliance</b>	Maharashtra	10-10-2003-BS-II / Vol-II	18-36/2001-BS-II	20.07.2001
<b>Reliance</b>	Orissa	10-10-2003-BS-II / Vol-II	18-112/2001-BS-II	20.07.2001
<b>Reliance</b>	Punjab	10-10-2003-BS-II / Vol-II	18-31/2001-BS-II	20.07.2001
<b>Reliance</b>	Rajasthan	10-10-2003-BS-II / Vol-II	18-115/2001-BS-II	20.07.2001
<b>Reliance</b>	Tamil Nadu	10-10-2003-BS-II / Vol-II	18-29/2001-BS-II	20.07.2001
<b>Reliance</b>	UP(East)	10-10-2003-BS-II / Vol-II	18-34/2001-BS-II	20.07.2001
<b>Reliance</b>	UP(West)	10-10-2003-BS-II / Vol-II	18-39/2001-BS-II	20.07.2001

**List of Cellular, Fixed & Unified Access Service Providers**

Circle	Operators		
	Mobile		Fixed
	Cellular	Unified	
Delhi	Hutch	Reliance Infocomm	MTNL
	MTNL	Tata Teleservices	
	Idea Cellular	Bharti Televentures Ltd	
Mumbai	BPL	Reliance Infocomm	MTNL
	Hutch	Tata Teleservices	
	MTNL	Bharti Televentures Ltd	
Chennai	Aircel Cellular	Reliance Infocomm	BSNL
	BSNL	Tata Teleservices	
	Hutchison South	Bharti Televentures Ltd	
Kolkata	Hutchison East	Reliance Infocomm	BSNL
	BSNL	Tata Teleservices	
	Reliable Internet Services Ltd.	Bharti Televentures Ltd	
Maharashtra	BPL	Reliance Infocomm	BSNL
	Idea Cellular	Tata Teleservices	
	BSNL	Bharti Televentures Ltd	
Gujarat	Fascel (Hutch)	Reliance Infocomm	BSNL
	Idea Cellular	Tata Teleservices	
	BSNL	Bharti Televentures Ltd	
Andhra Pradesh	Idea Cellular	Reliance Infocomm	BSNL
	Hutchison South	Tata Teleservices	
	BSNL	Bharti Televentures Ltd.	
Karnataka	Spice *	Reliance Infocomm	BSNL
	BSNL	Tata Teleservices	
	Hutch South	Bharti Televentures Ltd.	
Tamilnadu	BPL	Reliance Infocomm	BSNL
	Aircel	Tata Teleservices	
	BSNL	Bharti Televentures Ltd	
Kerala	Idea Communications	Reliance Infocomm	BSNL
	BPL	Tata Teleservices	
	BSNL	Bharti Televentures Ltd	
Punjab	BSNL	Reliance Infocomm	BSNL
	Hutchinson South	HFCL Infocom	
		Tata Teleservices	
		Bharti Televentures Ltd.	
	Spice Communications		

Haryana	Idea Communications	Reliance Infocomm	BSNL
	ADIL (Hutch)	Tata Teleservices	
	BSNL	Bharti Televentures Ltd.	
Uttar Pradesh(W)	Idea Communications	Reliance Infocomm	BSNL
	BSNL	Huchinson Essar South Ltd.	
		Tata Teleservices	
		Bharti Televentures Ltd.	
Uttar Pradesh(E)	ADIL (Hutch)	Reliance Infocomm	BSNL
	BSNL	Tata Teleservices	
	Escorts Communications	Bharti Televentures Ltd.	
Rajasthan	ADIL (Hutch)	Reliance Infocomm	BSNL
	Bharti Ltd.	Tata Teleservices	
	BSNL	Shyam Telelink	
	Escorts Communications		
Madhya Pradesh	Idea	Reliance Infocomm	BSNL
	BSNL	Tata Teleservices	
	Reliance Telecom	Bharti Televentures Ltd.	
WB&A&N	BSNL	Reliance Infocomm	BSNL
	Reliance Telecom	Tata Teleservices	
		Bharti Televentures Ltd.	
		Huchinson Essar South Ltd.	
		Dishnet Wireless Ltd.	
Himachal Pradesh	BSNL	Reliance Infocomm	BSNL
	Reliance Telecom	Tata Teleservices	
	Escorts Communications	Dishnet Wireless Ltd.	
		Bharti Televentures Ltd.	
Bihar	BSNL	Reliance Infocomm	BSNL
	Reliance Telecom	Tata Teleservices	
		Bharti Televentures Ltd.	
		Dishnet Wireless Ltd.	
Orissa	BSNL	Reliance Infocomm	BSNL
	Reliance Telecom	Tata Teleservices	
		Bharti Televentures Ltd.	
		Dishnet Wireless Ltd.	
Assam	BSNL	Dishnet Wireless Ltd.	BSNL
	Reliance Telecom	Bharti Televentures Ltd.	



North East	Reliance Telecom	Dishnet Wireless Ltd.	BSNL
	BSNL		
	Bharti Hexacom Ltd.		
Jammu & Kashmir	BSNL	Dishnet Wireless Ltd.	BSNL
		Bharti Televentures Ltd.	
		Reliance Infocomm	

\* Spice became UASL in December 2005

### Average Revenue Per User (ARPU)

Table a: ARPU (Rs. per month during the quarter)

Circle	Postpaid	Prepaid	Blended ARPU
Circle A	511	205	255
Circle B	395	206	226
Circle C	379	178	193
Metro	574	216	296
<b>All India</b>	<b>511</b>	<b>207</b>	<b>256</b>

Table b: Trends in All India Monthly ARPU

Quarter ending	ARPU (Rs. per month)
Mar-05	<b>241</b>
Jun-05	<b>240</b>
Sep-05	<b>244</b>
Dec-05	<b>256</b>

Table c: Trends in All India Monthly ARPU

Quarter ending	ARPU (Rs. per month)
Dec-04	398
Mar-05	394
Jun-05	381
Sep-05	374
Dec-05	<b>362</b>

## Usage Pattern for CDMA

Table a: MOU &amp; SMS (per subscriber per month)

	Postpaid				Prepaid			
	Outgoing MOU	Incoming MOU	Total MOU	Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU	Outgoing SMS
Circle A	371	296	668	25	140	242	382	13
Circle B	372	280	652	26	201	257	457	15
Circle C	371	229	600	26	240	162	402	12
Metro	381	312	693	31	165	271	437	11
<b>All India</b>	375	298	673	28	171	251	423	13

Table b: BLENDED [Postpaid + Prepaid]

	Outgoing MOU	Incoming MOU	Total MOU	Outgoing SMS
Circle A	178	251	428	15
Circle B	219	259	478	16
Circle C	250	167	417	13
Metro	216	274	491	16
<b>All India</b>	205	257	462	15

Table c: Composition of outgoing Local (Intra-circle) minutes of use

Circle	To Fixed	To Mobile	To Own Network (Mobile)
Circle A	14%	86%	58%
Circle B	10%	90%	68%
Circle C	7%	93%	33%
Metro	15%	85%	60%
<b>All India</b>	13%	87%	60%

Table d: Composition of outgoing NLD (Inter-Circle) minutes of use

Circle	To Fixed	To Mobile
Circle A	31%	69%
Circle B	29%	71%
Circle C	28%	72%
Metro	34%	66%
<b>All India</b>	32%	68%

Table e: Composition of Total outgoing minutes of use (excl. ILD)

Circle	To Fixed	To Mobile
Circle A	16%	84%
Circle B	12%	88%
Circle C	8%	92%
Metro	18%	82%
<b>All India</b>	15%	85%

## Usage Pattern for GSM

Table a: MOU &amp; SMS (per subscriber per month)

Circle	Postpaid				Prepaid			
	Outgoing MOU	Incoming MOU	Total MOU	Outgoing SMS	Outgoing MOU	Incoming MOU	Total MOU	Outgoing SMS
Circle A	318	387	705	43	114	204	318	62
Circle B	287	393	679	37	113	173	286	29
Circle C	307	226	533	29	157	247	403	14
Metro	306	388	694	45	86	205	291	34
<b>All India</b>	306	373	679	41	110	197	307	40

Table b: BLENDED [Postpaid + Prepaid]

	Outgoing MOU	Incoming MOU	Total MOU	Outgoing SMS
Circle A	163	248	410	58
Circle B	144	212	356	30
Circle C	197	241	438	18
Metro	147	256	402	37
<b>All India</b>	155	237	393	40

Table c: Composition of outgoing Local (Intra-circle) minutes of use

Circle	To Fixed	To Mobile	To Own Network (Mobile)
Circle A	17%	83%	51%
Circle B	19%	81%	57%
Circle C	33%	67%	70%
Metro	15%	85%	43%
<b>All India</b>	19%	81%	53%

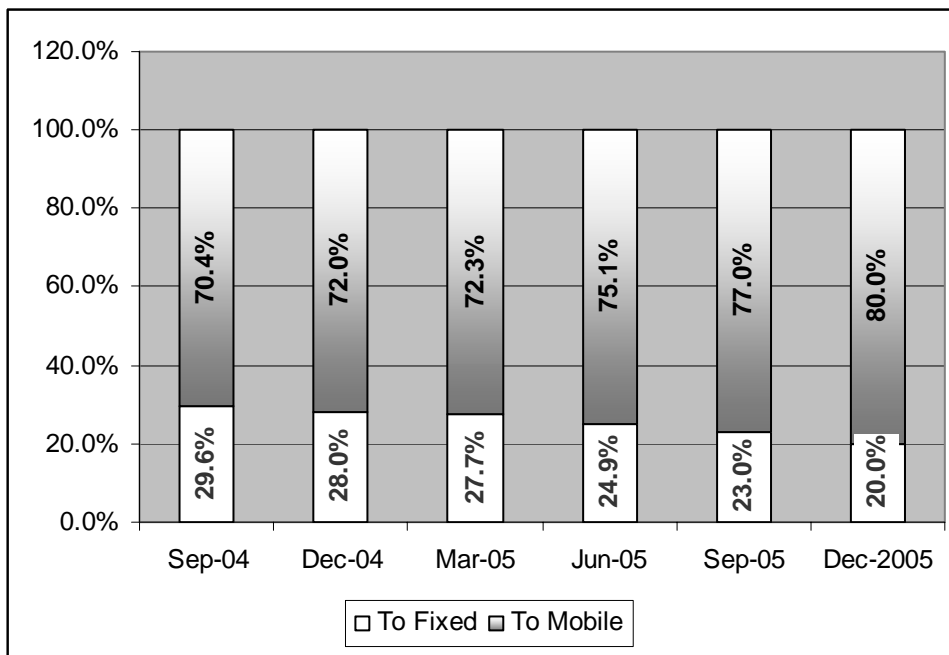
Table d: Composition of outgoing NLD (Inter-Circle) minutes of use

Circle	To Fixed	To Mobile
Circle A	29%	71%
Circle B	28%	72%
Circle C	32%	68%
Metro	27%	73%
<b>All India</b>	28%	72%

Table e: Composition of Total outgoing minutes of use (excl. ILD)

Circle	To Fixed	To Mobile
Circle A	19%	81%
Circle B	20%	80%
Circle C	33%	67%
Metro	18%	82%
<b>All India</b>	20%	80%

Chart: Trend in composition of total outgoing MOUs (excl. ILD)



## Revenue Per Minute (RPM)

Table a: Revenue realization per minute for total usage [Incoming + Outgoing MOU]

Circle	Postpaid	Prepaid	[In Rs.]
			Blended
Circle A	0.77	0.54	0.59
Circle B	0.61	0.45	0.47
Circle C	0.63	0.44	0.46
Metro	0.86	0.50	0.60
<b>All India</b>	<b>0.77</b>	<b>0.49</b>	<b>0.55</b>

Table b: Revenue realization per minute for total usage [Incoming + Outgoing MOU]

Circle	Postpaid	Prepaid	[In Rs.]
			Blended
Circle A	0.85	0.88	0.87
Circle B	0.79	0.97	0.91
Circle C	0.85	0.71	0.75
Metro	1.12	1.06	1.08
<b>All India</b>	<b>0.92</b>	<b>0.93</b>	<b>0.92</b>

### Growth Pattern of Internet Subscribers

Chart 4 - Growth Trends

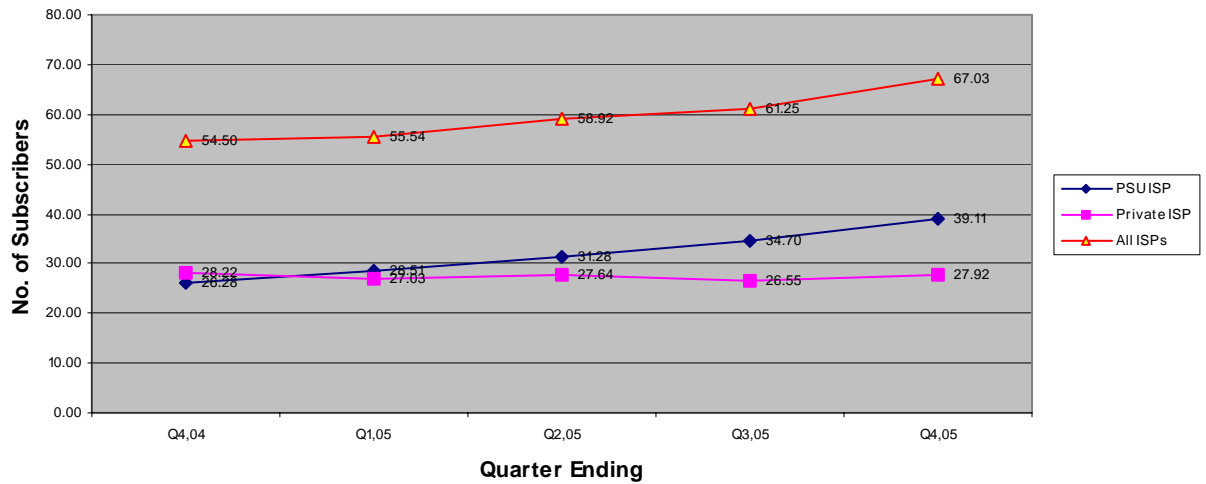
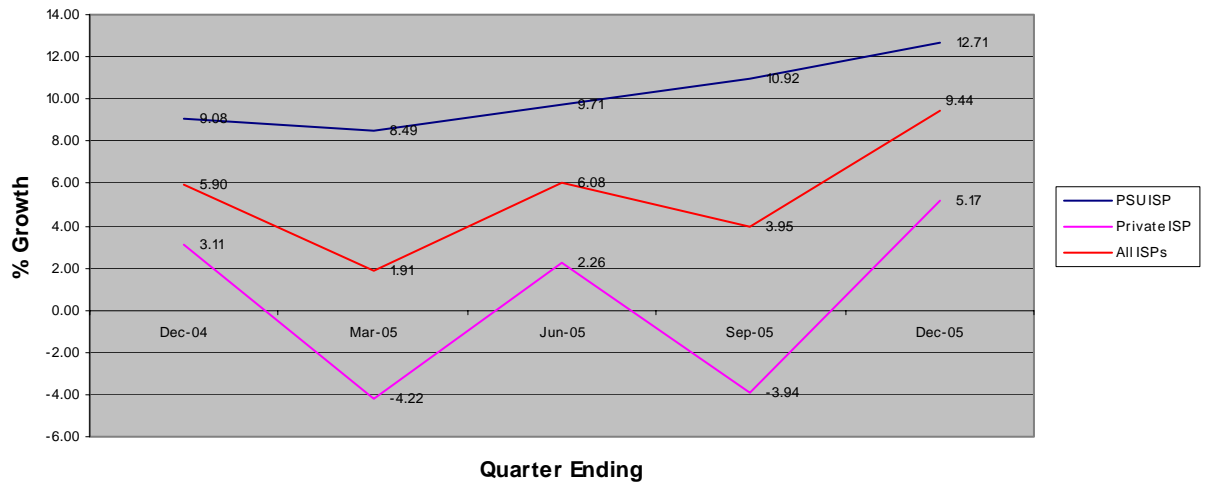


Chart 5 - Growth Trends-II



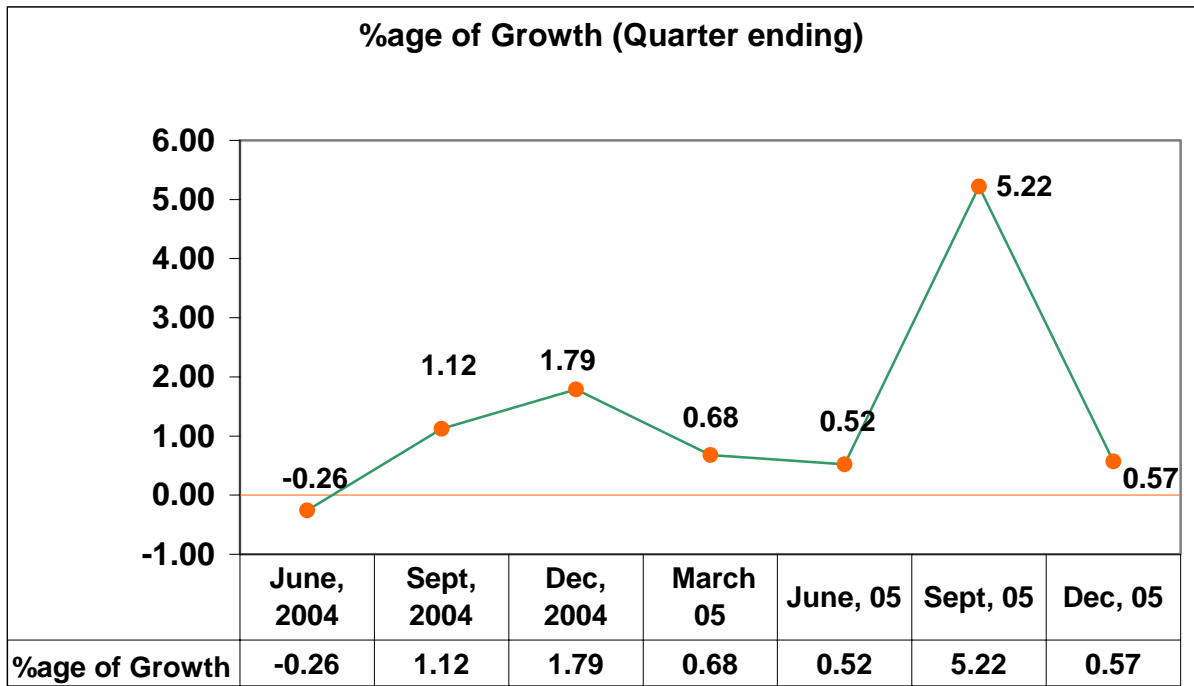


**List of Internet Telephony Service Providers**

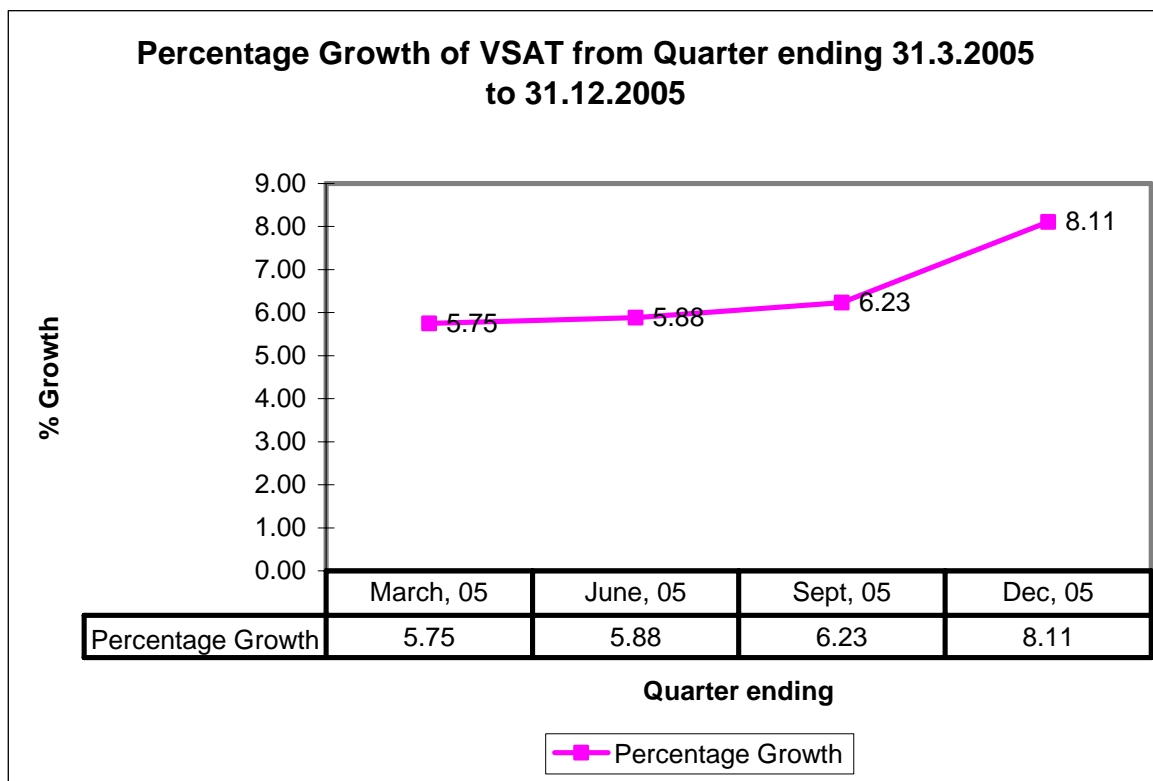
<b>S. No.</b>	<b>Name of ISPs</b>
1	Apna Telelink Pvt. Ltd.
2	Asianet Satellite Communications Ltd.
3	BG Broadband India Pvt. Ltd.
4	Bharti Broadband Network Ltd.
5	BSNL
6	City Online Services Pvt. Ltd.
7	Data Infosys Ltd.
8	Data Link Impex Pvt. Ltd.
9	Digital2Virtual SP Pvt. Ltd.
10	Estel Communications Pvt. Ltd.
11	Gateway Systems (I) Pvt. Ltd.
12	Growth Compusoft Exports Ltd.
13	GTL Limited
14	Hathway Cable & Datacom Pvt. Ltd.
15	HCL Infinet Ltd.
16	Icenet.net Limited
17	In2Cable.Com (India) Ltd
18	iServe India Solutions Pvt. Ltd.
19	Jain Infonet Pvt. Ltd.
20	Karuturi Networks Ltd.
21	Mahanagar Telephone Nigam Limited
22	Narmada Cyberzone Pvt. Ltd.
23	NetMagic Solutions (P) Ltd.
24	Nettlinx Ltd.
25	Online Media Solution Ltd.
26	Opto network Pvt. Ltd.
27	Ortel Communications Ltd.
28	PBC Venutres Ltd.
29	Primus Telecommunication India Ltd.
30	Rolta India Limited
31	SAB Infotech Pvt. Ltd.
32	Seven Star Dot Com
33	Sify Ltd.
34	Southern Online Services Ltd.
35	Surana Telecom Ltd.
36	Swiftmail Communications Ltd.
37	Trak Online Net India Pvt.Ltd
38	Trikon electronics Pvt. Ltd.
39	Value Healthcare Ltd.
40	VSNL
41	Wilnet Communications Pvt. Ltd.
42	World Phone Internet Services (P) Ltd.

43	Swastik Netvision Telecom Pvt. Ltd.
44	Pioneer Online Pvt. Ltd.
45	Speed Online.net Pvt. Ltd.
46	Bharti Infotel Ltd.
	Mylai Karpagambal Information Systems Pvt.
47	Ltd.
48	DelDSL Internet Pvt. Ltd.
49	Vebtel Obconic Internet Protocol Pvt. Ltd.
50	Growth Compusoft Exports Ltd.
51	Tata Teleservices (Maharashtra) Ltd.

**Growth Rate of PMRTS subscribers**



**Growth Rate of VSAT Subscribers**



**Annex 5.1**

**Quality of Service (QOS) Performance for Basic Services**

S. No	Service Area	Service Provider	New connections after registration of demand	Fault incidences per 100/sub/month)	Fault repaired by next working day	Mean Time to Repair (MTR)	Grade of service (calls per thousand)	Call completion rate in local network	Metering & billing credibility- % of bills disputed	Shifts	Closures	Additional facility	Response Time to the Customer for Assistance						
													95% of requests			%age of calls answered (electronically)		%age of calls answered by operator (voice to voice)	
													100% in < 7days	<5	>90%	<8 hrs	a) Junction between local exchange (2/1000)	>55%	<0.1%,
1	ANDRA PRADESH	BSNL	78.18	5.01	NA	19.00	NA	55.00%	0.03	69.40	78.44	NA	NA	NA	NA				
		RELIANCE	57.52	3.00	2.87	4.90	0.4100	NA	2.24	100.00	34.68	95.51	NA	NA	91.50	100.00			
		BHARTI	94.09	12.18	1.72	2.26	0.0020	53.00%	1.80	59.91	88.66	100.00	NA	NA	75.85	81.89			
		TATA	87.43	3.29	59.52	17.14	0.2170	49.30%	0.10	85.78	98.00	94.84	NA	NA	NA	NA			
2	BIHAR	BSNL	28.33	9.81	NA	13.00	NA	37.00%	0.04	100.00	NA	NA	NA	NA	NA				
		RELIANCE	100.00	4.54	75.00	4.65	0.0310	NA	0.00	NIL	NIL	76.92	NA	NA	91.50	100.00			
3	DELHI	MTNL	50.00	10.63	88.56	10.98	0.0020	47.00%	0.08	84.40	75.34	66.18	100.00	100.00	89.00	83.00			
		RELIANCE	22.65	2.61	2.92	5.27	0.0000	NA	0.10	57.14	50.00	93.97	NA	NA	91.50	100.00			
		BHARTI	88.54	5.74	NA	10.28	0.0010	59.10%	0.05	49.28	0.00	34.88	NA	NA	66.00	NA			
		TATA	93.49	0.37	100.00	2.58	0.0007	51.70%	0.10	97.86	57.86	96.68	NA	NA	NA	NA			
4	GUJARAT	BSNL	84.72	6.29	NA	10.00	NA	62.00%	0.06	93.03	94.43	NA	NA	NA	NA				
		RELIANCE	100.00	9.81	2.80	8.05	0.0350	NA	0.09	72.83	47.65	95.93	NA	NA	91.50	100.00			
		BHARTI	71.18	5.21	53.00	12.50	0.0000	NA	2.03	Nil	Nil	7.18	NA	NA	NA	NA			
		TATA	96.35	0.42	93.36	5.90	0.0112	67.22%	0.17	100.00	100.00	97.90	NA	NA	NA	NA			
5	MP &	BSNL(MP)	83.19	7.31	NA	6.00	NA	71.00%	0.08	99.00	85.35	NA	NA	NA	NA				

	<b>CHATTISGARH</b>	<b>BSNL(Chattisgarh)</b>	66.34	10.17	NA	14.00	NA	63.00%	0.10	89.40	64.20	NA	NA	NA	NA	NA
		<b>RELIANCE</b>	54.68	2.91	95.99	4.28	0.0040	NA	0.07	69.57	NA	NA	NA	NA	91.50	100.00
		<b>BHARTI</b>	NA	4.32	94.26	7.11	0.0000	65.70%	0.03	57.82	100.00	90.89	99.80	100.00	90.00	100.00
6	<b>MAHARASHTRA</b>	<b>BSNL</b>	93.55	8.14	NA	15.00	NA	55.00%	0.03	66.86	76.51	NA	NA	NA	NA	NA
		<b>RELIANCE</b>	15.31	2.76	88.68	2.14	0.1010	NA	0.21	77.27	36.96	94.97	NA	NA	91.50	100.00
		<b>BHARTI</b>	9.01	16.63	16.00	612.60	0.0000	NA	Nil	Nil	Nil	20.83	NA	NA	NA	NA
		<b>TATA</b>	NA	5.50	94.29	4.06	0.0020	62.49%	0.26	93.59	100.00	93.02	NA	NA	NA	NA
7	<b>PUNJAB</b>	<b>BSNL</b>	97.51	8.04	NA	13.00	NA	66.00%	0.03	99.00	99.72	NA	NA	NA	NA	NA
		<b>RELIANCE</b>	48.24	6.44	99.26	4.03	0.0180	NA	0.07	66.67	72.84	96.65	NA	NA	91.50	100.00
		<b>BHARTI</b>	66.76	5.25	85.39	11.60	0.1000	52.90%	3.95	96.74	77.10	21.08	NA	NA	NA	NA
		<b>HFCL</b>	85.85	1.86	95.55	7.10	0.0016	56.10%	0.10	92.05	98.00	95.86	100.00	NA	77.00	98.00
8	<b>RAJASTHAN</b>	<b>BSNL</b>	78.58	8.68	NA	11.00	NA	57.00%	0.03	87.01	80.25	NA	NA	NA	NA	NA
		<b>RELIANCE</b>	69.42	5.86	99.42	13.19	0.0140	NA	1.79	Nil	78.57	91.67	NA	NA	91.50	100.00
		<b>SHYAM</b>	100.00	2.92	93.47	5.00	0.0010	77.00%	0.93	95.26	100.00	97.20	NA	NA	93.00	95.00
9	<b>TAMILNADU</b>	<b>BSNL</b>	100.00	4.01	NA	7.00	NA	74.00%	0.03	100.00	89.63	NA	NA	NA	NA	NA
		<b>RELIANCE</b>	83.33	5.16	99.78	4.20	0.1450	NA	0.06	75.00	34.44	93.44	NA	NA	91.50	100.00
		<b>BHARTI</b>	88.71	3.24	NA	1.13	0.0020	70.00%	0.07	78.54	94.11	93.75	18.09	28.55	75.85	81.89
		<b>TATA</b>	Nil	Nil	0.00	27.00	0.0000	58.53%	0.00	N/Ap	N/Ap	N/Ap	NA	NA	NA	NA
10	<b>HARYANA</b>	<b>BSNL</b>	92.79	7.77	NA	9.00	NA	71.00%	0.06	98.33	91.24	NA	NA	NA	NA	NA
		<b>RELIANCE</b>	53.49	2.48	84.21	7.31	0.0660	NA	0.00	97.06	40.00	85.71	NA	NA	91.50	100.00
		<b>BHARTI</b>	100.00	3.59	NA	12.18	0.0010	49.98%	NA	NA	NA	NA	NA	NA	NA	NA
11	<b>KARNATAKA</b>	<b>BSNL</b>	87.16	6.98	NA	7.00	NA	57.00%	0.03	93.68	93.89	NA	NA	NA	NA	NA
		<b>RELIANCE</b>	12.44	0.48	3.47	3.47	0.0800	NA	0.29	0.00	62.77	89.71	NA	NA	91.50	100.00
		<b>BHARTI</b>	90.22	2.44	96.11	4.20	0.0000	56.31%	0.53	42.18	90.00	98.50	NA	NA	100.00	NA
		<b>TATA</b>	93.68	0.92	80.24	14.40	0.0000	53.78%	0.06	80.85	64.29	64.40	NA	NA	NA	NA

Operators not meeting the TRAI's prescribed benchmarks

N/App

= Not Applicable

NA= Data not provide by the Service Operator

M/s Reliance have a centralised call centre data, for the parameter of "Response time to the customer for assistance", so the data is common for all circles.

S. No	Service Area	Service Provider	New connections after registration of demand	Fault incidences per 100/sub/month	Fault repaired by next working day	Mean Time to Repair (MTR)	Grade of service (calls per thousand)	Call completion rate in local network	Metering & billing credibility- % of bills disputed	Shifts	Closures	Additional facility	Response Time to the Customer for Assistance						
													a) Junction between local exchange (2/1000)	95% of requests			%age of calls answered (electronically)		%age of calls answered by operator (voice to voice)
							100% in < 7days							<5	>90%	<8 hrs	>55%	<0.1%,	< 3 days
12	A&N	BSNL	79.47	11.57	NA	13.00	NA	NA	NA	70.14	60.65	NA	NA	NA	NA	NA			
13	Assam	BSNL	39.86	7.86	NA	4.00	NA	63.00%	0.08	100.00	50.88	NA	NA	NA	NA	NA			
14	Chennai	BSNL	92.81	13.96	NA	20.00	NA	70.00%	0.08	88.31	100.00	NA	NA	NA	NA	NA			
		Reliance	48.64	4.32	99.91	5.32	0.1440	NA	0.07	62.50	22.07	4.83	NA	NA	91.50	100.00			
		TATA	100.00	0.25	100.00	2.90	NA	0.49%	NA	100.00	100.00	100.00	NA	NA	NA	NA			
15	H P	BSNL	97.68	9.31	NA	6.00	NA	63.00%	0.05	95.03	95.29	NA	NA	NA	NA	NA			
16	Jhar khand	BSNL	36.96	8.09	NA	15.00	NA	37.00%	0.05	92.06	100.00	NA	NA	NA	NA	NA			
17	J&K	BSNL	16.38	16.33	NA	9.00	NA	41.00%	0.04	100.00	87.15	NA	NA	NA	NA	NA			
18	Kerala	BSNL	61.11	11.36	NA	16.00	NA	69.00%	0.05	97.22	92.88	NA	NA	NA	NA	NA			
		BHARTI	67.95	11.87	NA	3.40	2.0000	51.00%	1.67	0.00	0.00	100.00	NA	NA	96.00	100.00			
		RELIANCE	52.73	2.98	3.23	2.39	0.0050	NA	0.13	100.00	34.68	93.95	NA	NA	91.50	100.00			
19	Kolkata	BHARTI	34.27	10.35	NA	0.65	0.0000	38.40%	0.83	100.00	96.33	54.92	96.77	96.77	93.13	93.13			

		<b>RELIANCE</b>	54.86	3.16	88.70	4.94	0.0000	NA	0.10	71.88	7.48	95.60	NA	NA	91.50	100.00
		<b>BSNL</b>	63.49	4.85	NA	11.00	NA	50.00%	0.06	49.48	100.00	NA	NA	NA	NA	NA
20	Mumbai	<b>TATA</b>	NA	1.42	63.10	5.40	0.0020	64.05%	0.37	31.14	0.00	93.45	NA	NA	NA	NA
		<b>BHARTI</b>	55.02	2.18	46.00	3.40	0.0000	NA	2.38	45.45	NA	67.06	NA	NA	NA	NA
		<b>RELIANCE</b>	40.93	4.89	99.97	5.65	0.0000	NA	0.33	Nil	9.54	88.58	NA	NA	91.50	100.00
		<b>MTNL</b>	55.73	11.30	NA	25.10	0.0007	54.00%	0.11	30.74	70.58	54.92	NA	NA	NA	NA
		<b>BSNL</b>	40.00	5.37	NA	31.00	NA	53.00%	0.07	96.05	100.00	NA	NA	NA	NA	NA
21	NE-I	<b>BSNL</b>	91.39	5.19	NA	7.00	NA	56.00%	0.20	90.54	15.47	NA	NA	NA	NA	NA
22	NE-II	<b>BSNL</b>	100.00	6.35	NA	9.00	NA	73.00%	0.10	100.00	92.26	NA	NA	NA	NA	NA
23	Orissa	<b>RELIANCE</b>	76.74	1.44	91.67	4.65	0.8030	NA	0.49	Nil	100.00	Nil	NA	NA	91.50	100.00
		<b>BSNL</b>	92.18	6.95	NA	8.00	NA	85.00%	0.05	93.19	55.54	NA	NA	NA	NA	NA
24	UP-E	<b>BHARTI</b>	98.16	4.32	94.26	7.11	0.0000	65.70%	0.03	57.82	100.00	33.60	99.80	100.00	90.00	100.00
		<b>RELIANCE</b>	37.26	9.23	100.00	5.35	0.0200	NA	0.11	89.29	51.85	93.61	NA	NA	91.50	100.00
		<b>BSNL</b>	73.28	10.25	NA	10.00	NA	62.00%	0.02	88.13	83.21	NA	NA	NA	NA	NA
25	UP-W	<b>BHARTI</b>	9.95	6.73	NA	6.73	0.0000	38.10%	1.15	20.00	NA	63.16	0.00	0.00	0.00	0.00
		<b>RELIANCE</b>	43.18	2.90	94.74	3.25	0.8150	NA	0.00	100.00	67.65	93.75	NA	NA	91.50	100.00
		<b>BSNL</b>	55.56	10.93	NA	6.00	NA	85.00%	0.05	100.00	93.73	NA	NA	NA	NA	NA
26	Uttaranchal	<b>BSNL</b>	33.28	7.71	NA	18.00	NA	67.00%	0.04	97.85	95.28	NA	NA	NA	NA	NA
27	West Bengal	<b>RELIANCE</b>	0.00	7.14	75.00	1.69	0.0960	NA	2.97	Nil	73.91	100.00	NA	NA	91.50	100.00

Operator not meeting the prescribed benchmark

N/App =



**Annex 5.2**

**Quality of Service Performance for Mobile (GSM) Services**

Sr. No.	Service Providers	Parameters													
		(A) Network Performance						(B) Customer help lines				(C) Billing Complaints			
		(i)	(ii)	(iii)	(iv)	(v)	(vi)	(i)				(i)	(ii)	(iii)	
		Accumulated down time of community isolation	Call Set-up Success Rate (within licensees own network)	Service Access Delay	Blocked Call Rate	Call Drop Rate	%age of connections with good voice quality	Response time to the customer for assistance				Complaints per 100 bills issued	% of complaints resolved within 4 weeks	Period of all refunds/ payment due to customers from the date of resolution of complaints as in (ii) above	
Benchmarks															
		<24 hrs	>95%	Between 9 to 20 seconds depending upon number of paging attempts (Average of 100 calls = <15 sec)	(I) SDCCH / Paging Channel Congestion <1%	(ii) TCH Congestion <2%	<3%	>95%	(I) %age of calls answered (electronically); within 20 seconds = 80%,	(I) %age of calls answered (electronically); within 40 seconds = 95%	(I) %age of calls answered by operator (voice to voice); within 60 seconds = 80%,	(I) %age of calls answered by operator (voice to voice); within 90 seconds = 95%,	<0.1%	100%	<4 weeks
	<b>'A' Circle</b>														
<b>I</b>	<b>Maharashtra</b>														
1	BPL Cellular	18.05	98.07%	11.0	1.00%	1.73%	1.31%	97.8%	100.00%	100.00%	100.00%	N/Ap	0.100%	100.00%	30 days
2	IDEA Cellular	2.05	98.98%	10.6	0.88%	1.16%	1.48%	99.0%	100.00%	100.00%	61.00%	74.00%	0.200%	100.00%	30 days
3	BSNL	40.00	96.00%	2.0	2.10%	3.10%	1.30%	98.0%	100.00%	100.00%	99.00%	95.00%	0.100%	100.00%	30 days
4	Bharti Tele-ventures	22.05	97.64%	9.9	0.21%	0.23%	0.98%	95.2%	99.00%	99.00%	94.00%	95.00%	0.100%	100.00%	30 days
5	Reliance - CDMA	1.09	98.35%	4.3	0.00%	0.41%	0.82%	99.4%	99.50%	NA	82.21%	91.70%	0.070%	100.00%	30 days
6	Tata, MH -CDMA	0.00	97.62%	20.0	0.00%	0.55%	0.57%	97.3%	100.00%	100.00%	87.32%	N/Ap	0.650%	100.00%	60 days
<b>ii</b>	<b>Gujarat</b>														
7	Hutch - Fascel	9.17	96.27%	11.2	0.15%	0.77%	1.21%	96.2%	100.00%	100.00%	79.67%	90.67%	0.032%	100.00%	06 days
8	IDEA Cellular	2.15	98.85%	14.1	0.92%	0.52%	1.62%	97.5%	95.00%	99.00%	73.00%	83.00%	0.100%	100.00%	30 days
9	BSNL	Nil	99.00%	2.0	0.90%	1.80%	1.00%	98.0%	100.00%	100.00%	100.00%	100.00%	0.000%	100.00%	30 days
10	Bharti Tele-ventures	0.00	99.92%	12.5	0.25%	0.78%	1.49%	97.1%	90.29%	96.84%	95.08%	97.23%	0.160%	100.00%	07 days

11	Reliance - CDMA	1.14	98.66%	4.7	0.00%	0.36%	0.82%	99.7%	99.50%	NA	86.33%	94.10%	0.070%	100.00%	30 days
12	Tata -CDMA	12.11	98.27%	4.6	0.00%	0.07%	0.56%	98.5%	100.00%	N/Ap	92.00%	98.00%	0.100%	100.00%	30 days
<b>iii</b>	<b>Andhara Pradesh</b>														
13	IDEA Cellular	2.01	99.99%	4.8	0.28%	1.69%	0.47%	99.4%	100.00%	100.00%	89.00%	98.00%	0.400%	100.00%	30 days
14	Bharti Tele-ventures	177.67	98.75%	14.1	0.24%	0.62%	0.97%	99.7%	99.00%	99.00%	94.00%	97.00%	0.100%	100.00%	30 days
15	BSNL, AP	Nil	98.00%	6.0	0.40%	4.90%	1.60%	97.0%	100.00%	100.00%	81.00%	97.00%	0.000%	100.00%	Immediate
16	Hutchison Essar S	16.00	99.68%	5.0	0.31%	0.51%	0.53%	98.0%	100.00%	100.00%	93.33%	95.00%	0.006%	100.00%	02 days
17	Reliance - CDMA	0.81	99.18%	4.3	0.00%	0.56%	0.67%	99.9%	99.50%	NA	36.21%	50.37%	0.070%	100.00%	30 days
18	Tata -CDMA	11.41	99.00%	5.7	0.00%	0.02%	0.43%	96.4%	100.00%	N/Ap	78.00%	93.00%	0.100%	100.00%	30 days
<b>iv</b>	<b>Karnataka</b>														
19	Bharti Tele-ventures	22.86	99.47%	13.0	0.44%	0.42%	1.28%	96.4%	97.49%	97.53%	91.97%	96.14%	0.003%	100.00%	30 days
20	Spice Comm.	3.70	99.79%	9.0	0.22%	3.37%	1.18%	99.0%	NA	NA	88.00%	98.00%	0.020%	100.00%	07 days
21	BSNL	20.00	96.00%	12.0	2.80%	5.80%	1.20%	98.0%	96.00%	97.00%	53.00%	58.00%	0.100%	100.00%	30 days
22	Hutchison Essar S	14.08	99.96%	10.0	0.05%	1.91%	1.95%	96.3%	100.00%	100.00%	85.00%	97.00%	0.023%	100.00%	02 days
23	Reliance - CDMA	1.15	98.64%	4.0	0.00%	0.55%	0.63%	99.8%	99.50%	NA	54.91%	70.54%	0.070%	100.00%	30 days
24	Tata -CDMA	17.41	99.75%	8.9	0.00%	0.53%	1.35%	96.7%	100.00%	N/Ap	85.00%	95.00%	0.200%	100.00%	30 days
<b>v</b>	<b>Tamil Nadu</b>														
25	BPL Cellular	49.54	98.83%	11.8	0.74%	1.31%	0.74%	98.9%	100.00%	N/Ap	100.00%	N/Ap	0.070%	100.00%	30 days
26	Aircel	19.51	99.18%	11.4	NA	NA	1.79%	95.9%	100.00%	100.00%	83.00%	96.00%	0.040%	100.00%	30 days
27	BSNL	Nil	95.00%	8.0	1.00%	2.00%	1.30%	96.0%	85.00%	96.00%	85.00%	97.00%	0.000%	100.00%	Nil
28	Bharti Tele-ventures	20.00	99.61%	14.6	0.18%	0.17%	0.88%	98.8%	99.95%	100.00%	95.96%	96.00%	0.070%	100.00%	30 days
29	Reliance - CDMA	0.64	99.79%	4.3	0.00%	0.48%	0.76%	100.0%	99.50%	NA	62.65%	72.83%	0.080%	100.00%	30 days
30	Tata -CDMA	12.53	98.69%	11.0	0.00%	0.13%	1.16%	97.7%	100.00%	N/Ap	83.00%	91.00%	0.130%	100.00%	30 days
	<b>B' Circle</b>														
<b>vi</b>	<b>Kerala</b>														
31	IDEA-Escotel Mobile	21.17	99.98%	13.4	0.26%	1.31%	1.67%	97.9%	NA	NA	NA	NA	0.100%	100.00%	30 days
32	BPL Cellular	19.75	95.50%	16.2	0.21%	1.50%	1.18%	99.4%	NA	NA	NA	NA	0.004%	100.00%	30 days
33	BSNL	8.00	98.00%	13.0	0.40%	1.60%	2.00%	96.0%	81.00%	97.00%	82.00%	96.00%	0.000%	100.00%	30 days
34	Bharti Tele-ventures	2.47	99.45%	12.4	0.06%	0.05%	1.25%	98.8%	99.99%	100.00%	100.00%	Nil	0.060%	100.00%	30 days
35	Tata - CDMA	0.00	99.80%	17.5	0.00%	0.00%	0.58%	96.8%	100.00%	N/Ap	85.00%	96.00%	0.300%	100.00%	30 days
36	Reliance - CDMA	0.33	99.81%	4.0	0.00%	0.39%	0.68%	99.8%	99.50%	NA	63.27%	75.88%	0.100%	100.00%	30 days
<b>vii</b>	<b>Punjab</b>														
37	Spice Comm.	19.20	95.68%	9.1	0.45%	3.62%	1.49%	98.0%	99.00%	99.00%	98.00%	98.00%	0.022%	100.00%	07 days

38	HFCL - CDMA	0.00	97.00%	13.0	0.00%	0.00%	0.67%	97.1%	100.00%	N/Ap	100.00%	Nil	Nil	Nil	Nil
39	Bharti Tele-ventures	8.25	98.15%	10.0	0.23%	0.24%	1.69%	99.3%	99.77%	99.99%	99.99%	99.99%	0.090%	100.00%	15 days
40	Hutchission Essar South	Nil	99.03%	10.0	0.17%	0.60%	1.50%	99.8%	100.00%	100.00%	91.00%	95.00%	0.011%	100.00%	04 days
41	BSNL	3.00	100.00%	4.0	0.10%	1.00%	1.10%	99.0%	100.00%	100.00%	70.00%	85.00%	0.100%	100.00%	Immediate
42	Reliance - CDMA	0.73	98.61%	4.7	0.00%	0.30%	0.88%	98.4%	99.50%	NA	79.02%	91.14%	0.090%	100.00%	30 days
43	Tata - CDMA	0.16	99.84%	8.0	0.00%	0.68%	0.61%	95.9%	100.00%	N/Ap	77.00%	91.00%	0.500%	100.00%	30 days
<b>viii</b>	<b>Haryana</b>														
44	IDEA-Escotel Mobile	7.42	99.98%	13.6	0.17%	0.99%	1.05%	99.4%	40.00%	75.00%	100.00%	Nil	0.300%	100.00%	30 days
45	Hutch-Aircel Digilink	6.50	99.96%	9.4	0.02%	0.27%	1.26%	98.3%	88.67%	100.00%	91.33%	94.33%	0.077%	100.00%	05 days
46	BSNL	11.00	95.00%	9.0	0.80%	1.80%	2.90%	96.0%	100.00%	100.00%	70.00%	85.00%	0.100%	100.00%	30 days
47	Bharti Tele-ventures	2.71	97.87%	11.0	0.22%	0.21%	1.77%	99.0%	99.88%	99.93%	95.72%	97.63%	0.090%	100.00%	15 days
48	Reliance - CDMA	0.40	98.90%	4.0	0.00%	0.29%	0.80%	99.7%	99.50%	NA	79.02%	91.14%	0.080%	100.00%	30 days
49	Tata - CDMA	3.59	99.77%	8.0	0.00%	1.64%	0.79%	96.2%	100.00%	N/Ap	71.00%	91.00%	0.270%	100.00%	30 days
<b>ix</b>	<b>UP - W</b>														
50	Hutchission Essar S	Nil	97.60%	9.0	0.10%	0.27%	1.95%	96.0%	100.00%	100.00%	91.67%	93.33%	0.980%	100.00%	03 days
51	IDEA	3.15	99.87%	11.7	0.57%	1.77%	1.61%	97.3%	82.00%	96.00%	84.00%	95.00%	0.300%	100.00%	15 days
52	BSNL	Nil	99.00%	14.0	0.90%	2.80%	2.80%	99.0%	90.00%	98.00%	80.00%	96.00%	0.000%	100.00%	07 days
53	Bharti Tele-ventures	22.53	97.67%	14.0	0.31%	0.44%	1.65%	96.5%	98.00%	99.00%	92.00%	95.00%	0.100%	100.00%	30 days
54	Reliance - CDMA	1.07	98.53%	4.3	0.00%	0.63%	0.83%	98.6%	99.50%	NA	35.27%	48.45%	0.100%	100.00%	30 days
55	Tata - CDMA	5.01	100.00%	18.8	0.00%	1.00%	0.78%	95.3%	100.00%	N/Ap	88.00%	95.00%	0.100%	100.00%	30 days
<b>x</b>	<b>UP - E</b>														
56	Bharti Tele-ventures	24.00	99.05%	11.0	0.32%	1.17%	1.75%	97.0%	99.45%	99.85%	90.60%	97.93%	0.100%	100.00%	25 days
57	Hutch -ADIL	Nil	96.02%	10.0	0.24%	1.39%	2.10%	96.3%	100.00%	100.00%	89.67%	95.67%	0.031%	100.00%	06 days
58	BSNL	3.00	95.00%	10.0	1.00%	2.00%	3.00%	96.0%	90.00%	98.00%	80.00%	96.00%	0.100%	100.00%	30 days
59	Reliance - CDMA	1.41	98.91%	4.7	0.00%	0.54%	0.73%	99.3%	99.50%	NA	35.27%	48.45%	0.070%	100.00%	30 days
60	Tata - CDMA	22.40	100.00%	17.0	0.00%	0.00%	0.76%	99.0%	100.00%	N/Ap	89.00%	95.00%	0.100%	100.00%	81 days
<b>xi</b>	<b>Rajasthan</b>														
61	Hutch-Aircel Diglink	13.08	96.63%	9.6	0.16%	0.40%	1.78%	97.5%	99.33%	100.00%	86.67%	95.00%	0.050%	100.00%	05 days
62	BSNL	21.00	96.00%	6.0	1.40%	7.90%	2.20%	98.0%	82.00%	96.00%	84.00%	97.00%	0.020%	100.00%	30 days
63	Bharti - Hexacom	20.82	97.34%	10.0	1.49%	0.51%	1.31%	96.0%	99.98%	99.99%	92.34%	95.00%	0.100%	100.00%	30 days
64	Reliance - CDMA	1.84	98.44%	4.7	0.00%	0.50%	0.83%	99.7%	99.50%	NA	68.47%	83.72%	0.080%	100.00%	30 days
65	Tata - CDMA	16.28	97.68%	9.7	0.00%	0.00%	0.69%	98.5%	100.00%	N/Ap	92.00%	96.00%	0.040%	100.00%	30 days

<b>xii</b>	<b>Madhya Pradesh</b>															
66	IDEA Cellular	19.23	98.22%	1.0	1.44%	12.28%	1.73%	98.5%	100.00%	100.00%	97.72%	99.48%	0.100%	100.00%	30 days	
67	Reliance - GSM	22.28	100.00%	7.8	0.63%	8.90%	2.33%	96.4%	NA	NA	100.00%	NA	0.020%	100.00%	01 day	
68	BSNL	4.00	100.00%	3.0	0.30%	1.10%	1.10%	100.0%	100.00%	100.00%	100.00%	100.00%	0.100%	100.00%	30 days	
69	Bharti Tele-ventures	23.12	99.85%	13.0	0.05%	0.35%	0.54%	98.3%	99.93%	99.99%	91.41%	98.33%	0.020%	100.00%	30 days	
70	Reliance - CDMA	1.23	98.98%	4.0	0.00%	0.64%	0.79%	99.5%	99.50%	NA	56.17%	72.51%	0.080%	100.00%	30 days	
71	Tata - CDMA	2.40	98.29%	3.2	0.00%	0.00%	0.58%	99.1%	100.00%	N/Ap	88.00%	96.00%	0.200%	100.00%	30 days	
<b>xiii</b>	<b>West Bengal</b>															
72	Bharti Tele-ventures	0.00	97.41%	9.0	0.01%	0.08%	1.73%	100.0%	91.00%	99.00%	94.00%	98.60%	0.040%	100.00%	21 days	
73	Reliance - GSM	8.29	96.83	9.09	1.25	8.26	2.54	96.51	NA	NA	100	NA	Nil	N/Ap	N/Ap	
74	BSNL	Nil	99.00%	6.0	0.20%	1.10%	2.20%	99.0%	86.00%	96.00%	87.00%	97.00%	0.000%	100.00%	Immediate	
75	Tata - CDMA	20.32	99.14%	9.4	0.00%	0.00%	1.12%	98.3%	NA	NA	NA	NA	0.400%	100.00%	30 days	
76	Reliance - CDMA	1.08	99.27%	4.0	0.00%	0.50%	0.71%	97.2%	99.50%	NA	49.76%	69.19%	0.120%	100.00%	30 days	
77	Hutchission Essar S	16.51	95.34%	10.0	0.28%	0.94%	1.17%	97.8%	100.00%	100.00%	90.33%	95.00%	0.080%	100.00%	05 days	
78	Dishnet	0.00	99.62%	8.0	0.00%	0.00%	1.36%	99.0%	NA	NA	98.00%	99.00%	0.050%	100.00%	NA	
	<b>C' Circle</b>															
<b>xiv</b>	<b>Himachal Pradesh</b>															
79	Bharti Tele-ventures	4.58	97.72%	10.0	0.27%	0.31%	1.70%	98.7%	99.73%	99.86%	NA	NA	0.001%	100.00%	15 days	
80	Reliance - GSM	17.10	100.00%	8.9	0.33%	1.10%	2.52%	98.6%	NA	NA	95.00%	100.00%	Nil	N/Ap	N/Ap	
81	BSNL	Nil	98.00%	6.0	0.70%	1.40%	2.70%	96.0%	82.00%	96.00%	81.00%	95.00%	0.000%	NA	NA	
82	Reliance - CDMA	1.07	98.40%	4.7	0.00%	0.36%	0.73%	99.5%	99.50%	NA	79.02%	91.14%	0.060%	100.00%	30 days	
83	Tata - CDMA	4.00	98.38%	12.0	0.00%	0.02%	0.52%	95.5%	100.00%	N/Ap	75.00%	91.00%	0.200%	100.00%	30 days	
<b>xv</b>	<b>Bihar</b>															
84	Reliance - GSM	7.20	97.33%	8.2	1.60%	9.80%	2.05%	97.5%	NA	NA	95.00%	100.00%	Nil	N/Ap	N/Ap	
85	BSNL	10.00	99.00%	9.0	1.50%	4.50%	3.20%	90.0%	86.00%	95.60%	87.00%	97.00%	0.100%	100.00%	30 days	
86	Reliance - CDMA	1.02	98.87%	4.0	0.00%	0.44%	0.70%	98.9%	99.50%	NA	49.76%	69.19%	0.080%	100.00%	30 days	
87	Bharti Tele-ventures	12.39	98.74%	6.7	0.07%	1.26%	1.91%	95.6%	91.97%	97.79%	97.37%	97.37%	0.050%	100.00%	30 days	
88	Tata - CDMA	21.20	99.21%	8.3	0.00%	0.00%	0.59%	98.3%	NA	NA	NA	NA	0.100%	100.00%	30 days	
<b>xvi</b>	<b>Orissa</b>															
89	Reliance - GSM	2.53	98.89%	7.3	0.16%	6.83%	1.98%	97.3%	NA	NA	91.00%	100.00%	Nil	N/Ap	N/Ap	
90	BSNL	33.00	94.00%	10.0	2.10%	3.20%	2.00%	92.0%	84.00%	85.00%	83.00%	96.00%	0.000%	100.00%	Nil	
91	Bharti Tele-ventures	0.00	99.63%	7.1	0.07%	0.14%	1.13%	98.9%	98.00%	98.00%	95.00%	95.00%	0.030%	100.00%	30 days	
92	Reliance - CDMA	0.84	99.75%	4.0	0.00%	0.48%	0.83%	99.5%	99.50%	NA	56.17%	72.51%	0.130%	100.00%	30 days	

93	Tata - CDMA	2.33	97.88%	11.2	0.00%	0.00%	0.70%	95.3%	NA	NA	NA	NA	0.090%	100.00%	01 day
94	Dishnet	0.00	99.72%	8.0	0.01%	0.00%	2.18%	99.0%	NA	NA	99.00%	99.00%	0.000%	N/Ap	N/Ap
<b>xvii</b>	<b>Assam</b>														
95	Bharti Tele-ventures	0.00	97.70%	10.0	0.89%	1.40%	1.47%	95.9%	95.00%	97.00%	99.00%	100.00%	0.010%	100.00%	30 days
96	BSNL	3.00	99.00%	12.0	0.10%	1.70%	2.80%	95.0%	80.00%	95.00%	81.00%	95.00%	0.000%	100.00%	30 days
97	Reliance - GSM	41.05	95.67%	7.2	0.89%	4.64%	1.17%	97.4%	NA	NA	80.00%	100.00%	0.020%	100.00%	NA
98	Dishnet	0.00	99.44%	7.0	0.23%	0.73%	2.36%	99.0%	NA	NA	89.00%	99.00%	0.050%	100.00%	NA
<b>xviii</b>	<b>J &amp; K</b>														
99	BSNL	3.00	100.00%	12.0	0.80%	1.50%	1.90%	96.0%	85.00%	96.00%	83.00%	97.00%	0.000%	N/Ap	21 days
100	Bharti Tele-ventures	4.25	96.17%	11.0	0.83%	0.44%	1.50%	97.4%	99.99%	99.99%	NA	NA	0.060%	100.00%	01 day
<b>xix</b>	<b>NE</b>														
101	BSNL	13.00	96.00%	12.0	0.80%	1.70%	2.50%	96.0%	84.00%	96.00%	90.00%	97.00%	0.000%	100.00%	21 days
102	Bharti Tele-ventures	0.00	98.76%	10.0	0.44%	0.13%	1.39%	97.1%	96.00%	98.00%	100.00%	Nil	0.030%	100.00%	30 days
103	Reliance - GSM	20.39	96.33%	8.1	1.19%	8.45%	4.60%	98.2%	NA	NA	76.00%	100.00%	0.005%	100.00%	NA
104	Dishnet	0.00	99.87%	8.0	0.11%	0.04%	2.15%	99.0%	NA	NA	99.00%	99.00%	Nil	N/Ap	N/Ap
	<b>METRO</b>														
<b>xx</b>	<b>Delhi</b>														
105	Bharti Tele-ventures	0.00	98.74%	16.6	0.08%	0.08%	1.45%	95.8%	99.46%	99.84%	92.27%	95.00%	0.066%	100.00%	30 days
106	Hutchison Essar M Serv	Nil	98.99%	7.9	0.01%	0.00%	1.17%	97.8%	100.00%	100.00%	82.00%	88.33%	0.050%	100.00%	03 days
107	MTNL	Nil	95.36%	13.6	0.36%	1.24%	1.29%	96.3%	97.50%	98.50%	92.00%	95.45%	0.090%	100.00%	30 days
108	IDEA Cellular	Nil	98.98%	7.0	0.54%	1.45%	0.59%	98.4%	100.00%	N/Ap	82.00%	15.00%	0.100%	100.00%	30 days
109	Tata - CDMA	0.35	97.79%	9.5	0.00%	0.03%	0.58%	95.3%	100.00%	N/Ap	93.00%	98.00%	0.100%	100.00%	30 days
110	Reliance - CDMA	0.00	98.48%	4.0	0.00%	0.55%	0.72%	98.2%	99.50%	NA	56.11%	73.58%	0.070%	100.00%	30 days
<b>xxi</b>	<b>Mumbai</b>														
111	BPL Mobile	18.57	99.51%	10.8	0.27%	1.77%	1.52%	99.0%	77.87%	NA	97.77%	99.41%	0.100%	100.00%	40 days
112	Hutchison Max Tel	Nil	99.14%	10.0	0.32%	1.27%	1.68%	96.4%	97.67%	100.00%	90.33%	94.67%	0.002%	100.00%	03 days
113	MTNL	Nil	98.93%	13.4	0.88%	1.78%	1.48%	95.8%	83.00%	95.00%	84.00%	96.50%	0.060%	100.00%	30 days
114	Bharti Tele-ventures	0.00	98.69%	12.0	0.29%	0.20%	1.10%	98.3%	98.80%	98.94%	93.72%	94.77%	0.030%	100.00%	07 days
115	Reliance - CDMA	0.00	98.35%	4.0	0.00%	0.51%	0.89%	100.0%	95.50%	NA	61.12%	77.05%	0.070%	100.00%	30 days
116	Tata -CDMA	0.00	98.24%	20.0	0.00%	0.03%	0.59%	97.4%	0.00%	0.00%	NA	NA	1.040%	100.00%	NA
<b>xxii</b>	<b>Chennai</b>														
117	Aircel Cellular Ltd	3.00	97.80%	13.0	1.20%	7.63%	0.93%	95.0%	95.00%	100.00%	86.00%	100.00%	0.200%	100.00%	30 days

118	Bharti Tele-ventures	0.00	99.55%	12.8	0.08%	0.09%	0.72%	97.8%	99.98%	99.99%	91.00%	98.00%	0.090%	100.00%	30 days
119	Hutchison Essar S	Nil	99.62%	12.3	0.19%	1.19%	0.75%	98.7%	100.00%	100.00%	93.67%	97.67%	0.083%	100.00%	03 days
120	BSNL	Nil	96.00%	10.0	0.40%	2.40%	1.00%	99.0%	NA	NA	100.00%	100.00%	0.000%	100.00%	30 days
121	Reliance - CDMA	0.00	98.74%	4.0	0.00%	0.68%	0.47%	99.9%	99.50%	NA	62.65%	72.83%	0.070%	100.00%	30 days
122	Tata - CDMA	0.00	99.95%	12.9	0.00%	0.01%	0.69%	96.7%	100.00%	N/Ap	83.00%	91.00%	0.250%	100.00%	30 days
<b>xxiii</b>	<b>Kolkata</b>														
123	Bharti Tele-ventures	0.00	97.37%	5.3	0.03%	0.68%	1.54%	95.5%	99.37%	99.41%	81.00%	84.00%	0.100%	100.00%	07 days
124	Hutchison Essar S	Nil	99.94%	16.0	0.30%	1.40%	0.75%	96.4%	100.00%	100.00%	83.67%	95.00%	0.088%	100.00%	04 days
125	BSNL	Nil	98.00%	8.0	0.50%	2.60%	0.90%	99.0%	85.00%	96.00%	84.00%	97.00%	0.200%	100.00%	30 days
126	Reliable Internet. Ser.	0.00	99.33%	9.7	0.01%	0.06%	1.69%	98.7%	NA	NA	100.00%	NA	Nil	N/Ap	N/Ap
127	Tata - CDMA	18.45	97.08%	9.4	0.00%	0.12%	0.62%	97.0%	NA	NA	NA	NA	0.100%	100.00%	30 days
128	Reliance - CDMA	0.00	98.44%	4.0	0.00%	0.58%	0.93%	98.3%	99.50%	NA	49.76%	69.19%	0.080%	100.00%	30 days
	Service Providers not meeting the benchmarks NA=Data not available N/Ap = Not Applicable														

## Annex 5.3

### Quality of Service Performance for ISPs

S. No.	Name of the Service Provider	Service Activation time	Time to Access	Access Portability in 1 <sup>st</sup> attempt (in %)	Access Portability in 2 <sup>nd</sup> attempt (in %)	Access Portability in 3 <sup>rd</sup> attempt (in %)	ISP Node unavailability	Grade of Service (QoS)	Mean time to Restore of faults resulting as per subscriber complaints	
	<b>TRAI Benchmarks</b>	<b>6 hrs</b>	<b>30 sec</b>	<b>80</b>	<b>90</b>	<b>99</b>	<b>30 min</b>	<b>1 : 100</b>	<b>3 days</b>	
1	Bharat Sanchar Nigam Ltd.	0-4 hrs	15-30 sec	92	98	100	Nil	1:100	0-4 hrs	
2	MTNL	Delhi	Online	30 sec	99.67	99.99	-	-	0.01	5 min
		Mumbai	Immediate	26 sec	100	-	-	-	0.005	15 min
3	Sify Ltd.	3 mins	30 sec	90	95	99	20 min	0.005	4 hrs	
4	VSNL	2-4 hrs	30 sec	80	90	99	Nil	Not provided by BSO	10-15 min	
5	Reliance Communications Infrastructure	Online	<25 sec	98	100	-	Nil	-	<45 mins	
6	Bharti Infotel Ltd.	5 min (online)	30-35 sec	99.8	100	100	Nil	1:100	2 hrs	
7	Data Infosys	2-3 min	20-25 sec	95	97	99	30 min	1:100	15 min	
8	Iqara Telecom India Pvt. Ltd. (BG Broadband)	2 min (Online)	20 sec	98	99	100	Nil	Not provided by BSO	23 hrs	
9	Hathway Cable & Data Pvt. Ltd.*	-	-	-	-	-	-	-	-	
10	HCL Infinet Ltd.	4 min	26 sec	99.1	99.2	99.4	24 min	1:200	17-19 hrs	
11	ICENET.NET Ltd.	2 hrs	20 sec	85	95	100	Nil	1:100	1 hr	
12	Asianet Satellite Communications Ltd.	Immediate	10 sec	98	99	100	<b>&lt;1 Hr</b>	1 in 500	3 Hrs 10 mins	
13	Tata Teleservices (Maharashtra) Ltd. (Hughes Telecom)	-	25 sec	99.65	Nil	Nil	-	1:1000	1 hr	
14	Shyam Internet Services Pvt. Ltd.	5 min	20 sec	98.5	99.5	99.99	15 min	1%	1.5 hrs	
15	HFCL Infotel Ltd.	-	30 sec	98.2	99.2	100	Nil	0.85 in 100	7 min	
16	Fascel Ltd.*	-	-	-	-	-	-	-	-	
17	WWW Communications Ltd.	4-5 mins	20-35 sec	87	96	99	<b>190 min</b>	-	10-15 min	
18	Hughes*	-	-	-	-	-	-	-	148.5 min	
19	Broadband Pacenet (I) Pvt. Ltd.	-	-	-	-	-	-	-	3 hrs	
20	Webel ISP	-	-	-	-	-	-	-	25 min	

\*are not providing Internet Access on Dial Up. Internet Access on Mobile is provided via WAP Setup but they have been included in Top 20 on the basis of Total Number of Subscribers.