



# **Telecom Regulatory Authority of India**

The Indian Telecom Services  
Performance Indicators October - December 2006

**17<sup>th</sup> April 2007**

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## INTRODUCTION

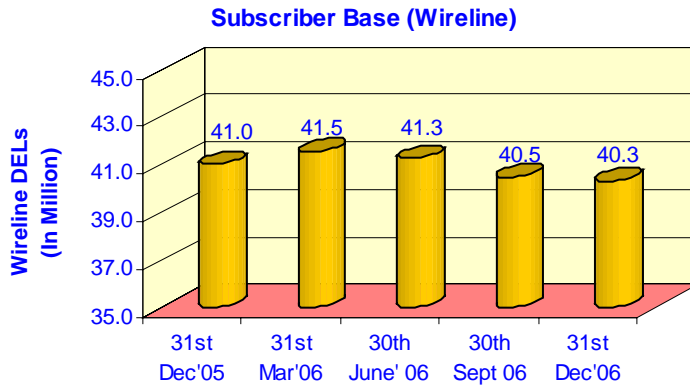
- 1.1 This report provides an update on the growth trends for the telecom services in the country for the period **October-December 2006**. This is an update over the previous reports and presents a broad perspective on the Telecom Services to serve as a reference document for various stakeholders, research agencies and analysts. Under the Unified Access Service Regime, the details under wireless services combine both GSM & CDMA. The wireless subscriber base includes GSM, CDMA, WLL(F) and WLL(M). QOS performances of various service providers have been included in Chapter Five. This report includes the performance of Cable TV, DTH & Radio Broadcast services in Chapter Six. The Executive Summary of various Telecom Services has been given in the beginning followed by 'Quarterly results at a Glance' showing the growth pattern of Wireline, Wireless, Internet and Broadband services.
- 1.2 The report has been compiled based on the information from various telecom service providers. TRAI collects performance-oriented data from various service providers on a quarterly basis to monitor the growth trend in the sector.
- 1.3 This quarterly report is also available on the TRAI website ([www.trai.gov.in](http://www.trai.gov.in)). Any suggestions pertaining to this may please be addressed to S. K. Gupta, Advisor (CN), TRAI; Tel. 23217914, Fax. 23211998 and e-mail: [skgupta@traigov.in](mailto:skgupta@traigov.in) or [guptask61@gmail.com](mailto:guptask61@gmail.com)

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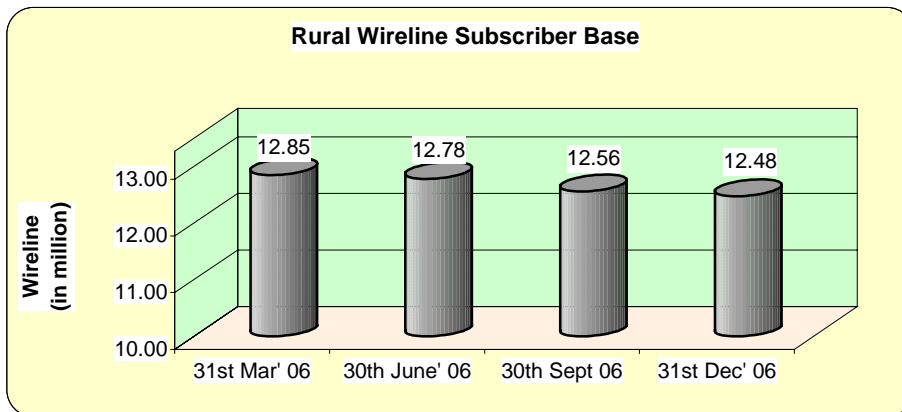
# Executive Summary

## A. Wireline Services

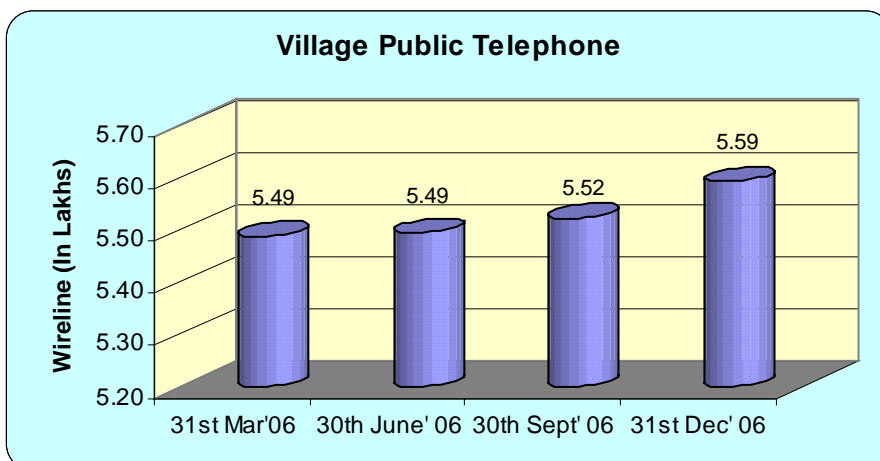
At the end of quarter ending December' 06 Wireline subscribers base is **40.3 Million.**



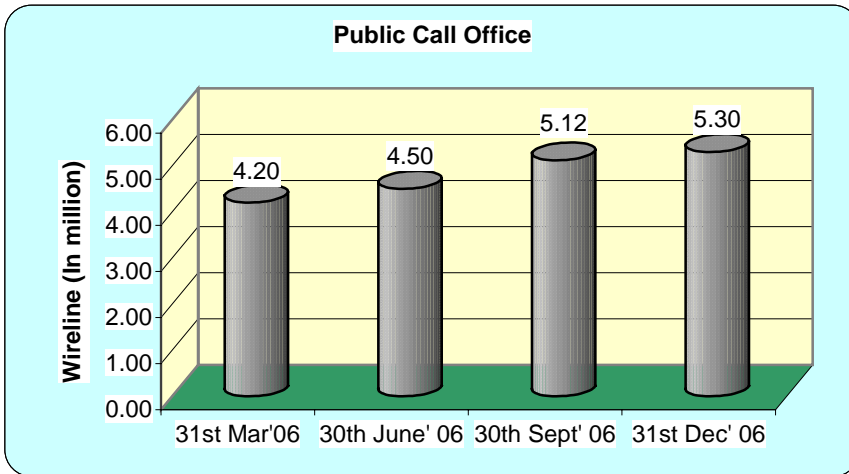
Rural Wireline Subscriber base also reduced from 12.56 million in quarter ending September 2006 to 12.48 in December 2006.



Number of VPTs has increased from 5.52 lakhs to 5.59 lakhs in quarter ending December 2006.



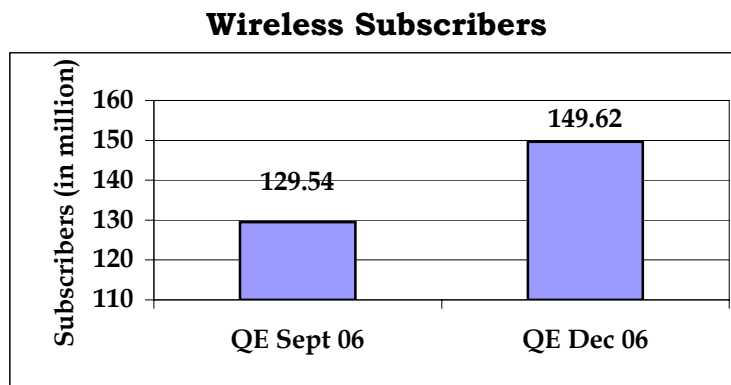
Number of Public Call Offices (PCOs) have increased from 5.12 million to 5.30 million in quarter ending December 2006.



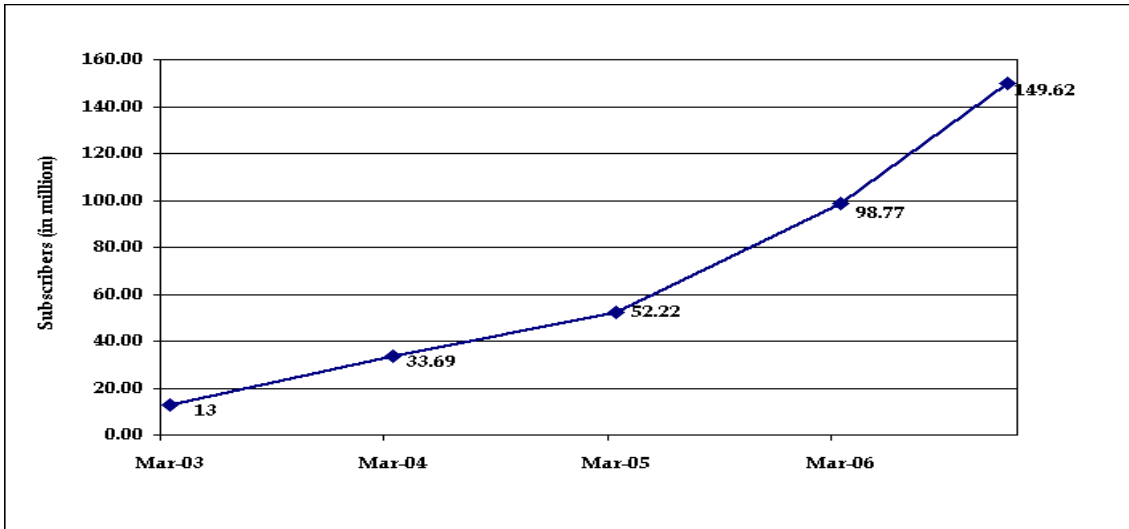
## B. Wireless Services

As on 31.12.2006, the Wireless (Mobile and WLL (F)) Market has reached 149.62 million subscribers as against 129.54 million subscribers in the previous quarter. During this quarter 20.08 million subscribers were added, thus recording a growth of 15.50%. The total wireless subscriber base has grown from 75.94 million in December 2005 to 149.62 million in December 2006.

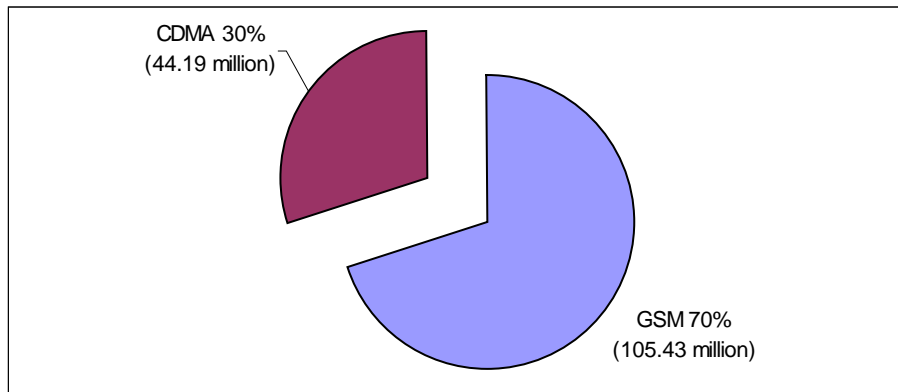
### (i) Subscriber Growth/Market Share



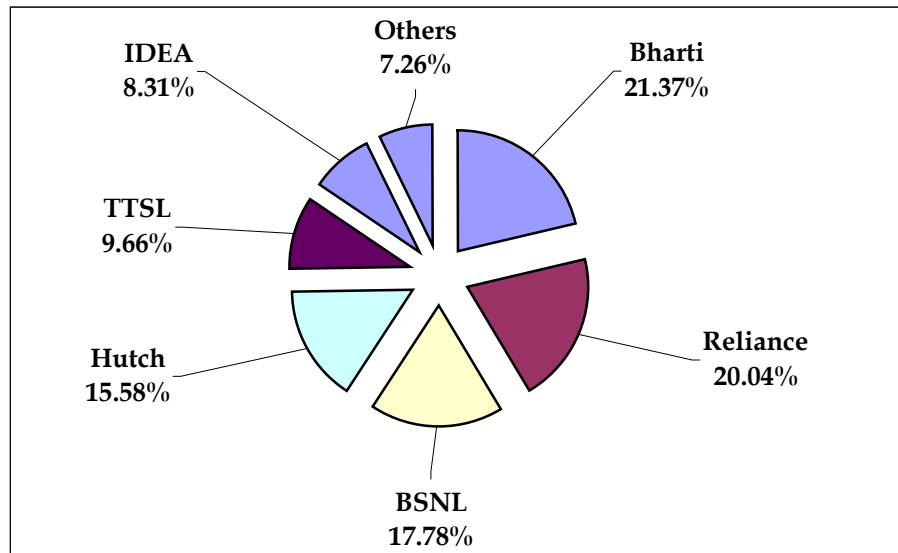
### Total Subscriber Base (Wireless)



### Technology-wise Wireless Market Share (QE Dec 2006)



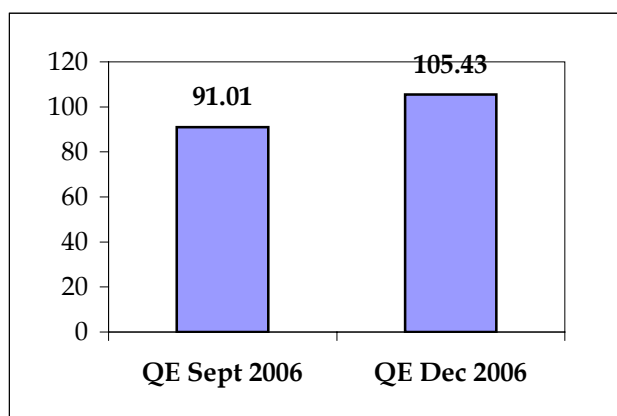
### Wireless Operator Market Share (QE Dec 2006)



## **(ii) GSM**

GSM industry recorded 15.84% growth during the quarter and reached subscriber base of 105.43 million at the end of December 2006.

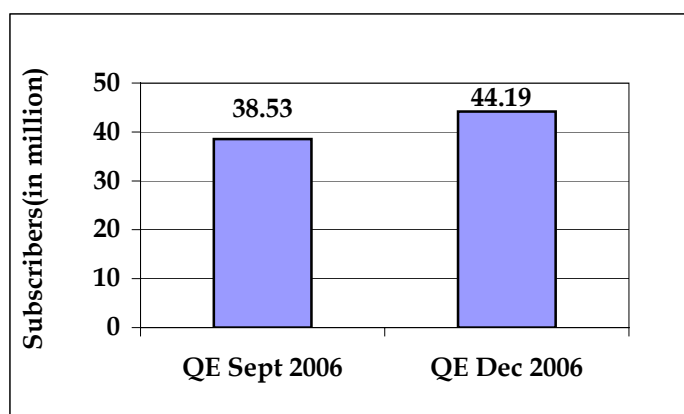
**GSM Subscribers Growth (in million)**



## **(iii) CDMA**

CDMA subscriber base recorded a growth of 14.69% during the quarter and reached subscriber base of 44.19 million at the end of December 2006.

**CDMA Subscriber Growth**



## **(v) Average Revenue Per User (ARPU), Minutes of Usage (MoU), etc.**

### **(a) GSM**

All India blended ARPU (per month) for the quarter ending December 2006 is Rs. 316/- as against Rs. 337/- for the quarter ending September-2006.

The lowest blended ARPU per month is in Circle B (Rs. 280/-) while the highest blended ARPU is in Metro (Rs. 393/-).

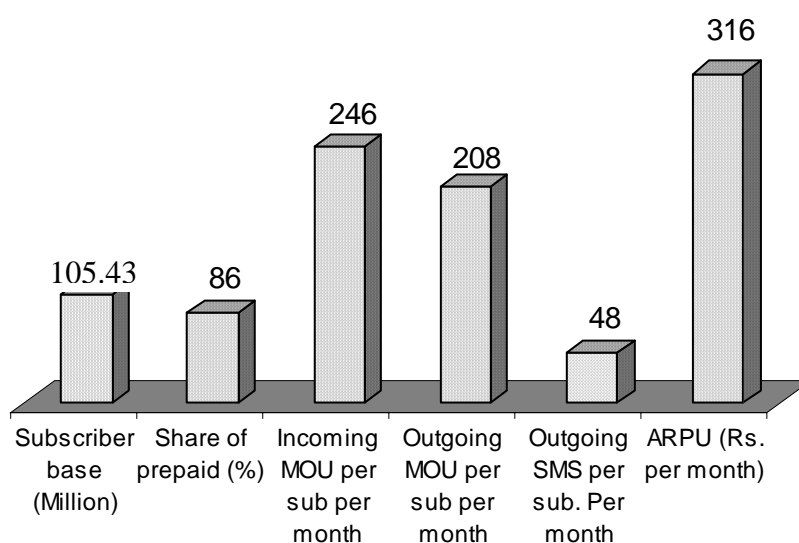
Monthly ARPU in postpaid segment is Rs. 632/- and for prepaid segment it is Rs. 262/-. The huge difference between postpaid and prepaid ARPU noted last



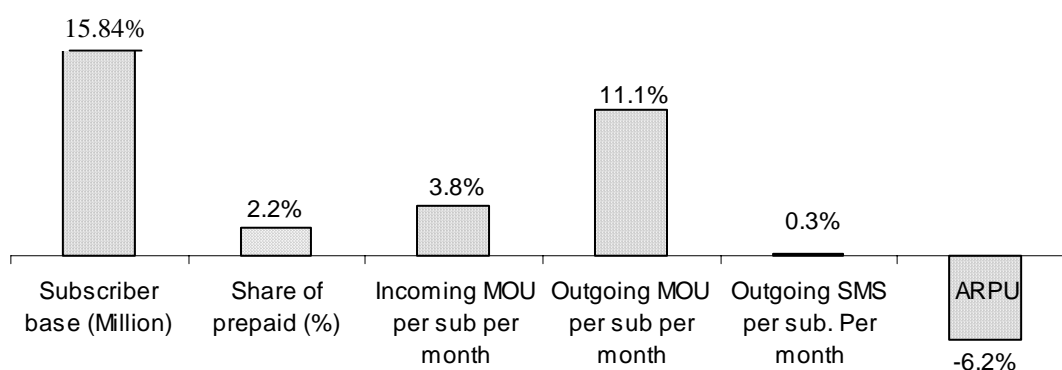
quarter continued to remain valid for this quarter as well. Postpaid ARPU has been 2.41 times that of prepaid ARPU. The gap is lowest in Circle B (1.93 times) and highest in Metro (2.70 times).

Average MOU per subscriber per month for the quarter is 454. On an average a GSM subscriber makes 208 minutes of outgoing calls, sends 48 SMS and receives incoming calls for 246 minutes in a month. The highest outgoing MOU is recorded for Circle B at 210 per subscriber per month and the lowest outgoing MOU is seen in Metro at 203 per subscriber per month. The ratio of incoming – outgoing traffic is 54:46 in the quarter ending December 2006.

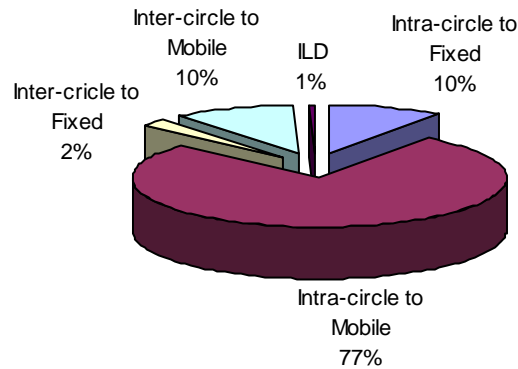
### Key Indicators for GSM (QE Dec 2006)



### Variation in Key Indicators over last quarter (in %)



## GSM Mobile Originated Traffic - distribution by terminating network



### (b) CDMA

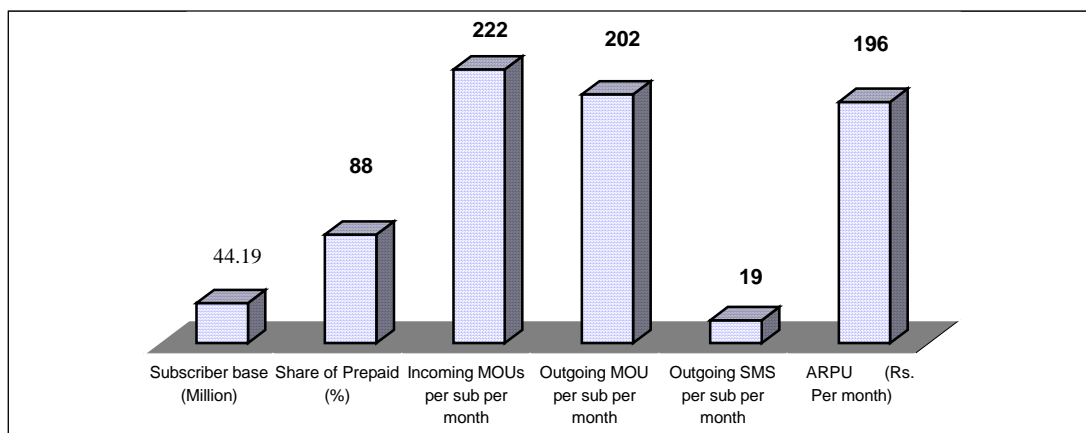
All India blended ARPU (per month) for the quarter ending December 2006 is Rs. 196/- as against Rs. 215/- for the quarter ending September-2006.

The lowest blended ARPU per month is in Circle B (Rs. 175/-) while the highest blended ARPU is in Metro (Rs. 241/-).

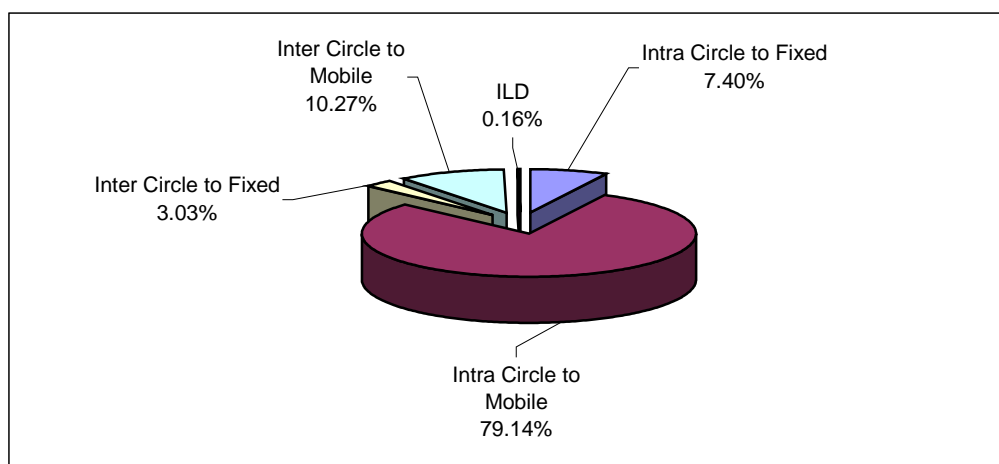
Monthly ARPU in postpaid segment is Rs. 456/- and for prepaid segment it is Rs. 159/-. The huge difference between postpaid and prepaid ARPU noted last quarter continued to remain valid for this quarter as well. Postpaid ARPU has been 2.87 times that of prepaid ARPU, which perhaps, could be attributed to declining importance of processing fee on recharge coupon/ voucher purchased by prepaid subscribers. The gap is lowest in Circle C (2.31) times and highest in Metro (3.03) times.

Average MOU per subscriber per month for the quarter is 424. On an average a CDMA subscriber makes 202 minutes of outgoing calls, sends 19 SMS and receives incoming calls for 222 minutes in a month. The highest outgoing MOU is recorded for Circle C at 240 per subscriber per month and the lowest outgoing MOU is seen in Circle A at 184 per subscriber per month. The ratio of incoming – outgoing traffic is 52:48 in the quarter ending December 2006.

### Key Indicators for CDMA



## CDMA Mobile originated Traffic – distribution by terminating network.

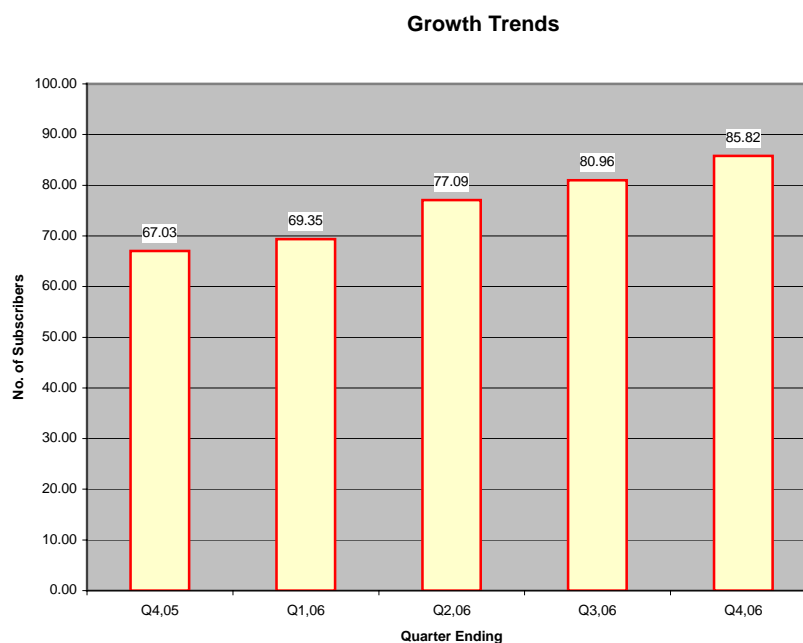


## C. Internet Services

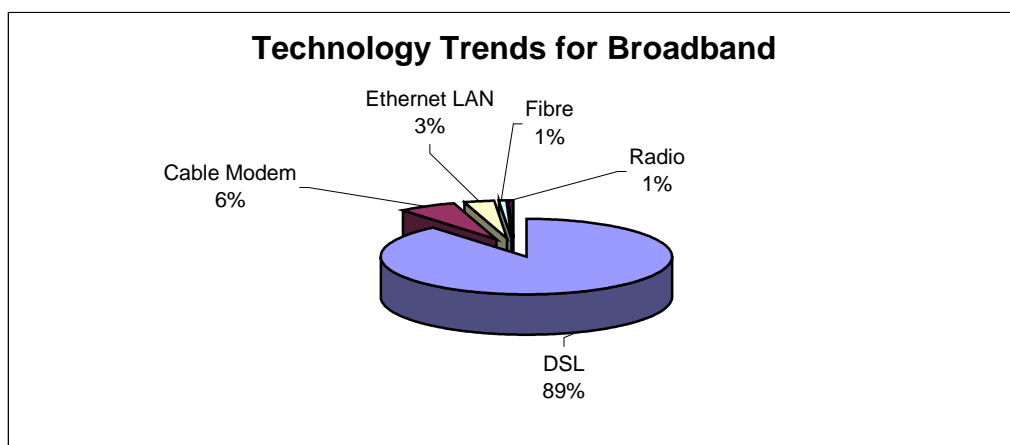
Internet subscribers stood at 85.82 lakhs for the quarter ending 31<sup>st</sup> Dec 2006 as compared to 80.96 lakhs during the preceding quarter registering an increase of 6.00%. The growth trend during the quarter is positive as compared with last quarter where it was 5.02%. The total Internet subscribers increased from 67.03 lakhs at the end of Dec 2005 to 85.82 lakhs at the end of Dec 2006 registering a growth of 28.03%.

The key indicators for Internet Services are presented below through bar charts.

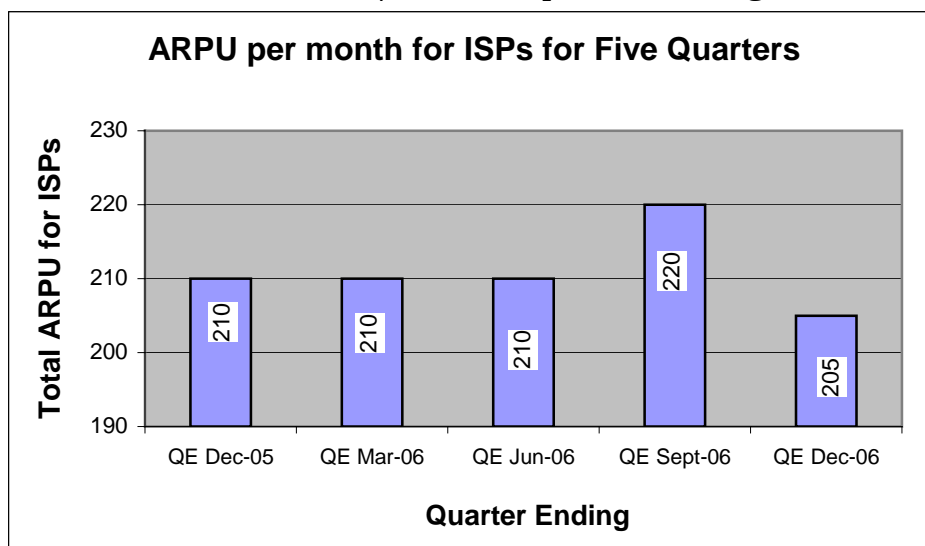
- i) **Internet Subscribers Growth** - There are 85.82 lakhs Internet Subscribers during quarter ending Dec 06.



- ii) **Broadband Subscriber Growth** - The number of Broadband subscribers as reported by ISPs was 20.54 Lakhs at the end of Dec 2006 as compared to 18.17 Lakhs at the end of Sept 2006, thus registering a growth of 13.04% over the previous quarter.
- iii) **Broadband Subscribers Share (Technology wise)** – The number of Broadband subscribers (with a download speed of 256 Kbps or more) was 20.54 Lakhs on 31st Dec'06. Out of these 1700053 are DSL based; 117846 Cable Modem; 63654 Ethernet LAN; 16833 Fibre and 10513 Radio customers.



- iv) **ARPU** – Average Revenue Per User per month for dialup Internet Subscribers is Rs. 205/- for the quarter ending Dec 06.



## D. Quality of Service

### QOS Performance during the year

#### (a) Basic Services

The performance of the Basic Service Providers has improved as compared to the previous quarter, in respect of parameters “Provision of Telephones (New connection after registration of demand), Faults incidences, Faults repaired by

next working day, Mean time to repair, Metering & Billing credibility and Customer Care Services related to Shifts, Closures & Additional Facilities”. However, the performance has deteriorated in this quarter, as compared to the previous quarter, in respect of “Call Completion Rate, Response time to the customer for assistance and Time taken for refunds of deposits”.

A comparison of performance of basic service providers in meeting the key benchmarks is given below:

Sl. No.	Parameter	Bench Marks	No. of operators not meeting the benchmarks	
			Sept, 2006	Dec, 2006
			Out of 73	Out of 79
1	Provision of Telephones after registration of demand	100% within 7 Days	93.15%	86.08%
2	Fault incidences per 100 subs/month	<5	43.84%	37.97%
3	Fault repaired by next working day	>90%	26.03%	22.78%
4	MTTR	<8Hrs	41.10%	34.18%
5	Metering & billing credibility - % of bills	<0.1%	21.92%	17.72%

#### (b) Cellular Mobile Service

133 licensees have reported their performance in QOS parameters in 23 circles during the quarter ended on 31st December 2006. 100% Cellular Mobile Service Providers have achieved the benchmark in respect of parameters Accumulated down time of community isolation, Call Set-up Success Rate, Call Drop Rate and %age of calls answered (electronically) within 20 sec. The performance relating to the parameters Service access delay, Blocked Call Rate, %age of connections with good voice quality, %age of call answered by operator (voice to voice) within 60 sec & within 90 sec and %age of complaints resolved within 4 weeks has improved in this quarter as compared to the previous quarter. However, the performance of the Service Providers has deteriorated in respect of performance relating to %age of calls answered (electronically) within 40 sec and Complaints per 100 bills issued.

The comparative statement of the key parameters is given in the following table:-

Sr. No.	Parameters	Bench-Marks	No. Of Operators Meeting The Benchmarks	
			QE Sept, 2006	QE Dec, 2006
			Out Of 129	Out Of 133
1	Accumulated down time of Community isolation	<24 hrs	97.67%	100.00%
2	Call Set-Up Success Rate (Within Licensee's Own network)	>95%	100.00%	100.00%
3	Service access delay	<15 Sec	96.12%	98.50%
4	Call drop rate	<3.0%	100.00%	100.00%
5	Complaints per 100 bills issued	<0.1%	93.02%	89.47%

**Quarterly Results at a Glance**  
**Performance Indicators of Telecom Services for QE December 2006**

**A. Growth of Wireline & Wireless Services:-**

	QE Dec 2005	QE Mar 2006	QE Jun 2006	QE Sept 2006	QE Dec 2006	%age growth over Dec 2005 (12 months)	%age growth over Mar2006 (9 months)	%age growth over Jun 2006 (6 months)	%age growth over Sept 2006 (3 months)
<b>1) Subscriber's Base (in millions)</b>									
i) Wireline	48.84#	50.18#	41.27*	40.48*	40.30*	-17.49	-19.69	-2.35	-0.44
ii) Wireless	75.94*	90.14*	112.15#	129.54#	149.62#	97.02	65.99	33.41	15.50
<b>Gross Total</b>	<b>124.78</b>	<b>140.32</b>	<b>153.42</b>	<b>170.02</b>	<b>189.92</b>	<b>52.20</b>	<b>35.35</b>	<b>23.79</b>	<b>11.70</b>
<b>2) Traffic (MOU) (minutes of use/ sub/month) (combined for GSM &amp; CDMA)</b>									
i) Mobile									
I. GSM	393	395	414	425	454	15.52	14.94	9.66	6.82
II. CDMA	462	550	443	413	424	-8.23	-22.91	-4.29	2.66
<b>3) ARPU (Rs./sub/ month) (combined for GSM &amp; CDMA)</b>									
i) Mobile									
I. GSM	362	366	352	337	316	-12.71	-13.66	-10.23	-6.23
II. CDMA	256	256	228	215	196	-23.44	-23.44	-14.04	-8.84
<b>4) Teledensity</b>									
Population in million (Estimated)	1092	1096	1099	1103	1107				
i) Wireline	4.47	4.58	3.76	3.67	3.64	-18.60	-20.49	-3.06	-0.80
ii) Wireless	6.95	8.22	10.20	11.74	13.52	94.35	64.34	32.45	15.08
<b>Gross Total</b>	<b>11.43</b>	<b>12.80</b>	<b>13.96</b>	<b>15.41</b>	<b>17.16</b>	<b>50.14</b>	<b>34.00</b>	<b>22.90</b>	<b>11.30</b>

# including WLL (F) and \* excluding WLL (F)

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

	QE Dec 2005	QE Mar 2006	QE Jun 2006	QE Sept 2006	QE Dec 2006	%age growth over Dec 2005 (12 months)	%age growth over Mar2006 (9 months)	%age growth over Jun 2006 (6 months)	%age growth over Sept 2006 (3 months)
<b>1) Subscriber's Base (in million)</b>									
i) Internet	6.70	6.94	7.71	8.10	8.58	28.06	23.63	11.30	5.98
ii) <b>Broadband Connections</b> (>=256 Kbps download speed)	0.903	1.348	1.567	1.817	2.054	127.46	52.37	31.08	13.04
<b>2) Minutes of Use (Dialup Internet) (MOU/ subs/month)</b>									
	189	175	190	185	190	0.53	8.57	0.00	2.70
<b>3) ARPU (Dialup Internet) (Rs/ subs/ month)</b>									
	210	210	210	220	205	-2.38	-2.38	-2.38	-6.82

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

**(I) Wireline Subscribers Base(in Million)**

<b>I) Basic Service Providers</b>	<b>QE Dec 2005#</b>	<b>QE Mar 2006 #</b>	<b>QE Jun 2006*</b>	<b>QE Sept 2006*</b>	<b>QE Dec 2006*</b>	<b>%age growth over Dec 2005 (12 months)</b>	<b>%age growth over Mar2006 (9 months)</b>	<b>%age growth over Jun 2006 (6 months)</b>	<b>%age growth over Sept 2006 (3 months)</b>
BSNL	36.76	37.51	34.94	33.97	33.58	-8.65	-10.48	-3.89	-1.15
MTNL	3.86	3.87	3.80	3.71	3.69	-4.40	-4.65	-2.89	-0.54
Tata/Hughes	4.04	4.02	0.42	0.46	0.48	-88.12	-88.06	14.29	4.35
Bharti	1.20	1.35	1.48	1.63	1.74	45.00	28.89	17.57	6.75
Reliance	2.57	2.99	0.30	0.39	0.49	-80.93	-83.63	63.33	25.64
HFCL	0.24	0.26	0.18	0.17	0.17	-29.17	-34.62	-5.56	0.00
Shyam	0.17	0.17	0.15	0.15	0.15	-11.76	-13.79	0.00	0.00
<b>Total</b>	<b>48.84</b>	<b>50.18</b>	<b>41.27</b>	<b>40.48</b>	<b>40.30</b>	<b>-17.49</b>	<b>-19.69</b>	<b>-2.35</b>	<b>-0.44</b>

# including WLL (F) and \* excluding WLL (F)

**(II) Wireless Subscriber Base (in Million)**

<b>Service Providers</b>	<b>QE Dec 2005#</b>	<b>QE Mar 2006 #</b>	<b>QE Jun 2006*</b>	<b>QE Sept 2006*</b>	<b>QE Dec 2006*</b>	<b>%age growth over Dec 2005 (12 months)</b>	<b>%age growth over Mar2006 (9 months)</b>	<b>%age growth over Jun 2006 (6 months)</b>	<b>%age growth over Sept 2006 (3 months)</b>
Reliance	14.68	17.31	22.52	25.98	29.98	104.25	73.22	33.14	15.41
Bharti	16.33	19.58	23.09	27.06	31.97	95.80	63.30	38.48	18.16
BSNL	14.83	17.65	21.02	23.70	26.60	79.37	50.71	26.55	12.24
Hutch	11.41	15.36	17.54	20.36	23.31	104.29	51.76	32.90	14.49
Idea	6.47	7.37	8.54	10.36	12.44	92.27	68.79	45.67	20.08
BPL Group	2.89	1.34	1.30	1.05	1.06	-63.32	-20.90	-18.46	0.95
Aircel	2.28	2.61	3.20	3.80	4.51	97.81	72.80	40.94	18.68
Spice	1.63	1.93	2.05	2.20	2.45	50.31	26.94	19.51	11.36
Tata/Hughes	3.68	4.85	10.36	12.38	14.45	292.66	197.94	39.48	16.72
MTNL	1.65	2.05	2.31	2.43	2.60	57.58	26.83	12.55	7.00
HFCL	0.06	0.06	0.15	0.15	0.15	150.00	150.00	0.00	0.00
Shyam	0.03	0.03	0.06	0.08	0.09	200.00	200.00	50.00	12.50
<b>Total</b>	<b>75.94</b>	<b>90.14</b>	<b>112.15</b>	<b>129.54</b>	<b>149.62</b>	<b>97.02</b>	<b>65.98</b>	<b>33.41</b>	<b>15.50</b>

# including WLL (F) and \* excluding WLL (F)

## Chapter One

### PERFORMANCE OF WIRELINE SERVICES

#### 1.1 Subscribers Base: -

1.1.1 The Wireline services were provided by 5 licensed private operators in addition to incumbents BSNL and MTNL as on 31<sup>st</sup> December 2006. List of Wireline Service providers along with their areas of operation is given in Table 1 below:

**Table 1**

Sl. No.	Name of the Service Provider	Area of Operation
1	BSNL	All India except Delhi & Mumbai
2	MTNL	Delhi & Mumbai
3	Bharti Airtel Ltd	AP, MP, Delhi, Haryana, TN , 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 Communications Ltd.	AP, Bihar, Delhi, Gujarat, Haryana, HP, Karnataka, Kerala, MP, Maharashtra, Mumbai Orissa, Punjab, Rajasthan, TN, Chennai, UP (E), UP (W), West Bengal, Kolkata

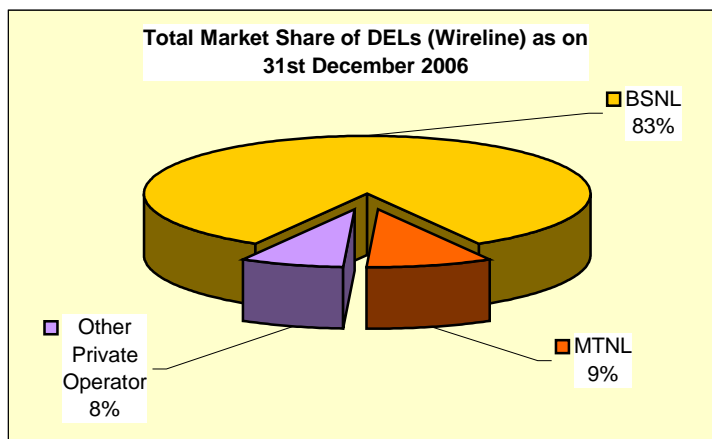
#### 1.1.2 Market Share of DELs.

The total subscriber base of Wireline stood at 40.3 million as on 31<sup>st</sup> December 2006. The incumbents BSNL and MTNL have 83% and 9% market share respectively in the subscriber base, while all the five private operators together have 8% share. In the current quarter the wireline market share of private operators increased by 1% and that of BSNL decreased by 1%, as compare to

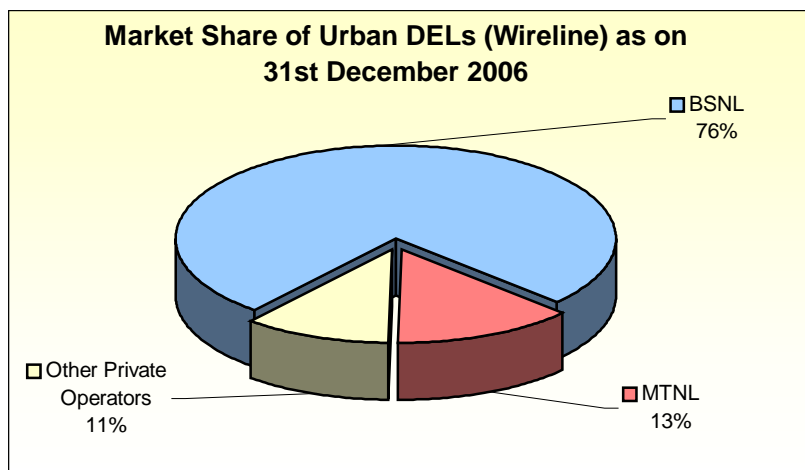


previous quarter wireline market share. As on 31<sup>st</sup> December 2006 the total Urban DELs are 27.84 million and Rural DELs are 12.46 million. The market share of Wireline Service Providers in Urban DELs and Rural DELs is depicted in the charts below:

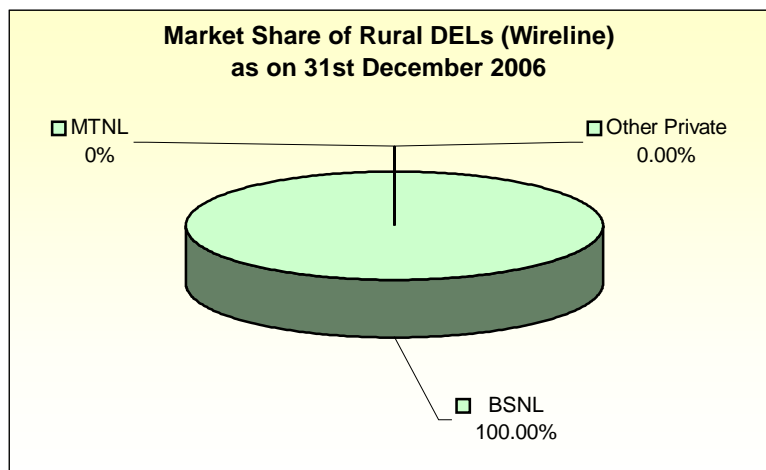
**A. Distribution of Market share of Urban + Rural Wireline subscriber**



**B. Distribution of Market share of Urban Wireline subscriber**

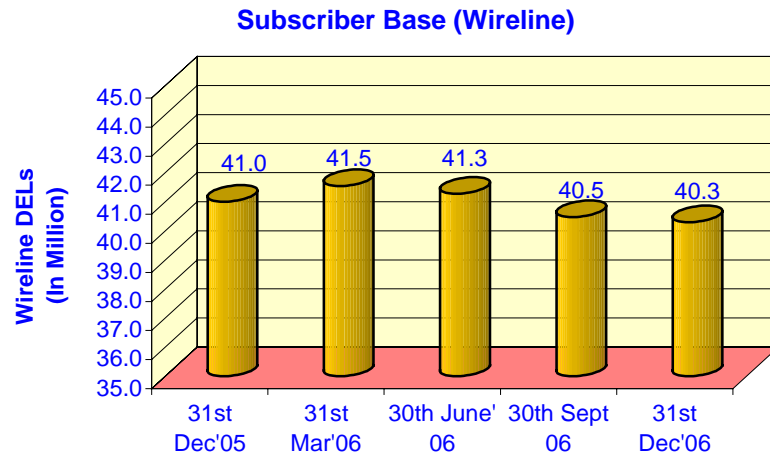


**C. Distribution of Market share of Rural Wireline subscriber**



### 1.1.3 Subscriber Base of Wireline for last five quarters

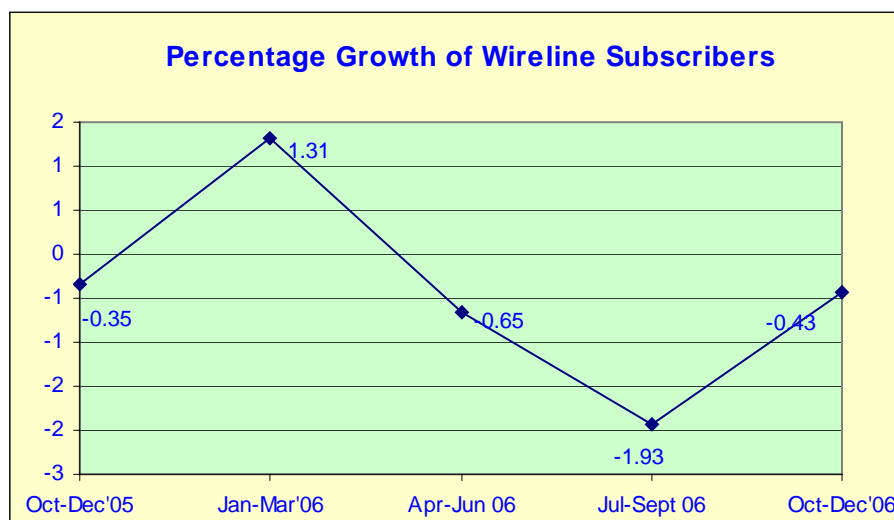
The subscriber base of the Wireline service sector for last five quarters is depicted below:



### 1.1.4 Growth of DELs

The Wireline Service sector has registered a decrease of 1,75,450 lines during the quarter from September'2006 to December'2006. The net number of DELs has decreased to 40.301 million from 40.477 million as on 31<sup>st</sup> December 2006. The overall percentage of decrease in subscriber base during the Quarter is 0.43%.

The reduction in the subscriber base of Wireline is mainly by the following operators. BSNL from 33.965 million to 33.577 million (3,88,825), MTNL from 3.716 million to 3.696 million, a decrease of 0.0199, HFCL Infotel Ltd. from 0.174 million to 0.173 million & Shyam Telelink Ltd from 0.1518 million to 0.1512 million. On the other hand some of the Service Providers such as M/s Bharti Airtel Ltd., Tata Teleservices Ltd. (TTL) and Reliance Communications Ltd. (RCL) have increased its Wireline subscriber base.

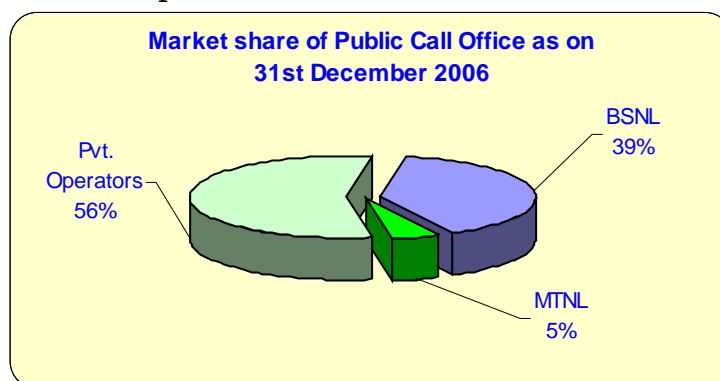


## 1.2 Other Performance Indicators: -

### 1.2.1 Public Call Offices:

During the current quarter 0.183 million new PCOs have been added. Total number of PCOs in the country as on 31st December 2006 is 5.302 million. The share of BSNL in this is 2.092 million i.e. 39% of the total PCOs. The share of MTNL and other private operators combined is 0.261 million (5%) and 2.948 million (56%) respectively.

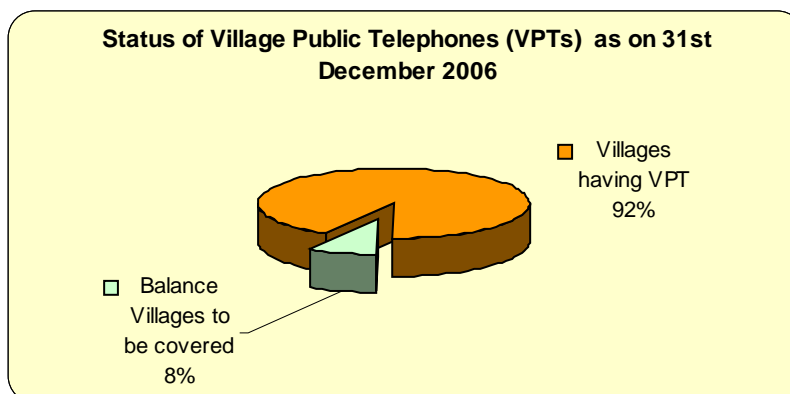
Operator-wise (BSNL/MTNL/Other Private Operators) market share of PCO is depicted in the chart below. Operator-wise details of PCOs is available at Table 1.2



### 1.2.2 Village Public Telephones (VPT):

There are 6,07,491 villages in India. During the previous quarter ending 30th September 2006 there were 5,52,309 VPTs in the country whereas by the end of this quarter i.e. 31st December 2006, the total number of VPTs has increased to 5,59,355. Thus 7046 VPTs have been added during the current quarter. BSNL has added 7091 VPTs during the quarter. Among the five private operators there was a decrease of 45 VPTs during this quarter. The total number of villages left uncovered, as on 31st December 2006 are 48,136. The status of VPT's is depicted in the chart below:-

Circle-wise and Operator-wise details of village public telephones as on 31st December 2006 and achievement during the quarter are available at Table 1.3.



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## Chapter Two

### PERFORMANCE OF WIRELESS SERVICES

Subscriber Base Growth touches 149.62 million

#### PART A:

**2.1 Details of service providers:** - The list of all the Wireless service providers along with their licensed service area is as under: -

#### 2.2

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 NE
3	Aircel Group	All India (23)		All India except Chennai & TN
4	Reliance Group	All India (23)		All India except NE & AS
	Reliance Infocomm	All India (except Assam & NE) (21)	Assam & NE	All India except NE & AS
	Reliance Telecom	MP, WB, HP, Bihar, Orissa, Assam & NE (7)	Delhi, Mumbai, Chennai, Kolkata, MH, Gujarat, AP, KTK, TN, Kerala, PB, Haryana, UP (W), UP (E), Rajasthan & J&K	
	Reliable Internet Services Ltd	Kolkata (1)	All India except Kolkata	
5	Hutch	All India (except MP) (22)	MP	UP-W, WB, HP, Bihar, Orissa, Assam, NE, J&K
6	Tata Teleservices	All India (except AS, NE & J&K) (20)	AS, NE & J&K	All India except (AS, NE & J&K)
7	IDEA	Delhi, Mumbai, MH, Guj, AP, KR, HR, UP-W, UP-E, Raj, MP, HP & Bihar (13)	Chennai, Kolkata, KTK, TN, Punjab, WB, Orissa, Assam, NE & J&K	Mumbai, Bihar
8	Spice Communications	KTK, Punjab (2)	All India except (KTK, Punjab)	KTK, Punjab
9	BPL	Mumbai (1)	All India except (Mumbai)	--
10	HFCL	Punjab (1)	All India except Punjab	Punjab
11	Shyam Telelink	Rajasthan (1)	All India except Rajasthan	Rajasthan

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

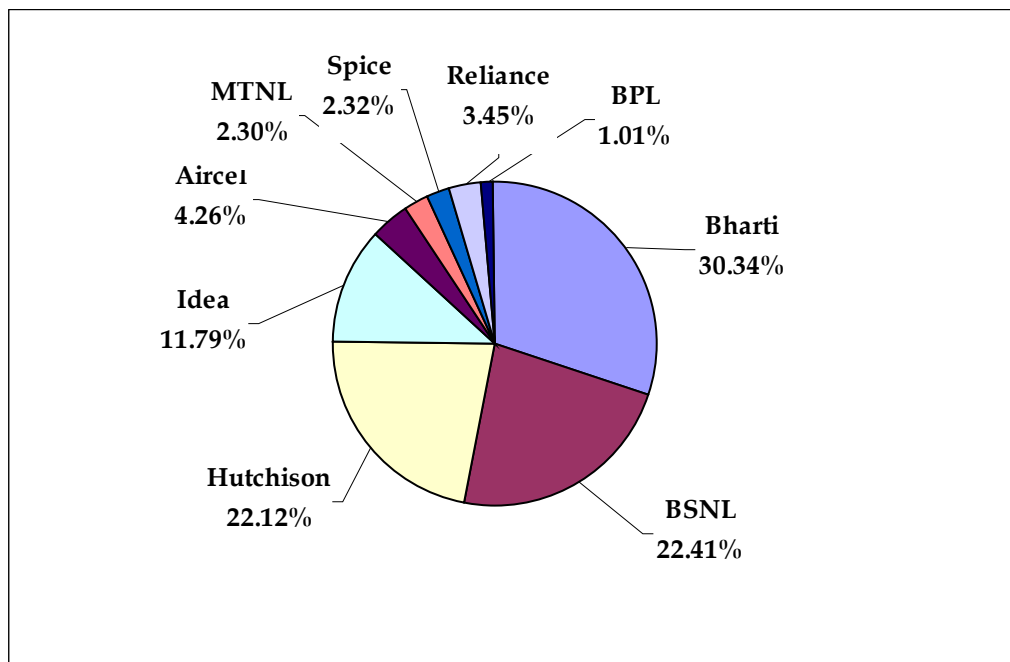
Circle-wise details of Cellular, Wireline & Unified Access Service providers at the end of the quarter are given at Annex 2.1. All the service areas of the country have Wireless operators ranging from 4 to 7.

## 2.2 Growth of Subscribers Base: -

### 2.2.1 GSM sector

- The GSM subscribers' base has reached 105.43 million in the quarter ending December 2006 as against 91.01 million at the end of the previous quarter registering a growth rate of 15.84%.
- The subscriber base of Bharti, BSNL, Hutch & Idea is more than 86% of the total GSM subscribers base.
- Private operators have 75% subscribers whereas Public sector Operators (BSNL & MTNL) have 25% subscribers in the GSM segment. It is mentioned that number of PSU licensee are 23 where are number of operational private operator licensee are 70. Department of Telecommunications has issued 22 new licensee to private operators in Dec, 06 and these new licenses have not commenced their services till now.

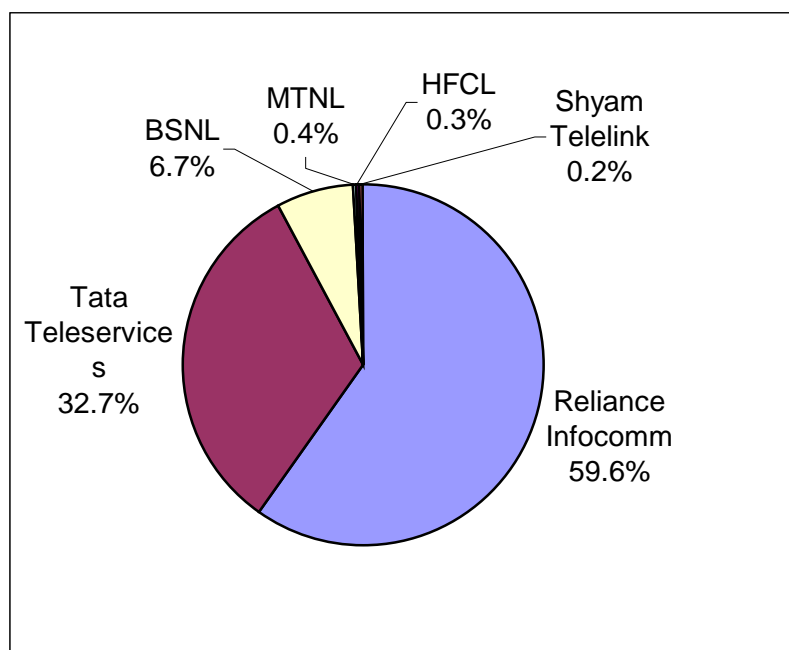
### Operator-wise Market Share of GSM service providers as on 31.12.06



### 2.2.2 CDMA sector

- CDMA subscriber base recorded a growth of 14.69% during the quarter and reached subscriber base of 44.19 million.
- M/s Reliance Infocomm continued to have the highest subscriber base with 60% market share followed by M/s TTSL with 33% market share, while other players in CDMA Technology have the remaining 7%.
- Maharashtra circle has registered the highest number of additional subscribers (5.70 lakhs) during the quarter end December 2006
- Only BSNL in Kolkata has registered a negative subscriber growth.

#### Operator-wise Market Share of CDMA Wireless as on 31.12.06



### 2.2.3 Subscribers Base

As on 31.12.2006, total Wireless (Mobile and WLL (F)) Market has reached the 149.62 million subscribers mark as against 129.54 million subscribers in the previous quarter.

### 2.2.4 Addition in Subscribers Base

During this quarter 20.08 million subscribers were added. Thus recording a growth of 15.50%. The total wireless subscriber base has grown from 75.94 million in December 2005 to 149.62 million in December 2006.

### 2.2.5 Company wise Market Share

a) The Subscriber Base of different wireless operators is given in Table 2.1

The top six Wireless operators on the basis of market share are : -

<b>SLNO</b>	<b>Operator (With number of Circle)</b>	<b>Subscribers Base as on Qtr Ending Dec 06</b>	<b>Market Share as on Quarter Ending Dec 06</b>	<b>Subscribers Base as on Quarter Ending Sept 06</b>	<b>Market Share as on Qtr Ending Sept 06</b>
1	Bharti (23)	31.97 million	21.37%	27.06	20.89%
2	Reliance (23)	29.98 million	20.04%	25.98	20.06%
3	BSNL (21)	26.6 million	17.78%	23.7	18.30%
4	Hutch (16)	23.31 million	15.58%	20.36	15.72%
5	TTSL	14.45 million	9.66%	12.38	9.56%
6	Idea	12.44 million	8.31%	10.36	8.00%
7	Others	10.87 million	7.27%	9.71	7.47%

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 Wireless services as on December 2006 among Metros, Circles A to C is given in Table 2.3.

## PART B : ARPU and MoU

### 2.3 GSM

#### 2.3.1 Average Revenue Per User (ARPU)

- The all India blended ARPU per month has declined by 6.2% from Rs. 337/- in the quarter ending Sept-06 to Rs. 316/- in the quarter ending Dec-06.
- ARPU for postpaid service has declined by 1.7% from Rs. 643/- in Sep-06 to Rs. 632/- in Dec-06. Prepaid ARPU declined by 5.3% from Rs.277/- in Sept-06 to Rs.262/- in Dec-06.
- According to the revenue reports by the service providers, revenue, net of “pass through”, is about Rs. 9260 Crores in the quarter ending Dec-06 as against Rs. 8491 Crores in the Sept-06 quarter. Growth in revenue has been 9% as against 10% in the previous quarter.

ARPU (Rs. per month during the quarter)

Circle	Postpaid	Prepaid	Blended ARPU
Circle A	638	251	306
Circle B	495	256	280
Circle C	550	289	326
<b>Metro</b>	755	280	393
All India	<b>632</b>	<b>262</b>	<b>316</b>
<b>All private SPs</b>	671	254	314
<b>BSNL/MTNL</b>	528	286	324

#### 2.3.2 Usage Pattern

- MOU per subscriber increased by 7% from 425 in quarter ending Sept-06 to 454 in quarter ending Dec-06. Outgoing MOUs continued to grow at 11.06% higher rate than incoming MOUs (3.82%).
- In Postpaid, total MOUs increased by 12.02% from 868 in Sept-06 to 972 in Dec-06. Corresponding increase in prepaid has been 8.5%, from 337 to 365.
- The continuing growth of outgoing MOUs has resulted in the proportion of outgoing minutes in total usage strengthening from 44% in Sept-06 to 46% in Dec-06. For postpaid, ratio of incoming-outgoing minutes is 52:48 and for prepaid segment, it is 55:45.

The related data may be referred in Annex. 2.2.

#### 2.3.3 Average Subscriber outgo (rental + call charges) per minute

The tariff plans are of bundled nature and the trade-off is generally between monthly Fixed charges and Variable (call) charges. Annex 2.4 indicates the average outgo per outgoing minute i.e. Rental revenue + Airtime revenue per outgoing minute. This parameter can also be viewed as an indicator of average tariff per minute prevailing in the market from the subscribers' perspective.



The All India Average Subscriber Outgo per month declined from Rs. 1.45/- in September 2006 to Rs. 1.26/- in December 2006

## 2.4 CDMA

### 2.4.1 ARPU

- All India blended ARPU (per month) for the quarter ending December 2006 is Rs. 196/- as against Rs. 215/- for the quarter ending September-2006.
- The lowest blended ARPU per month is in Circle B (Rs. 175/-) while the highest blended ARPU is in Metro (Rs. 241/-).
- Monthly ARPU in postpaid segment is Rs.456/- and for prepaid segment it is Rs.159/-.
- The huge difference between postpaid and prepaid ARPU noted in last quarter continued to remain valid for this quarter as well. Postpaid ARPU has been 2.87 times that of prepaid ARPU, which perhaps, could be attributed to declining importance of processing fee on recharge coupon/ voucher purchased by prepaid subscribers. The gap is lowest in Circle C (2.31) times and highest in Metro (3.03) times.

#### ARPU (Rs. per month during the quarter) - CDMA

Circle	Postpaid	Prepaid	Blended ARPU
Circle A	426	148	183
Circle B	387	153	175
Circle C	427	185	196
Metro	539	178	241
<b>All India</b>	<b>456</b>	<b>159</b>	<b>196</b>

### 2.4.2 Usage Pattern

- Average MOU per subscriber per month for the quarter is 424.
- On an average a CDMA subscriber makes 202 minutes of outgoing calls, sends 19 SMS and receives incoming calls for 222 minutes in a month. The highest outgoing MOU is recorded for Circle C at 240 per subscriber per month and the lowest outgoing MOU is seen in Circle A at 184 per subscriber per month.
- The ratio of incoming – outgoing traffic is 52:48 in the quarter ending December 2006.
- Metro has recorded lowest per subscriber usage for both outgoing and incoming calls at 411 minutes per month.
- For Outgoing calls, circle A at 184 minutes per month has recorded the lowest per subscriber usage.
- For Incoming calls, circle B at 209 minutes per month has recorded the Lowest per subscriber usage.
- The highest number of SMS per subscriber is recorded in Circle A (23 per subscriber per month), and lowest in Circle C (9).

The related data may be referred in Annex. 2.3.

### **2.4.3 Average Subscriber Outgo (rental + call charges) Per Minute**

Average Subscriber Outgo per minute (Rental Revenue + Airtime Revenue per outgoing minute) is given in Annex. 2.4.

The All India Average Subscriber Outgo per minute has declined from Rs. 1.05/- in September 06 to Rs. 0.86/- in December 06.

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## Chapter Three

### PERFORMANCE OF INTERNET SERVICES

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

Total 85.82 lakhs Internet subscribers were reported in quarter ending December 2006, indicating a growth rate of 6.00% over last quarter.

Bharat Sanchar Nigam Ltd (BSNL) has retained its top position and reported a subscriber base of 38.12 Lakhs Internet subscribers against 35.49 Lakhs during the last quarter. Mahanagar Telephone Nigam Limited (MTNL) has retained second position with a subscriber's base of 16.58 Lakhs. M/s Sify Limited is third with subscriber base of 8.06 lakhs. (Ref. Table 3.1).

#### 3.2 Internet Telephony: -

Department of Telecom (DOT) has granted permission to 128 ISPs to offer Internet Telephony services. As per the reports submitted to TRAI, 27 ISPs are offering Internet Telephony services, the list of which is enclosed at Annex 3.2. Total minutes of the use (MoU) for Internet Telephony during the quarter were 88.80 million.

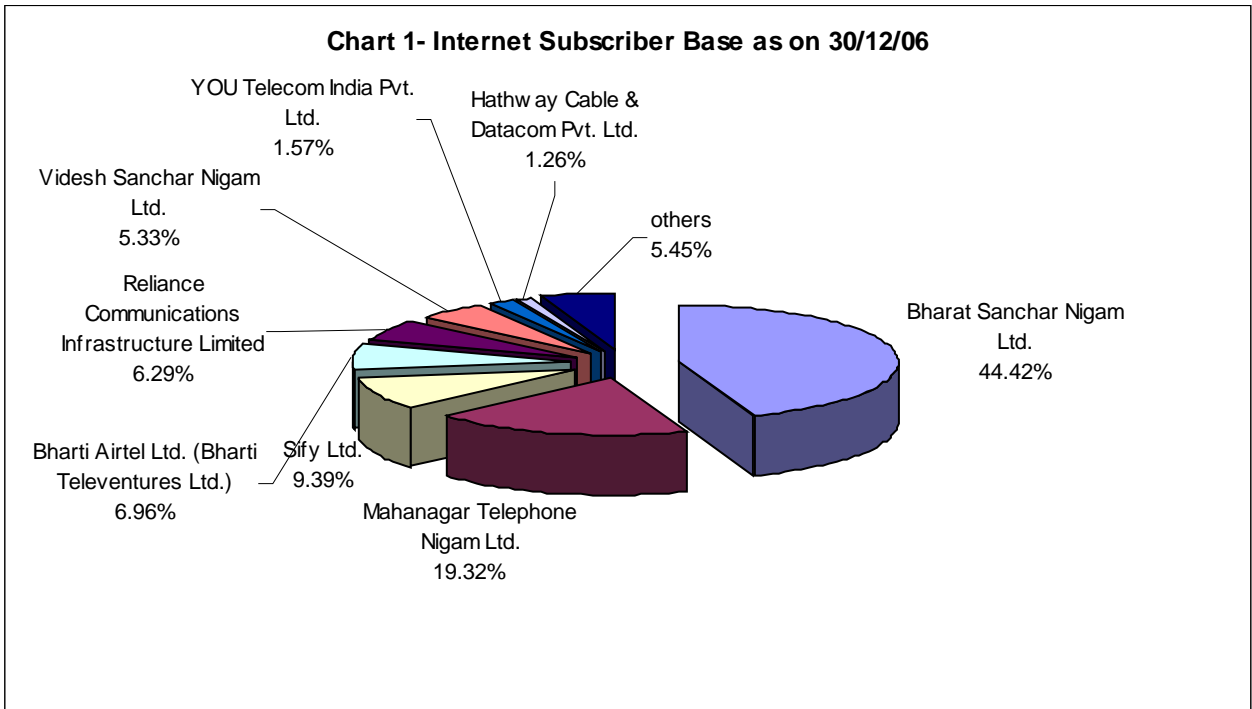
#### 3.3 Market Share: -

The growth trend indicates good market share of PSU owned ISPs. During the quarter PSU owned ISPs have captured 63.74% market share.

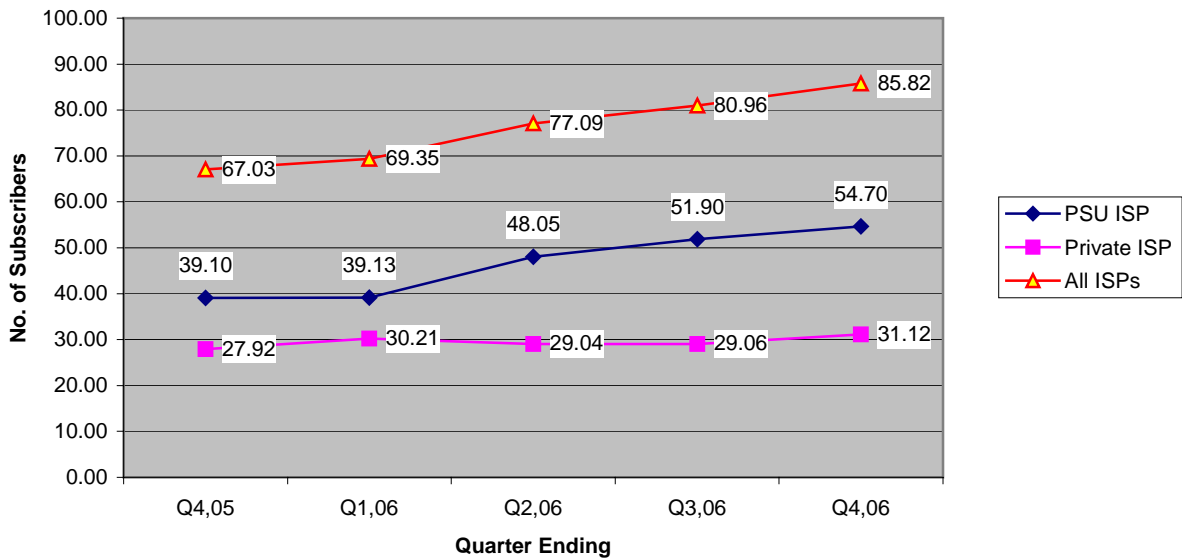
The market share of top 5 ISPs is as under:

ISP	Share in %
Bharat Sanchar Nigam Ltd.	44.42
Mahanagar Telephone Nigam Ltd.	19.32
Sify Ltd.	9.39
Bharti Airtel Ltd. (Bharti Televentures Ltd.)	6.96
Reliance Communications Infrastructure Limited	6.29

Among PSU owned ISPs; M/s BSNL has shown steady increase in the subscriber base and holding 44.42% of total subscriber base. MTNL is at second position and having a market share of 19.32%.



**Chart 2 - Growth Trends**



### 3.4 Leased Lines Connectivity:

The Internet leased line customer base as reported by ISPs stood at 18058 for the quarter ending December 2006 compared to 18876 of September'06 registering a decrease of 4.33%.

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

The number of Broadband subscribers (with a download speed of 256 Kbps or more) was 20.54 Lakhs on 31st Dec'06. Out of these 1700053 are DSL based; 117846

Cable Modem; 63654 Ethernet LAN; 16833 Fibre and 10513 Radio customers. The growth rate of broadband subscribers in this quarter is 13.04% while in the previous quarter it was of the order of 15.95%.

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

For dialup access minutes of usage (MoU) per subscriber/month were approximately 190 minutes as against 185 minutes at the end of previous quarter registering an increase of 2.7 %.

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

The average revenue per user (ARPU) per month for dialup Internet subscribers was Rs. 205/- for the quarter ending Dec '06.

### **3.8 International connectivity:**

The bandwidth owned by various IGSP for their ISP operations and Internet Leased lines is reported to be 14 GB for down-linking and 13 GB for up-linking.

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## Chapter Four

### PERFORMANCE OF VALUE ADDED SERVICES

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

- The subscriber base of PMRTS increased from 30189 in Sept. 2006 to 30670 in December 2006 registering a growth rate of 1.59%.
- Delhi, Bangalore, Mumbai and Chennai together account for **72.05%** of market share of the total subscribers. Delhi leads the tally with the market share of 9114 subscribers followed by Bangalore, Mumbai and Chennai with the market share of 6075, 4121 and 2789 subscribers respectively.
- Arvind Mills Limited leads the tally of subscribers with a subscriber base of 9234 followed by Procall and Quick Calls India Pvt. Ltd. with a subscriber base of 8273 and 4224 respectively. Out of the 12 PMRTS operators only 5 have registered a positive growth rate namely M/s Aryadoot Transport Pvt. Ltd., Jet Aiu Skyline Transport, United Liner, Arvind Mills Ltd. and India Satcom. M/s India Satcom Ltd. has registered the highest growth rate of 15.13% in this quarter whereas M/s Arya Offshore Services, German Express Shipping Agency, Procall Ltd., Smartalk, Quick Call and Bhilwara Telenet Services have registered a negative growth rate 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 8 VSAT Service Providers. Out of 8 only one namely, M/s Essel Shyam have not submitted their performance report in this quarter.
- In the present quarter, there was an addition of 3156 new subscribers. The total number of subscribers increased from 55070 in Sept 2006 to 58226 in December, 2006, registering a growth of 5.73% as against the growth rate of 4.42% in quarter ended September, 2006.
- M/s HCL Comnet remained the market leader with 19376 VSAT subscribers followed by Hughes Escorts Communications Ltd. (HECL) with 19077, Bharti Tele-ventures with 8518 and M/s Bharti Broadband Limited with 4803 VSAT subscribers respectively.
- DoT vide Letter no. 815-80-2007-DS dated 1.3.2007 have informed that the commercial CUG/VSAT license no.815-80/2001-LR dated 27.02.2003 has been transferred from M/s Tata Services Limited to Tatanet Services Limited.
- M/s Tatanet Services Limited added the maximum number of new connections, i.e. 801 with a percentage growth rate of 26.11%.
- M/s GNFC is having a negative growth rate of 9.09% in this quarter.

The number of subscribers of each service providers along with the Market Share in terms of Percentage of Subscribers as on 31<sup>st</sup> December 2006 is given in Table 4.2.

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## Chapter Five

### QUALITY OF SERVICE (QOS) PERFORMANCE

#### 5.1 Quality of Service performance of Basic Service Operators : -

Based on Quality of Service Parameters reported by all the Basic Service Operators for the quarter ending December 2006, the information on QoS performance is attached to this report as Annex 5.1.

The analysis of data indicates following trends : -

Sr. No.	Parameters	Benchmark	No. of operators not meeting the benchmarks			
			Sept, 2006		Dec, 2006	
			Out of 73 In Nos.	Out of 73 In %	Out of 79 In Nos.	Out of 79 In %
1	<b>Provision of Telephones after registration of demand</b>	100% within 7 Days	68	93.15%	68	86.08%
<p><b>Key Findings</b> - Only Ten Licensees namely BSNL-(Chhattisgarh, TN, A&amp; N, UP – W), Tata – (Bihar, TN, Punjab, Kerala, Kolkatta) and Bharti – (Gujarat) have met the benchmark, however M/s BSNL (Bihar) have not reported their performance for this parameter. The achievement level for the Licensees who have not met the benchmark for this parameter ranges from 0.00% to 99.73%. The performance of the licensees namely BSNL – (Assam, West Bengal), Reliance (Bihar, Delhi, MP, Raj, HR, MH, KTK, Chennai, HP, Mumbai, Orissa, WB) and Tata (HR,) is poor and below 50.00% against the benchmark of 100%.The performance of Reliance (Bihar , HP) and TATA ( HR) is extremely poor with achievement level 0.0%.</p>						
2	<b>Fault incidences per 100 subs/month</b>	<5	32	43.84%	30	37.97%
<p><b>Key Findings</b> - 43 Licensees have met the benchmark for this parameter. M/s BSNL (Bihar), Reliance (HR, HP, OR, UP-W &amp; WB) have not submitted their performance in this quarter. The achievement level for the Licensees who have not met the benchmark for this parameter ranges from 5.10 to 11.72. The performance of the licensees namely MTNL (Delhi) is poor and above 10.00 against the benchmark of &lt;5.00 faults incidences per 100 subs/month.</p>						
3	<b>Fault repaired by next working day</b>	>90%	19	26.03%	18	22.78%
<p><b>Key Findings</b> - 54 Licensees have met the benchmark for this parameter. The achievement level for the Licensees who have not met the benchmark for this parameter ranges from 51.13% to 89.00%.</p>						
4	<b>MTTR</b>	<8Hrs	30	41.10%	27	34.18%
<p><b>Key Findings</b> - 39 Licensees have met the benchmark for this parameter. The achievement level for the Licensees who have not met the benchmark for this parameter ranges from 8.10 hrs to 30.40 hrs. M/s Reliance (06 Circles), Tata (06 Circles) and BSNL (01 Circle) have not submitted their performance for this parameter in this quarter. The performance of the licensees namely BSNL (AP, Punjab, KTK, Assam, Jharkhand, NE-I &amp; II, WB) and MTNL (Mumbai) is poor and above 12.00 hrs against the benchmark of &lt;8.00 hrs.</p>						

Sr. No.	Parameters	Benchmark	No. of operators not meeting the benchmarks			
			Sept, 2006		Dec, 2006	
			Out of 73 In Nos.	Out of 73 In %	Out of 79 In Nos.	Out of 79 In %
5	<b>Grade of Service (Junction between local exchange)</b>	2/1000	20	27.40%	25	31.65%
<p><b>Key Findings</b> – The Grade of Service is not being reported by BSNL stating that they have about 40,000 switches and measurement of GOS for each junction between exchanges would result in very huge data to be compiled. Some of the operators namely Tata – (Delhi, Gujarat, TN), Bharti – (AP, HR) and Reliance – (Delhi, Kolkatta, Mumbai, UP-E) have reported GOS as 0.00% which indicates that there is no congestion in their networks. Further it is noted that the operators where the GoS has been reported as 0.00% are having CCR below the benchmark. In view of the veracity of the data there is no concrete key finding.</p>						
6	<b>Call Completion Rate (in local network)</b>	>55%	19	26.03%	39	49.37%
<p><b>Key Findings</b> –The 32 licensees have met the benchmark for this parameter. M/s BSNL (Bihar), Tata (Bihar, PB, HR, Kerala, Kolkatta), Shyam (RAJ) and Reliance (WB) have not provided their data for this parameter in this quarter. The achievement level for the Licensees who have not met the benchmark for this parameter ranges from 24.78% to 54.66%. The performance of the licensees namely Reliance (AP – 37.69%, Bihar – 24.78%, TN – 33.33%, Raj – 37.92%, KTK – 36.60%,HP – 39.65%) and BSNL (A&amp;N – 39.00%) is poor and below 40.00% against the benchmark of &gt;55.00%.</p>						
7	<b>Metering &amp; billing credibility - % of bills</b>	<0.1%	16	21.92%	14	17.72%
<p><b>Key Findings</b> - 62 Licensees have met the benchmark for this parameter. The achievement level for the Licensees who have not met the benchmark for this parameter ranges from 0.13% to 2.21%. The performance of the licensees namely Reliance (Orissa), Tata (Delhi, MH, Mumbai) and Bharti Airtel (MH, Kerala, Kolkatta, Mumbai, UP-E, UP - W) is poor and above 0.20% against the benchmark of &lt;0.1%.</p>						
8	<b>Customer Care Service (95% of requests)</b>					
(i)	Shifts	<3 Days	37	50.68%	31	39.24%
<p><b>Key Findings</b> - 46 Licensees have met the benchmark for this parameter. The achievement level for the Licensees who have not met the benchmark for this parameter ranges from 0.00% to 94.57%. The performance of the licensees namely MTNL (Mumbai), and Bharti Airtel (AP, MP, Raj, KR, Kolkatta, UP-E) is poor and below 60.00% against the benchmark of 95.00% of the requests within 3 days. The performance of Bharti Airtel Raj – 8.82%, Kolkatta – 0.00%)is extremely poor.</p>						
Sr. No.	Parameters	Benchmark	No. of operators not meeting the benchmarks			
			Sept, 2006		Dec, 2006	
			Out of 73 In Nos.	Out of 73 In Nos.	Out of 79 In Nos.	Out of 79 In Nos.
(ii)	Closures	<24 hrs.	25	34.25%	21	26.58%
<p><b>Key Findings</b> - 56 Licensees have met the benchmark for this parameter. M/s BSNL - Bihar and Orissa have not reported the data for this parameter in this quarter. The achievement level for the Licensees who have not met the benchmark for this parameter ranges from 0.00% to 94.01%. The performance of the licensees namely MTNL (Mumbai), Tata (MH) and Bharti Airtel (AP, UP-W, KR) is poor and below 60.00% against the benchmark of 95% of the requests within 3 days. The performance of Bharti Airtel - AP &amp; KR (0.00%) is extremely poor.</p>						



(iii)	Additional Facilities	<24 hrs.	24	32.88%	24	30.38%
	<b>Key Findings</b> - 53 Licensees have met the benchmark for this parameter. The achievement level for the Licensees who have not met the benchmark for this parameter ranges from 54.00% to 94.00%. The performance of the licensees namely BSNL (AP, Kolkatta) and MTNL (Mumbai) is poor and below 60.00% against the benchmark of 95% of the requests within 3 days.					
<b>9</b>	<b>Response time to the customer for assistance</b>					
(i)	%age of calls answered (electronically)					
	Within 20 sec = 80%	80%	0	0.00%	1	1.27%
	within 40 sec = 95%	95%	01	1.37%	3	3.80%
	Only one operator namely, M/s BSNL (Uttranchal) have not achieved the benchmark for the parameter %age of calls answered (Electronically) within 20 sec and three operators Tata (Kolkatta)and BSNL (Uttranchal, West Bengal) have not achieved the TRAI's stipulated benchmark for the parameter of %age of calls answered (Electronically) within 40 sec .					
(ii)	%age of calls answered by operator (voice to voice)					
	Within 60 sec = 80%	80%	7	9.59%	8	10.13%
	within 90 sec = 95%	95%	16	21.92%	25	31.65%
	M/s BSNL (AP, BR, A&N, Assam, HP, Jharkhand, J&K, NE-I, Orissa, WB), Bharti Airtel (Delhi, ) have not provided the data for this parameter.					
10.	<b>Time taken for refund of deposits after closures</b>	100% within 60 days	11	15.07%	14	17.72%
	<b>Key Findings</b> - BSNL (Bihar,J&K), Tata Teleservices (Punjab, TN, HR, Chennai, Mumbai) and Bharti Airtel (Raj, Kolkatta, ) have not reported the data for this parameter. The achievement level for the Licensees who have not met the benchmark for this parameter ranges from 3.86% to 98.00%. The performance of the licensees namely Bharti Airtel (AP, Delhi, MP, PB, HR, UP-E) is poor and below 60.00% against the benchmark of 100.00% of within 60 days.					

## 5.2 Quality of Service performance of Cellular Service Providers for quarter ending 31<sup>st</sup> December 2006: -

This report covers performance of 91 GSM Cellular operators and 42 CDMA service operators vis-à-vis the QoS benchmarks prescribed by TRAI. The summary of performance of service providers in meeting the benchmark in this quarter is given in the following table:

Sr. No.	Parameters	Bench-Marks	No. Of Operators Meeting The Benchmarks			
			Quarter Ending Sept, 2006		Quarter Ending Dec, 2006	
			Out Of 129 (Nos.)	Out Of 129 (%)	Out Of 133 (Nos.)	Out Of 133 (%)
1	Accumulated down time of Community isolation	<24 hrs	<b>126</b>	97.67%	<b>133</b>	100.00%
2	Call Set-Up Success Rate (Within Licensee's Own network)	>95%	<b>129</b>	100.00%	<b>133</b>	100.00%
3	Service access delay	<15 Sec	<b>124</b>	96.12%	<b>131</b>	98.50%
4	Blocked call rate <b>(i) SDCCH/paging channel congestion</b>	<1%	<b>120</b>	93.02%	<b>125</b>	93.98%
	<b>(ii) TCH Congestion</b>	<2%	<b>117</b>	90.70%	<b>122</b>	91.73%
5	Call drop rate	<3.0%	<b>129</b>	100.00%	<b>133</b>	100.00%
6	% of Connections with good voice quality	>95%	<b>127</b>	98.45%	<b>131</b>	98.50%
7	Response time to the customer for assistance <b>%age of calls answered (electronically) within 20 seconds = 80%</b>	80%	<b>127</b>	98.45%	<b>133</b>	100.00%
	<b>%Age of calls answered (electronically) within 40 seconds = 95%</b>	95%	<b>126</b>	97.67%	<b>128</b>	96.24%
	<b>%Age of calls answered by operator (voice to voice); within 60 seconds = 80%</b>	80%	<b>93</b>	72.09%	<b>126</b>	94.74%
	<b>%Age of calls answered by operator (voice to voice); within 90 seconds = 95%</b>	95%	<b>74</b>	57.36%	<b>87</b>	65.41%
8	Complaints per 100 bills issued	<0.1%	<b>120</b>	93.02%	<b>119</b>	89.47%
9	% Of complaints resolved with 4 weeks	100%	<b>125</b>	96.90%	<b>132</b>	99.25%
10	Period of all Refunds/Payment due to Customers from the date of resolution of complaints As In (9) above	<4 Weeks	<b>128</b>	99.22%	<b>132</b>	99.25%

## **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 for quarter ending 31<sup>st</sup> December 2006: -**

**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 were able to meet the benchmarks, barring one or two cases.

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

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

All the ISPs have met the benchmark of 6 hrs.

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

All the ISPs have met the benchmark

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

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

#### **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. WWW Communications Ltd. has informed that the benchmark was not met due to breakage on the circuit.

#### **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 YOU Telecom 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.

#### **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.

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## Chapter Six

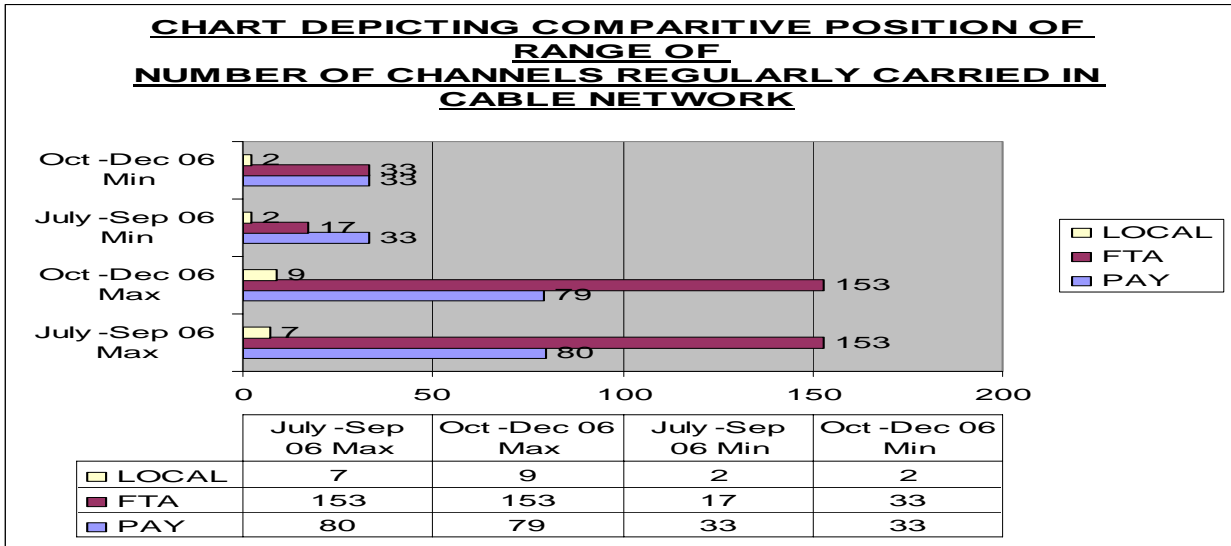
### PERFORMANCE OF CABLE TV, DTH AND RADIO BROADCASTING SERVICES

6.1 This chapter contains:

- a) Range of number of channels Pay, FTA, Local regularly carried on network at the end of quarter ending 31<sup>st</sup> March', 2006 and quarter ending 31<sup>st</sup> December' 2006. Refer Table 6.1 (a) & 6.1(b).
- b) Details of new pay channels / FTA Channels converted into Pay Channels after 26.12.2003 are at Table 6.2. The table information on New Pay Channels and Free to Air (FTA) channels converted into Pay Channels after 26.12.2003 indicates that there are 36 new pay channels/ converted FTA Channels to pay that have been launched since 26.12.2003. This is based on information reported by broadcasters in terms of clause 4 of the TRAI's Tariff Order of 1.10.2004 on broadcasting and cable services
- c) Information on total Advertisement Revenue of FM Radio Stations is compiled in table 6.3.
- d) For detail of number of application received, letter of intent, number of Licence issued for community radio refer Table 6.4.
- e) Details of number of applications received, number of Licenses issued for DTH services refer Table 6.5.

#### 6.2 Highlights

1.1 The figures of **Maximum and Minimum** are based on number of channels (analogue and /or digital) reported across different networks of different reporting service providers having different combinations of pay, FTA and Local channels. Therefore, the sum of number pay / FTA/Local channels column will not add to give figures in the total column.

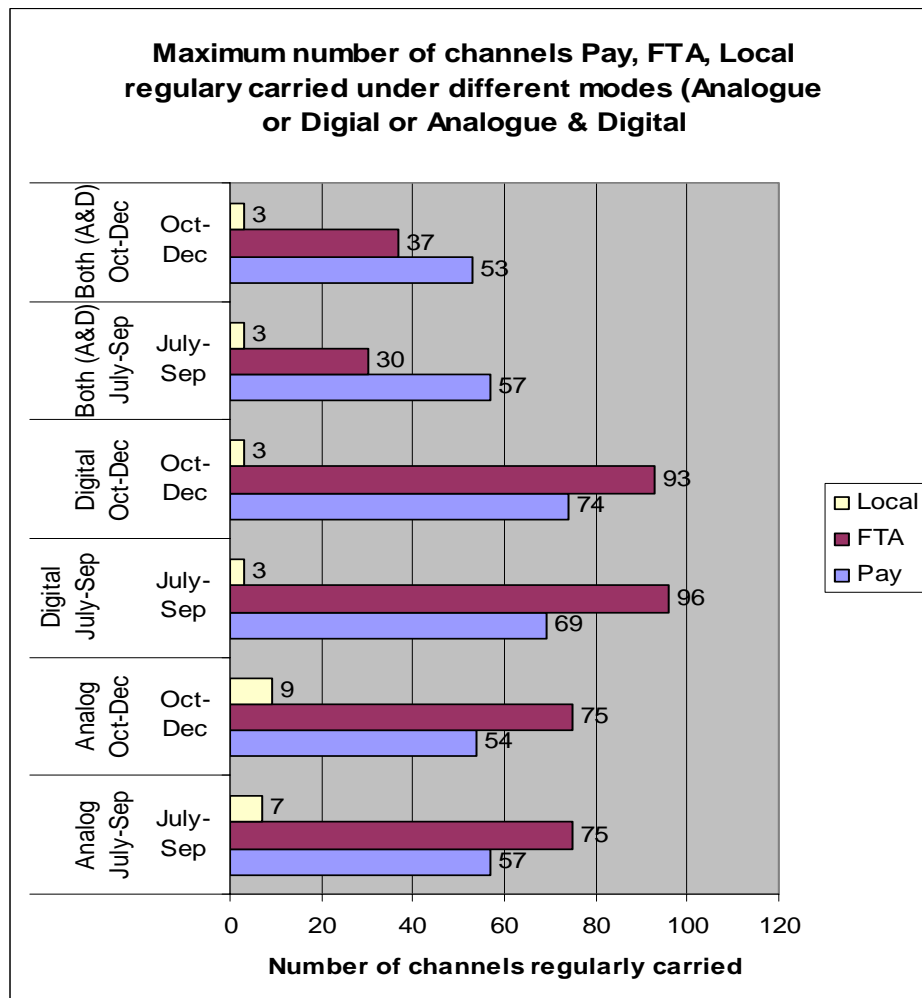


**Chart No 1**

1.2 The figures of **Maximum and Minimum** are based on number of channels (analogue and /or digital) reported across different networks of different reporting service providers having different combinations of pay, FTA and Local channels. Therefore, figures in various cells above across a particular row as a combination may not be indicative size of network etc.

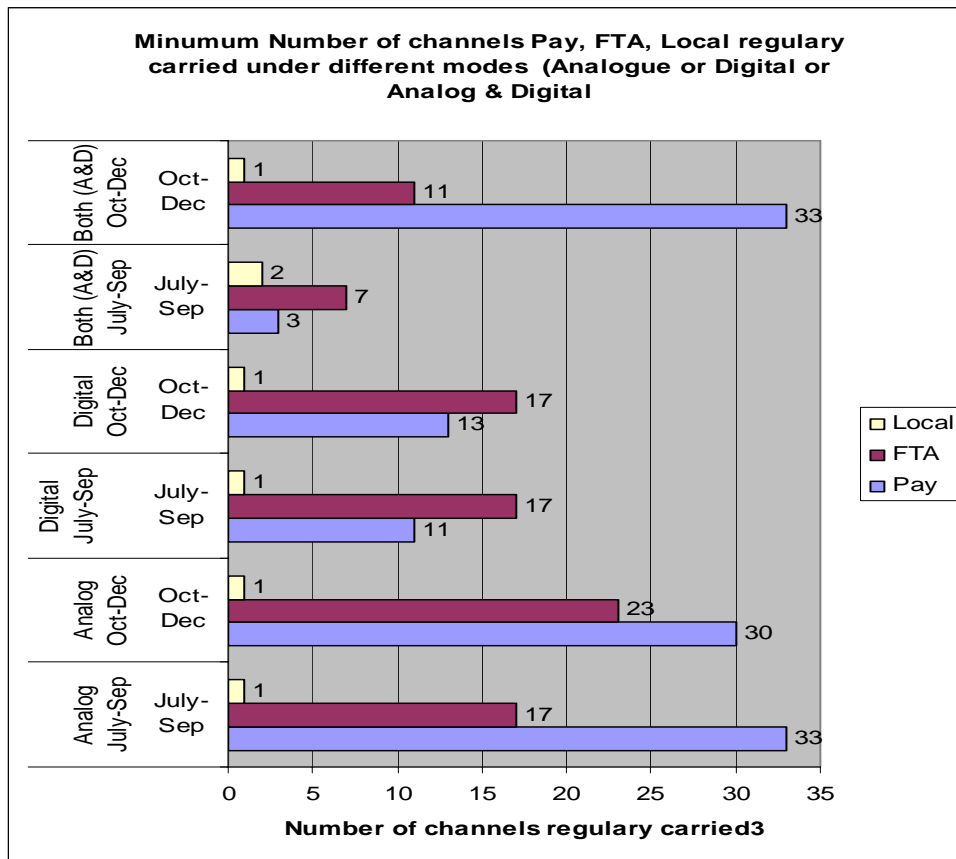
a)

**Chart No 2  
(Maximum No of channels)**



b)

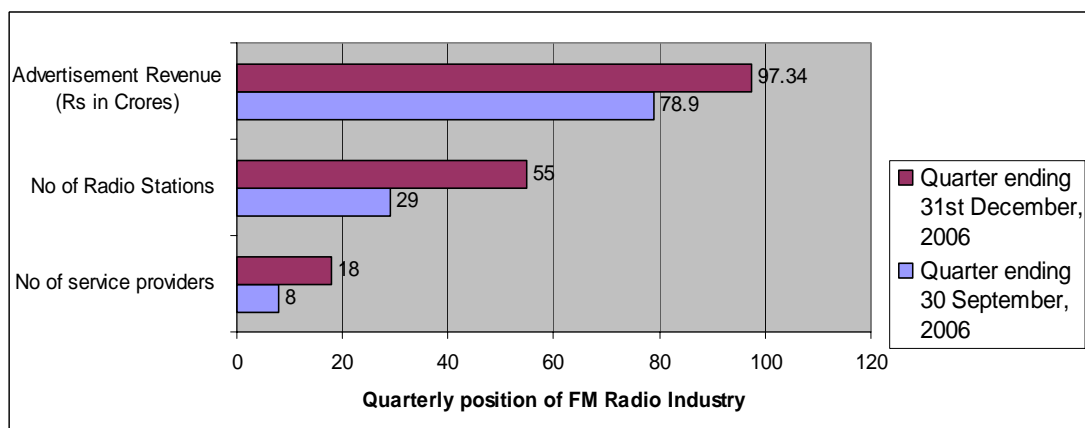
**Chart No 3  
(Minimum Number of channels)**



1.3

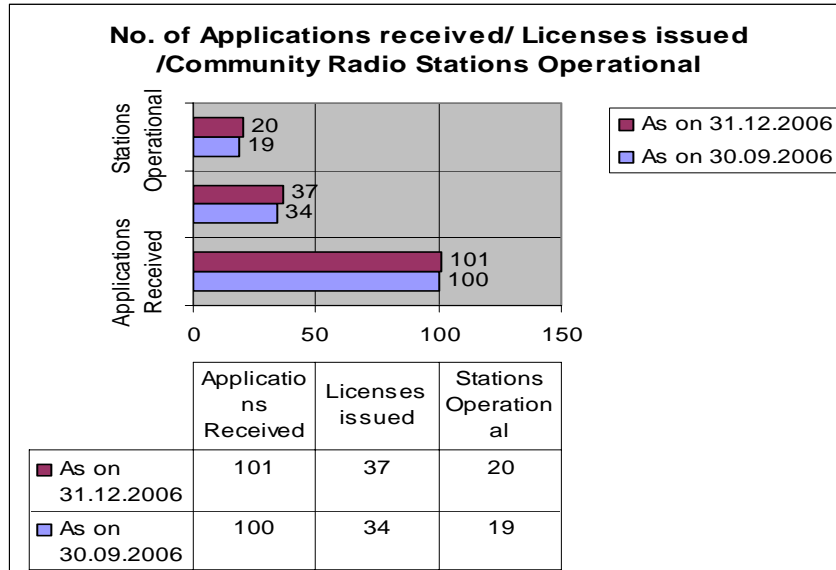
The total Advertisement Revenue in quarter ending September 2006 of 8 FM Radio Service Providers and December 2006 of 18 FM Radio Service Providers who have given their reports are given in the chart.

**Chart No 4  
The Total Advertisement Revenue**



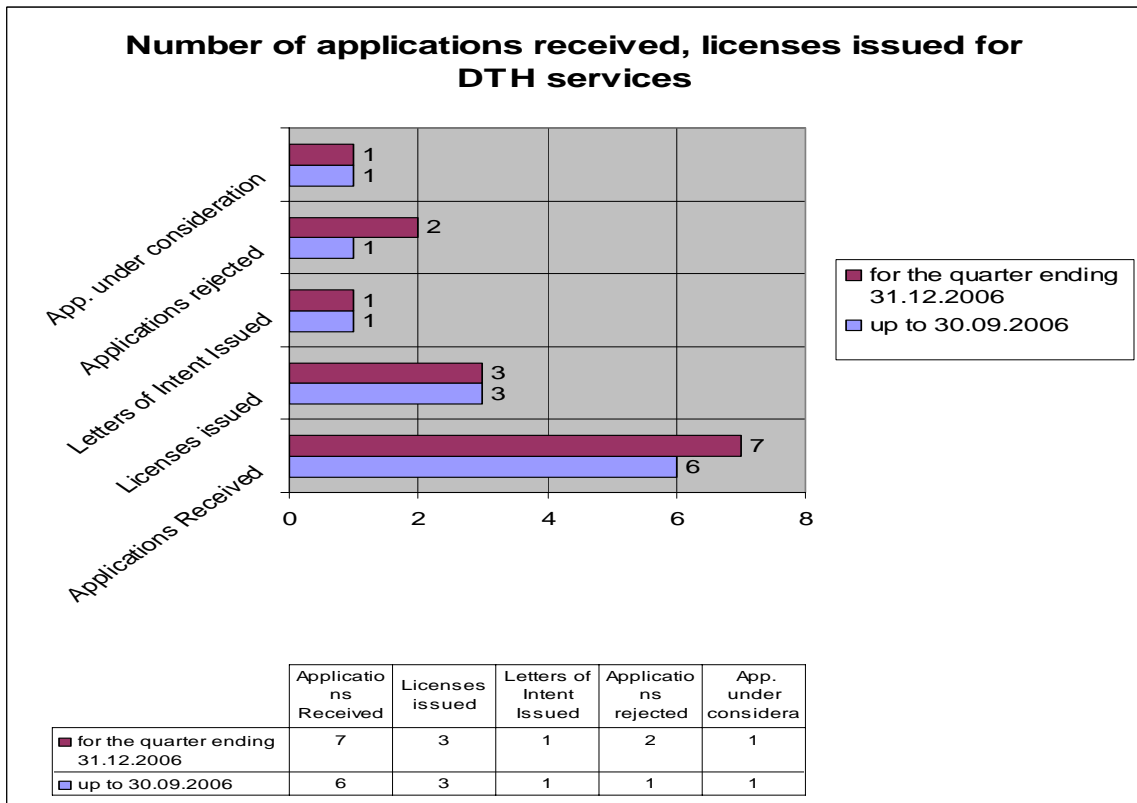
1.4 Details of number of applications received, number of Licenses issued for Community Radio Stations are given in the chart below:-

**Chart No 5**



1.5 Details of number of applications received, number of Licenses issued for DTH services are given in the chart below.

**Chart 6**



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