

Telecom Regulatory Authority of India



The Indian Telecom Services Performance Indicators July – September 2005

December 2005

TRAI House
A-2/14, Safdarjung Enclave,
Africa Avenue,
New Delhi-110029
Tel: +91-11- 26103466
Fax: +91-11- 26103294
Web: www.trai.gov.in

CONTENTS

OBSERVATIONS: -

- (i) Introduction
 - (ii) Quarterly results at a glance
-
- Chapter One : Performance of Fixed Service
 - Chapter Two : Performance of Mobile Service
 - Chapter Three : Performance of Internet Service
 - Chapter Four : Performance of Other Value Added Services
 - (i) PMRTS
 - (ii) VSAT
 - Chapter Five : Quality of Service (QOS) Performance
 - Chapter Six** : **Performance of Cable TV, DTH & Radio Broadcasting Services**

TABLES:

- 1.1 Subscribers Base of Fixed Services
- 1.2 Details of Public Call Offices (PCO)
- 1.3 Details of Village Public Telephones (VPT)
- 2.1 Subscriber Base of Mobile operators
- 2.2 Market Share of Mobile Service Providers
- 2.3 Growth pattern of Mobile Subscribers Base
- 3.1 Subscribers Base of Internet Service
- 4.1 Subscriber Base of Public Mobile Radio Trunking Service (PMRTS)
- 4.2 Subscriber Base of VSAT Service Providers
- 6.1 No. of Cable and Satellite TV Households
- 6.2 Genrewise Cable and Satellite Viewership pattern (in %) in four Metros
- 6.3 Viewing Pattern of FTA Vs Pay Channels (in % terms) (+4 Cable and Satellite viewers) in four Metros
- 6.4 Average Weekly Reach of DD 1 in Millions among Cable, Non Cable & Satellite Viewers of 4+
- 6.5 Colour TV Penetration among C &S Households
- 6.6 Range of number of channels Pay, FTA, Local regularly carried on Network
- 6.7 Information on New Pay Channels and Free to Air (FTA) channels converted into Pay Channels after 26.12.2003
- 6.8 No. of Applications/Letters of Intent/Licenses Issued in respect of DTH Service Provider
- 6.9 Status of Community Radio Stations in the country

ANNEXES:

- 1.1 Details of Fixed Service Licenses issued to private operators
- 2.1 List of Cellular, Fixed & Unified Access Service Providers
- 3.1 Growth Pattern of Internet subscribers
- 3.2 List of Internet Telephony Service Providers
- 4.1 Growth Rate of PMRTS subscribers
- 4.2 Growth Rate of VSAT Subscribers
- 5.1 Quality of Service Performance for Fixed Services
- 5.2 Quality of Service Performance for Mobile (GSM) Services
- 5.3 Quality of Service Performance for ISPs

(i) INTRODUCTION

- 1.1 This report provides an update on the growth trends for the telecom services for the period July-September 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). In this edition, a new chapter (chapter 6) on the performance of Cable TV, DTH & Radio Broadband services has also been included. 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.traigov.in) and is updated on quarterly basis. Any suggestions pertaining to this may please be addressed to S. N. Gupta, Advisor (CN), TRAI; Tel. 26167914, Fax. 26191998 and e-mail: traio9@bol.net.in.

(ii) Quarterly Results at a Glance
Performance Indicators of Telecom Services for QE Sept 2005

A. Growth of Fixed & Mobile Services:-

	QE Sept 2004	QE Dec 2004	QE Mar 2005 (FY 2004-05)	QE Jun 2005	QE Sept 2005	%age growth over Sept 2004 (12 months)	%age growth over Dec 2004 (9 months)	%age growth over Mar 2004 (6 months)	%age growth over Jun 2005 (3 months)
1) Subscriber's Base (in millions)									
i) Fixed Line including WLL(F)	43.87	44.87	46.19	46.85	48.00	9.41	6.98	3.92	2.45
ii) Mobile (GSM + CDMA)	42.99	48.01	52.22	57.37	65.07	51.36	35.53	24.61	13.42
Gross Total	86.86	92.88	98.41	104.22	113.07	30.17	21.74	14.90	8.49
2) Teledensity									
Population in million (Estimated)	1073	1077	1080	1085	1091				
i) Fixed including WLL(F)	4.09	4.17	4.28	4.32	4.40	7.61	5.60	2.87	1.89
ii) Mobile (GSM + CDMA)	4.01	4.46	4.84	5.29	5.96	48.86	33.79	23.35	12.80
Gross Total	8.10	8.62	9.11	9.61	10.36	28.03	20.17	13.74	7.89

* Revenue and usage data made available by service providers for quarters ending June & Sept 2005 is under scrutiny and certain clarifications are awaited from service providers

B. Growth of Internet & Broadband Services:-

	QE Sept 2004	QE Dec 2004	QE Mar 2005 (FY 2004-05)	QE Jun 2005	QE Sept 2005	%age growth over Sept 2004 (12 months)	%age growth over Dec 2004 (9 months)	%age growth over Mar 2004 (6 months)	%age growth over Jun 2005 (3 months)
1) Subscriber's Base (in million)									
i) Internet	5.32	5.45	5.55	5.89	6.13	15.23	12.48	10.45	4.07
ii) Broadband Connections (>=256 Kbps download speed)		0.047	0.183	0.399	0.612		1202.13	234.43	53.38
2) Minutes of Use (MOU/subs/month)	320	275	305	300	315	-1.56	14.55	3.28	5.00
3) ARPU (Internet) (Rs/subs/month)	280	167	220	200	190	-32.14	13.77	-13.64	-5.00

C. Performance of service providers during the quarter: -

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

1) Basic Service Providers	QE Sept 2004	QE Dec 2004	QE Mar 2005 (FY 2004-05)	QE Jun 2005	QE Sept 2005	%age growth over Sept 2004 (12 months)	%age growth over Dec 2004 (9 months)	%age growth over Mar 2004 (6 months)	%age growth over Jun 2005 (3 months)
BSNL	36.15	36.49	37.04	36.80	36.80	1.80	0.84	-0.65	0.00
MTNL	4.12	4.08	4.06	3.95	4.05	-1.70	-0.61	-0.25	2.53
Tata/Hughes	1.64	2.00	2.58	3.07	3.62	120.73	80.64	40.31	17.92
Bharti	0.77	0.80	0.86	0.93	1.06	37.66	31.84	23.26	13.98
Reliance	0.92	1.18	1.31	1.72	2.09	127.17	76.82	59.54	21.51
HFCL	0.16	0.18	0.19	0.21	0.22	37.50	20.88	15.79	4.76
Shyam	0.108	0.13	0.15	0.17	0.16	48.15	23.08	6.67	-5.88
Total	43.87	44.87	46.19	46.85	48.00	9.42	6.97	3.92	2.45

(II) Mobile Services Subscriber Base (in Million)

Service Providers	QE Sept 2004	QE Dec 2004	QE Mar 2005 (FY 2004-05)	QE Jun 2005	QE Sept 2005	%age growth over Sept 2004 (12 months)	%age growth over Dec 2004 (9 months)	%age growth over Mar 2004 (6 months)	%age growth over Jun 2005 (3 months)
Reliance	9.04	10.15	10.45	11.65	12.99	43.69	28.03	24.31	11.50
Bharti	8.70	9.83	10.98	12.26	14.07	61.72	43.19	28.14	14.76
BSNL	7.96	8.90	9.90	10.69	12.38	55.53	39.18	25.06	15.81
Hutch	6.37	7.18	7.79	8.44	9.71	52.43	35.26	24.65	15.05
Idea	4.36	4.70	5.07	5.55	5.94	36.24	26.49	17.16	7.03
BPL Group	2.34	2.47	2.58	2.63	2.81	20.09	13.86	8.91	6.84
Others	1.47	1.65	1.76	1.87	2.09	42.18	26.90	18.75	11.76
Spice	1.42	1.50	1.44	1.47	1.49	4.93	-0.47	3.47	1.36
Escotel									
Tata/ Hughes	0.69	0.81	1.09	1.43	2.06	198.55	155.58	88.99	44.06
MTNL	0.57	0.78	1.08	1.29	1.44	152.63	85.57	33.33	11.63
HFCL	0.043	0.05	0.05	0.06	0.06	39.53	22.45	20.00	0.00
Shyam	0.027	0.03	0.03	0.03	0.03	11.11	15.38	0.00	0.00
Total	42.99	48.01	52.22	57.37	65.07	51.36	35.53	24.61	13.42

Chapter One

PERFORMANCE OF FIXED SERVICES

Subscribers Base touches 48 million

1.1 Subscribers Base: -

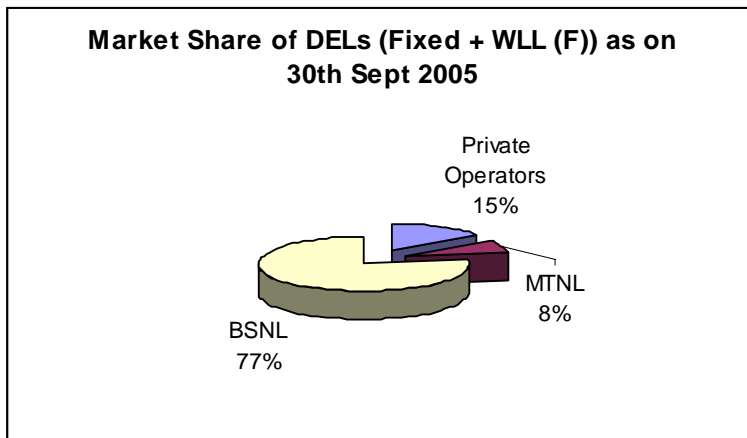
1.1.1 As on 30th September 2005 and the Fixed lines were provided by 5 licensed private operators in addition to incumbents BSNL and MTNL. List of Fixed Service provider's along with their area of operation is given in Table 1:

Table 1

S.No.	Name of the Service Provider	Area of Operation
1	BSNL	All India (Except Delhi & Mumbai)
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, 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
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

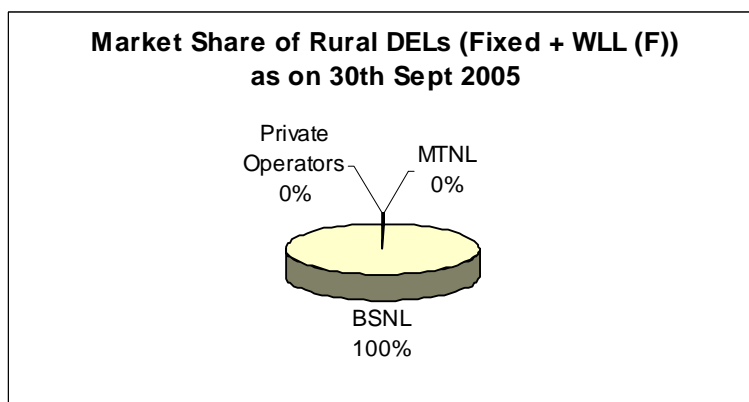
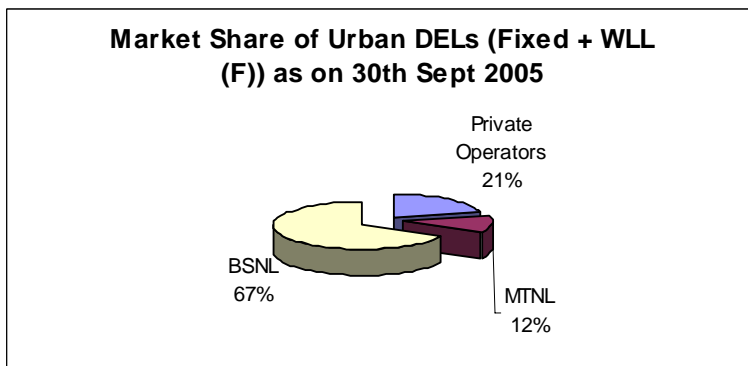
The information in this report is based on the data provided by the Fixed Service Providers. The operator-wise subscriber base is given in Table 1.1.

1.1.2 Market Share of DELs



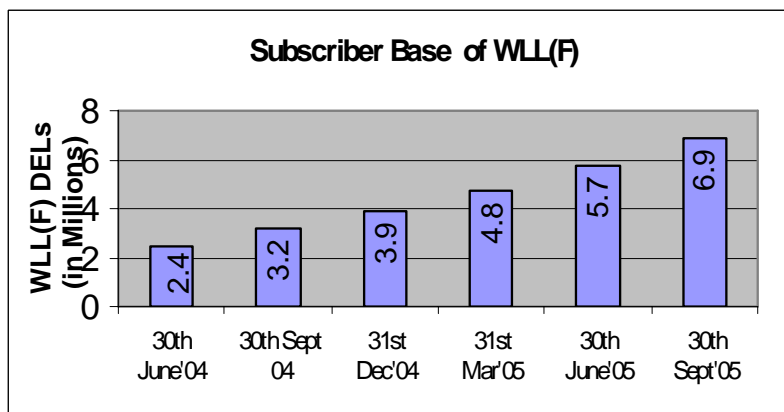
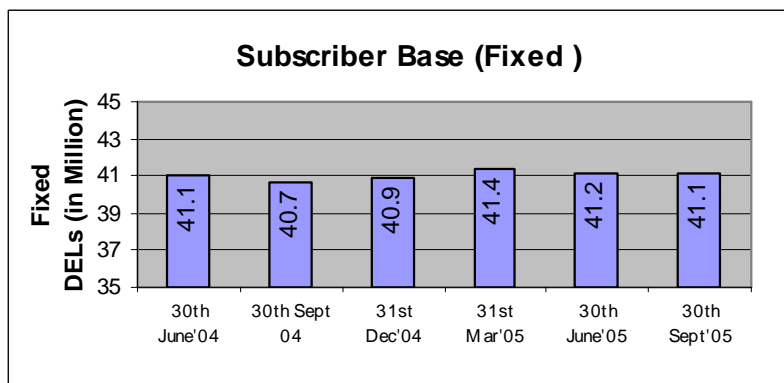
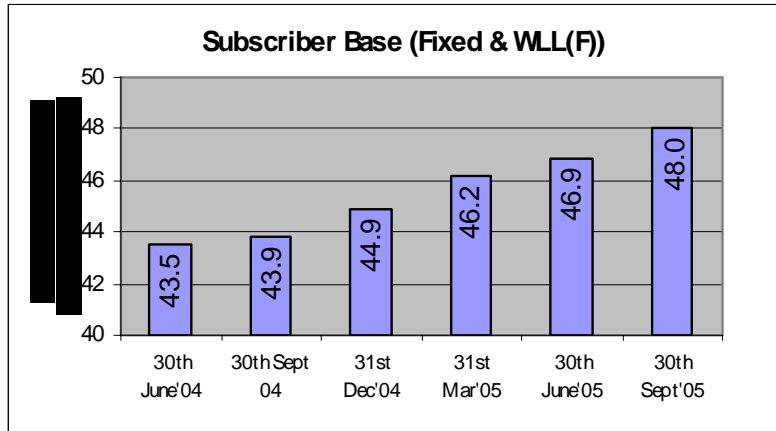
As on 30th Sept 2005, the total subscriber base of Fixed lines including WLL (F) stood at 48.0 million. The incumbents BSNL and MTNL have 77% and 8% market share respectively in the subscriber base, while all the five private operators have 15% share. In the current quarter, the share of private operators have increased by 2% and the share of BSNL has declined by 2% whereas the share of MTNL remains the same.

As on 30th Sept 2005 total urban DELs are 34.20 million and rural DELs are 13.80 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

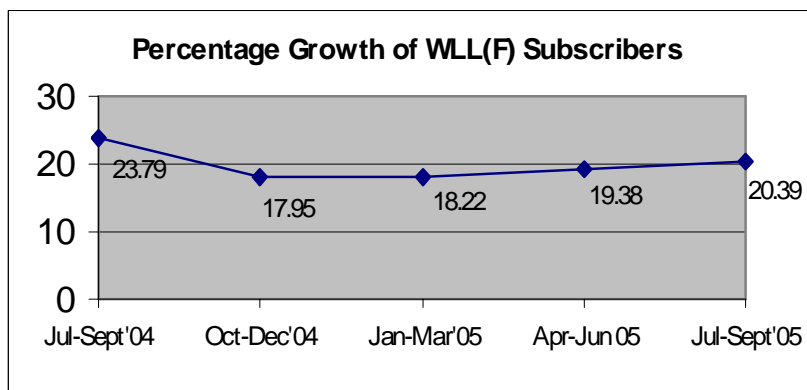
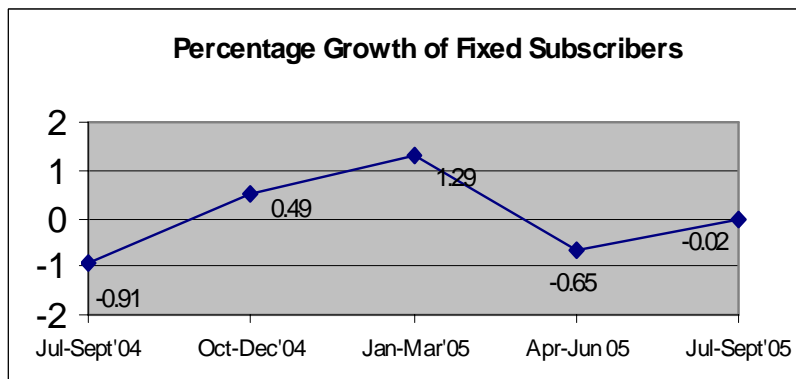
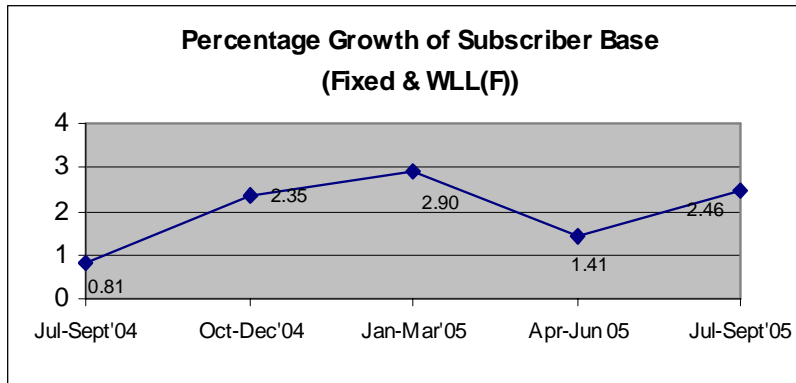
The subscriber base of the Fixed service sector for last five quarters is depicted in the bar chart below:



1.1.4 Growth of DELs

The Fixed Service sector has registered a growth of 11,50,850 lines during the quarter from 1st July 2005 to 30th Sept 2005. The actual number of DELs has increased from 4,68,51,142 as on 30th June 2005 to 4,80,01,992 as on 30th Sept 2005. The overall percentage of growth in subscriber base during the Quarter is 2.46%.

Average percentage growth rate of Fixed Wireline and WLL(F) Subscribers

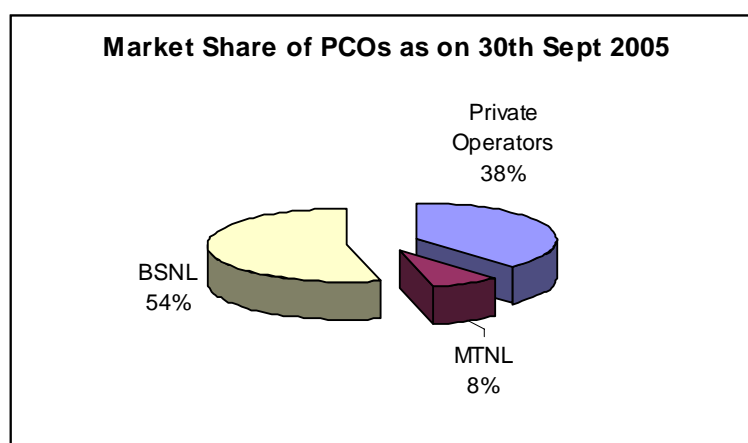


1.2 Other Performance Indicators: -

1.2.1 Public Call Offices:

During the current quarter 7,02,674 new PCOs have been added. Total number of PCOs in the country as on 30th Sept 2005 is 36,51,742. The contribution of BSNL is 19,86,323 i.e. 54% of the total PCOs. The contribution of MTNL and other private operators is 2,83,249 (8%) and 13,82,170 (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 30th June 2005 there were 5,30,667 VPTs in the country whereas by the end of this quarter, the total number of VPTs has marginally increased to 5,35,048. Thus 4,381 VPTs have been added during the current quarter. The total number of villages left uncovered, as on 30th Sept 2005 are 72,443. BSNL has added 4,451 VPTs during the quarter. Among the five private operators there was an increase of 1 VPT in TATA (MH) whereas there was a decrease of 48 VPTs in TATA and 23 VPTs in HFCL respectively during this quarter.

Circle-wise and Operator-wise details of village public telephones as on 30th Sept 2005 and achievement during the quarter are available Table 1.3.

Chapter Two

PERFORMANCE OF MOBILE SERVICES

Subscriber Base crosses 65 million mark

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, MH, Gujarat, AP, KTK, TN, 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 (AS, NE & J&K)	AS, NE & J&K	All India except (AS, NE & J&K)
5	Hutch	Delhi, Mumbai, Chennai, Kolkata, Guj, AP, KTK, Punjab, HR, UP-W, UP-E, Raj & WB (13)	MH, KR, TN, MP, HP, BR, OR, AS, NE & J&K	UP-W, WB
6	IDEA	Delhi, MH, Guj, AP, KR, HR, UP-W, MP (8)	Mumbai, Chennai, Kolkata, KTK, TN, Punjab, UP-E, Raj, WB, HP, Bihar, Orissa, Assam, NE & J&K	--
7	BPL	Mumbai, MH, TN, KR (4)	All India except (Mumbai, MH, TN, KR)	--
8	Aircel Cellular	Chennai, TN (2)	All India except (Chennai, TN)	--
9	Spice Communications	KTK, Punjab (2)	All India except (KTK, Punjab)	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, Raj, HP)	---
13	Dishnet Wireless Ltd	WB, HP, BR, OR, AS, NE & J&K (7)	All India except (WB, HP, BR, OR, AS, NE & J&K)	WB, HP, BR, OR, AS, NE & J&K
Note: 1. Reliance Telecom for all his circles & Spice, Karnataka has applied for Unified Licence.				
Note: 2 Reliance Infocomm in J&K, Escorts Communications & Dishnet Wireless Ltd (except Assam and North East) 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 65.07 million subscribers mark (GSM 50.86 million & CDMA 14.21 million) for the quarter ending 30th September 2005.

2.1.2 Addition in Subscribers Base

The subscriber's base stood at 65.07 million as against 57.37 million for the quarter ending 30.9.2005. Around 7.70 million subscribers were added in this quarter.

2.1.3 Growth Rate

The growth rate for this quarter is 13.42% (13.16% in GSM and 14.37% in CDMA) as against 9.86% (9.44% in GSM and 12.43% in CDMA) for the quarter ending June 2005. M/s Bharti remains the largest mobile operator followed by M/s Reliance and M/s BSNL.

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: -

Cellular Group	Subscribers as on September, 05 (in Millions)	Market Share (in %age)	Technology Used
Bharti	14.07	21.62	GSM
Reliance	12.99	19.96	GSM & CDMA
BSNL	12.38	19.03	GSM & CDMA
Hutchison	9.71	14.92	GSM
IDEA	5.94	9.13	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 September 2005 among Metros, Circles A to C is given in Table 2.3.

2.1.5 Change in Market Structure

M/s Bharti, M/s Reliance and BSNL/MTNL has licenses to offer mobile services in all 23 service area. The largest mobile 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 all its 21 circles (Except Delhi & Mumbai). M/s Tata Teleservices is offering services in all its licensed 20 service areas. M/s Tata Teleservices does not have license to offer access services in J&K, Assam & North East.

PART B

2.2 Minimum Effective Charge:

Tariff Trends

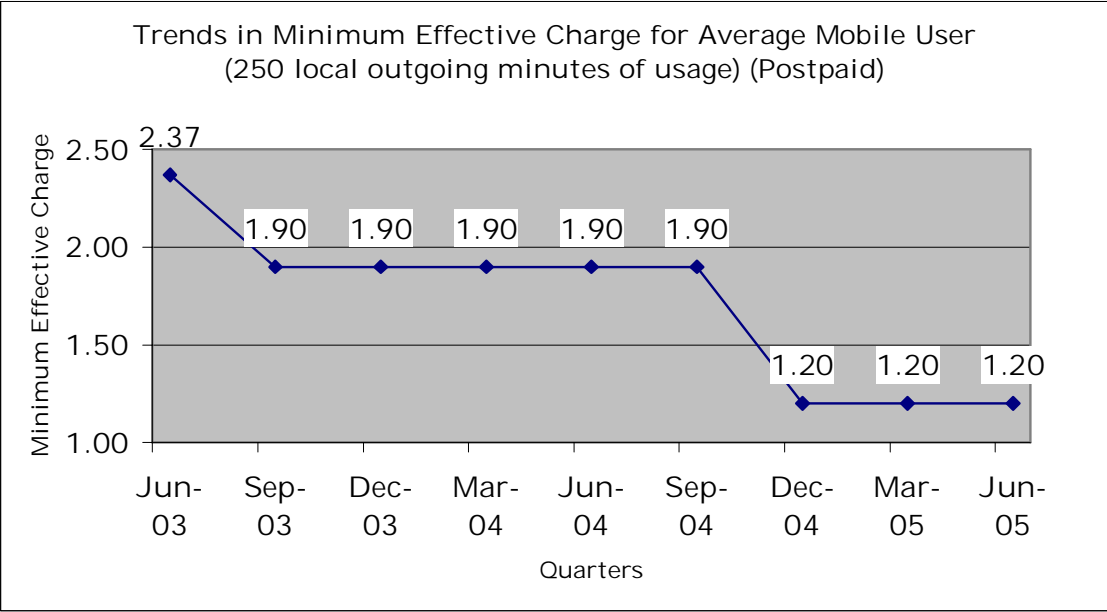
Ø Lowest Postpaid Tariffs available in the market (for local outgoing usage) as of Sept-05 for Access services

Effective charge reflects the actual payout by a user with a total outgoing usage of 250 local minutes per month. The lowest available effective charge per minute in postpaid service is:

Service	Lowest effective charge [Rs. per minute]
Fixed	0.85
Mobile	1.20

Assumptions used to work out minimum effective charge are as follows:

- i) For calculation of minimum effective charge (Rs. per minute), only postpaid tariff plans have been considered.
- ii) Charges payable by the subscriber on account of rental, local call charges, and CLIP are included. Free call allowance has also been considered.
- iii) Total outgoing traffic has been distributed between fixed and mobile and further between on-net and off-net based on the traffic information furnished by the Mobile and Fixed service providers as a part of quarterly report.
- iv) Distribution of traffic between Peak & off-peak = 70 : 30
- v) Average holding time has been taken as 2 minutes
- vi) Service tax and other levies are excluded.



Chapter Three

PERFORMANCE OF INTERNET SERVICES

Subscribers base crosses 6.1 million to meet the Broadband policy target of 6.0 million Broadband lags behind the target

3.1 Service Providers & Subscribers Base: -

For the quarter ending September 2005, 163 Internet Service Providers were operational. Bharat Sanchar Nigam Ltd (BSNL) has retained its top position and reported a subscriber base of 22.62 Lakhs against 20.17 Lakhs during the last quarter. Mahanagar Telephone Nigam Limited (MTNL) has retained second position with a subscriber's base of 12.07 Lakhs against 11.11 Lakhs subscribers during the last quarter. M/s Sify Limited is on the third position with a subscriber base of 8.56 lakhs as against 8.46 lakhs. M/s Videsh Sanchar Nigam Limited is at fourth position with subscriber base of 5.09 lakhs. Reliance Communications Infrastructure Ltd. reported a subscriber base of 3.09 Lakhs and remained at fifth place during the quarter ending 30th September 2005. (Ref Table 3.1).

The reported subscriber base has touched 61.25 lakhs as on quarter ending 30th September 2005 as compared to 58.92 lakhs during the preceding quarter registering an increase of 4% during the quarter. With this the Internet subscribers base has crossed the Broadband policy target of 6.0 million, three months before the target date.

3.2 Internet Telephony: -

The Internet Telephony was permitted to Internet Service Providers w.e.f 1st April 2002. 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 47.31 million, as compared to 41.52 million for the last quarter.

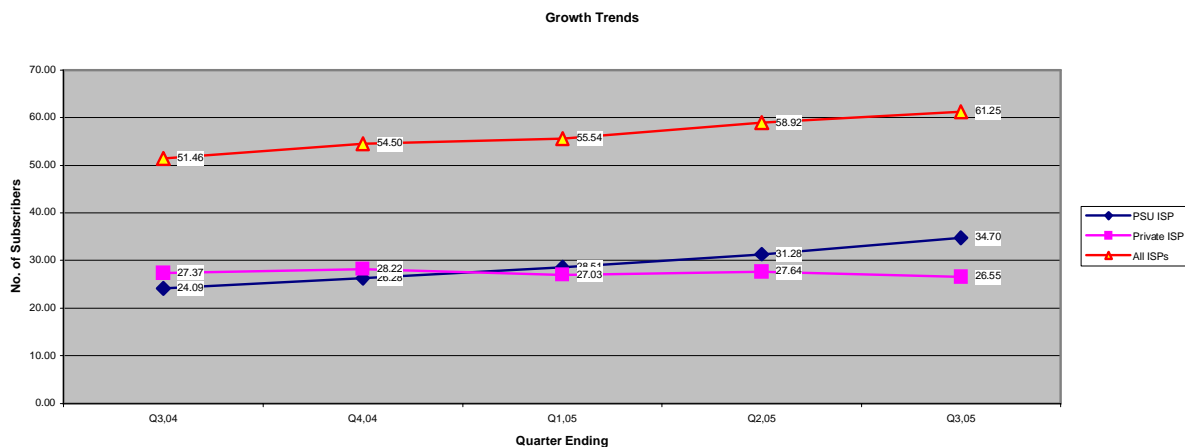
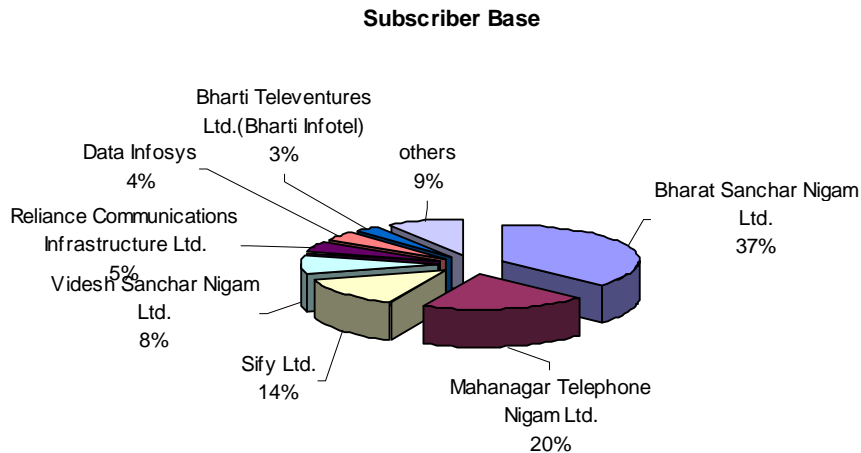
3.3 Market Share: -

The growth trend indicates a considerable growth in market share of PSU owned ISPs. During the quarter PSU owned ISPs have retained 56.65% market share.

The market share of top 5 ISPs is as under:

ISP	Share in %
Bharat Sanchar Nigam Ltd.	36.94
Mahanagar Telephone Nigam Ltd.	19.71
Sify Ltd.	13.97
Videsh Sanchar Nigam Ltd.	8.32
Reliance Communications Infrastructure Ltd.	5.06

Among PSU owned ISPs; M/s BSNL has reported a subscriber's base of 22.62 Lakhs during the quarter ending 30th September 2005 as against 20.17 Lakhs during the previous quarter registering an increase of 12.14%. M/s MTNL has reported a subscriber base of 12.07 Lakhs against the subscriber base of 11.11 Lakhs reported during the previous quarter, registering an increase of 8.72 %.



3.4 Leased Lines Connectivity: -

The numbers of Leased Line Internet connections reached 17,112 during the quarter as compared to 11,547 for the quarter ending June,2005.

3.5 Broadband Connectivity (>=256 Kbps): -

The number of Broadband subscribers as reported by ISPs was 6.10 Lakhs at the end 30th September,2005 as compared to 3.96 Lakhs of 31st June, 2005, thus registering a growth of 54% over the previous quarter. But the Broadband policy target of 3 million for December 2005 is far from being reached.

3.6 Minutes Of Use (MOU)per subscriber: -

As reported by 34 ISPs the average minutes of use per subscriber/ month is approximately 315 minutes.

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

A total of approx. Rs 363 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 190.

3.8 International connectivity: -

The bandwidth owned by various IGSP for their ISP operations and Internet Leased lines is reported to be 9.7 GB for downlinking and 9.5 GB for uplinking.

Chapter Four

PERFORMANCE OF OTHER VALUE ADDED SERVICES

Normal growth trend continues

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 30th September 2005:

- Ø M/s Mobilkom India Ltd. has informed TRAI regarding closure of their service w.e.f. 6th August 2005. Thus the number of PMRTS service providers has reduced from 13 to 12 in this quarter.
- Ø The subscriber base of PMRTS increased from 26384 in June 2005 to 27867 in September 2005 registering a growth rate of 5.22%.
- Ø Delhi, Mumbai, Bangalore and Chennai together account for 71.23% of market share of the total subscribers. Delhi leads the tally with the market share of 8790 subscribers followed by Bangalore, Mumbai and Chennai with the market share of 4488, 3937 and 2635 subscribers respectively.
- Ø Procall Limited leads the tally of subscribers with a subscriber base of 8326 followed by Arvind Mills and QuickCalls India Pvt. Ltd. with a subscriber base of 7081 and 3948 respectively. M/s German Express Shipping Agency (I) Pvt. Ltd. had increased their subscribers base with the highest growth rate of 39.40% in previous quarter whereas it has a negative growth rate of 0.26% in this quarter. M/s India Satcom has also a negative growth of 3.17% in this quarter. M/s Bhilwara Telenet Services Pvt. Ltd. has registered the highest growth rate of 17.90% 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 30th September 2005:

- Ø VSAT services are being provided by 9 VSAT service providers.
- Ø M/s Telstra Vishesh has not submitted their report in this quarter, so the figure of last quarter has been taken.
- Ø In the present quarter, there was an addition of 2527 new subscribers. The total number of subscribers increased from 40556 in June 2005 to 43083 in September 2005, registering a growth of 6.23% as against the growth rate of 5.88% in quarter ending June 2005. HCL Comnet remained the market leader with 14882 VSAT

subscribers followed by Hughes Escorts Communications Ltd. (HECL) with 13269, Bharti BT with 6199 and Comsat Max with 4655 VSAT subscribers respectively.

- Ø M/s Tata services added the maximum number of new connections 645 with a percentage growth rate of 62.99
- Ø GNFC is having a negative growth of 4.00%.

The number of subscribers of each service providers along with the Market Share in terms of Percentage of Subscribers as on 30th September 2005 is given in Table 4.2.

Chapter Five

QUALITY OF SERVICE (QOS) PERFORMANCE

5.1 Quality of Service performance of Basic Service Operators for the quarter ending 30th September 2005: -

Based on Quality of Service Parameters reported by all the Basic Service Operators for the quarter ending September 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).

56 out of 68 Licensees have not met the QoS benchmark for this parameter. The performance of M/s MTNL (Delhi, Mumbai), BSNL (Bihar, Assam, Jharkhand, NE-I & West Bengal) is (49.07%, 30.41%), (31.27%, 47.35%, 19.27%, 42.12% & 26.33%) respectively. Among the private operators, the performance for this parameter of M/s Bharti Tele-ventures Limited (Mumbai) and Reliance Infocom Limited (Bihar, Delhi, Gujarat, MP & Chhattisgarh, Maharashtra, Punjab, Tamilnadu, Karnataka, Kerala, Kolkata, Mumbai and Haryana) is (24.26%) and (26.90%, 34.13%, 29.98%, 48.27%, 36.08%, 46.18%, 44.19%, 32.49%, 49.53%, 33.50%, 31.69% and 0.0%) 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) and Mahanagar Telephone Nigam Limited have not met the stipulated QoS benchmark for this parameter in all their circles.

Among the Private Operators only Bharti Tele-ventures (AP, DL, PB, HR, Kolkata & UP-W), Reliance Infocom (BR, GJ, PB, 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%)

All the operators have not met the TRAI stipulated benchmark of >90% for this parameter in this quarter.

M/s Reliance infocom Limited and Bharti Tele-ventures (AP) have not submitted their performance for this parameter whereas no fault has been reported by M/s Tata Teleservice Limited, Tamilnadu in this quarter.

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

M/s BSNL, in only 7 out of 26 circles have met the benchmark whereas MTNL (Delhi & Mumbai) have failed to meet the benchmark. The performance of M/s BSNL (AP, MP & Chhattisgarh, Assam, Jharkhand, NE-I & WB), MTNL, Mumbai and Tata, AP is (19.00, 19.00, 24.00, 20.00, 33.00 & 18.00), 45.25 and 17.56 hrs respectively which is way below the TRAI benchmark of <8 hrs.

Among the private service operators only M/s Reliance Infocom (Mumbai & Gujarat), Bharti (UP-E, UP-W, DL, MP & Chhattisgarh, PB & HR), Tata (AP, Gujarat, KTK) and HFCL, Punjab have not met the QoS benchmark.

- (5) Call Completion Rate in local network (should be >55%)
M/s BSNL in 9 out of 26 circles and MTNL (Delhi and Mumbai) have not met the OoS benchmark.
Among the private Operators only Tata (AP), and Bharti Tele-ventures (Kolkata, UP-E, UP-W, AP, DL & PB) have not achieved the desired QoS benchmark of TRAI.
- (6) Metering and Billing credibility (Not more than 0.1% of bills should be disputed over a billing cycle)
Only 7 out of 26 service areas of BSNL and M/s MTNL, Mumbai and Delhi have not met the benchmark for this parameter.
Among the Private Operators M/s Tata Teleservices (AP, DL, GJ, MH, KTK, Mumbai), Bharti (AP, PB, KTK, HR, Mumbai, UP-E, UP-W) and M/s Reliance (AP, DL, GJ, MP, MH, PB, TN, HR, KTK, Chennai, KR, Kolkata, Mumbai, UP-E) 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 has 0.00% performance for this parameter against the TRAI stipulated benchmark of 95% of requests. MTNL (Delhi, Mumbai) have also failed to meet the requirement on "Customer care – Shifts".
Among the private operators only Shyam Telelink, Rajasthan, HFCL, Punjab, Tata (Chennai & Gujarat) and Bharti (UP-E & PB) have met the QoS benchmark on Customer Care (Shifts).
- (ii) Closures:-
Only 9 out of 26 service area of M/s BSNL have met the TRAI QoS Benchmarks whereas M/s MTNL (Delhi and Mumbai) have also failed to meet the benchmarks of 95% of requests attend within 24 hrs.
Among the private operators only Tata (Chennai, AP, GJ, MH), Bharti (Kolkata, UP-E, UP-W, AP, MP), Reliance Infocom (BR), 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 30th September 2005: -

- a) This report covers performance of 82 GSM Cellular Mobile operators and 40 CDMA service operators vis-à-vis the QoS benchmarks prescribed by TRAI.
- b) M/s Reliable Internet Services Limited, Kolkata 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 122 to 123 in this quarter.
- c) This report has been prepared on the basis of the new QoS regulation issued by TRAI as on 8th July, 2005. Hence, some new parameters like "Blocked Call Rate and Response Time to the Customer Assistance" have been included and the parameters like "No. of faults and Faults cleared within 24 hrs." have been dropped in this report.

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 June, 2005		Quarter ending Sept, 2005	
			Out of 122 (Nos.)	Out of 122(%)	Out of 123 (Nos.)	Out of 123(%)
1	Accumulated down time of community isolation	<24 hrs	94	77.04%	99	80.49%
2	Call Set-up Rate (within licensee's own network)	>95%	100	81.97%	119	96.75%
3	Service Access Delay	Between 9 to 20 Sec	122	100.00%	112	91.06%
4	Blocked Call Rate * (i) SDDCH Paging Channel Congestion	<1%			105	85.36%
	(II) TCH Congestion	<2%			99	80.49%
5	Call Drop Rate	<3.0%	120	98.36%	121	98.37%
6	% of connection with good voice quality	>95%	117	95.90%	121	98.37%
7	Response Time to the customer for assistance * (i) %age of calls answered (electronically) within 20 seconds = 80%	80%			113	91.87%
	(ii) %age of calls answered (electronically) within 40 seconds = 95%	95%			104	84.55%
	%age of calls answered by operator (voice to voice); within 60 seconds = 80%	80%			99	80.49%
	(iii) %age of calls answered by operator (voice to voice); within 90 seconds = 95%	95%			88	71.54%
8	Complaints per 100 bills issued	<0.1%	94	77.05%	93	75.61%
9	% of complaints resolved with 4 weeks	100%	116	95.08%	118	95.93%
10	Period of all refunds/payment due to customers from the date of resolution of complaints as in (9) above	<4 weeks	112	91.80%	119	96.75%

* These parameters are included from this quarter.

5.2.1 The analysis of PMR of 123 Cellular licensees in 23 service areas is as under: -

(A) Network Performance

- i. Accumulated down time of community isolation:- Performance of Idea (MH), BSNL (MH, RAJ), Bharti (AP, AS), Reliance-CDMA (BR) and BPL (Mumbai) is 92.74 hrs, 87 hrs, 144.30 hrs, 164.3 hrs, 154.56 hrs, 82 hrs and 285.46 hrs respectively, which is way beyond the stipulated TRAI benchmark of <24 hrs.
- ii. Call Set-up Success Rate – Only M/s Bharat Sanchar Nigam Limited (MH, UP-E, RAJ and Orissa) has not met the TRAI stipulated benchmark of >95%.
- iii. Blocked Call Rate

1. SDCCH Paging Channel Congestion – The Performance of M/s BSNL is MH-4.4%, HR-6.88, UP-E-4.00%, OR-4.45%, BR-3.34% and As-3.00% which is way below the TRAI benchmark of <1%.

2. TCH Congestion – M/s BSNL (AP, HR, RAJ, BR, OR, J&K), Idea Cellular-MP, Reliance Telecom (WB, BR, OR, NE) and Aircel Cellular Limited, Chennai reported their performance for this parameter is (9.39%, 13.47%, 14.80%, 12.96%, 11.77%, 7.33%), 8.10%, (7.49%, 9.20%, 7.74%, 7.17%) and 6.50% respectively, which is much below the benchmark of 2.00%.

iv) Call Drop Rate - All the service providers have met the benchmark of this parameter except BSNL (HR – 3.43% and BR – 3.04%) 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 M/s BSNL (MH, GJ, KR, PB, HR, UP-W, UP-E, WB, HP, BR, OR, J & K, NE, Kolkata), Reliance Telecom, BR and Tata CDMA (WB, BR, OR) have not reported the data for this parameter in this quarter.

- (i) %age of call answered (electronically) within 20 sec:- The performance of M/s BPL, KR and BSNL, Raj is 0.39% and 0.60% respectively, which is way below the benchmark of 80%.
- (ii) %age of call answered (electronically) within 40 sec:- M/s Idea Cellular (MH, KR, AP,DL) and BSNL, Raj have reported the data for this parameter is 0.0%,0.0%,0.0%,0.0% and 4.2% respectively, which is way below the TRAI benchmark of 90%.
- (iii) %age of call answered by operator (voice to voice) within 60 sec:- The performance of M/s Reliance-CDMA (UP-W , UP-E) and BSNL, Raj is 35.33%, 49.9% and 20% respectively against the TRAI benchmark of 80%
- (iv) %age of call answered by operator (voice to voice) within 90 sec:- The performance of Reliance CDMA (UP-W, WB, DL, UP-E, BR, Kolkata) and BSNL (Raj) is (35.23%, 52.70%, 56.30%, 35.33%, 52.70%, 52.70%) and (32.20%) respectively against the TRAI stipulated benchmark of 95%.

(C) Billing Complaints

- (i) No. of Complaints per 100 bills issued the performance of M/s Tata Teleservices CDMA, Bihar is 1.92% 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 is 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., Fascal, 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., Fascal, Hughes, Broadband Pacenet (I) Pvt. Ltd. and Webel ISP have not provided the data.

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. MTNL has not provided the data for 3rd attempt for Delhi circle, 2nd and 3rd attempts for Mumbai circle.

Reliance Communications Infrastructure Ltd. has not provided the data for 3rd attempt, Hathway Cable & Datacom Pvt. Ltd., Fascal 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 but MTNL, Hathway Cable & Datacom Pvt. Ltd., Fascal Ltd., Hughes, Broadband Pacenet (I) Pvt. Ltd. and Webel ISP 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 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.

Chapter Six

PERFORMANCE OF CABLE TV, DTH AND RADIO BROADCASTING SERVICES

Quarterly Report of the B &CS Division for the Quarter ending 30th Sept 2005

Introduction

1.1. There is no known authentic source for periodically collecting information on the sector. The information available on the sector are essentially based on guess estimates, sample surveys and are not widely circulated. Currently TRAI has also very limited information on the sector.

1.2 TRAI has planned to set up a process a system of collection of data/information from service providers /Govt Agencies and also third party sources and disseminate the same along with the quarterly reports on the Telecom sector in a manner that would not only give information to stakeholders, consumers and research agencies but also ensure the confidentiality of commercially sensitive information.

1.3 This report for the quarter ending July –Sept 2005 on the broadcasting and Cable TV sector is the first step in the direction. The current exercise is very limited. Efforts are on to collect more data and make it available to the public.

1.4 The scope of coverage could be expanded depending upon the need and response of the service providers.

This Report Contains

2.1 This report gives information under three sections– Cable Television, DTH Services and Radio

- i) Total No of Cable and Satellite TV Households estimated as per two surveys, one done by the National Readership Survey and Indian Readership Survey. The figures are provided for NRS 2005 and NRS 2003 and IRS 2005 (1st Round) [Table 6.1]
- ii) Genewise % share of viewership in four metros, [Table 6.2] Viewing Pattern of FTA Vs Pay Channels (in % terms) (+4 Cable and Satellite viewers) in four Metros [Table 6.3], Average Weekly Reach of DD 1 in Millions among Cable, Non Cable & Satellite Viewers of 4+ during July -Sept 2005 [Table 6.4], Penetration Colour and Black & white TV sets in Hindi Speaking States [Table 6.5] as per the Consultancy Report of TAM Media Research, Mumbai provided to TRAI for the period July –Sept 2005.
- iii) Range of number of channels carried regularly in network and cities where digital services are offered. [Table 6.6]
- iv) 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 6.7]
- v) Details of no of applications, received, no of Licenses issued for DTH services. [Table 6.8]

vi) Status of Community Radio Stations in the country as on 30.9.2005 [Table 6.9]

2.2 This above information has been given in 9 tables appended to this report. The Highlights are indicated in the following paragraphs.

Highlights

A. Cable Television

3.1 It may be seen from Table 6.2 that the Regional Entertainment Channels are dominant in Chennai with a viewership of 62% and Kolkata having 24%. Hindi General Entertainment has the highest viewership in three Metros of Delhi, Mumbai and Kolkata. The share of Cable programmes is the 2nd largest in terms of viewership % in all the four metros. The sports viewership % is around 6% in three Metros of Mumbai, Kolkata and Delhi whereas in Chennai a CAS notified metro has very negligible presence.

3.2 It may be from Table 6.3 that the viewing pattern in Chennai is heavily loaded in favour of FTA Channels whereas in other Metros it is the pay channels which are seen to be having higher viewership liking.

3.3 It may be seen from Table 6.4 that UP & Maharashtra show a great potential as there is a huge gap between All TV reach & the Cable & satellite reach. Orissa & MP are the biggest for Doordarshan among the Cable & Satellite viewers.

3.4 Table 6.5 indicate that a number of Hindi Speaking States still have more than 10% Black and White TV Sets.

3.5 As per the Media Partner's Asia Ltd report on Asia Pacific and Cable and Satellite Markets 2005 the total Cable Industry Revenue is estimated at US \$ 2675 Million (approx Rs.13000 crores) for the Y/Ending Dec 2004.

3.6 Table 6.6 indicates wide variation in the total number of channels regularly carried as well as pay and FTA channels. This may due to different sizes of network in different areas and different economic clusters in which different networks could be operating.

3.7 Table 6.7 giving Information on New Pay Channels and Free to Air (FTA) channels converted into Pay Channels after 26.12.2003 indicates that there have been 27 new pay channels/converted FTA Channels to pay that have been launched since 26.12.2003

DTH Services

3.8 It can be seen from Table 6.8 that besides the existing DTH player there could be five 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.

Radio

3.9 There are 21 FM radio stations in operation across 12 cities. The cities are Chennai, Delhi, Kolkata, Mumbai, Ahmedabad, Bangalore, Coimbatore, Indore, Lucknow, Pune, Tirunelveli, Vishakapatnam. The service providers have been requested to provide details on advertisement revenue. The information on this of the Industry will be put on web site when it is made available by the service providers.

3.10 Table 6.9 gives the status on Community Radio Stations in the country.

Table 1.1

Subscriber Base of Fixed Services

Sr. No.	FSO	Area of Operation	30th Sept 2005		
			Urban	Rural	Total
1	BSNL	All India (except Delhi & Mumbai)	23029549	13770795	36800344
2	MTNL	Delhi & Mumbai	4046571	0	4046571
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	1060670	0	1060670
4	Tata Teleservices (Maharashtra) Ltd	Maharashtra & Mumbai	985913	2654	988567
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	2620902	7849	2628751
6	HFCL Infotel Ltd	Punjab	223308	645	223953
7	Shyam Telelink Ltd	Rajasthan	156674	8521	165195
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), WB, Kolkata	2074659	13282	2087941
Grand Total			34198246	13803746	48001992

Table 1.2

Details of Public Call Offices (PCO)

S.No	Service Providers	Area of Operation	PCOs as on 30.9.05	PCOs added during the quarter ending 30.9.05
1	BSNL	All India	1986323	93950
2	MTNL	Delhi & Mumbai	283249	363
3	Bharti	AP, MP, Delhi, Haryana, Tamil Nadu, Chennai, Kerala, Karnataka, Gujarat, Punjab, Maharashtra, Mumbai, U.P. (W) including Uttaranchal, West Bengal and Kolkata	457924	331289
4	HFCL	Punjab	37800	2832
5	TATA	Maharashtra, Mumbai, 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	327707	150871
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	532594	124153
7	STL	Rajasthan	26145	-784
	TOTAL		3651742	702674

* Source - Operators

Table 1.3

Details of Village Public Telephones (VPT)

S.No	Service Providers	Area of Operation	VPTs as on 30.9.05	Achievement during the Qtr. ending 30.9.05
1	BSNL	All India	523266	4451
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	645	-23
5	TATA	Maharashtra	2654	1
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	-48
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
		TOTAL	535048	4381

* Source – Operators

Table 2.1

Subscriber Base of Mobile operators

Mobile Groups and their market share			
Mobile Group	Subscribers as on September, 05 (in Millions)	Market Share (in %age)	Technology Used
Bharti	14.07	21.62	GSM
Reliance	12.99	19.96	GSM & CDMA
BSNL	12.38	19.03	GSM & CDMA
Hutchison	9.71	14.92	GSM
IDEA	5.94	9.13	GSM
BPL	2.81	4.32	GSM
Aircel	2.09	3.21	GSM
Spice	1.49	2.29	GSM
TTSL	2.06	3.17	CDMA
MTNL	1.44	2.21	GSM & CDMA
HFCL	0.06	0.09	CDMA
Shyam Telelink	0.03	0.05	CDMA
Dishnet Wireless Ltd	0.00	0.00	GSM
Total Subscribers	65.07	100	GSM & CDMA

* Source - Operators

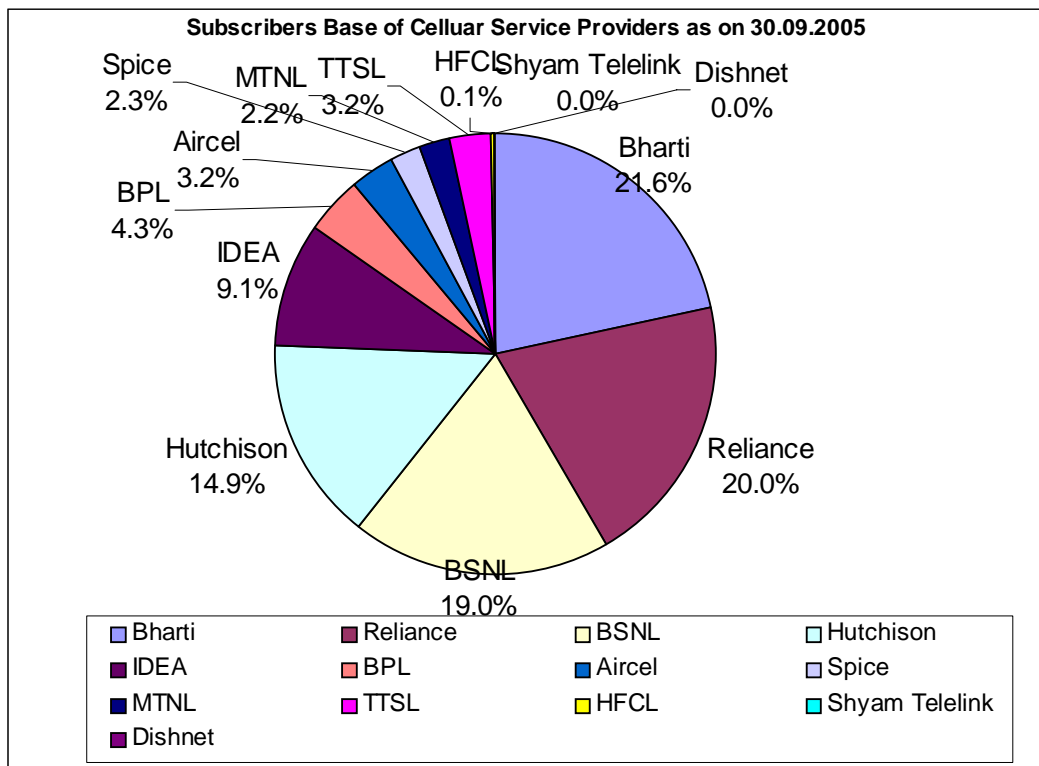


Table 2.2

Market Share of Mobile (GSM + CDMA) Service Providers

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

GSM Group	No of Subscribers (in millions)	Market Share (in %age)
Bharti	14.07	27.7
BSNL	11.88	23.36
Hutchison	9.71	19.09
Idea	5.95	11.70
BPL	2.81	5.52
Aircel	2.09	4.11
Reliance	1.58	3.11
Spice	1.49	2.93
MTNL	1.28	2.52
Dishnet Wireless Ltd	0.0004	0.00
Total	50.86	100

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

CDMA Group	No of Subscribers (in Millions)	Market Share (in %age)
Reliance Infocomm	11.41	80.30
Tata Teleservices	2.06	14.50
BSNL	0.5	3.52
MTNL	0.15	1.06
HFCL	0.06	0.42
Shyam Telelink	0.03	0.21
Total	14.21	100

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	16.91 million	25.98%
Circles 'A'	22.81 million	35.05%
Circles 'B'	21.01 million	32.29%
Circles 'C'	4.34 million	6.68%

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

In Millions				
	Dec.'04	Mar, 05	June, 05	Sept., 05
Metros	13.83	14.59	15.54	16.91
A' Circle	17.33	18.84	20.58	22.81
B' Circle	14.51	15.91	17.83	21.01
C' Circle	2.35	2.87	3.41	4.34

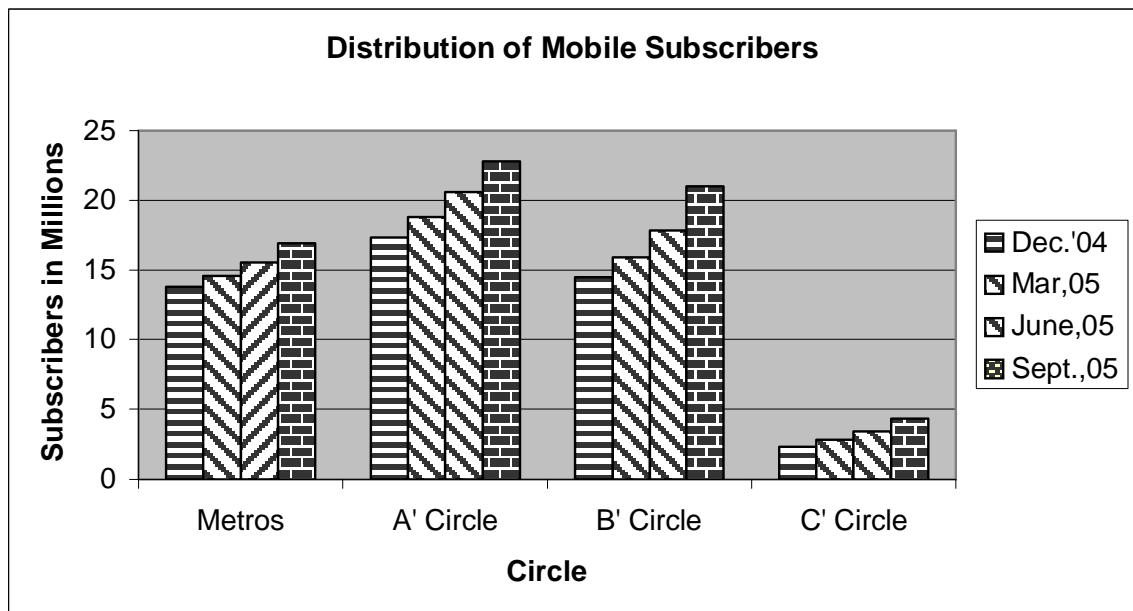


Table 3.1

Subscribers Base of Internet Services

S. NO.	Name of ISP	Category	Area of Operation	Jun-05	Sep-05	%Growth
1	Bharat Sanchar Nigam Ltd.	A	All India	2017405	2262349	12.14
2	Mahanagar Telephone Nigam Ltd.	B	Mumbai & Delhi	1110623	1207476	8.72
3	Sify Ltd.	A	All India	846147	855690	1.13
4	Videsh Sanchar Nigam Ltd.	A	All India	641251	509411	-20.56
5	Reliance Communications Infrastructure Ltd.	A	All India	283920	309951	9.17
6	Data Infosys	A	All India	230939	245560	6.33
7	Bharti Televentures Ltd.(Bharti Infotel)	A	All India	155342	192996	24.24
8	Iqara Telecom India Pvt. Ltd. (BG Broadband)	A	All India	95680	104281	8.99
9	Shyam Internet Service Pvt. Ltd.	A	All India	49259	50028	1.56
10	Hathway Cable & Data Pvt Ltd.	A	All India	40920	49929	22.02
11	HCL Infinet Ltd.	A	All India	42875	42818	-0.13
12	ICENET.NET Ltd.	B	Gujrat	28399	27720	-2.39
13	Tata Teleservices (Maharashtra) Ltd. (Hughes Telecom)	A	All India	23979	23955	-0.10
14	Asianet Sattelite Communications Ltd.	B	Kerala	20929	23147	10.60
15	HFCL Infotel Ltd.	B	Punjab	16854	18409	9.23
16	Fascel Ltd.	B	Gujarat	18001	18001	0.00
17	WWW Communications Ltd.	B	Delhi	14680	14680	0.00
18	Hughes Escorts Communications Ltd.	A	All India	10382	11192	7.80
19	Broadband Pacenet (I) Pvt. Ltd.	B	Mumbai	21106	10229	-51.54
20	West Bengal Electronics Industry Development Corporation Ltd.	B	Calcutta	7580	9437	24.50
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	7366	7748	5.19
23	Spectra Net Ltd	A	All India	6628	6671	0.65
24	Primus Telecommunications India Ltd.	A	All India	6557	6557	0.00
25	Rolta India Ltd.	B	Mumbai	8446	6387	-24.38
26	Ortel Communications Ltd.	C	Cuttack, Bhubaneshwar, Rourkela	4156	5461	31.40
27	RPG Infotech Ltd. (Sprint RPG India)	A	All India	5430	5430	0.00

28	In 2 Cable.com(India) pvt. Ltd.	A	All India	5506	5341	-3.00
29	Digital 2 Virtual ISP Private Ltd.	C	vadodara	2457	5156	109.85
30	Forum Infotech (P) Ltd.	C	Srinagar SSA	5050	5050	0.00
31	Space Online (P) Ltd.	B	Gujarat	4788	4788	0.00
32	E-Comm Opportunities Pvt. Ltd.	B	Gujrat	3912	3912	0.00
33	Trak Online Net India	A	All India	6636	3587	-45.95
34	Trikon Electronics	B	Mumbai	2544	3295	29.52
35	Blazenet Pvt. Ltd.	B	Gujrat	3244	3209	-1.08
36	Southern Online Bio Technologies Ltd.	B	Andhra Pradesh	3105	3184	2.54
37	Siti Cable Network (Zee Interactive Multimedia Ltd.)	A	All India	2700	2700	0.00
38	Sixth Sense Informatics Pvt. Ltd.	B	Mumbai	2600	2600	0.00
39	Vasnet Communications Pvt. Ltd.	C	Mangalore SSA	2194	2374	8.20
40	Geocity Network Solutions Pvt. Ltd.	B	Delhi		2249	
41	Value Heathcare Ltd.	B	Mumbai	1478	2229	50.81
42	Hathway Bhawani Cable & Datacom	B	Mumbai	1420	1704	20.00
43	Descon Ltd.	B&C	Kolkata, West Bengal	1695	1695	0.00
44	City Online Services Pvt. Ltd.	B	Andhra Pradesh & Karnataka	2209	1558	-29.47
45	Ankhnet Information Pvt. Ltd.	B	Mumbai	1555	1555	0.00
46	Tawi e.com	C	Jammu Tawi	1611	1476	-8.38
47	Jain Info net Pvt Ltd.	B	Rajasthan	1431	1431	0.00
48	Spectrum softech Solutions	C	Ernakulam SSA	1268	1273	0.39
49	Dishnet Wireless Ltd.	A	All India	763	1270	66.45
50	Sab Industires Ltd. (Sab Infotech)	B	Punjab, Karnal & Dharamshala	31176	1195	-96.17
51	iPath India Pvt. Ltd.	C	Ernakulam	1262	1151	-8.80
52	ERNET India Ltd.	A	All India	1202	1130	-5.99
53	Swiftmail Communications Ltd.	A	All India	1114	1089	-2.24
54	Jindal Online.com Ltd.	B	Gujrat	1025	1025	0.00
55	Broadlane Network Pvt. Ltd.	C	Kalyan SSA	970	989	1.96
56	Pacific Internet India	A	All India	1012	975	-3.66
57	Mylai Karpagamba Information System Pvt. Ltd.	B	Chennai	964	964	0.00
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	Tata Internet Services Ltd.	A	All India	873	661	-24.28
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	Speed Online.net Pvt. Ltd.	C	Rajkot	716	564	-21.23
66	Bohra Prastisthan Pvt. Ltd.	C	Udaipur SSA	456	535	17.32
67	Bhasinsoft India Ltd.	B	Karnataka	641	532	-17.00
68	Uclix Computer's Pvt. Ltd.	C	Jodhpur	525	525	0.00
69	Primenet Global Ltd.	A	All India	721	524	-27.32

70	Micky Online Pvt. Ltd.	C	Moradabad, Nainital	673	497	-26.15
71	My Guru Online	B	Andhra Pradesh	495	495	0.00
72	Atria Convergence Technologies Pvt. Ltd.	B	Karnataka	462	462	0.00
73	Bhaskar Multinet Pvt. Ltd.	C	Jaipur SSA	454	454	0.00
74	Tulip IT Service Ltd.	B	Kerala	68	450	561.76
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	SpaceCom Broadband Network Ltd.	B	Delhi	366	366	0.00
80	ISP Solutions India pvt. Ltd.	C	Coimbatore SSA	360	355	-1.39
81	Antriksh Technologies Pvt. Ltd.	C	Jammu SSA	354	354	0.00
82	Rajasthan Telematics Ltd.	B	Rajasthan	350	350	0.00
83	Quest Consultancy Pvt. Ltd.	C	Valsad	345	340	-1.45
84	CJ Online Pvt. Ltd.	C	Ghaziabad SSA	441	320	-27.44
85	Emtici Engineering Ltd.	C	Khera SSA	305	305	0.00
86	Lee & Nee Softwares (Exports) Ltd.	C	Bhuvaneshwar	303	303	0.00
87	Gateway Systems Pvt. Ltd.	A	All India	310	301	-2.90
88	Alliance Broadband Services Pvt. Ltd.	B	Kolkata	290	290	0.00
89	n-Logue Communications(P) Ltd	A	All India	268	268	0.00
90	GUJ Info Petro Ltd.(GIPL)	A	All India	262	262	0.00
91	Rida Communications Pvt. Ltd.	C	Aligarh	212	261	23.11
92	NetMagic Solutions (P) Ltd.	B	Mumbai	248	256	3.23
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	Bhupati Hotels Pvt. Ltd.	C	Visakhapatnam	213	213	0.00
96	Karuturi Networks Limited	B	Karnataka	195	200	2.56
97	i2i Enterprise Ltd.	A	All India	121	197	62.81
98	Trans Virtual Pvt. Ltd.	C	Guwahati	196	196	0.00
99	Digital Nagpur Online Pvt. Ltd.	C	Nagpur	186	186	0.00
100	Online Media Solutions Ltd.	B	Andhra Pradesh	500	175	-65.00
101	del DSL Internet Pvt. Ltd.	B&C	Delhi, Ghaziabad, Gurgaon	174	173	-0.57
102	Planet Internet Satellite Pvt. Ltd.	C	Nadiad SSA	181	170	-6.08
103	Q Tel Comtech Ltd.	C	Gurgaon	154	154	0.00
104	North East Online Services Pvt. Ltd.	C	Guwahati	142	142	0.00
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	107	100	-6.54
109	Reach Network India Pvt. Ltd.	A	All India	91	93	2.20

110	Sanyog Networks Pvt. Ltd.	C	Tripura	80	80	0.00
111	Mynet Services India Pvt. Ltd.	C	Salem	94	74	-21.28
112	Instant Cable Network Pvt. Ltd.	C	Gurgaon SSA	72	72	0.00
113	Manipal Ecommerce Ltd. (Manipal Control Data Electronic Commerce Ltd.)	B	Karnataka	83	72	-13.25
114	Saravana Cables Pvt. Ltd.	c	Trichirapalli SSA	68	68	0.00
115	L&T Finance Ltd. (L&T Netcom Ltd.)	A	All India	59	62	5.08
116	CJM Consultancy Services Pvt. Ltd.	B&C	Delhi, Ghaziabad	236	59	-75.00
117	Swastik netvision telecom pvt. Ltd.	B	Gujrat	73	55	-24.66
118	Direct Internet Pvt. Ltd.	B	Delhi	46	46	0.00
119	Aksh Broadband Ltd.	C	Jaipur SSA	45	45	0.00
120	GTL Ltd.	A	All India	73	40	-45.21
121	Tata Power Broadband Company Ltd.	B	Mumbai	44	38	-13.64
122	Czars Oleoresin Pvt. Ltd.	C	Gulbarga	51	37	-27.45
123	Pioneer Online Service Pvt. Ltd.	B	Andhra Pradesh	27	36	33.33
124	Indian Quotations Systems Pvt. Ltd.	B	Mumbai	32	32	0.00
125	Opto Networks Pvt.Ltd.	C	Ghaziabad, Meerut SSA	185	32	-82.70
126	Vebtel Obconic Internet Protocol Pvt. Ltd.	B	Andhra Pradesh	30	32	6.67
127	Nettlinx Ltd.	B	Andhra Pradesh	22	27	22.73
128	RailTel Corporation of India Ltd.	A	All India	27	27	0.00
129	Chandra net Pvt. Ltd.	B	Gujrat	25	25	0.00
130	Surevin Internet Services Ltd	C	Ghaziabad SSA	65	23	-64.62
131	Access Online Pvt. Ltd.	B	Mumbai	22	22	0.00
132	IOL Broadband Ltd. (India Online Network Ltd.)	B	Mumbai	22	22	0.00
133	Gujrat Narmada Valley Fertilizer Co. Ltd. (GNFC)	A	All India	20	21	5.00
134	PBC Venture Ltd. (earlier Chemical & Metallurgical Design Co. Ltd.)	B	Delhi	22	21	-4.55
135	Essel Shyam Communication Ltd,	A	All India	18	18	0.00
136	Centre for Development of Advanced Computing, C-DAC (Electronics Research and Development Centre of India (ER&DC))	C	Ghaziabad	74	17	-77.03
137	World Phone Internet services (P) Ltd.	A	All India	17	17	0.00
138	Astro Network India Pvt. Ltd.	A	All India	16	16	0.00
139	Conjoinex Technologies Pvt. Ltd.	C	J&K, Chandigarh		16	
140	Arun Girija Communications Pvt Ltd.	C	Patna SSA	15	15	0.00
141	Nachiket (I) Management Services (P) Ltd.	C	Sri Ganganagar	13	13	0.00

142	Uttar Pradesh Network Pvt. Ltd.	B	Uttar Pradesh (E&W)	10	10	0.00
143	Cyquator Technologies Ltd.	A	All India	7	9	28.57
144	Samkhya Networks (P) Ltd.	C	Gurgaon	9	9	0.00
145	Astra Infonets Pvt. Ltd.	B	Hydrabad	8	8	0.00
146	A-Team Information Technology Ltd.	C	Erode	8	8	0.00
147	Software Technology Park of India (STPI)	A	All India	8	8	0.00
148	Akaansha Infotainment Pvt. Ltd.	C	Kamrup SSA	6	6	0.00
149	Giga Solutions Pvt. Ltd.	B	Maharashtra	5	5	0.00
150	Godrej Infotech Ltd.	B	Mumbai	4	5	25.00
151	Haryana Cybernet Pvt. Ltd.	B	Haryana	5	5	0.00
152	Infomagic Services Pvt. Ltd.	B	mumbai	5	5	0.00
153	Kerala communication Network Pvt. Ltd.	B	Kerala	5	5	0.00
154	Punjab Cybernet pvt. Ltd.	B	Punjab	5	5	0.00
155	Surana Telecom Ltd.	B	Andhra Pradesh	3	3	0.00
156	Tandem Infotech Pvt. Ltd.,	C	Trivandrum	3	3	0.00
157	Compucom (I) Ltd.	C	Jaipur SSA	3	2	-33.33
158	Apna Telelink Pvt LTD	C	Jalandhar SSA	0	0	
159	Dialnet Communications Ltd.	B	Delhi	54	0	-100.00
160	HCL Comnet	A	All India	0	0	
161	Kushagra Telecom Pvt Ltd.	C	Ghaziabad SSA	11	0	-100.00
162	Nelco Ltd.	A	All India	0	0	
163	Shreedhar Infosys Ltd.	C	Varanasi SSA	4	0	-100.00
	Total			5892116	6125010	3.95

Table 4.1

Subscriber Base of Public Mobile Radio Trunking Service (PMRTS)

Sr. No.	Name of the Service Provider	Operative Area	Subscriber Base as on 30-06-2005	Subscriber Base as on 30-09-2005
1	Aryadoot Transport Pvt Limited	Vishakhapatnam	1059	1119
2	Jet-Aiu Skyline Transport Pvt Ltd.	Indore	361	367
3	Container Movement (Bombay) Transport Pvt Ltd.	Delhi	5	5
4	Arya Offshore Services Pvt Ltd.	Mumbai	530	548
		Chennai	832	820
	Total		1362	1368
5	German Express Shipping Agency (India) Pvt Ltd. (Hapag Llyod)	Navi Mumbai (Belapur)	636	645
		Delhi	528	516
	Total		1164	1161
6	United Liner Agencies of India (Pvt) Ltd	Delhi	647	694
		Calcutta	1060	1113
			1707	1807
7	Procall Limited	Delhi	6836	6826
		Jaipur	314	332
		Gurgaon	651	929
		Faridabad	222	239
	Total		8023	8326
8	The Arvind Mills Ltd.	Delhi	655	684
		Faridabad	1	1
		Mumbai	1398	1383
		Vashi	46	46
		Ahmedabad	266	245
		Baroda	364	376
		Surat	1014	1042
		Chennai	1209	1197
	Bangalore	1805	2107	
	Total		6758	7081

9	Smartalk Pvt Limited	Pune	712	821
		Vashi	286	260
		Mumbai	333	392
	Total		1331	1473
10	QuickCalls India Pvt. Limited	Bangalore	2088	2137
		Hyderabad	1123	1193
		Chennai	430	618
	Total		3641	3948
11	Bhilwara Telenet Services Pvt Limited	Mumbai	821	968
		Delhi	0	
	Total		821	968
12	India Satcom Ltd.	Bangalore	252	244
	Grand Total		26384	27867

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

Table 4.2

Subscriber Base of VSAT Service Providers

S.No.	Service Provider	30.06.2005	30.09.2005	%ageMarket Share (%)
1	Hughes	12454	13269	30.80
2	HCL Comnet	14129	14882	34.54
3	Comsat Max	4540	4655	10.80
4	Bharti BT	6134	6199	14.39
5	Essel Shyam	2073	2209	5.13
6	Tata Services	1024	1669	3.87
7	Telstra Vishesh*	127	127	0.29
8	ITI	49	49	0.11
9	GNFC	26	24	0.06
	Total	40556	43083	100.00

* 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)
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

Table 6.2

Genrewise Cable and Satellite Viewership pattern (in %) in four Metros during the period July -Sept 2005

Genre	Chennai	Delhi	Kolkata	Mumbai
Cable and Others	24%	22%	21%	24%
English				
Entertainment	0%	2%	1%	2%
Hindi Movies	0%	13%	11%	12%
Hindi and English				
News	1%	12%	3%	8%
Infotainment	0%	1%	1%	1%
Kids	3%	7%	4%	5%
Hindi General				
Entertainment	0%	35%	24%	28%
Hindi Music	0%	2%	1%	2%
Regional				
Entertainment	62%	1%	24%	11%
Regional News	2%	0%	2%	1%
Regional Music	8%	0%	2%	0%
Sports	0%	5%	6%	6%
Total	100%	100%	100%	100%

Source : TAM consultancy Report to TRAI for the Quarter July -Sept 2005.

Note 0% means a very negligible figure.

+4 means viewers of the age above 4

Source : TAM consultancy Report to TRAI for the Quarter July -Sept 2005.

Table 6.3

Viewing Pattern of FTA Vs Pay Channels (in % terms) (+4 Cable and Satellite viewers)in four Metros during the period July - Sept 2005

Genre	Chennai	Delhi	Kolkata	Mumbai
Cable Channels	1	11	13	12
FTA Channels	95	23	37	27
Pay Channels	4	66	50	61
Total	100	100	100	100

Source : TAM consultancy Report to TRAI for the Quarter July –Sept 2005.

% Figures rounded off to whole numbers

+4 means viewers of the age above 4

Table 6.4

Average Weekly Reach of DD 1 in Millions among Cable, Non
Cable & Satellite Viewers of 4+ during July -Sept 2005

Market Segment	C &S viewers watching DD1	C &S and Non C &S viewers watching DD1
Mumbai	2.6	5.5
Gujarat	2.6	5.7
Rest of Maharashtra	2.4	8.7
Delhi	1.8	5.7
AP	1.9	4.9
UP	1.8	9.8
MP	1.6	5.6
PHCHP	1.1	2.6
Kolkata	1.1	4.4
West Bengal .1-1 Mn	0.5	2.2
Hyderabad	1	2.7
Rest of AP	0.9	2.2
Bangalore	0.8	1.5
Rajasthan .1Mn Plus	0.8	3.5
Chennai	0.5	1.3
Rest of Tamilnadu	0.5	1.7
Orissa .1-1 Mn	0.3	1.4
Kerala	0.3	1.8
HSM	16.6	55.2
All India	21.8	68.7

HSM : Hindi Speaking Market

+4 means viewers of age above 4

.1-1 Mn means cities/towns with population of 1 lakh to 1 Million

PHCHP: Punjab, Haryana, Chandigarh, Himachal Pradesh

Source : TAM consultancy Report to TRAI for the Quarter July –Sept 2005

Table 6.5

Colour TV Penetration among C &S Households in cities/towns

Table (i): Colour TV Penetration among
C &S Households in cities/towns with
population of 1Mn plus

Market Segment	% of Colour TV	%of B/W TV
PHCHP	95	5
Maharashtra	95	5
Delhi	94	6
Gujarat	94	6
Mumbai	92	8
UP	91	9
MP	90	10
Rajasthan	90	10
WestBengal	84	16
Kolkata	82	18

Source: NRS 2005 for 1 lac +towns as reported in TAMs
Consultancy Report to TRAI for the quarter ending 30th Sept 2005.
PHCHP : Punjab Haryana, Chandigarh, Himachal Pradesh.

Table (ii): Colour TV Penetration among
C &S Households in cities /towns with a
population between 1 lakh and 1 Million

Market Segment	% of Colour TV	%of B/W TV
PHCHP	92	8
Gujarat	89	11
Orissa	87	13
Maharashtra	87	13
MP	83	17
UP	82	18
West Bengal	75	25

Source: NRS 2005 for 1 lac +towns as reported in TAMs
Consultancy Report to TRAI for the quarter ending 30th Sept 2005.
PHCHP : Punjab Haryana, Chandigarh, Himachal Pradesh.

Table 6.6

Range of number of channels Pay, FTA, Local regularly carried on Network as at the end of quarter ending 30th Sept 2005.

Range	Toal No of Channels Regularly Carried	No of Pay Channels	No of FTA channels	No of Local Channels
Maximum	183	54	149	8
Minimum	55	26	27	0
Note : Since the figures of maximum and minimum is based on no of channels (analogue and/or digital) across different networks of different reporting service providers having different combinations of pay, FTA and Local channels, the sum of pay, FTA and Local channels may not add up to the total number of channels. The range is for both analogue and digital.				
2. No of Service Providers reported: 4				
3. The digital services on the basis of reporting MSOs are offered in the cities of Delhi, Mumbai, Pune, Bangalore, Chennai				

Source : Reporting MSOs

Table 6.7

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	Action Cinema (Zee Action)	Zee Turner Ltd	New Pay channel
12	Premier Cinema (Zee Premier)	Zee Turner Ltd	New Pay channel
13	Classic Cinema (zee Classic)	Zee Turner Ltd	New Pay channel
14	MX (Zee Select)	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	Sun Network	New Pay Channel
27	Teja News	Sun Network	New Pay Channel

Note:- i. The distribution of Nick, Ten Sports and HBO changed hands and were pay channels as on 26.12.03.
ii) The names of channel in bracket in respect of S Nos 11 to 14 are new names.

Table 6.8

No. of Applications/Letters of Intent/Licenses Issued in
respect of DTH Service Provider

Total No. of Applications Received up to 30.9.2005	6
No. of Licenses issued up to 30.9.2005	1
No. of Letters of Intent issued up to 30.9.2005	2
No. of Applications rejected	NIL
No. of Applications under consideration	3

Source: Ministry of Information & Broadcasting

Table 6.9

Status of Community Radio Stations in the country as on
30.9.2005

Sno	Particulars	Till 31.3.2005	From 1.4.2005 to 30.9.2005	Till 30.9.2005
1	No of Applications Received	67	9	76
2	No of Letters of Intent Issued	28	13	41
3	No of Applications Rejected	7	1	8
4	No of Licenses Issued /License Agreements Signed	19	5	24
5	No of Stations Operational	7	6	13

Annex 1.1

Details of Fixed Service Licenses issued to private operators

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

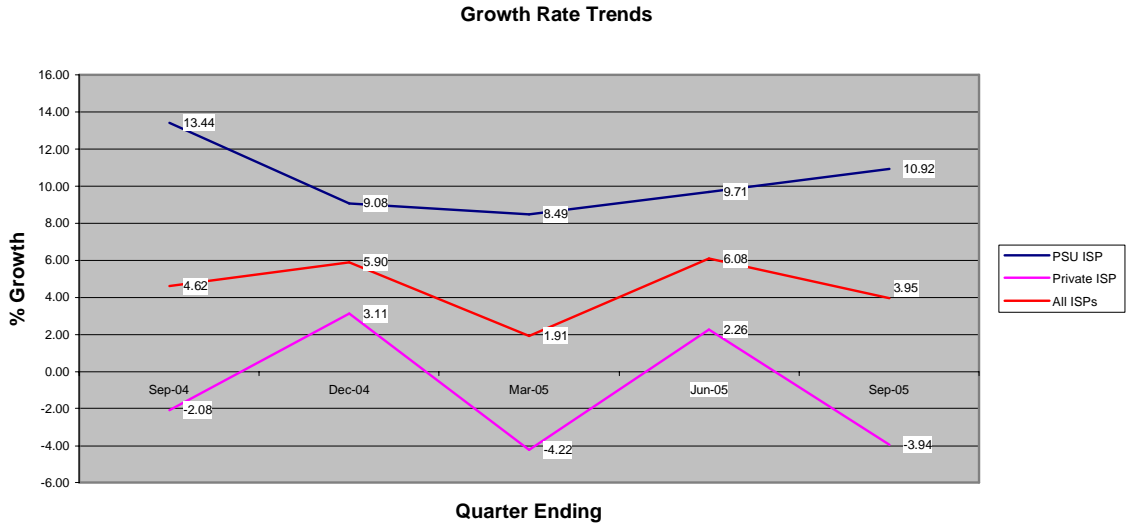
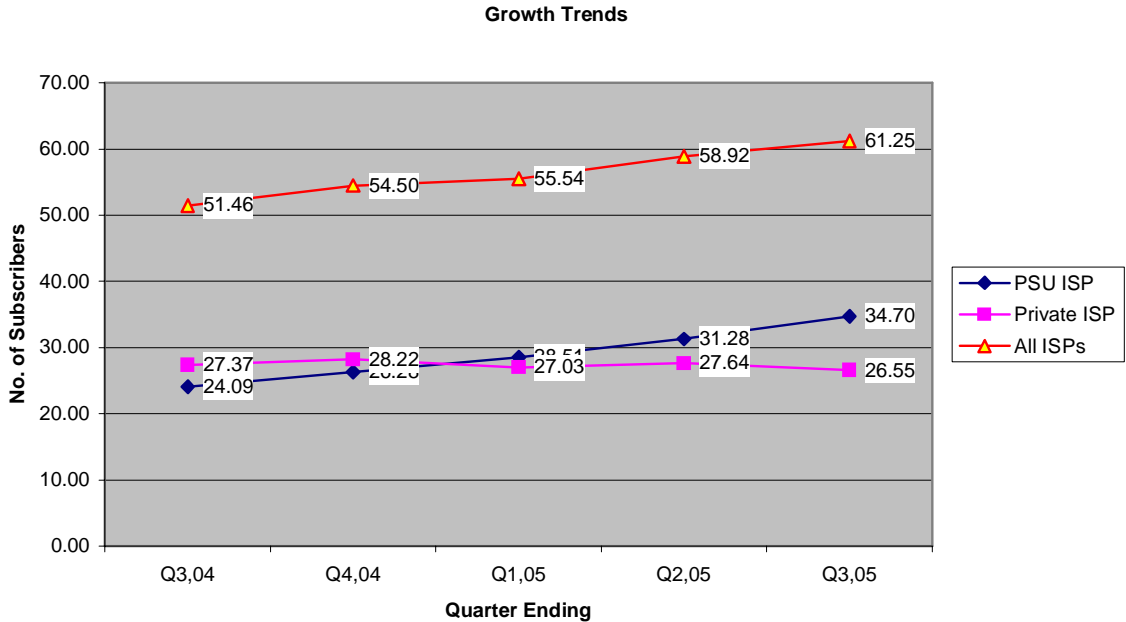
List of Cellular, Fixed & Unified Access Service Providers

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 Communications	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	

Growth Pattern of Internet Subscribers

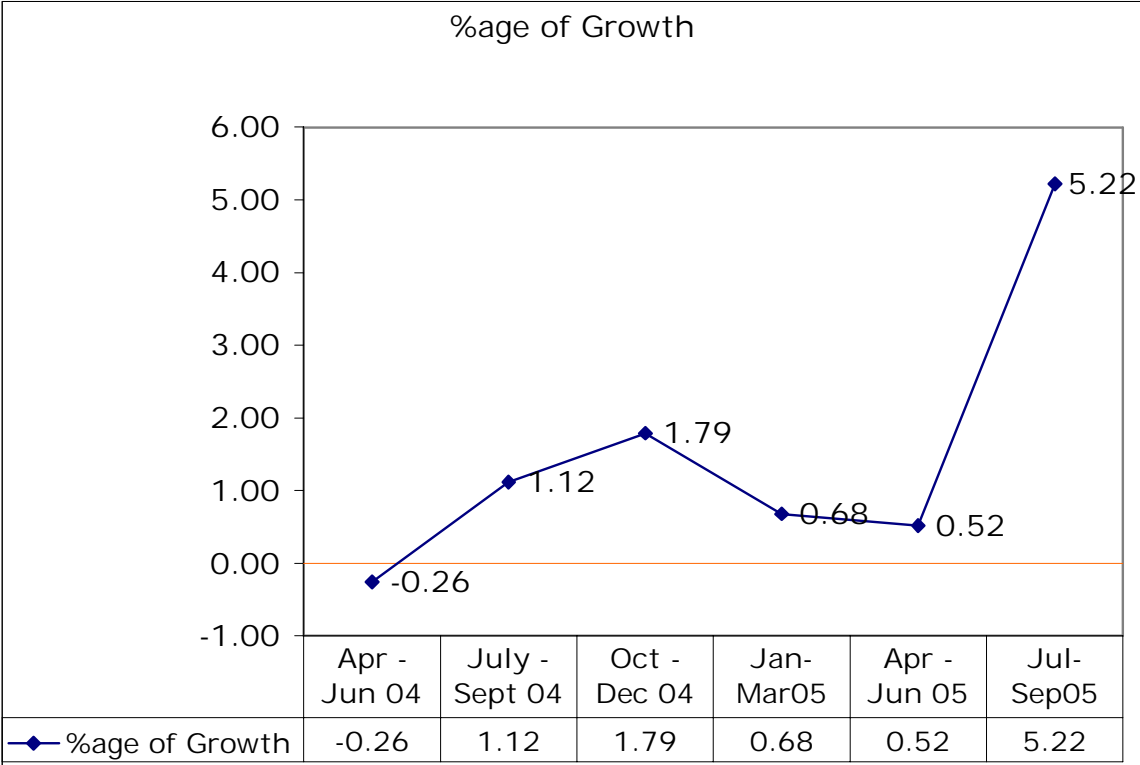


List of Internet Telephony Service Providers

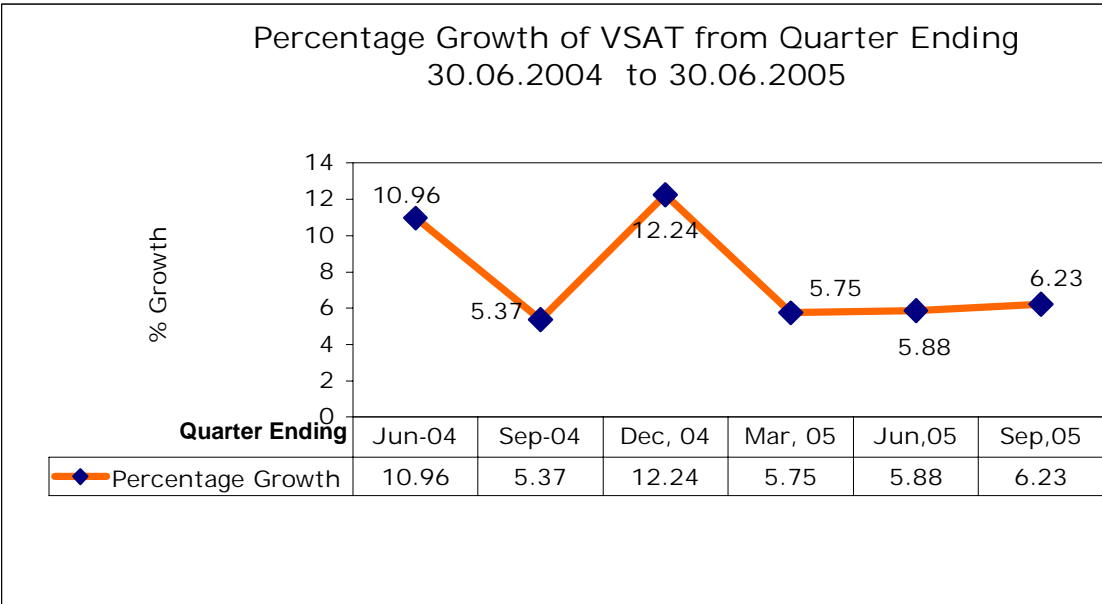
S. No.	Name of ISPs
1	Apna Telelink Pvt. Ltd.
2	Asianet Satellite Communications Ltd.
3	BG Broadband India Pvt. Ltd.
4	Bharti Broadband Network Ltd.
5	BSNL
6	City Online Services Pvt. Ltd.
7	Data Infosys Ltd.
8	Data Link Impex Pvt. Ltd.
9	Digital2Virtual SP Pvt. Ltd.
10	Estel Communications Pvt. Ltd.
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 DeIDSL 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 (MTTR)	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
1	ANDRA PRADESH	BSNL	67.98	6.57	82.95	19.00	NA	53.45%	0.05	0.00	82.03	NA	NA	NA	NA				
		RELIANCE	56.10	4.39	NA	4.51	NA	66.86%	2.24	26.09	43.88	99.96	NA	NA	91.50	NA			
		BHARTI	85.01	14.72	NA	5.18	0.0020	53.00%	1.44	52.91	100.00	100.00	NA	NA	NA	NA			
		TATA	91.83	3.84	65.06	17.56	0.0520	50.05%	0.14	80.98	97.17	94.73	77.00	82.00	NA	NA			
2	BIHAR	BSNL	31.27	7.09	85.30	13.00	NA	39.15%	0.04	0.00	94.48	NA	NA	NA	NA				
		RELIANCE	26.90	6.32	NA	4.72	NA	66.43%	0.00	88.89	100.00	92.86	NA	NA	91.50	NA			
3	DELHI	MTNL	49.07	5.26	81.07	13.87	0.0003	46.00%	0.14	87.90	91.03	73.56	100.00	Nil	95.00	Nil			
		RELIANCE	34.13	3.32	NA	5.27	NA	66.94%	2.32	6.25	52.00	99.79	NA	NA	91.50	NA			
		BHARTI	100.00	7.07	68.08	8.54	0.0010	52.32%	0.07	13.76	90.77	63.16	NA	NA	87.00	NA			
		TATA	93.74	0.00	100.00	7.00	0.0002	63.00%	0.25	78.79	24.64	97.83	84.00	89.00	NA	NA			
4	GUJARAT	BSNL	88.13	8.74	89.63	12.00	NA	61.13%	0.11	0.00	93.20	NA	NA	NA	NA				
		RELIANCE	29.98	11.45	NA	8.05	NA	67.31%	1.52	6.15	46.94	99.86	NA	NA	91.50	NA			
		TATA	99.54	1.04	71.41	14.70	0.0080	74.84%	0.40	100.00	100.00	97.16	80.00	84.00	NA	NA			
5	MP &	BSNL(MP)	79.83	6.06	96.75	7.00	NA	70.23%	0.10	0.00	76.50	NA	NA	NA	NA				

	CHATTISGARH	BSNL(Chattisgarh)	67.37	12.89	71.24	19.00	NA	62.72%	0.04	0.00	79.86	NA	NA	NA	NA	NA
		RELIANCE	48.27	4.97	NA	4.40	NA	66.68%	1.88	75.00	NA	NA	NA	NA	91.50	NA
		BHARTI	97.74	4.52	87.86	11.20	0.0000	64.30%	0.02	52.06	100.00	99.99	100.00	Nil	81.00	100.00
6	MAHARASHTRA	BSNL	57.49	10.18	88.15	15.00	NA	53.60%	0.04	0.00	71.01	NA	NA	NA	NA	NA
		RELIANCE	36.08	2.26	NA	3.16	NA	67.27%	6.01	47.37	20.75	99.53	NA	NA	91.50	NA
		TATA	NA	NA	98.87	4.19	0.0020	64.11%	0.14	84.03	100.00	95.43	NA	NA	NA	NA
7	PUNJAB	BSNL	98.87	8.28	93.41	13.00	NA	64.90%	0.04	0.00	99.55	NA	NA	NA	NA	NA
		RELIANCE	46.18	8.96	NA	4.03	NA	67.04%	1.95	55.17	82.72	100.00	NA	NA	91.50	NA
		BHARTI	77.78	12.18	97.99	8.51	0.0010	49.87%	4.44	96.55	63.64	45.71	NA	NA	67.00	NA
		HFCL	95.56	2.72	NA	8.65	0.0017	55.48%	0.10	95.94	97.17	98.05	100.00	Nil	100.00	Nil
8	RAJASTHAN	BSNL	75.34	10.28	86.45	13.00	NA	55.88%	0.03	0.00	73.85	NA	NA	NA	NA	NA
		RELIANCE	52.22	0.17	NA	1.42	NA	66.39%	0.00	Nil	Nil	91.67	NA	NA	91.50	NA
		SHYAM	100.00	2.96	93.18	5.00	0.0010	68.00%	0.09	95.49	100.00	95.82	Nap	Nap	84.00	96.00
9	TAMILNADU	BSNL	100.00	3.96	96.82	7.00	NA	72.40%	0.04	0.00	80.93	NA	NA	NA	NA	NA
		RELIANCE	44.19	5.09	NA	4.11	NA	67.34%	0.72	80.33	64.90	100.00	NA	NA	91.50	NA
		BHARTI	91.08	2.15	98.64	3.30	0.0020	67.00%	0.09	52.47	87.66	96.89	NA	NA	NA	NA
		TATA	100.00	Nil	Nil	0.00	0.0000	NA	Nil	Nil	Nil	Nil	93.00	95.00	NA	NA
10	HARYANA	BSNL	88.96	8.38	92.32	15.00	NA	70.52%	0.05	0.00	81.87	NA	NA	NA	NA	NA
		RELIANCE	0.00	2.37	NA	6.17	NA	66.50%	28.57	Nil	Nil	85.71	NA	NA	91.50	NA
		BHARTI	100.00	8.01	65.72	11.76	0.0010	59.90%	0.11	13.33	93.08	59.25	NA	NA	87.00	NA
11	KARNATAKA	BSNL	90.49	7.73	93.33	5.00	NA	55.60%	0.11	0.00	90.25	NA	NA	NA	NA	NA
		RELIANCE	32.49	0.63	NA	3.47	NA	67.18%	1.72	66.67	61.58	99.96	NA	NA	91.50	NA
		BHARTI	70.53	1.94	98.56	3.00	0.0000	56.63%	0.20	25.60	Nil	82.16	86.20	NA	67.34	32.66
		TATA	80.22	1.04	76.17	16.30	0.0010	55.95%	0.35	78.79	91.95	94.11	93.00	96.00	NA	NA

Operators not meeting the TRAI's prescribed benchmarks

N/App
= Not Applicable

Data not provide by the
Service Operator
NA=

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 (MTTR)	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)	
													< 3 days	< 24 hours	< 24hours	Within 20 sec = 80%	within 40 sec = 95%	Within 60 sec = 80%	within 90 sec = 95%
12	A&N	BSNL	73.20	11.39	90.04	13.00	NA	39.96%	0.15	0.00	92.70	NA	NA	NA	NA	NA			
13	Assam	BSNL	47.35	7.63	96.24	24.00	NA	38.51%	0.15	0.00	60.97	NA	NA	NA	NA	NA			
14	Chennai	BSNL	92.24	6.40	95.11	15.00	NA	75.36%	0.12	0.00	100.00	NA	NA	NA	NA	NA			
		Reliance	97.10	0.85	NA	4.65	NA	68.10%	0.95	0.00	94.16	94.08	NA	NA	91.50	NA			
		TATA	100.00	0.08	100.00	4.60	0.0000	63.12%	0.00	100.00	100.00	100.00	93.00	95.00	NA	NA			
15	H P	BSNL	98.79	9.82	93.19	6.00	NA	59.34%	0.05	0.00	94.99	NA	NA	NA	NA	NA			
16	Jhar khand	BSNL	19.27	8.38	93.94	20.00	NA	44.02%	0.08	0.00	100.00	NA	NA	NA	NA	NA			
17	J&K	BSNL	64.63	12.35	93.13	10.00	NA	35.29%	0.05	0.00	78.30	NA	NA	NA	NA	NA			
18	Kerala	BSNL	62.65	9.39	85.19	18.00	NA	67.39%	0.02	0.00	90.66	NA	NA	NA	NA	NA			
		RELIANCE	49.53	4.11	NA	2.39	NA	NA	0.50	33.33	45.45	99.55	NA	NA	91.50	NA			
19	Kolkata	BHARTI	57.07	11.02	96.52	3.50	0.0000	45.00%	0.00	NA	98.68	93.94	NA	NA	NA	NA			
		RELIANCE	33.50	3.33	NA	4.64	NA	66.84%	2.86	3.03	20.83	99.42	NA	NA	91.50	NA			
		BSNL	59.76	5.60	86.87	13.00	NA	51.05%	0.07	0.00	100.00	NA	NA	NA	NA	NA			
20	Mumbai	TATA	NA	1.66	98.02	4.12	0.0020	64.37%	0.33	13.85	0.00	92.44	NA	NA	NA	NA			

		BHARTI	24.28	NA	95.10	0.00	0.0000	NA	0.84	60.71	94.08	94.56	NA	NA	NA	NA	
		RELIANCE	31.69	3.41	NA	8.41	NA	67.66%	1.37	38.10	19.77	98.15	NA	NA	91.50	NA	
		MTNL	30.41	20.86	NA	45.25	0.0004	51.24%	0.11	24.36	69.90	58.03	99.16	100.00	91.83	100.00	
21	NE-I	BSNL	42.12	5.87	92.03	33.00	NA	51.95%	0.08	0.00	100.00	NA	NA	NA	NA	NA	
22	NE-II	BSNL	89.82	5.19	92.23	5.00	NA	55.42%	0.18	0.00	0.00	NA	NA	NA	NA	NA	
23	Orissa	BSNL	100.00	6.96	91.15	11.00	NA	64.23%	0.27	0.00	100.00	NA	NA	NA	NA	NA	
		RELIANCE	55.56	0.54	NA	4.91	NA	66.35%	0.00	Nil	Nil	100.00	NA	NA	91.50	NA	
24	UP-E	BSNL	95.95	7.13	94.34	8.00	NA	63.74%	0.02	0.00	97.41	NA	NA	NA	NA	NA	
		BHARTI	97.74	0.07	95.32	11.20	0.0000	40.50%	0.74	100.00	100.00	100.00	100.00	100.00	Nil	81.00	100.00
		RELIANCE	62.62	11.75	NA	1.78	NA	66.37%	3.54	50.00	48.39	99.89	NA	NA	91.50	NA	
25	UP-W	BSNL	71.38	10.20	84.88	11.00	NA	63.12%	0.03	0.00	72.91	NA	NA	NA	NA	NA	
		BHARTI	100.00	6.47	66.95	12.80	0.0010	54.39%	1.00	11.02	100.00	63.29	NA	NA	87.00	NA	
		RELIANCE	Nil	2.72	NA	3.42	NA	66.41%	Nil	90.00	Nil	90.63	NA	NA	91.50	NA	
26	Uttaranchal	BSNL	61.41	9.20	94.65	6.00	NA	63.74%	0.02	0.00	95.72	NA	NA	NA	NA	NA	
27	West Bengal	BSNL	26.33	7.51	89.69	18.00	NA	65.07%	0.03	0.00	95.47	NA	NA	NA	NA	NA	
		RELIANCE	Nil	7.41	NA	3.20	NA	66.38%	0.00	Nil	Nil	100.00	NA	NA	91.50	NA	

Operator not meeting the prescribed benchmark

N/App =

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		
	'A' Circle														
I	Maharashtra														
1	BPL Cellular	18.51	98.27%	5.0	0.99%	1.67%	1.32%	97.4%	100.00%	Nil	100.00%	Nil	0.100%	100.00%	30 days
2	IDEA Cellular	92.74	98.54%	12.0	0.95%	1.16%	1.54%	98.4%	100.00%	Nil	57.00%	64.00%	0.300%	100.00%	30 days
3	BSNL	87.00	80.05%	2.2	4.40%	2.26%	1.32%	98.0%	NA	NA	NA	NA	0.410%	100.00%	30 days
4	Bharti Cellular	23.10	99.27%	9.2	0.44%	0.27%	0.91%	95.3%	99.00%	99.00%	94.00%	94.00%	0.090%	100.00%	30 days
5	Reliance - CDMA	41.00	98.00%	6.0	0.00%	0.51%	0.97%	98.0%	99.50%	99.50%	72.83%	72.83%	0.080%	100.00%	30 days
6	Tata, MH -CDMA	0.38	97.57%	20.0	0.00%	0.30%	0.41%	97.3%	67.34%	71.16%	NA	NA	0.430%	100.00%	60 days
ii	Gujarat														
7	Hutch - Fascel	19.48	96.55%	9.6	0.11%	0.27%	1.06%	96.9%	99.82%	99.82%	81.66%	95.30%	0.074%	100.00%	07 days
8	IDEA Cellular	9.88	98.97%	15.7	1.60%	0.69%	1.52%	98.0%	74.00%	95.50%	68.50%	76.50%	0.078%	100.00%	30 days
9	BSNL	0.00	98.97%	2.2	0.48%	1.58%	0.99%		NA	NA	NA	NA	0.020%	100.00%	30 days
10	Bharti Cellular	12.38	99.84%	11.9	0.11%	0.08%	0.81%	97.3%	100.00%	Nil	82.24%	96.02%	0.190%	100.00%	07 days
11	Reliance - CDMA	36.33	98.35%	4.7	0.00%	0.47%	0.92%	99.2%	99.50%	99.50%	71.13%	71.13%	0.090%	100.00%	30 days
12	Tata -CDMA	17.40	97.99%	4.7	0.00%	0.20%	0.68%	98.3%	80.00%	84.00%	NA	NA	0.280%	100.00%	30 days
iii	Andhara Pradesh														

13	IDEA Cellular	13.51	99.98%	5.5	0.28%	1.63%	0.52%	99.3%	100.00%	Nil	84.00%	96.00%	0.010%	100.00%	30 days
14	Bharti Mobile	164.30	98.66%	16.1	0.48%	0.69%	1.05%	99.5%	99.00%	99.00%	93.00%	95.00%	0.040%	100.00%	30 days
15	BSNL, AP	0.00	98.00%	6.0	0.70%	9.39%	1.62%	97.0%	100.00%	Nil	76.00%	85.00%	0.030%	97.00%	30 days
16	Hutchison Essar S	16.00	99.16%	5.0	0.28%	0.74%	0.63%	98.0%	100.00%	Nil	100.00%	Nil	0.090%	100.00%	15 days
17	Reliance - CDMA	41.00	98.75%	5.3	0.00%	0.63%	0.73%	99.9%	99.50%	99.50%	49.90%	49.90%	0.080%	100.00%	30 days
18	Tata -CDMA	5.29	99.32%	5.7	0.00%	1.33%	0.43%	97.2%	77.00%	82.00%	NA	NA	0.250%	100.00%	30 days
iv	Karnataka														
19	Bharti Mobile	23.10	99.65%	13.0	0.37%	0.32%	1.30%	96.4%	97.61%	97.65%	94.80%	96.38%	0.004%	100.00%	30 days
20	Spice Comm.	1.34	99.87%	9.0	0.15%	3.15%	1.25%	99.7%	NA	NA	100.00%	Nil	0.002%	100.00%	30 days
21	BSNL	21.00	99.50%	10.5	0.41%	3.50%	1.20%	98.0%	96.00%	98.00%	80.00%	88.00%	0.100%	100.00%	07 days
22	Hutchison Essar S	15.33	98.04%	10.0	1.00%	2.00%	1.95%	96.7%	97.00%	96.00%	97.30%	81.30%	0.020%	100.00%	30 days
23	Reliance - CDMA	39.67	98.62%	6.7	0.00%	0.58%	0.67%	99.9%	95.50%	95.50%	60.33%	60.33%	0.060%	100.00%	30 days
24	Tata -CDMA	14.35	99.39%	6.9	0.00%	0.24%	1.09%	96.4%	93.00%	96.30%	NA	NA	0.260%	100.00%	30 days
v	Tamil Nadu														
25	BPL Cellular	31.40	98.91%	11.7	0.74%	1.26%	0.80%	98.8%	99.55%	100.00%	98.53%	100.00%	0.090%	100.00%	30 days
26	Aircel	18.55	99.02%	11.4	2.66%	3.88%	1.67%	95.7%	100.00%	Nil	95.00%	95.00%	0.030%	100.00%	25 days
27	BSNL	0.00	95.10%	7.8	0.98%	1.90%	1.20%	95.0%	85.00%	85.00%	85.00%	97.00%	0.000%	100.00%	Nil
28	Bharti Cellular	20.00	99.63%	11.3	0.03%	0.76%	0.77%	98.4%	99.99%	100.00%	84.36%	95.57%	0.070%	100.00%	30 days
29	Reliance - CDMA	28.33	98.80%	5.7	0.00%	0.45%	0.76%	99.0%	99.50%	99.50%	80.43%	80.43%	0.070%	100.00%	30 days
30	Tata -CDMA	13.02	99.58%	10.7	0.00%	0.98%	1.11%	97.7%	93.00%	95.00%	NA	NA	0.130%	100.00%	03 days
	B' Circle														
vi	Kerala														
31	IDEA-Escotel Mobile	22.22	99.87%	13.9	0.35%	1.51%	2.16%	97.9%	100.00%	Nil	90.00%	98.00%	0.370%	100.00%	30 days
32	BPL Cellular	12.50	96.20%	15.9	0.80%	1.40%	1.26%	99.1%	0.39%	100.00%	96.00%	96.00%	0.005%	100.00%	30 days
33	BSNL	22.00	98.10%	16.6	0.67%	1.80%	1.63%	95.2%	NA	NA	NA	NA	0.002%	100.00%	30 days
34	Bharti Cellular	8.05	99.53%	12.4	0.03%	0.20%	1.23%	98.6%	84.00%	88.00%	100.00%	Nil	0.080%	100.00%	NA
35	Tata - CDMA	0.00	99.58%	18.5	0.00%	0.00%	0.38%	96.1%	92.00%	94.00%	NA	NA	0.110%	100.00%	07 days
36	Reliance - CDMA	13.33	98.75%	5.7	0.00%	0.44%	0.79%	99.6%	95.50%	95.50%	70.46%	70.46%	0.090%	100.00%	30 days
vii	Punjab														
37	Spice Comm.	23.50	95.06%	12.0	0.12%	3.61%	1.58%	97.0%	100.00%	Nil	100.00%	98.00%	0.022%	100.00%	30 days
38	Bharti Mobile	6.60	99.01%	11.0	0.12%	0.07%	1.82%	99.2%	99.91%	99.98%	99.99%	99.99%	0.090%	100.00%	01 day
39	Hutchission Essar South	Nil	99.06%	10.0	0.07%	0.44%	1.47%	100.0%	97.66%	97.66%	80.83%	95.80%	0.091%	100.00%	30 days
40	BSNL	42.50	99.80%	3.8	0.30%	1.67%	1.19%	100.0%	NA	NA	NA	NA	0.010%	100.00%	30 days
41	Reliance - CDMA	23.00	98.57%	4.3	0.00%	0.48%	1.06%	99.7%	99.50%	99.50%	61.00%	61.00%	0.070%	100.00%	30 days

42	Tata - CDMA	3.06	99.90%	6.0	0.00%	0.11%	0.62%	95.3%	96.60%	96.60%	NA	NA	0.210%	100.00%	30 days
viii	Haryana														
43	IDEA-Escotel Mobile	7.26	99.98%	13.9	0.30%	0.71%	0.94%	99.5%	100.00%	Nil	85.00%	95.00%	0.040%	100.00%	37 Days
44	Hutch-Aircel Digilink	7.10	99.90%	9.3	0.01%	0.32%	1.73%	98.4%	100.00%	Nil	82.40%	95.60%	0.090%	100.00%	15 days
45	BSNL	17.00	95.33%	3.7	6.88%	13.47%	3.43%	95.6%	NA	NA	NA	NA	0.010%	100.00%	30 days
46	Bharti Cellular	1.58	98.04%	10.0	0.34%	0.32%	1.75%	99.0%	99.98%	99.99%	98.00%	99.00%	0.090%	100.00%	01 day
47	Reliance - CDMA	33.33	98.22%	6.0	0.00%	0.54%	1.15%	99.4%	99.50%	99.50%	61.00%	61.00%	0.090%	100.00%	30 days
48	Tata - CDMA	6.34	99.62%	8.0	0.00%	0.48%	1.14%	97.1%	96.60%	96.60%	NA	NA	0.400%	100.00%	30 days
ix	UP - W														
49	Hutchission Essar S	Nil	97.40%	10.0	0.06%	0.03%	2.10%	96.0%	99.90%	99.90%	83.00%	91.00%	0.070%	100.00%	30 days
50	IDEA	7.00	99.68%	11.4	0.89%	1.94%	1.84%	97.7%	81.00%	96.00%	85.00%	96.00%	0.510%	100.00%	30 days
51	BSNL	0.00	99.00%	17.0	1.10%	0.20%	2.00%	99.0%	NA	NA	NA	NA	0.100%	100.00%	07 days
52	Bharti Cellular	12.55	98.72%	14.1	0.15%	0.40%	1.45%	97.0%	99.39%	99.78%	NA	NA	0.090%	100.00%	30 days
53	Reliance - CDMA	26.00	97.37%	4.7	0.00%	0.68%	1.25%	99.0%	99.50%	99.50%	35.23%	35.23%	0.080%	100.00%	30 days
54	Tata - CDMA	9.24	99.19%	17.1	0.00%	0.00%	0.81%	96.4%	85.80%	90.10%	NA	NA	0.160%	100.00%	30 days
x	UP - E														
55	Bharti Cellular	24.00	99.05%	14.1	0.43%	0.91%	1.95%	97.0%	81.00%	96.80%	97.00%	100.00%	0.070%	98.00%	21 days
56	Hutch -ADIL	0.00	97.35%	8.0	0.13%	0.09%	1.98%	96.1%	100.00%	93.00%	100.00%	99.00%	0.005%	100.00%	21 days
57	BSNL	2.00	93.00%	12.0	4.00%	4.00%	2.83%	95.0%	NA	NA	NA	NA	0.100%	100.00%	01 day
58	Reliance - CDMA	38.00	97.86%	4.3	0.00%	0.57%	1.60%	98.0%	99.50%	99.50%	35.33%	35.33%	0.070%	100.00%	30 days
59	Tata - CDMA	10.40	99.89%	16.8	0.00%	0.00%	0.56%	99.0%	95.00%	95.00%	NA	NA	0.520%	100.00%	NA
xi	Rajasthan														
60	Hutch-Aircel Diglink	6.23	99.27%	8.8	0.35%	0.34%	1.89%	97.2%	100.00%	87.51%	100.00%	94.24%	0.090%	100.00%	21 days
61	BSNL	144.30	94.80%	6.2	1.10%	14.80%	2.20%	97.5%	0.60%	4.20%	20.00%	32.20%	0.500%	99.30%	30 days
62	Bharti - Hexacom	23.00	96.89%	10.0	0.28%	0.45%	1.71%	96.4%	99.91%	99.98%	95.32%	97.31%	0.003%	100.00%	02 days
63	Reliance - CDMA	59.67	96.77%	6.7	0.00%	0.52%	1.64%	98.0%	99.50%	99.50%	54.63%	54.63%	0.090%	100.00%	30 days
64	Tata - CDMA	11.37	99.47%	9.7	0.00%	0.00%	0.74%	96.3%	67.33%	73.00%	NA	NA	0.026%	100.00%	30 days
xii	Madhya Pradesh														
65	IDEA Cellular	7.12	98.66%	12.3	0.74%	0.73%	1.87%	99.0%	100.00%	Nil	72.07%	76.60%	0.100%	100.00%	30 days

Annex - 3

66	Reliance - GSM	16.26	98.17%	8.1	0.57%	8.10%	2.84%	96.8%	100.00%	Nil	100.00%	Nil	0.030%	100.00%	01 day
67	BSNL	0.00	97.91%	2.7	0.70%	2.18%	2.18%	100.0%	99.00%	99.50%	97.00%	99.30%	0.029%	100.00%	30 days
68	Bharti Cellular	20.40	99.68%	10.0	0.03%	0.33%	0.58%	98.4%	99.93%	99.99%	97.22%	98.30%	0.098%	100.00%	30 days
69	Reliance - CDMA	60.33	97.78%	6.0	0.00%	0.59%	1.50%	98.0%	95.50%	95.50%	62.40%	62.40%	0.070%	100.00%	30 days
70	Tata - CDMA	0.27	98.27%	3.8	0.00%	0.00%	0.60%	98.1%	100.00%	Nil	NA	NA	0.420%	100.00%	30 days

xiii	West Bengal														
71	Bharti	0.00	98.75%	5.1	0.56%	1.78%	1.67%	100.0%	99.46%	99.81%	96.76%	97.89%	0.010%	100.00%	21 days
72	Reliance - GSM	7.49	98.00%	9.4	1.48%	7.23%	2.60%	97.4%	NA	NA	100.00%	Nil	Nil	NA	
73	BSNL	0.00	98.44%	5.8	0.97%	1.57%	2.61%	98.6%	NA	NA	NA	NA	0.000%	100.00%	Nil
74	Tata - CDMA	22.36	98.76%	9.6	0.00%	0.00%	0.95%	97.3%	NA	NA	NA	NA	0.170%	100.00%	30 days
75	Reliance - CDMA	25.00	98.16%	4.0	0.00%	0.66%	1.05%	98.4%	99.50%	99.50%	52.70%	52.70%	0.090%	100.00%	30 days
76	Hutchission Essar S	17.41	96.14%	9.5	0.30%	0.76%	1.83%	97.2%	100.00%	100.00%	90.00%	98.00%	0.090%	100.00%	30 days
	C' Circle														
xiv	Himachal Pradesh														
77	Bharti Telenet	4.83	97.94%	11.0	0.72%	0.80%	1.47%	98.7%	99.99%	100.00%	NA	NA	0.001%	100.00%	01 day
78	Reliance - GSM	11.10	100.00%	8.2	0.26%	1.56%	2.60%	98.3%	95.00%	100.00%	95.00%	100.00%	Nil	Nil	Nil
79	BSNL	0.00	98.40%	5.7	2.00%	4.00%	2.80%	95.2%	NA	NA	NA	NA	0.070%	100.00%	07 days
80	Reliance - CDMA	28.00	98.85%	4.3	0.00%	0.41%	0.74%	98.0%	95.50%	95.50%	61.00%	61.00%	0.080%	100.00%	30 days
81	Tata - CDMA	0.00	98.37%	12.0	0.00%	0.29%	0.71%	95.9%	96.60%	96.60%	NA	NA	0.220%	100.00%	30 days
xv	Bihar														
82	Reliance - GSM	15.53	96.33%	8.3	1.76%	9.20%	2.03%	96.6%	NA	NA	NA	NA	0.000%	NA	NA
83	BSNL	8.00	98.64%	8.1	3.34%	12.96%	3.04%	90.3%	NA	NA	NA	NA	0.220%	89.92%	42 days
84	Reliance - CDMA	82.00	95.88%	4.7	0.00%	0.60%	1.47%	99.2%	99.50%	99.50%	52.70%	52.70%	0.090%	100.00%	30 days
85	Bharti Cellular	6.36	98.63%	6.8	1.20%	1.85%	2.74%	97.8%	96.00%	99.00%	97.00%	97.00%	0.110%	100.00%	30 days
86	Tata - CDMA	0.18	99.19%	8.3	0.00%	0.00%	0.56%	98.3%	NA	NA	NA	NA	1.920%	100.00%	30 days
xvi	Orissa														
87	Reliance - GSM	1.32	98.61%	7.2	0.17%	7.74%	2.07%	98.8%	NA	NA	88.67%	100.00%	0.000%	NA	NA
88	BSNL	37.37	93.22%	10.0	4.45%	11.77%	2.10%	93.0%	NA	NA	NA	NA	0.160%	100.00%	Nil
89	Bharti	0.00	99.85%	7.0	0.04%	0.12%	1.08%	98.9%	99.95%	100.00%	96.86%	98.16%	0.040%	100.00%	30 days
90	Reliance - CDMA	46.33	98.19%	5.0	0.00%	0.56%	1.14%	98.0%	99.50%	99.50%	62.40%	62.40%	0.070%	100.00%	30 days
91	Tata - CDMA	2.23	97.76%	9.2	0.00%	0.00%	0.69%	95.8%	NA	NA	NA	NA	0.180%	100.00%	30 days
xvii	Assam														
92	Bharti	154.56	99.17%	10.0	0.11%	0.62%	1.91%	95.0%	99.80%	100.00%	NA	NA	0.080%	100.00%	30 days
93	BSNL	0.00	98.00%	10.0	3.00%	4.00%	3.00%	98.0%	70.00%	80.00%	80.00%	95.00%	0.010%	100.00%	30 days
94	Reliance - GSM	55.16	95.33%	12.2	1.04%	4.82%	1.16%	95.7%	85.00%	95.00%	85.00%	95.00%	0.040%	100.00%	NA
xviii	J & K														
95	BSNL	23.40	99.00%	15.0	1.30%	7.33%	2.00%	96.0%	NA	NA	NA	NA	0.100%	100.00%	21 days
96	Bhrati	4.50	97.92%	10.0	0.46%	0.25%	1.58%	97.7%	99.99%	100.00%	NA	NA	0.050%	100.00%	NA
xix	NE														
97	BSNL	7.00	99.80%	11.0	0.49%	1.37%	2.20%	98.1%	NA	NA	NA	NA	0.000%	100.00%	15 days

98	Bharti	0.00	98.99%	10.0	0.01%	0.08%	1.21%	97.5%	100.00%	Nil	NA	NA	0.130%	100.00%	30 days
99	Reliance - GSM	4.00	96.00%	8.3	0.93%	7.17%	2.71%	97.0%	65.00%	93.00%	65.00%	93.00%	0.005%	100.00%	01 day
	METRO														
	xx Delhi														
100	Bharti Cellular	0.00	98.51%	14.4	0.12%	0.06%	1.57%	98.3%	99.68%	99.85%	93.91%	95.76%	0.070%	100.00%	30 days
101	Hutchison Essar M Serv	Nil	99.62%	8.2	0.01%	0.05%	1.32%	98.8%	99.00%	99.00%	84.33%	87.33%	0.007%	100.00%	30 days
102	MTNL	0.00	95.34%	12.7	0.55%	0.55%	1.43%	95.1%	Nil	Nil	97.60%	97.60%	0.090%	100.00%	30 days
103	IDEA Cellular	0.00	99.99%	7.0	1.29%	2.70%	0.58%	98.4%	100.00%	Nil	90.00%	98.00%	0.042%	100.00%	30 days
104	Tata - CDMA	0.00	98.07%	9.6	0.00%	0.19%	0.63%	95.5%	84.00%	89.00%	NA	NA	0.590%	100.00%	30 days
105	Reliance - CDMA	0.00	98.33%	4.0	0.00%	0.46%	0.83%	97.5%	99.50%	99.50%	56.33%	56.30%	0.080%	100.00%	30 days
	xxi Mumbai														
106	BPL Mobile	285.46	99.45%	11.1	0.27%	1.87%	1.63%	99.0%	72.93%	NA	97.49%	99.06%	0.100%	100.00%	40 days
107	Hutchison Max Tel	0.00	99.26%	9.0	0.69%	1.59%	1.61%	97.2%	97.47%	97.51%	84.42%	90.05%	0.001%	100.00%	30 days
108	MTNL	0.00	99.00%	13.8	0.88%	1.72%	1.48%	95.8%	81.50%	95.50%	82.00%	95.50%	0.073%	100.00%	30 days
109	Bharti Cellular	1.00	96.13%	6.0	0.22%	0.31%	1.07%	96.7%	96.39%	96.40%	85.00%	90.00%	0.020%	100.00%	30 days
110	Reliance - CDMA	0.00	97.68%	4.0	0.00%	0.62%	1.23%	99.9%	99.50%	99.50%	64.03%	64.03%	0.070%	100.00%	30 days
111	Tata -CDMA	0.38	97.57%	20.0	0.00%	0.65%	0.41%	97.3%	67.34%	71.16%	NA	NA	0.430%	100.00%	NA
	xxii Chennai														
112	Aircel Cellular Ltd	1.40	97.60%	14.0	2.21%	6.50%	0.93%	95.2%	95.00%	95.00%	95.00%	95.00%	0.300%	100.00%	30 days
113	Bharti Mobinet	0.00	99.68%	16.4	0.03%	0.04%	0.61%	96.5%	99.97%	99.99%	86.39%	95.00%	0.080%	100.00%	30 days
114	Hutchison Essar S	0.00	99.59%	12.4	0.35%	1.10%	0.85%	98.8%	100.00%	Nil	85.60%	99.30%	0.030%	100.00%	30 days
115	BSNL	0.00	98.00%	12.2	0.40%	3.50%	1.00%	100.0%	NA	NA	NA	NA	0.100%	100.00%	01 day
116	Reliance - CDMA	0.00	98.84%	5.0	0.00%	0.53%	0.42%	100.0%	99.50%	99.50%	80.43%	80.43%	0.070%	100.00%	30 days
117	Tata - CDMA	0.00	99.63%	14.9	0.00%	0.04%	0.68%	96.6%	93.00%	95.00%	NA	NA	0.140%	100.00%	03 days
	xxiii Kolkata														
118	Bharti Mobinet	0.00	96.00%	7.8	0.01%	0.11%	1.34%	96.0%	99.84%	99.99%	87.44%	90.35%	0.090%	100.00%	24 days
119	Hutchison Essar S	0.00	99.95%	15.0	0.26%	1.70%	0.84%	96.6%	100.00%	Nil	85.30%	96.00%	0.080%	100.00%	30 days
120	BSNL	0.00	98.10%	7.0	0.81%	1.63%	1.46%	97.9%	NA	NA	NA	NA	0.010%	99.00%	30 days
121	Reliable Internet. Ser.	0.00	99.47%	9.4	0.01%	0.03%	1.73%	99.5%	NA	NA	100.00%	Nil	Nil	NA	NA
122	Tata - CDMA	20.55	99.59%	9.6	0.00%	0.11%	0.52%	96.4%	NA	NA	NA	NA	0.300%	100.00%	30 days
123	Reliance - CDMA	0.00	98.20%	6.0	0.00%	0.53%	1.27%	98.3%	95.50%	95.50%	52.70%	52.70%	0.080%	100.00%	30 days
	Service Providers not meeting the benchmarks NA=Data not available														

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 st attempt (in %)	Access Portability in 2 nd attempt (in %)	Access Portability in 3 rd attempt (in %)	ISP Node unavailability	Grade of Service (QoS)	Mean time to Restore of faults resulting as per subscriber complaints	
	TRAI Benchmarks	6 hrs	30 sec	80	90	99	30 min	1 : 100	3 days	
1	Bharat Sanchar Nigam Ltd.	0-4 hrs	15-30 sec	93	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	Data Infosys	2-3 min	20-25 sec	95	97	99	30 min	1:100	15 min	
7	Bharti Infotel Ltd.	5 min (online)	30-35 sec	99	100	100	Nil	1:100	2 hrs	
8	Iqara Telecom India Pvt. Ltd. (BG Broadband)	2 min (Online)	20 sec	98	99	100	Nil	Not provided by BSO	24-48 hrs	
9	Shyam Internet Services Pvt. Ltd.	30 min	30 sec	98	99	99.99	30 min	1%	2 hrs	
10	Hathway Cable & Data Pvt. Ltd.*	-	-	-	-	-	-	-	-	
11	HCL Infinet Ltd.	4 min	28 sec	99.1	99.4	99.3	27 min	1:200	17-19 hrs	
12	Icenet.net Limited	2 hrs	20 sec	85	95	100	Never	1:100	-	
13	Tata Teleservices (Maharashtra) Ltd. (Hughes Telecom)	Nil	25 sec	99.62	Nil	Nil	-	1:1000	1 hr	
14	Asianet Satellite Communications Ltd.	Immediate	10 sec	98	99	100	<1 Hr	1 in 500	2 Hrs 05 mins	
15	HFCL Infotel Ltd.	-	30 sec	98.2	99.2	100	Nil	0.85 in 100	7.29 min	
16	Fascel Ltd.*	-	-	-	-	-	-	-	-	
17	WWW Communications Ltd.	4-5 mins	20-35 sec	87	96	99	900 min	-	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.