# Telecom Regulatory Authority of India

The Indian Telecom Services
Performance Indicators July– September 2008

New Delhi, India
13th January 2009

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# Contents



**TABLES**

## ANNEXURES

# INTRODUCTION

(i) This report presents the growth trends for the telecom services in India for the quarter ending **September 2008.** This report provides 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 (UAS) Regime, the details of subscriber base under wireless services, both GSM & CDMA (WLL(F) + WLL(M)) technologies has been combined. The Executive Summary of various Telecom Services has been given in the beginning followed by 'Performance Indicators at a Glance' showing the growth pattern of Wireline, Wireless, Internet and Value Added Services (VAS) in the first four chapters. Chapter Five includes QoS performance analysis of various service providers. Chapter Six is on performance of Cable TV, DTH & Radio Broadcast services. Financial details of telecom services sector is given in Chapter Seven.

(ii) The report has been compiled on the basis of information received from various telecom service providers. TRAI collects performance-based data from various service providers on quarterly basis to monitor the growth trends in the telecom sector.

(iii) This performance indicator report is also available on TRAI's website (http://www.trai.gov.in/Reports_list_year.asp). Any suggestion pertaining to this may please be addressed to S. K. Gupta, Advisor (CN), TRAI; Tel. +91-11-23217914, Fax. +91-11-23211998 and e-mail: advcn@trai.gov.in or cn@trai.gov.in

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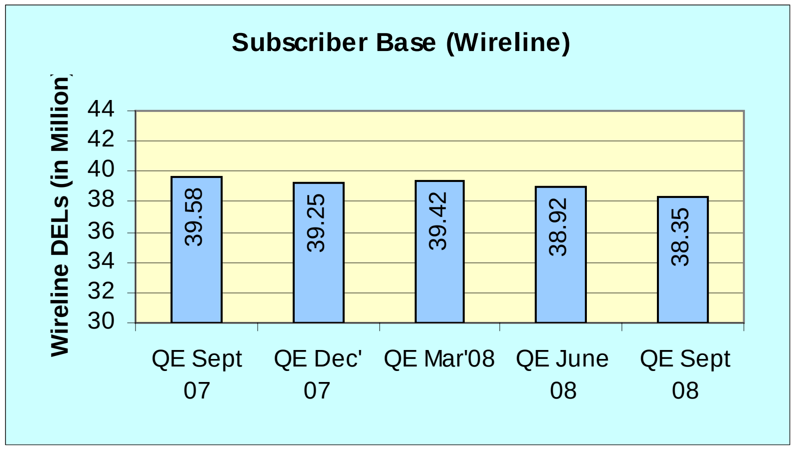
## EXECUTIVE SUMMARY

## A. Wireline Services

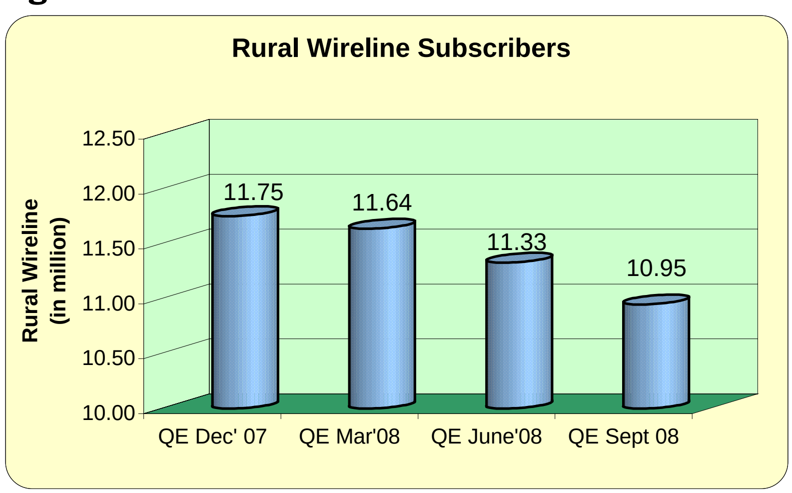
A.1 Wireline services subscriber base stood at 38.35 million in quarter ending September 2008 as compared to 38.92 million in quarter ending June 2008.

**Figure –1 : Subscriber Base (Wireline)**



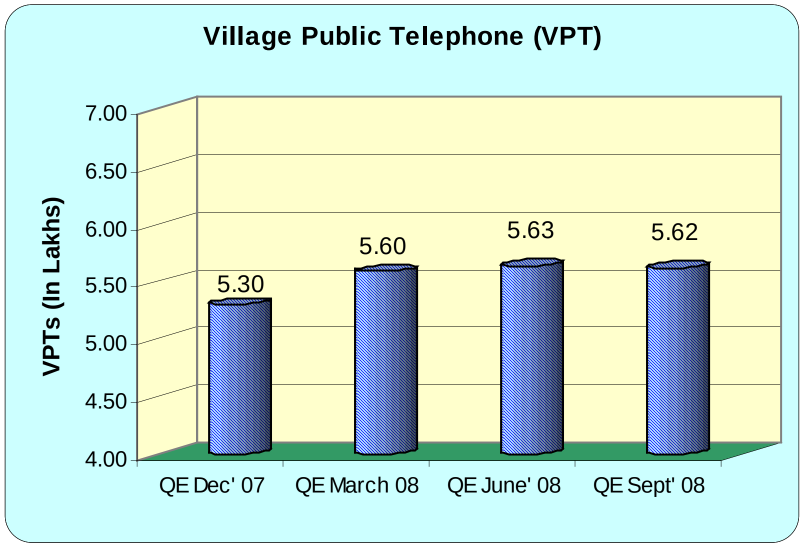

A.2 Rural Wireline Subscriber base stood at 10.95 million in quarter ending September 2008 as compared to 11.33 million in quarter ending June 2008.

**Figure- 2 : Rural Wireline Subscribers**



A.3 Number of Village Public Telephones (VPTs) have decreased from 5.63 lakhs in quarter ending June 2008 to 5.62 lakhs in quarter ending September 2008.

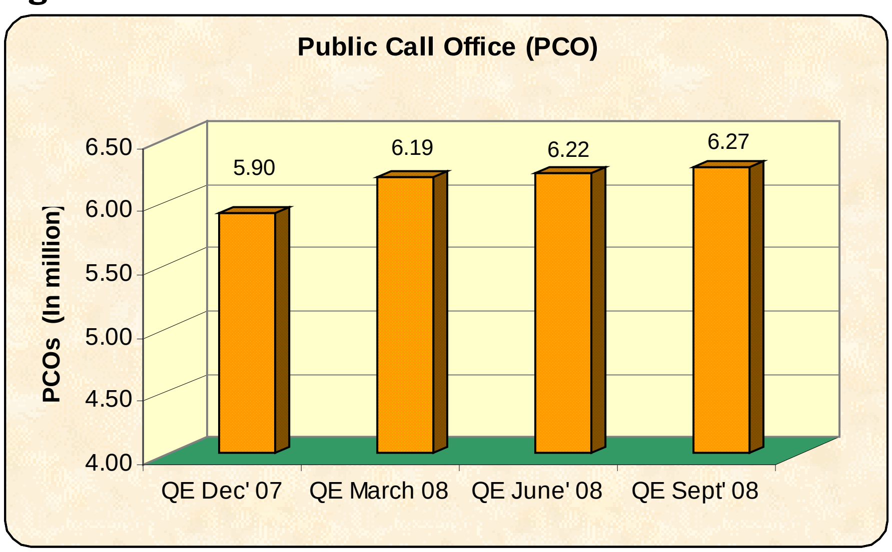
**Figure-3 : Village Public Telephone**




Net decrease in VPTs during the quarter is 1,531 (The figures of M/s Tata Teleservices Ltd are as on 31.3.2008.)

A.4 Number of Public Call Offices (PCOs) have increased from 6.22 million in quarter ending June 2008 to 6.27 million in quarter ending September 2008.

**Figure-4 : Public Call Office**




Net increase in PCOs during the quarter is 47,623. (The information has not been furnished by MTNL (Delhi & Mumbai) and by M/s Tata for some of the circles, therefore figures of 30.6.2008 have taken into account in respect of these service providers.)

## B. Wireless Services

B.1 The Wireless subscribers have reached to 315.31 million as on 30th September 2008 as against 286.87 million subscribers in the previous quarter. During this quarter 28.44 million wireless subscribers were added.

**Figure-5 : Wireless Subscribers**

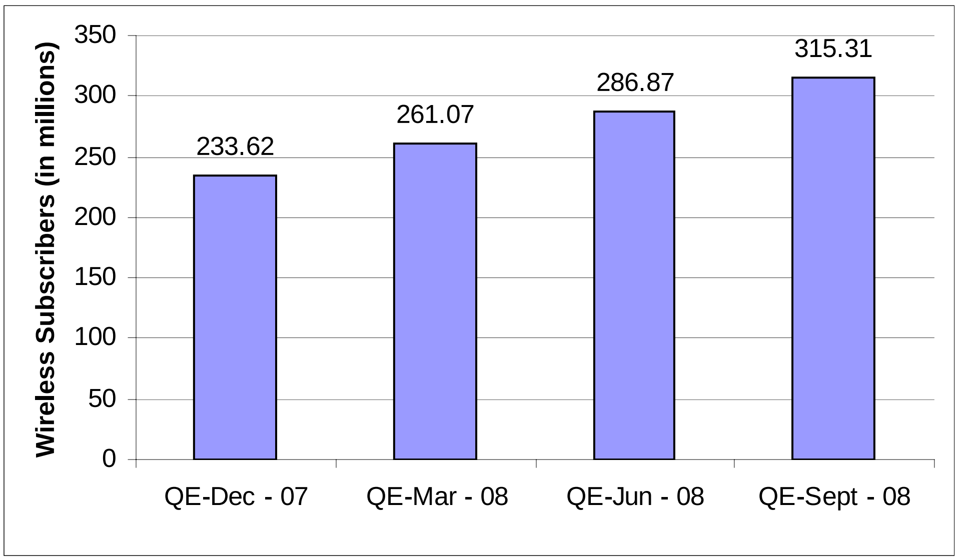
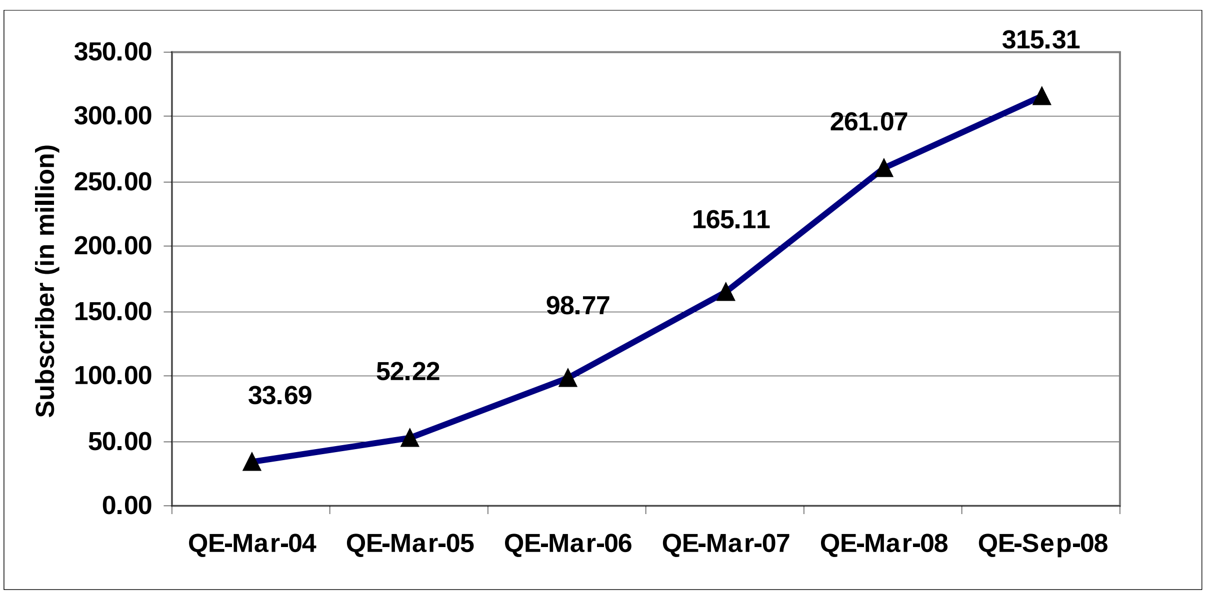


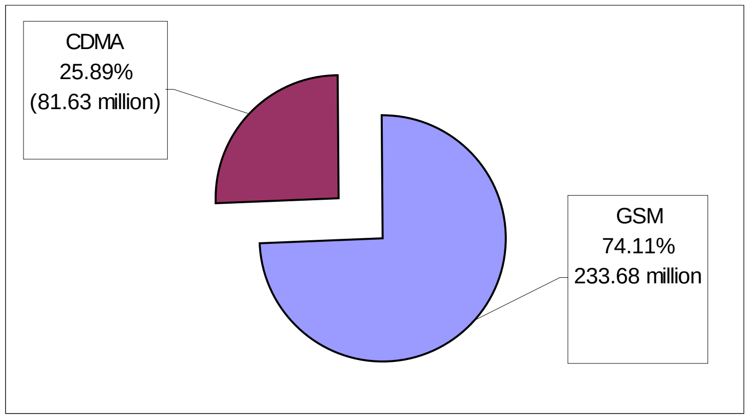

**Figure-6: Total Subscriber Base (Wireless)**



B.2 **Technology-wise Wireless Market Share**

There are 233.68 million GSM subscribers (74.11%) and 81.63 million CDMA subscribers (25.89%) at the end of September 2008.

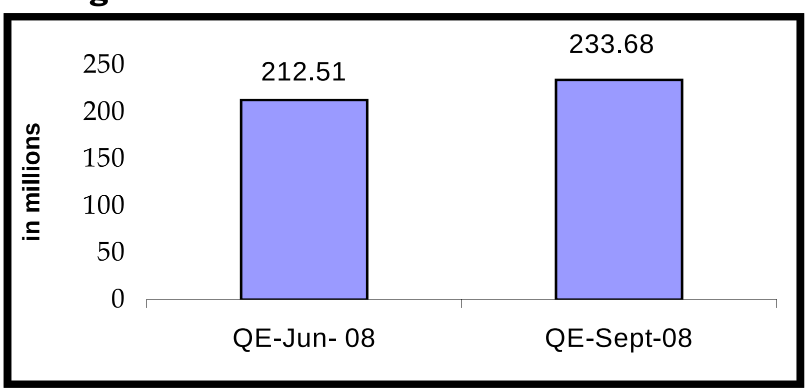
**Figure-7: Technology wise Wireless Market Share**




B.2.1 **GSM**

The GSM subscriber base has reached 233.68 million in the quarter ending September 2008 as against 212.51 million at the end of the previous quarter.

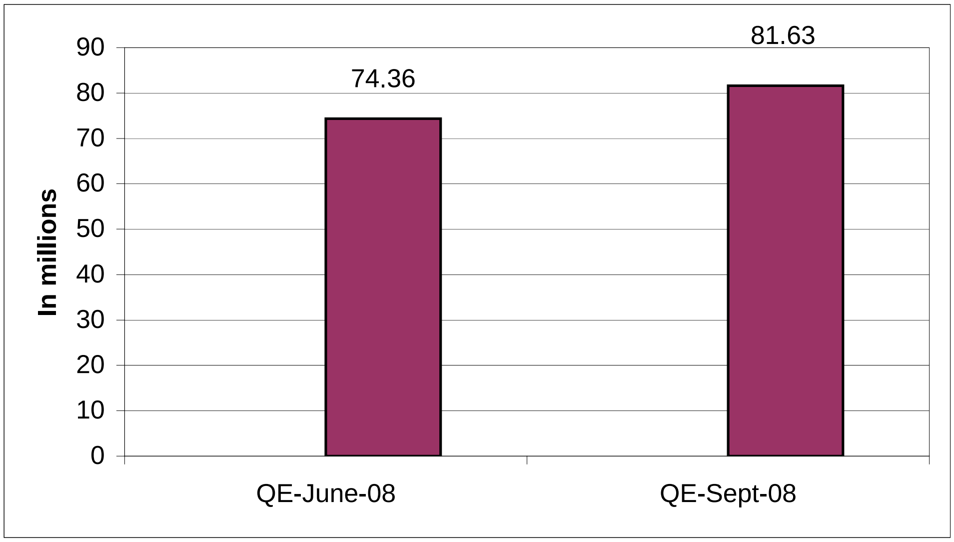
**Figure-8 : GSM Subscriber Growth**



B.2.2 **CDMA**

The CDMA subscriber base has reached 81.63 million in the quarter ending September 2008 as against 74.36 million at the end of the previous quarter.

**Figure-9 : CDMA Subscriber Growth**

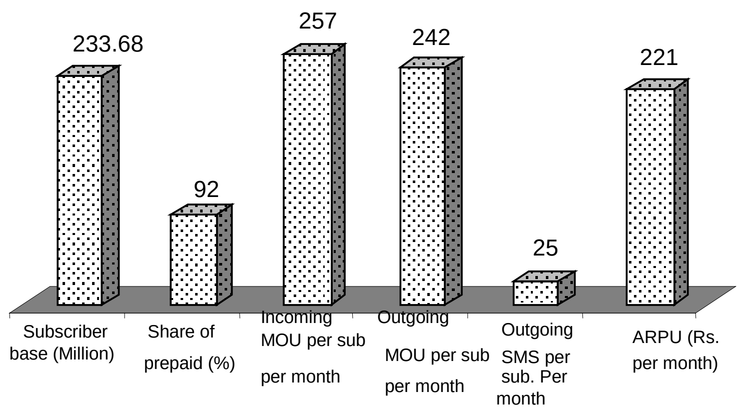



B.3 **Average Revenue Per User (ARPU), Minutes of Usage (MoU) etc.**

**(**B.3.1**)** **GSM – Full Mobility Service**

- The all India blended ARPU per month has declined by 7.5% from Rs. 239/- in June 2008 to Rs. 221/- in September 2008.
- ARPU for postpaid service has shown a decline of 2.8% from Rs. 600/- in June 2008 to Rs. 584/- in September 2008. Prepaid service has also shown a decline in ARPU of 7.5% from Rs. 204/- in June 2008 to Rs. 189/- in September 2008.
- Reversing the general increasing MOUs trend of network usage, total MOU per subscriber on an all India basis has declined from 505 minutes in June 2008 to 499 minutes in September 2008, thereby showing a decline of 1.33% as against an increase of 2.55% in June 2008. The outgoing MOUs declined by 1.45% and incoming by 1.22%.
- Postpaid segment alone has shown an increase of 7.86% in MOUs per subscriber. On the other hand, prepaid segment has shown a decline of 2.27%.
- The overall ratio of incoming-outgoing MOUs has been 52:48 as compared for 51:49 in June 2008.
- Outgoing SMS per subscriber showed a reversal of trend – an increase of 11.6% from 22 in June 2008 to 25 in September 2008.

## Figure-10 : Key Indicators for GSM




## Figure-11 : Variation in Key Indicators over Last Quarter

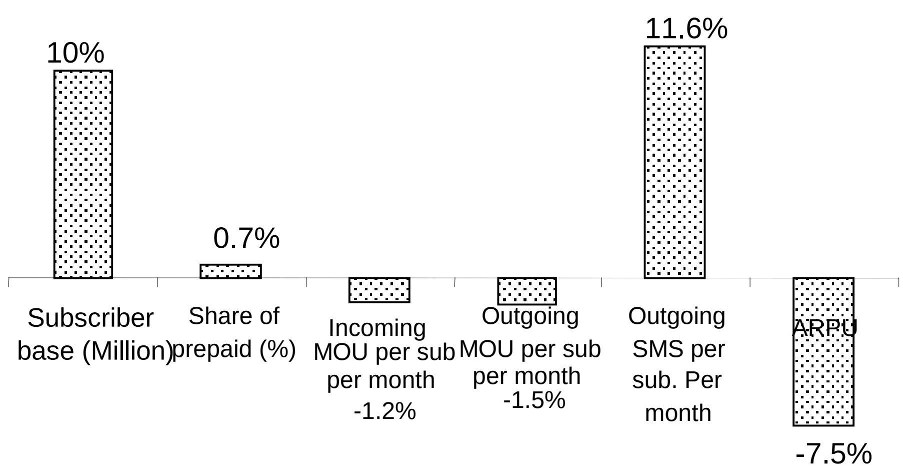
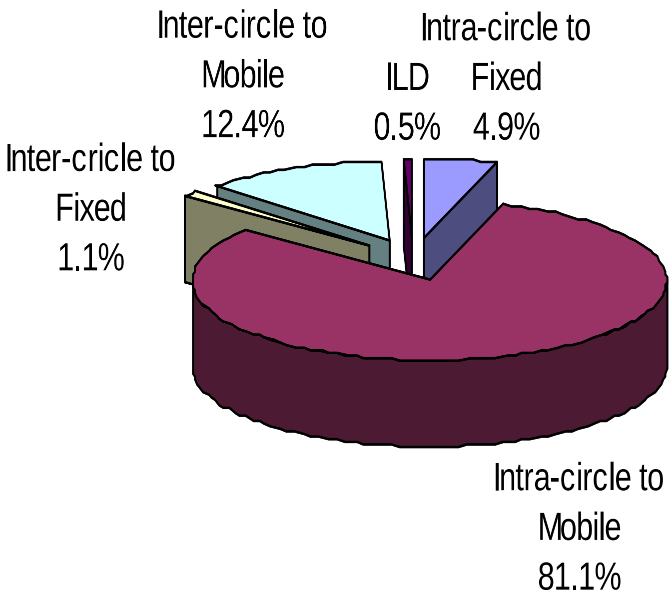


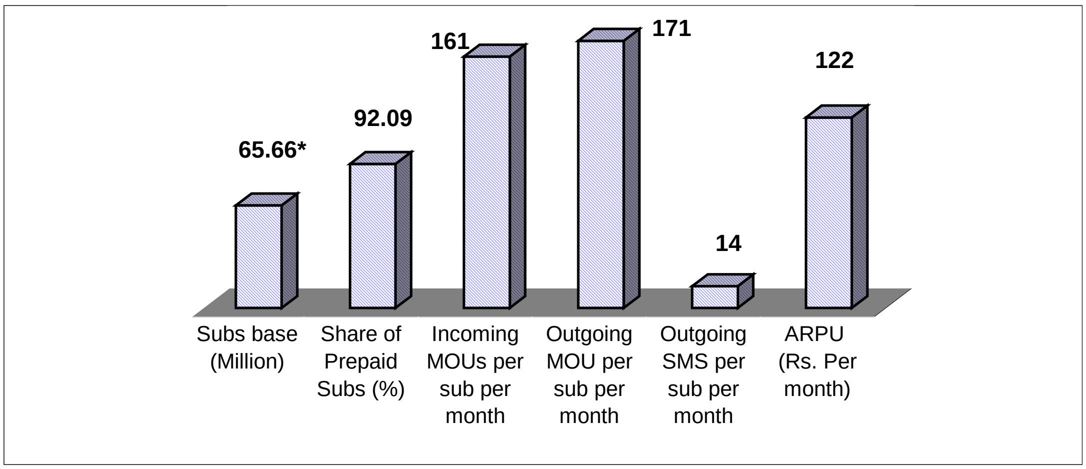
**Figure-12: GSM Originated Traffic- distribution by terminating network**



**(**B.3.2**) CDMA (Full Mobility)**

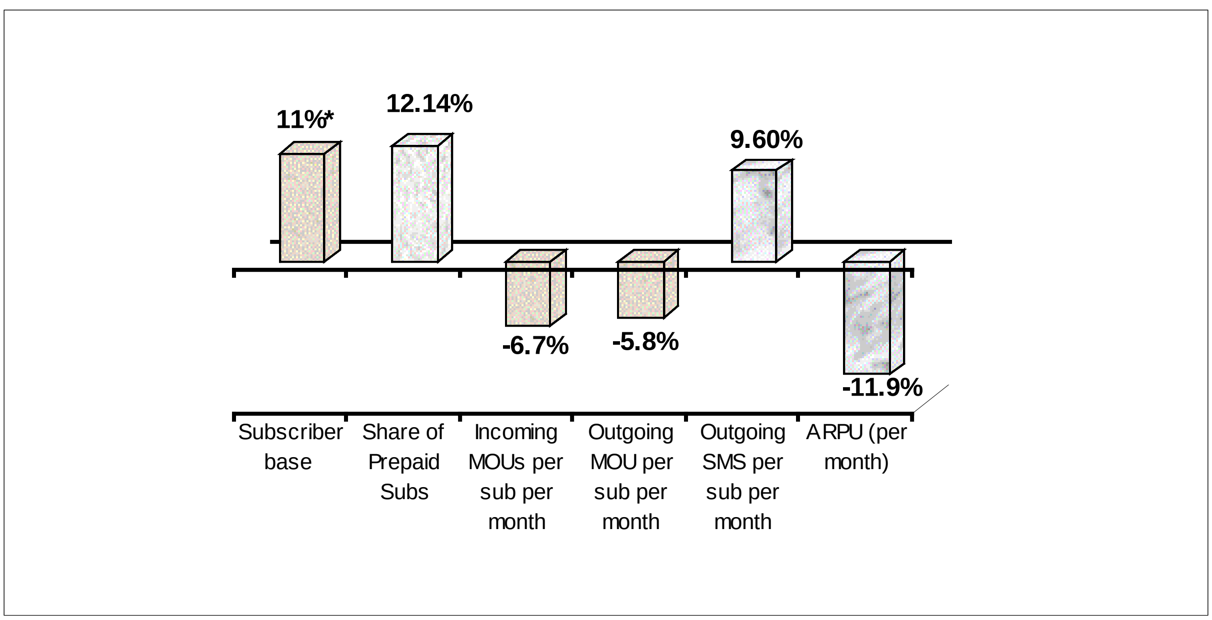
- All India blended ARPU (per month) for the quarter ending September 2008 is Rs.122/- as compared to Rs. 139/- for the quarter ending June 2008.
- All India Total Blended MOU per subscriber per month has shown a decline from 354 minutes for the quarter ending June 2008 to 332 minutes for the quarter ending September 2008.

**Figure-13 : Key Indicators for CDMA**



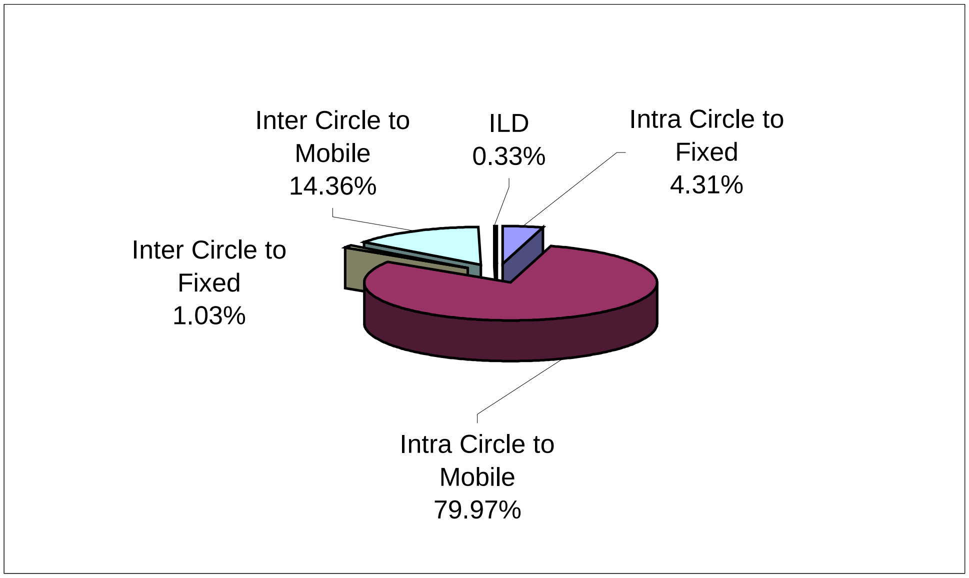

*Does not include WLL (F) & WLL (M) subscriber.

**Figure-14 : Variation in Key Indicators over last quarter**




* Does not include WLL (F) & WLL (M) subscriber.

**Figure-15 : CDMA Originated Traffic- distribution by terminating network**

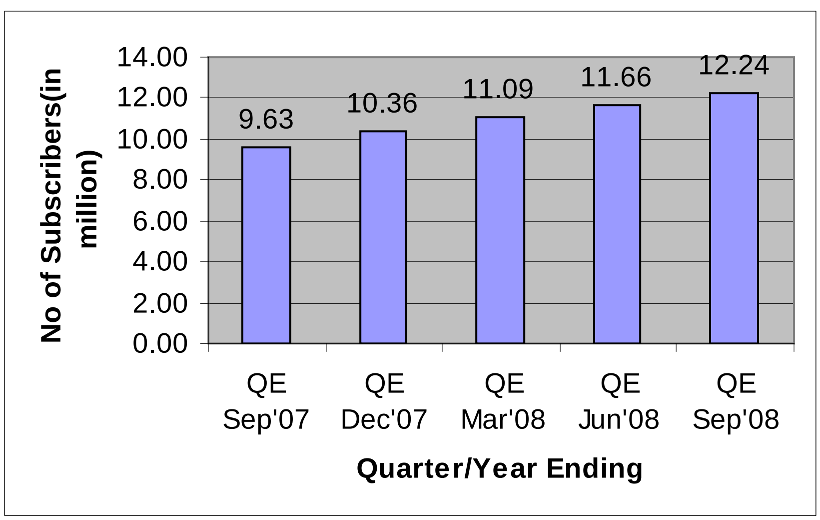



## C. Internet Services

C.1 There are 12.24 million Internet subscribers at the end of September 2008 as compared to 11.66 million at the end of June 2008 registering a growth of 4.97%. This growth rate is less than the growth rate of 5.09% at the end of June 2008.

C.2 Besides above, there are 88.27 million wireless data subscribers at the end of September 2008 (capable of accessing data services including internet through mobile handsets (GSM/ CDMA)).

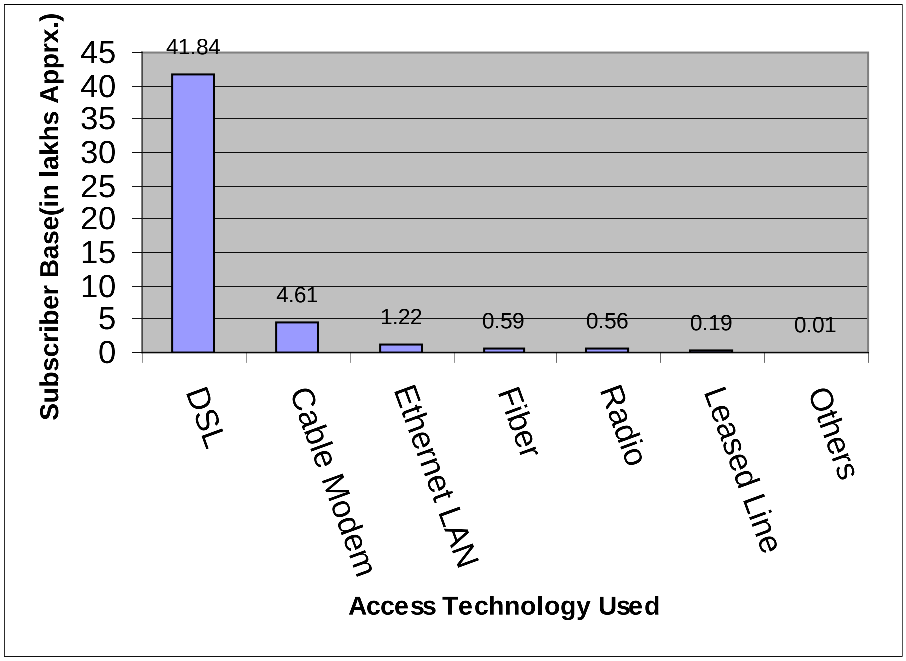
**Figure-16 : Internet Subscriber Base**



C.3 **Broadband Subscriber Growth** - The number of Broadband subscribers (with a download speed of 256 Kbps or more) was 4.90 million at the end of September 2008 as compared to 4.38 million at the end of June 2008. The growth rate of broadband subscribers in this quarter is 11.87%.

C.4 **Broadband Subscribers Share (Technology wise) –** Out of total 4.90 million broadband subscribers, 4.184 million are DSL based; 0.461million Cable Modem; 0.122 million Ethernet LAN; 0.059 million Fiber; 0.056 million Radio, Leased Line 0.019 million and 0.001 million use other technologies.

**Figure-17 : Technology Trends for Broadband**




## D. Quality of Service Performance

### D.1 **Wireline Services**

This report covers 84 licences providing basic services. In this quarter the performance of the Basic Service Providers have improved as compared to the previous quarter in respect of parameters like Provision of Telephones**,** Faults incidences, Call Completion Rate, Customer Care Services (Shifts, Closures).

However, the performance of Basic Service Providers have deteriorated in this quarter, as compared to the previous quarter, in respect to parameters like Faults repaired by next working day, Mean Time to Repair, Metering & Billing credibility, Customer Care Services (Additional Facilities), Response time to the customer for assistance - %age of calls answered by Operator (i) Voice to voice: within 60 sec (ii) Voice to voice: within 90 sec and Time Taken to Refund.

The performance of the Basic Service Providers remained at same level as compared to the previous quarter in respect of the parameter like Response time to the customer for assistance - %age of calls answered (Electronically) within 20 sec and within 40 sec.

The summary of performance of the service providers who have not met the benchmarks in this quarter as compared to previous quarter is given in the table –1.

**Table 1: Summary of Performance of Wireline Service Providers**

| Sr. No. | Parameters | Benchmark | No. of operators not meeting the benchmarks | | | |
|---|---|---|---|---|---|---|
| | | | June, 2008 | | September, 2008 | |
| | | | Out of 78 In Nos | Out of 78 In %age | Out of 84* In Nos | Out of 84* In %age |
| 1 | **Provision of Telephones after registration of demand** | 100% within 7 Days | 52 | 66.67% | 35 | 41.67% |
| 2 | **Fault incidences per 100 subs/month** | <3 | 46 | 58.97% | 43 | 51.19% |
| 3 | **Fault repaired by next working day** | >90% | 17 | 21.79% | 21 | 25.00% |
| 4 | **MTTR** | <8Hrs | 21 | 26.92% | 29 | 34.52% |
| 5 | **Call Completion Rate (in local network)** | >55% | 4 | 5.13% | 3 | 3.57% |
| 6 | **Metering & billing credibility - % of bills** | <0.1% | 1 | 1.28% | 6 | 7.14% |
| 7 | **Customer Care Service (95% of requests)** | | | | | |
| (i) | Shifts | <3 Days | 18 | 23.08% | 12 | 14.29% |
| (ii) | Closures | <24 hrs. | 8 | 10.26% | 5 | 5.95% |
| (iii) | Additional Facilities | <24 hrs. | 9 | 11.54% | 12 | 14.29% |
| 8 | **Response time to the customer for assistance** | | | | | |
| (i) | %age of calls answered (electronically) | | | | | |
| | Within 20 sec = 80% | 80% | 1 | 1.28% | 1 | 1.19% |
| | within 40 sec = 95% | 95% | 2 | 2.56% | 2 | 2.38% |

| | | | | | | |
|---|---|---|---|---|---|---|
| (ii) | %age of calls answered by operator (voice to voice) | | | | | |
| | Within 60 sec = 80% | 80% | 2 | 2.56% | 4 | 4.76% |
| | within 90 sec = 95% | 95% | 8 | 10.26% | 22 | 26.19% |
| **9** | **Time taken for refund of deposits after closures** | 100% within 60 days | 2 | 2.56% | 7 | 8.33% |

**NOTE :** * M/s Tata Teleservices has commissioned its services in Orissa, Rajasthan, MP, UP-E, UP-W, HP service areas in June 2008. So, total no. of Licensees providing PMR is 84

### D.2 **Wireless Service**

This report covers performance of 93 GSM Cellular Mobile Licensees and 44 CDMA service Licensees vis-à-vis the QoS benchmarks prescribed by TRAI. All Cellular Mobile Service Providers have achieved prescribed TRAI benchmark in respect of the following parameters:-

1. Accumulated down time of Community isolation
2. Call Drop Rate
3. Response time to the customer for assistance
   (i) %age of calls answered (electronically) within 20 sec.
   (ii) %age of calls answered (electronically) within 40 sec.
4. %age of complaints resolved within 4 weeks.
5. Period of all refunds/payments due to customers from the date of resolution of complaints.

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

1. Service access Delay.
2. %age of Connections with good voice quality.
3. Response time to the customer for assistance
   (i) %age of calls answered (electronically) within 40 sec
   (ii) %age of calls answered (voice to voice) within 60 sec
   (iii)%age of calls answered (voice to voice) within 90 sec
4. %age of complaints resolved within 4 weeks
5. Period of all refunds/payment due to customers from the date of resolution of complaints.

The performance has deteriorated in this quarter as compared to the previous quarter related to the parameters like Call Set-Up Success Rate (Within Licensee's Own network), Blocked Call rate (SDCCH/paging channel congestion and TCH Congestion) & Complaints per 100 bills issued.

The performance of the Cellular Mobile Service Providers is at same level as compared to the previous quarter in respect of the parameter of Accumulated down time of community isolation, Call drop rate, Response time to the customer for assistance – %age of calls answered (electronically) within 20 sec., all the operators met the benchmark on the lines of previous quarter.

The comparative statement of the key parameters is given in the table 2:-

**Table 2 : Summary of Performance of Wireless Service Providers**

| **Sr.No.** | **Parameters** | **Benchmarks** | **No. Of Operators Not Meeting The Benchmarks** | | | |
|---|---|---|---|---|---|---|
| | | | **Quarter Ending June, 2008** | | **Quarter Ending September, 2008** | |
| | | | **Out Of 134 (Nos.)** | **Out Of 134 (in %)** | **Out Of 138* (Nos.)** | **Out Of 138* (in %)** |
| **1** | **Accumulated down time of Community isolation** | **<24 hrs** | 0 | 0.00% | 0 | 0.00% |
| **2** | **Call Set-Up Success Rate (Within Licensee's Own network)** | **>95%** | 5 | 3.73% | 6 | 4.35% |
| **3** | **Service access delay** | **<15 Sec** | 2 | 1.49% | 1 | 0.72% |
| **4** | **Blocked call rate** (i) SDCCH/paging channel congestion | **<1%** | 6 | 4.48% | 8 | 5.80% |
| | (ii) TCH Congestion | **<2%** | 12 | 8.96% | 13 | 9.42% |
| **5** | **Call drop rate** | **<3.0%** | 0 | 0.00% | 0 | 0.00% |
| **6** | **%age of Connections with good voice quality** | **>95%** | 6 | 4.48% | 3 | 2.17% |
| **7** | **Response time to the customer for assistance** | | | | | |
| (i) | %age of calls answered (electronically); within 20 seconds = 80% | **80%** | 0 | 0.00% | 0 | 0.00% |
| (ii) | %age of calls answered (electronically); within 40 seconds = 95% | **95%** | 1 | 0.75% | 0 | 0.00% |
| (iii) | %age of calls answered by operator (voice to voice); within 60 seconds = 80% | **80%** | 22 | 16.42% | 13 | 9.42% |
| (iv) | %age of calls answered by operator (voice to voice); within 90 seconds = 95% | **95%** | 47 | 35.07% | 39 | 28.26% |
| **8** | **Complaints per 100 bills issued** | **<0.1%** | 2 | 1.49% | 3 | 2.17% |
| **9** | **% Of complaints resolved with 4 weeks** | **100%** | 1 | 0.75% | 0 | 0.00% |

| | | | | | | |
|---|---|---|---|---|---|---|
| **10** | **Period of all Refunds/Payment due to Customers from the date of resolution of complaints As In (9) above** | **<4 Weeks** | 1 | 0.75% | 0 | 0.00% |

**NOTE : *** a) M/s Dishnet Wireless has commissioned its services in Kolkata circle on 05.05.2008 and has submitted PMR for same.
b) M/s Vodafone has commissioned its services in Orissa on 28.07.2008, in Assam & NE on 09.09.2008 and submitted the PMR for these circles also. So, total no. of licensees providing PMR is 138.

### D.3 **Broadband Service**

Regulations on 'Quality of Service of Broadband Service Regulations 2006' came into force with effect from 1st Jan 2007. Total number of the Service providers providing Broadband was 72 in last quarter (June, 2008). No new service provider is added in this quarter.

This report covers performance of 13 Service Providers providing Broadband vis-à-vis the QoS benchmarks prescribed by TRAI.

## E. Broadcasting and Cable Services

E.1 Based on the data received from various Multi System Operators (MSOs) across the country, the maximum number of Free-to-Air (FTA) and Pay Channels being carried in the cable networks are 161 and 113 respectively. There are 129 pay channels as reported by 19 broadcasters/their distributors at the Quarter ending September 2008.

E.2 Apart from All India Radio, there were 236 FM Radio station in operation as on June 30, 2008. During the quarter ending September 30, 2008, no new private FM radio station came into operation.

E.3 No DTH license was issued during the quarter ending September 2008. Therefore, at present, apart from free to air DTH service of Doordarshan, there are 6 private DTH licensees. Out of these 6 licensees, 4 licensees are offering pay DTH services to the customers as on 30.09.2008, while two other are in the process of rolling out its services. Total number of reported registered subscribers being served by these four Private DTH operators is 7.99 million at the end of quarter ending 30.09.2008.

E.4 Upto quarter ending June 2008, there were 51 Community Radio Station licensee and out of these, 35 were operational. In the quarter ending September 2008, 6 more licenses were issued. Now, at the quarter ending September 2008, out of 57 licensees of community radio stations, 36 stations are in operation.

E.5 At the end of the quarter June 2008, there were 681650 number of set top boxes (STBs) installed in the CAS notified areas of Delhi, Mumbai, Kolkata and Chennai. Now, at the quarter ending September 2008, the STB number has increased to 717722 in the CAS notified areas of Delhi, Mumbai, Kolkata and Chennai.

E.6 Upto quarter ending June 2008, there were 50 Teleport Service Providers in operation in India. In the quarter ending September 2008, 4 more licenses were issued. Now, at the quarter ending September 2008, 54 Teleport Service providers are in operation in India.

## F. Financial Details of the Telecom Network:

F.1 The Gross Revenue of the Telecom Service Sector for the II[nd] Quarter (July – September 2008) of the financial year 2008-09 was Rs.37196 Crores as against Rs. 35311 Crores for the I[st] Quarter thereby showing increase by 5.34%. The Adjusted Gross Revenue (AGR) for the Quarter under review is placed at Rs.27,357 Crores as against Rs. 26,990 Crores for the previous quarter thereby showing increase of 1.36%.

F.2 The Gross Revenue and AGR of the Public Sector units in Telecom Sector is Rs.10265 Crores and Rs.8544 Crores respectively as against Rs. 9756 Crores and Rs. 8467 Crores for the previous quarter.

F.3 The Gross Revenue and AGR of the Private Sector enterprises in Telecom Sector is placed at Rs.26931 Crores and Rs.18813 Crores respectively as against Rs. 25555 Crores and 18524 Crores for the previous quarter.

F.4 The Share of Public and Private sector enterprises in the total AGR from Telecom Service is 31.23% and 68.77% respectively as against 31.37% and 68.63% in the previous quarter.

F.5 Overall % of License Fee paid by Telecom Service Providers to AGR is 8.55%.

F.6 The Pass Thru as % of GR for the ILD services is highest at 58.23% followed by NLD at 27.54% and Access at 23.39%.

## G. Performance Indicators at a Glance for Quarter ending 30th September 2008

**Table 3 : Growth of Wireline & Wireless Services:-**

| | **QE Sep 2007** | **QE Dec 2007** | **QE Mar 2008** | **QE Jun 2008** | **QE Sep 2008** | **%age growth over Sep 2007 (12 months)** | **%age growth over Dec 2007 (9 months)** | **%age growth over Mar 2008 (6 months)** | **%age growth over June 2008 (3 months)** |
|---|---|---|---|---|---|---|---|---|---|
| **1) Subscriber's Base (in million)** | | | | | | | | | |
| | | | | | | | | | |
| i) Wireline | 39.58 | 39.25 | 39.42 | 38.92 | 38.35 | -3.11 | -2.29 | -2.71 | -1.46 |
| ii) Wireless | 209.08 | 233.62 | 261.07 | 286.87 | 315.31 | 50.81 | 34.97 | 20.78 | 9.91 |
| **Gross Total** | **248.65** | **272.87** | **300.49** | **325.79** | **353.66** | **42.23** | **29.61** | **17.69** | **8.55** |
| | | | | | | | | | |
| **2) Traffic (MOU) (minutes of use/ sub/month)** | | | | | | | | | |
| Wireless | | | | | | | | | |
| i) GSM | 462 | 464 | 493 | 505 | 499 | 8.01 | 7.54 | 1.22 | -1.19 |
| ii) CDMA | 413 | 375 | 364 | 354 | 332 | -19.61 | -11.47 | -8.79 | -6.21 |
| | | | | | | | | | |
| **3) ARPU (Rs./sub/ month)** | | | | | | | | | |
| Wireless | | | | | | | | | |
| i) GSM | 275 | 261 | 264 | 239 | 221 | -19.64 | -15.33 | -16.29 | -7.53 |
| ii) CDMA | 173 | 176 | 159 | 139 | 122 | -29.48 | -30.68 | -23.27 | -12.23 |
| | | | | | | | | | |
| **4) Teledensity** | | | | | | | | | |
| | | | | | | | | | |
| Population in million (Estimated) | 1137 | 1143 | 1146 | 1150 | 1154 | | | | |
| i) Wireline | 3.48 | 3.43 | 3.44 | 3.38 | 3.32 | -4.51 | -3.11 | -3.39 | -1.81 |
| ii) Wireless | 18.39 | 20.44 | 22.78 | 24.95 | 27.32 | 48.58 | 33.68 | 19.94 | 9.53 |
| **Gross Total** | **21.87** | **23.87** | **26.22** | **28.33** | **30.64** | **40.13** | **28.39** | **16.88** | **8.18** |
| | | | | | | | | | |

## Table 4: Growth of Internet & Broadband Services:-

| | QE Sep 2007 | QE Dec 2007 | QE Mar 2008 | QE Jun 2008 | QE Sep 2008 | %age growth over Sep 2007 (12 months) | %age growth over Dec 2007 (9 months) | %age growth over Mar 2008 (6 months) | %age growth over June 2008 (3 months) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| **1) Subscriber's Base (in million)** | | | | | | | | | |
| i) Internet | 9.63 | 10.36 | 11.09 | 11.66 | 12.24 | 27.10 | 18.15 | 10.37 | 4.97 |
| ii) Wireless Internet * | 46.37 | 57.83 | 65.50 | 75.97 | 88.27 | 90.36 | 52.64 | 34.76 | 16.19 |
| ii) **Broadband Connections** (>=256 Kbps download speed) | 2.67 | 3.13 | 3.87 | 4.38 | 4.90 | 83.52 | 56.55 | 26.61 | 11.87 |
| **2) Minutes of Use (Dialup Internet) (MOU/ subs/month)** | 206 | 210 | 220 | 225 | 212.34 | 3.08 | 1.11 | -3.48 | -5.63 |
| **3) ARPU (Dialup Internet) (Rs/subs/month)** | 200 | 210 | 220 | 225 | 213.08 | 6.54 | 1.47 | -3.15 | -5.30 |

* Accessing Internet through wireless (GSM & CDMA) networks

%age Growth figures are calculated by rounding the actual figures to nearest million. These may vary with values given in the subsequent chapters of this report.

## H. Performance of Service Providers during the quarter: -

### Table 5 : Wireline Subscriber Base(in Million)

| 1) Wireline Service Providers | QE Sep 2007 | QE Dec 2007 | QE Mar 2008 | QE Jun 2008 | QE Sep 2008 | %age growth over Sep 2007 (12 months) | %age growth over Dec 2007 (9 months) | %age growth over Mar 2008 (6 months) | %age growth over June 2008 (3 months) |
|---|---|---|---|---|---|---|---|---|---|
| BSNL | 32.22 | 31.71 | 31.55 | 30.87 | 30.12 | -6.52 | -5.01 | -4.53 | -2.43 |
| MTNL | 3.63 | 3.60 | 3.68 | 3.63 | 3.57 | -1.65 | -0.83 | -2.99 | -1.65 |
| Bharti | 2.08 | 2.18 | 2.28 | 2.39 | 2.51 | 20.67 | 15.14 | 10.09 | 5.02 |
| Reliance | 0.70 | 0.78 | 0.87 | 0.95 | 1.02 | 45.71 | 30.77 | 17.24 | 7.37 |
| Tata/ Hughes | 0.63 | 0.67 | 0.72 | 0.77 | 0.82 | 30.16 | 22.39 | 13.89 | 6.49 |
| HFCL | 0.16 | 0.15 | 0.15 | 0.15 | 0.15 | -6.25 | 0.00 | 0.00 | 0.00 |
| Shyam | 0.16 | 0.16 | 0.16 | 0.16 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **39.58** | **39.25** | **39.42** | **38.92** | **38.35** | **-3.11** | **-2.29** | **-2.71** | **-1.46** |

### Table 6: Wireless Subscriber Base (in Million)

| Service Providers | QE Sep 2007 | QE Dec 2007 | QE Mar 2008 | QE Jun 2008 | QE Sep 2008 | %age growth over Sep 2007 (12 months) | %age growth over Dec 2007 (9 months) | %age growth over Mar 2008 (6 months) | %age growth over June 2008 (3 months) |
|---|---|---|---|---|---|---|---|---|---|
| Bharti | 48.88 | 55.16 | 61.98 | 69.38 | 77.48 | 58.51 | 40.46 | 25.01 | 11.67 |
| Reliance | 36.32 | 40.96 | 45.79 | 50.79 | 56.05 | 54.32 | 36.84 | 22.41 | 10.36 |
| Vodofone | 35.66 | 39.86 | 44.13 | 49.20 | 54.63 | 53.20 | 37.05 | 23.79 | 11.04 |
| BSNL | 34.13 | 36.81 | 40.79 | 41.96 | 43.86 | 28.51 | 19.15 | 7.53 | 4.53 |
| Tata Tele | 19.50 | 21.74 | 24.33 | 26.33 | 29.33 | 50.41 | 34.91 | 20.55 | 11.39 |
| Idea | 18.67 | 21.05 | 24.00 | 27.19 | 30.38 | 62.72 | 44.32 | 26.58 | 11.73 |
| Aircel | 8.04 | 9.43 | 10.61 | 11.92 | 13.88 | 72.64 | 47.19 | 30.82 | 16.44 |
| Spice | 3.48 | 3.80 | 4.21 | 4.55 | 3.60 | 3.45 | -5.26 | -14.49 | -20.88 |
| MTNL | 2.99 | 3.20 | 3.53 | 3.72 | 3.96 | 32.44 | 23.75 | 12.18 | 6.45 |
| BPL | 1.15 | 1.24 | 1.29 | 1.38 | 1.66 | 44.35 | 33.87 | 28.68 | 20.29 |
| HFCL | 0.15 | 0.25 | 0.30 | 0.34 | 0.36 | 140.00 | 44.00 | 20.00 | 5.88 |
| Shyam | 0.10 | 0.10 | 0.11 | 0.11 | 0.12 | 20.00 | 20.00 | 9.09 | 9.09 |
| **Total** | **209.07** | **233.62** | **261.07** | **286.87** | **315.31** | **50.82** | **34.97** | **20.78** | **9.91** |

# CHAPTER ONE

# PERFORMANCE OF WIRELINE SERVICES

## Subscribers Base: -

1.1 The Wireline services were provided by 5 licensed private operators (UASL) in addition to incumbents BSNL and MTNL as on 30th September 2008. List of Wireline Service providers along with their areas of operation is given in the Table 7. The Operator wise details of Wireline Subscriber Base as on 30th September 2008 is given in Table 27.

**Table 7: List of Wireline Service Providers along with their Area of Operation**

| Sl. No. | Name of the Service Provider | Area of Operation |
|---|---|---|
| 1 | BSNL | All India except Delhi & Mumbai |
| 2 | MTNL | Delhi & Mumbai |
| 3 | Bharti Airtel Ltd | Andhra Pradesh, Delhi, Gujarat, Haryana, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Punjab, Rajasthan, Tamil Nadu(included Chennai circle), UP-East,UP-West (including Uttaranchal) and West Bengal. |
| 4 | Tata Teleservices (Maharashtra) Ltd. | Maharashtra, Mumbai |
| 5 | Tata Teleservices Ltd. | Andhra Pradesh, Bihar, Chennai, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Madhya Pradesh, Orissa, Punjab, Rajasthan, Tamil Nadu, UP(E), UP(W) including Uttaranchal and West Bengal |
| 6 | HFCL Infotel Ltd | Punjab |
| 7 | Shyam Telelink Ltd | Rajasthan |
| 8 | Reliance Communications Ltd. | Andhra Pradesh, Bihar, Chennai, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata Madhya Pradesh, Maharashtra, Mumbai, Orissa, Punjab, Rajasthan, Tamil Nadu, UP(E), UP(W) and West Bengal |

**Market Share of Wireline subscriber base.**

1.2 As on 30th September 2008, the total subscriber base of fixed (Wireline) lines stood at 38.35 million. The incumbents BSNL and MTNL have 78.55% and 9.32% market share respectively in the subscriber base, while all the five private operators together have 12.13% share. The market share of total Fixed (Wireline) lines is shown in the Figure below:-

**Figure 18: Distribution of Market share of Urban + Rural Wireline subscriber**

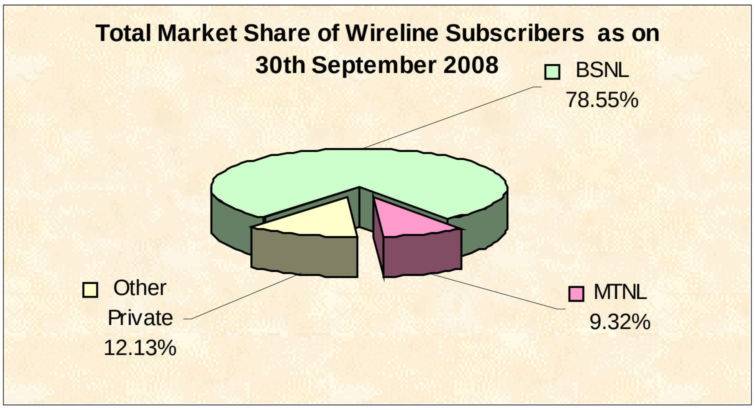



**Figure 19 : Distribution of Market share of Urban Wireline subscriber**

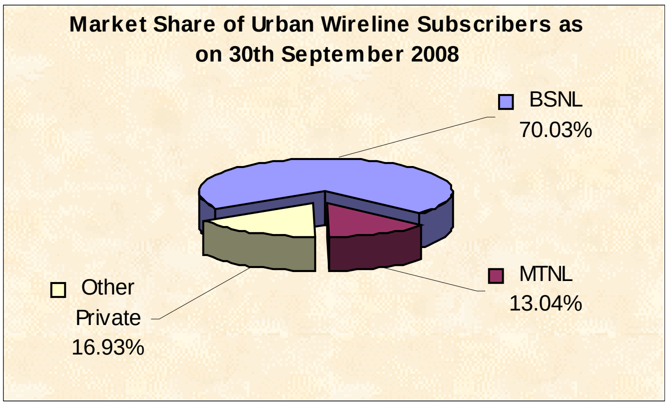
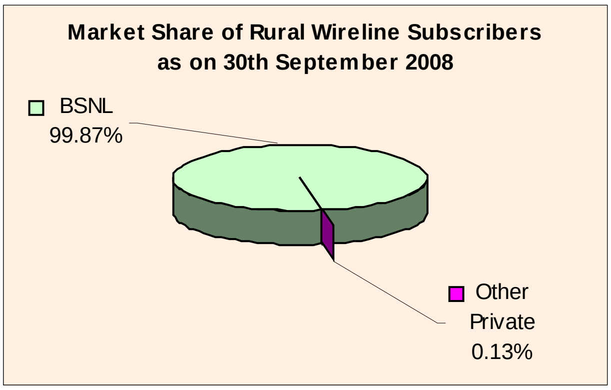


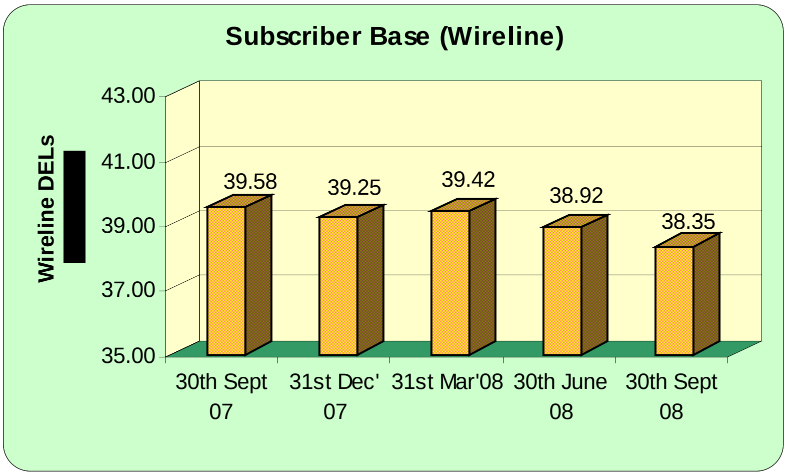
**Figure 20 : Distribution of Market share of Rural Wireline subscriber**




**Subscriber Base of Wireline for last five quarters**

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

**Figure 21: The subscriber base of the Wireline service sector for last five quarter**

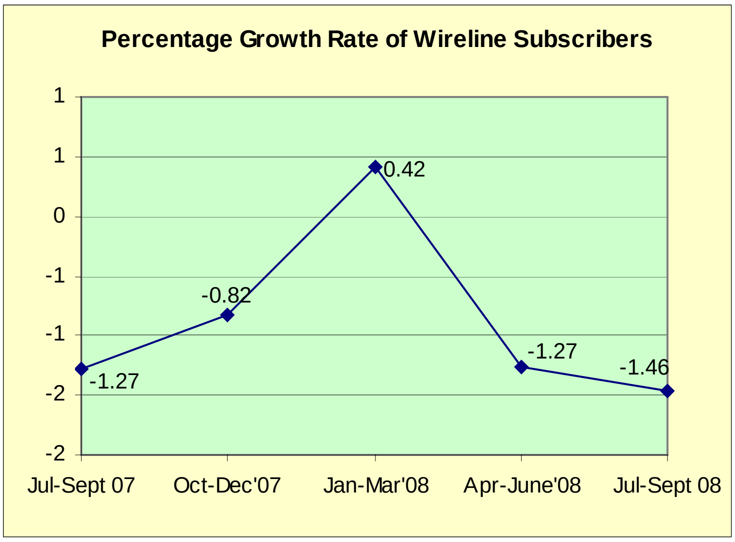



**Status of Wireline services**

1.4 The Fixed (Wireline) subscriber base registered a decrease of 568,187 lines during the quarter starting from the month July' 2008 to September' 2008. The net number of fixed (wireline) has decreased to 3,83,49,054 from 3,89,17,241 as on 30th September 2008. The overall percentage of decrease in subscriber base during the quarters is 1.46%.

1.5 During the quarter ending 30th September 2008 some service providers have increased their respective wireline subscriber base such as M/s Bharti Airtel Ltd. from 23,93,732 to 25,09,460(+115,728), M/s Tata Teleservices Ltd. (TTL) (including TT(M)L) from 772,202 to 821,602(+49,400), M/s Reliance Communications Ltd. (RCL) from 951,615 to 10,21,484(+69,869) and M/s HFCL Infotel Ltd. from 147,755 to 152249 (+4,494). The reduction in the subscriber base of Wireline during the quarter ending September' 08 reported by M/s BSNL from 3,08,66,077 to 301,22,269(-7,43,808), M/s Shyam Telelink Ltd. from 155,675 to 149,529 (-6,146) and M/s MTNL from 36,30,185 to 35,72,461 (-57,724)

**Figure 22 : Percentage Growth Rate of Wireline Subscribers**



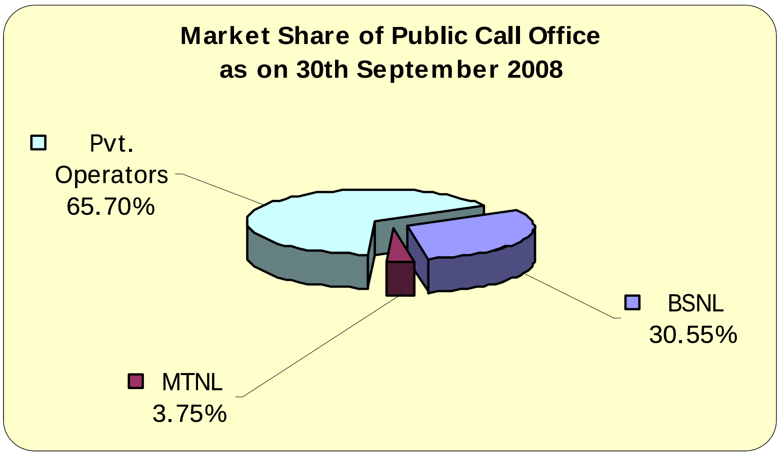

## Other Performance Indicators: -

### Public Call Offices:

1.6 During the quarter ending 30th September 2008, 47,623 new PCOs have been added. Total number of PCOs in the country as on 30th September 2008 is 62,68,713*. The share of BSNL in is 19,15,106 i.e. 30.55% of the total PCOs. The share of MTNL and other private operators combined is 2,34,941 (3.75%) and 41,18,666 (65.70%) respectively.

Operator-wise (BSNL/MTNL/Other Private Operators) market share of PCO is depicted in the chart below. Service area and operator wise details of PCO's are available at Table 28.

**Figure 23 : Market Share of Public Call Office as on 30.09.2008**

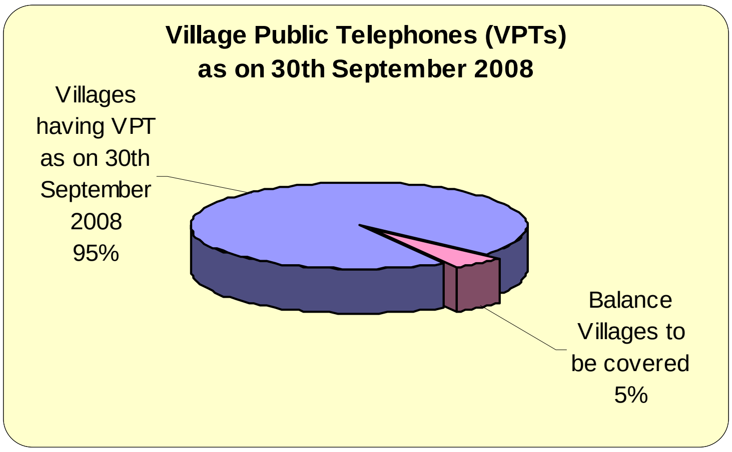



* The information has not been furnished by MTNL (Delhi & Mumbai) and by M/s Tata for some of the circles, therefore figures of 30.06.2008 have been taken into account.

**Village Public Telephones (VPT):**

1.7 There are 5,93,485 villages in India as per census 2001 as reported by BSNL. During the previous quarter ending 30th June 2008 there were 5,63,494 VPTs in the country whereas by the end of this quarter i.e. 30th September 2008, the total number of VPTs have decreased to 5,61,963 Thus 1,531 VPTs have decreased during the current quarter. The total number of villages left uncovered, are 31,522 as on 30th September 2008. The status of VPT's is depicted in the Figure 24

**Figure 24 : Village Public Telephones as on 30.09.2008**




*(* M/s Tata Teleservice Ltd. figures are as on 31.3.2008.)*

Circle-wise and Operator-wise details of village public telephones as on 30th September 2008 and addition/deletion during the quarter are available in Table 29.

*********

# CHAPTER TWO
# PERFORMANCE OF WIRELESS SERVICES

Wireless Subscriber Base reached 315.31 million

## PART A

**Details of service providers:**

2.1 The list of all the Wireless service providers currently providing services along with their licensed service areas is given in table 8.

**Table 8: List of Wireless Service providers**

| 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 (22) | | 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) (20) | Assam & NE | All India except NE & AS |
| | Reliance Telecom | Kolkata, MP, WB, HP, Bihar, OR, Assam & NE (8) | Delhi, Mumbai, Chennai, MH, Gujarat, AP, KTK, TN, KR, PB, Har, UP (W), UP (E), Raj & J&K | MP, WB, HP, Bihar, OR, Assam & NE |
| 5 | Vodafone | All India (23) | | UP-W, MP, WB, HP, Bihar, OR, Assam, NE, J&K |
| 6 | Tata Teleservices | All India (20) | | All India |
| 7 | IDEA | All India (22) | | Mumbai, Chennai & TN, Kol, KTK, Pb, WB, Bihar, OR, Assam, NE & J&K |
| 8 | Shyam Telelink | All India (22) | | All India |
| 9 | BPL/Loop Telecom Private Ltd | All India (22) | | All India except Mumbai |
| 10 | M/s Unitech Wirless | All India (22) | | All India |
| 11 | Datacom Solutions Pvt. Ltd. | All India except Pb (21) | Punjab | All India except Pb |
| 12 | Swan Telecom Pvt. Ltd | Delhi, Mumbai, Mah, Guj, AP, Ktk, KR, Chennai & TN, Punjab, HR, UP (W), UP (E) & Raj (13) | Kol., MP, WB, HP, Bihar, OR, Assam, NE & J&K | All India except Kol., MP, WB, HP, Bihar, OR, Assam, NE & J&K |
| 13 | Spice Communications | Delhi, Mah, AP, KTK, Punjab, Har (6) | All India except (Delhi, Mah, AP, KTK, Pb & Har) | Delhi, Mah, AP, KTK, Pb, Har |
| 14 | S Tel Ltd | HP, Bihar, Orissa, Assam, NE, J&K (6) | All India except HP, Bihar, OR, Assam, NE, J&K | HP, Bihar, OR, Assam, NE, J&K |
| 15 | HFCL | Punjab (1) | All India except Punjab | Punjab |

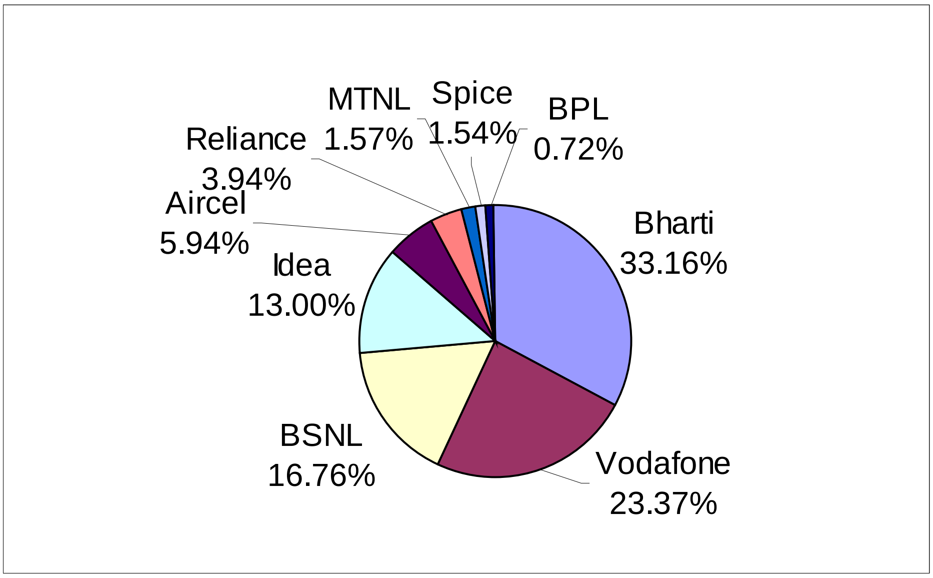
Circle-wise details of all Wireless, Wireline & Unified Access Service providers for the quarter ending September 2008 are given at Annex A & B.

## Growth of Subscribers Base: -

### GSM

2.2 The GSM subscribers base has reached 233.68 million in the quarter ending September 2008 as against 212.51 million at the end of the previous quarter. The quarterly growth for this quarter is 9.96%. M/s Bharti with 77.48 -million subscriber base remains the largest GSM mobile operator followed by M/s Vodafone, M/s BSNL and M/s Idea with subscribers base of 54.62 million, 39.17 million and 30.38 million respectively. The market share of different GSM operators is given below:

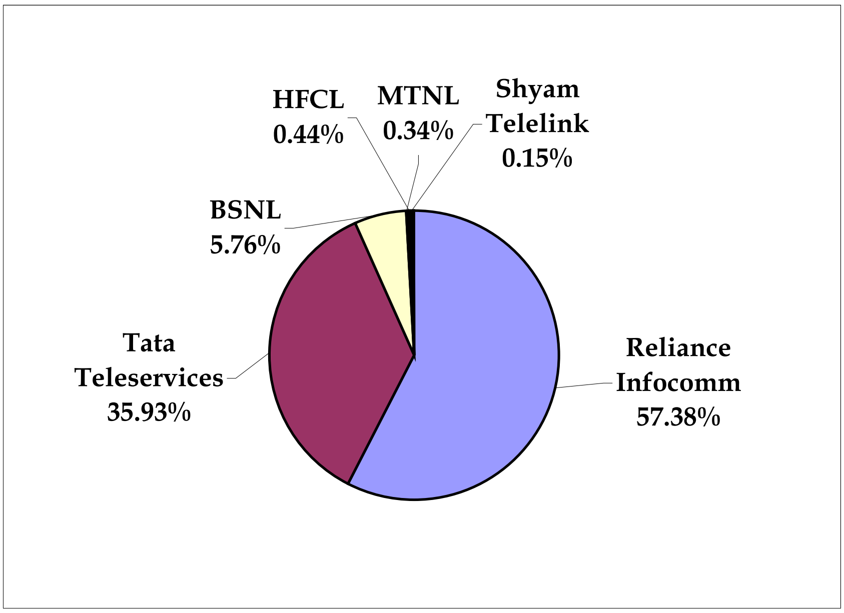
**Figure 25 : Operator-wise Market Share of GSM service providers as on 30th September 2008**




### CDMA

2.3 The CDMA Subscribers Base has reached 81.63 million during the quarter ending September 2008 as against 74.36 million at the end of previous quarter. The quarterly growth in this quarter is 9.78% as against 8.76% for the previous quarter. M/s Reliance remains the largest CDMA mobile operator followed by M/s Tata Teleservices and M/s BSNL with subscribers base of 46.84 million, 29.33 million and 4.70 million respectively.

**Figure 26: Operator-wise Market Share of CDMA Wireless as on 30th September 2008**




**Wireless Subscriber Base**

2.4 At the end of September 2008, the Wireless (Mobile and WLL (F)) market has reached 315.31million subscriber as against 286.87 million subscribers at the end of previous quarter.

**Addition in Subscribers Base**

2.5 During this quarter 28.44 million subscribers were added. The total subscriber base of 315.31 million comprises of 233.68 million GSM mobile (74.11%) & 81.63 million CDMA Mobile (25.89%). The growth rate in this quarter is 9.92% as against 9.88% in the previous quarter.

**Company wise Market Share**

2.6 M/s Bharti has maintained its 1st position with a subscriber base of 77.48 million. It has market share of 24.57% w.r.t total subscriber base. M/s Reliance is on 2nd position with a total subscribers base of 56.05 million. M/s Idea Cellular limited has started its services in Mumbai & M/s Vodafone has started its service in Orissa, Assam & North East.

2.7 The Wireless operators on the basis of market share are given below: -

**Table 9: The Wireless Operators on the basis of Market Share**

| SLNO | Wireless Group (with number of Circles) | Subscribers Base as on September 08 (In millions) | Market Share (in %age) |
|---|---|---|---|
| 1 | Bharti (22) | 77.48 | 24.57% |
| 2 | Reliance (22) | 56.05 | 17.78% |
| 3 | Vodafone (19) | 54.63 | 17.33% |
| 4 | BSNL(21) | 43.86 | 13.91% |
| 5 | Idea (12) | 30.38 | 9.63% |
| 6 | Tata (11) | 29.33 | 9.30% |
| 7 | Aircel ( 10) | 13.88 | 4.40% |
| 8 | MTNL (2) | 3.96 | 1.26% |
| 9 | Spice (2) | 3.6 | 1.14% |
| 10 | BPL (1) | 1.66 | 0.53% |
| 11 | HFCL (1) | 0.36 | 0.11% |
| 12 | Shyam (1) | 0.12 | 0.04% |
| | **Total** | **315.31** | **100%** |

The details of operator-wise subscribers of GSM and CDMA are given in Table 31and Table 32.

2.8 Distribution of Subscriber base and market share of Wireless services as on September 2008 among Metros, Circles A to C is given in Table 33, Table 34 and Figure 36.

# PART B : ARPU and MoU

## GSM (Full Mobility)

### Average Revenue Per User (ARPU)

2.9 The all India blended ARPU per month has declined by 7.5% from Rs. 239/- in June 2008 to Rs. 221/- in September 2008.

2.10 ARPU for postpaid service has shown a decline of 2.8% from Rs. 600/- in June 2008 to Rs. 584/- in September 2008. Prepaid service has also shown a decline in ARPU of 7.5% from Rs. 204/- in June 2008 to Rs. 189/- in September 2008.

2.11 As per the revenue reports furnished by the service providers, revenue from subscribers adjusted for interconnect charges, is about Rs. 14,772 Crores in the quarter ending September 2008 as against Rs. 14,470 Crores in the June 2008 quarter, thereby showing a growth of 2%.

**Table 10: Growth in Revenue of GSM Service Providers**

| **Period** | Revenue* (Rs. in Crores) | Quarterly rate of growth |
|---|---|---|
| July-07 to Sept-07 | 11,903 | 5.0% |
| Oct-07 to Dec-07 | 12,738 | 7.0% |
| Jan-08 to Mar-08 | 14,329 | 12.5% |
| Apr-08 to Jun-08 | 14,470 | 1.0% |
| Jul-08 to Sep-08 | 14,772 | 2.0% |

* Net of pass through

**Table 11: Average Revenue Per Unit (Rs. per month during the quarter)**

| **Circle** | **Postpaid** | **Prepaid** | **Blended ARPU** |
|---|---|---|---|
| Circle A | 580 | 193 | 225 |
| Circle B | 534 | 181 | 198 |
| Circle C | 533 | 196 | 212 |
| **Metro** | 627 | 193 | 275 |
| All India | **584** | **189** | **221** |
| | | | |
| **All private SPs** | 642 | 193 | 226 |
| **BSNL/MTNL** | 403 | 174 | 198 |

**Table 12: Composition of Revenue (%)**

| Item | Jun-08 | Sep-08 |
|---|---|---|
| Rental Revenue | 19.6% | 19.2% |
| Revenue from Call charges (usage) | 58.9% | 59.2% |
| Revenue from Roaming | 9.1% | 8.4% |
| Revenue from SMS | 4.2% | 4.2% |
| Other Revenues * | 8.2% | 8.9% |

Notes:
* Other revenue includes revenue from other value added services, installation etc.

**Usage Pattern**

2.12 Reversing the general increasing MOUs trend of network usage, total MOU per subscriber on an all India basis has declined from 505 minutes in June 2008 to 499 minutes in September 2008 thereby showing a decline of 1.33% as against an increase of 2.55% in June 2008. The outgoing MOUs declined by 1.45% and incoming by 1.22%.

2.13 Decline in MOUs is seen only in local (Intra-circle) segment. MOUs under NLD segment have shown a growth.

2.14 Postpaid segment alone has shown an increase of 7.86% in MOUs per subscriber. On the other hand, prepaid segment has shown a decline of 2.27%.

2.15 The overall ratio of incoming-outgoing MOUs has been 52:48 as compared for 51:49 in June 2008.

2.16 Outgoing SMS per subscriber showed a reversal of trend – an increase of 11.6% from 22 in June 2008 to 25 in September 2008.

2.17 The MOUs have recorded an increase in Metros and “A” category circles. However, there has been substantial decline in MOUs in other areas (“B” & “C” category circles) resulting in an overall negative trend for the GSM Industry.

Detailed data is given in Annex. C.

**Average Subscriber outgo (rental + call charges) per minute**

2.18 The tariff plans are of bundled nature and the trade-off is generally between monthly fixed charges and Variable (call) charges. The average outgo per outgoing minute (Rental revenue + Airtime revenue per outgoing minute), therefore, is a realistic indicator of tariff levels. Annex D indicates the average outgo per outgoing minute i.e. Rental revenue + Airtime revenue per outgoing minute.

2.19 All India average outgo per minute has declined from Rs. 0.84 in June 2008 to Rs. 0.79 in September 2008 indicating an overall decline in tariff for GSM services in the country.

## CDMA ( Full Mobility Service)

### ARPU (Average Revenue Per User per month)

2.20 All India blended ARPU per month for the quarter ending September 2008 is Rs. 122/- as compared to Rs. 139/- for the quarter ending June 2008.

2.21 According to the revenue reports submitted by the service providers for the quarter ending September 2008, revenue, net of "pass through", from CDMA full mobility service is Rs. 2289.33 crores which was 2332.68 crores in the quarter ending June 2008 registering a decline of 1.85%.

2.22 The huge difference between postpaid and prepaid ARPU noticed in the last quarter continued to remain valid for this quarter as well. Postpaid ARPU has been 4.56 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 (3.99 times) and highest in Circle A (4.86 times).

**Table 13: Average Revenue Per Uuit (Rs. per month during the quarter)**

| Circle | Postpaid | Prepaid | Blended ARPU |
|---|---|---|---|
| Circle A | 431 | 89 | 118 |
| Circle B | 406 | 93 | 111 |
| Circle C | 474 | 119 | 132 |
| Metro | 448 | 101 | 147 |
| **All India** | **432** | **95** | **122** |

**Table 14: Composition of Revenue (%)**

| Item | Jun-08 | Sep-08 |
|---|---|---|
| Rental Revenue | 23.0% | 24.3% |
| Revenue from Call Charges (usage) | 60.5% | 62.1% |
| Revenue from SMS | 2.1% | 2.3% |
| Roaming Revenue | 6.3% | 4.0% |
| Other Revenues* | 8.1% | 7.3% |

* Includes revenue from other value added services, installations etc.

**Usage Pattern (Minutes of Usage)**

2.23 In the traffic pattern: The total MOU per subscriber/ month has shown decline from 354 minutes (Q.E June 2008) to 332 minutes (Q.E September 2008).

2.24 The O/G MOU per subs/ month has also shown decline from 182 minutes in previous quarter to 177 minutes in the current quarter.

2.24 ARPU has also decreased from Rs. 139/- (Q.E June-2008) to Rs. 122/- (Q.E September-2008) for the CDMA operators by 12.23%.
Detailed data is given in Annex E.

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

2.25 Average Subscriber Outgo per minute (Rental Revenue + Airtime Revenue per outgoing minute) is given in Annex. F. The All India Average Subscriber Outgo per minute is Rs. 0.67/- in September 2008 as against Rs. 0.68/- in June 2008.

**********

# CHAPTER THREE

# PERFORMANCE OF INTERNET SERVICES

## Service Providers & Subscribers Base: -

3.1 There are 12.24 million Internet subscribers at the end of September 2008 as compared to 11.66 million at the end of June 2008 registering a growth of 4.97%. This growth rate in quarter ending September 2008 is slightly less than the growth rate of 5.09% at the end of June 2008.

3.2 Among 141 ISPs who reported their subscribers figure for Quarter ending 30th September 2008, Bharat Sanchar Nigam Ltd (BSNL) has retained its top position and reported a subscriber base of 6.38 million Internet subscribers against 5.94 million at the end of last quarter. Mahanagar Telephone Nigam Limited (MTNL) has retained second position with a subscriber's base of nearly 1.95 million. M/s Bharti Airtel Ltd is third with subscriber base of 0.93 million. (Ref. Table 35).

3.3 Besides above, there are 88.27 million wireless subscribers at the end of September 2008 (capable of accessing data services including Internet through mobile handset (GSM/ CDMA)).

## Internet Telephony: -

3.4 The Internet Telephony has been permitted to all Internet service providers w.e.f 24th August 2007. Total 35 ISPs have been providing Internet Telephony services during the quarter ending 30th September 2008, the list is enclosed as Annex H. Total minutes of usage for Internet Telephony during the quarter were 132.66 million, as compared to 111.68 million for the last quarter.

## Market Share: -

3.5 The growth trend of Wireline Internet Subscribers indicates a slight increase in the market share of PSU owned ISPs vis-à-vis private operators. During the quarter, private ISPs market share has slightly decreased to 31.96% as against 32.56% in the preceding quarter. The PSU owned ISPs market share has increased from 67.44% to 68.04% at the end of September 2008.

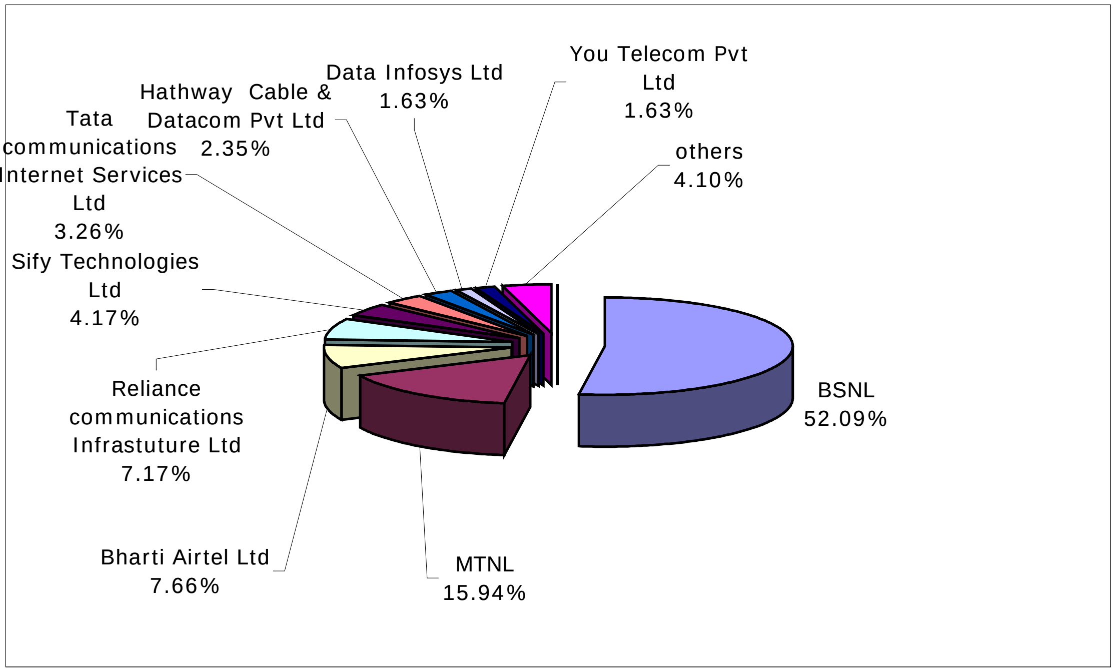
3.6 The market share of top 5 ISPs is given in Table 15.

**Table 15: Market Share of Top 5 Internet Service Providers**

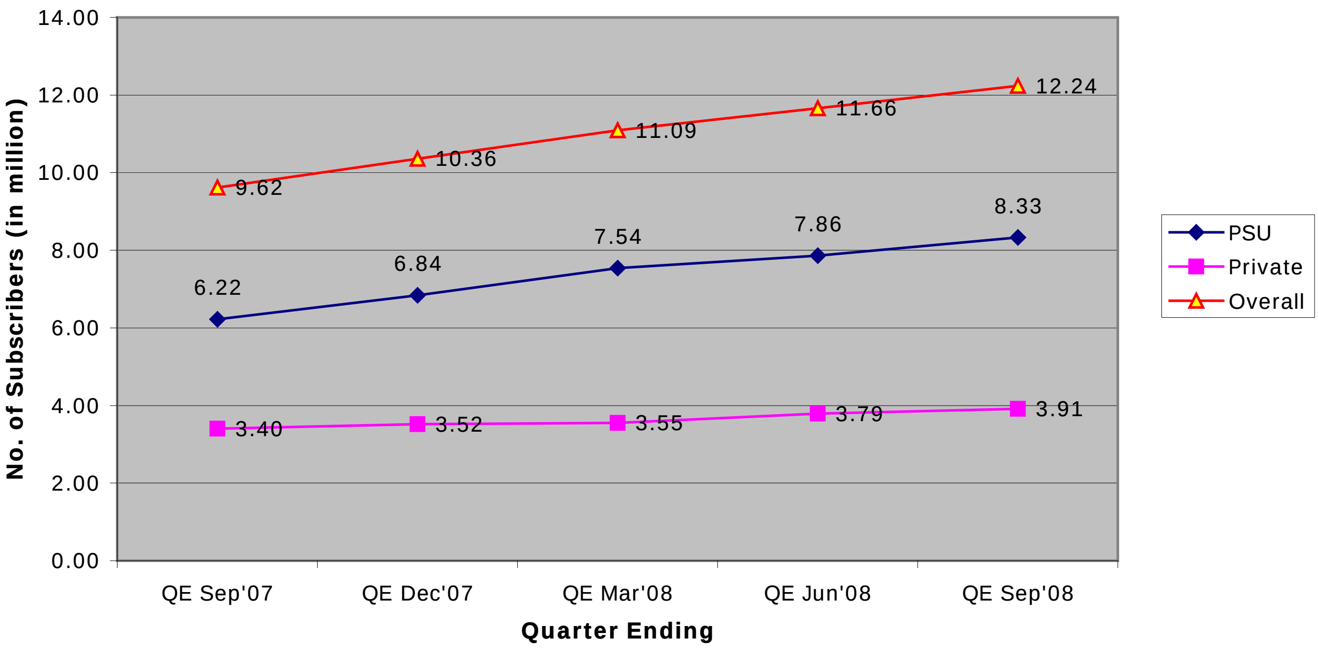
| Sl. | ISP | Subs. base | Share in % |
|---|---|---|---|
| 1 | Bharat Sanchar Nigam Ltd. | 6377051 | 52.09 |
| 2 | Mahanagar Telephone Nigam Ltd. | 1951851 | 15.94 |
| 3 | Bharti Airtel Ltd. (Bharti Televentures Ltd.) | 938251 | 7.66 |
| 4 | Reliance Communications Infrastructure Limited | 878252 | 7.17 |
| 5 | Sify Technologies Ltd. | 510071 | 4.17 |

Among PSU owned ISPs; M/s BSNL has shown an increase of 7.30% in the subscriber base and have 52.09% share of total wireline Internet subscriber base. MTNL is at second position and have a market share of 15.94% Wireline Internet Subscribers.

## Figure 27: Internet Subscriber Base as on 30.09.2008

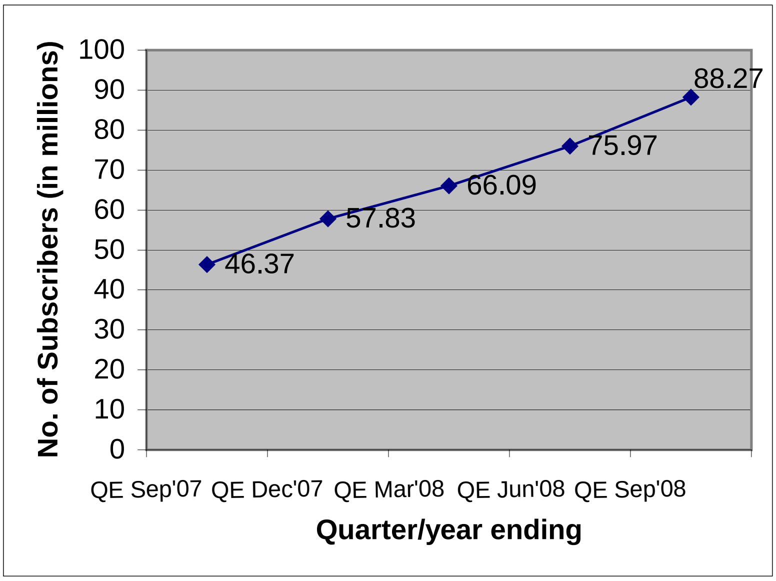



## Figure 28: Growth Trends of Wireline Internet Subscribers



3.7 The growth trend of Wireless Subscribers capable of accessing data services including Internet through their mobile handsets is shown in Figure 29.

**Figure 29 : Growth of Wireless Subscribers Capable of Accessing Data Services/ Internet**




This segment has been showing an increasing trend during the year 2008. These subscribers can use mobile handsets which are having "Internet enabled" feature.

## Leased Lines Connectivity:

3.8 The numbers of Internet Leased Line connections are 24076 at the end of September 2008 as compared to 24154 at the end of June 2008 registering a decrease of 0.32%.

## Broadband Connectivity (>=256 Kbps):

3.9 The number of Broadband subscribers (with a download speed of 256 Kbps or more) was 4902881 at the end of September 2008. Out of these 4184336 are DSL based; 461448 Cable Modem; 122367 Ethernet LAN; 58578 Fibre; 56130 Radio customers; Leased Line 18511 and 1511 Others.

## Company wise market share of Broadband Service Providers:

3.10 The Top 10 Internet Service Providers providing broadband service on the basis of market share are:-

**Table 16: Top 10 Service Providers providing Broadband**

| Sl.No | ISPs Offering Broadband Services | Subscribers Base | Share in % |
|---|---|---|---|
| 1 | Bharat Sanchar Nigam Ltd. | 2688739 | 54.84 |
| 2 | Mahanagar Telephone Nigam Ltd. | 616235 | 12.57 |
| 3 | Bharti Airtel Ltd. | 653502 | 13.33 |
| 4 | Tata Communications | 201883 | 4.12 |
| 5 | Hathway Cable & Datacom Pvt. Ltd. | 236273 | 4.82 |
| 6 | You Telecom India Pvt Ltd | 148324 | 3.03 |
| 7 | Sify Limited | 67488 | 1.38 |
| 8 | Reliance Comm. Infra. Ltd. | 96774 | 1.97 |
| 9 | Asianet Satellite Communication Limited | 49619 | 1.01 |
| 10 | HFCL Infotel Ltd | 17877 | 0.36 |
| | **Sub Total** | **4776714** | **97.42%** |
| | **Others** | **126294** | **2.58%** |
| | **TOTAL** | **4903008** | **100%** |

## Minutes of Use (MoU) per subscriber for Dialup Internet access:

3.11 The average minutes of usage per subscriber/ month for dialup subscribers was approximately 212.34 minutes during day time i.e. between 8 a.m to 8 p.m and approximately 108.01 minutes during night time i.e. between 8 p.m to 8 a.m. at the end of September 2008.

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

3.12 The average revenue per user (ARPU) per month for dialup Internet usage was Rs 213.08/- at the end of September 2008 as compared to Rs 225/- at the end of June 2008 having a decrease of 5.29%.

## International connectivity:

3.13 The bandwidth owned by various ISPs for their ISP operations and Internet Leased lines is reported to be 162 GB for downlinking and 162 GB for uplinking at the end of September 2008 as compared to 63 GB for downlinking and 62 GB for uplinking at the end of June 2008.

## Revenue of ISP Operators:

3.14 The total Revenue of the Internet Service Sector as reported by ISPs was Rs.1402.94 crores at the end of September 2008 as compared to Rs. 1316.92 crores at the end of June 2008 showing an increase of 6.53%.

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# CHAPTER FOUR

## PERFORMANCE OF VALUE ADDED SERVICES

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

4.1 The subscriber base of PMRTS decreased from 35157 in June, 2008 to 34846 in September, 2008 registering a negative growth of 0.89%.

4.2 It has been observed that M/s Arvind Mills Limited leads the tally of subscribers with a subscriber base of 11747 followed by M/s Procall (8779), M/s Quick Calls India Pvt. Ltd (3828), M/s.Smartalk Pvt. Ltd (2560), M/s United Liner Agencies of India (1988), M/s Arya Doot Transport Pvt Ltd(1774), M/s.Bhilwara Telenet Services Pvt. Ltd. (1461). M/s. Arya Offshore Services Pvt. Ltd. (1294), M/s. German Express Shipping Agencies of (India) Pvt. Ltd.(778), M/s Jet-Aiu(481),M/s India Satcom(150) and M/s Container Movement Transport Pvt Ltd (6). Operative area Delhi leads the tally with 9093 subscribers followed by Bangalore, Mumbai and Chennai with 5637, 5170 and 4105 subscribers respectively which accounted for 68.88% of the total subscribers.

4.3 M/s. India Satcom have registered maximum negative growth rate of –16.67 in their subscriber base followed by M/s. Quick Calls (-4.85). M/s Arya Offshore Services (-2.71), M/s Procall Ltd (-2.53) and M/s. Jet-Aiu Skyline Transport (-2.04).
The subscriber base of service providers of PMRTS is given in Table 36.

### VSAT services: -

4.4 VSAT services are being provided by 9 VSAT Service Providers.

4.5 In this quarter, there was an addition of 4568 new subscribers. The total number of subscribers increased from 89868 in June,2008 to 94436 in September,2008, registering a growth of 5.08% as against the growth rate of 10.41% in quarter ended June, 2008.

4.6 M/s Hughes Communication Limited is the market leader with subscriber base 29670 followed by M/s HCL Comnet with 24885 and M/s Bharti Airtel Limited Bangalore with 23989 VSAT subscribers respectively.

4.7 M/s BSNL has the highest growth rate of 20.26% in this quarter.

4.8 There is no change in the subscriber base for the VSAT operators M/s ITI and M/s GNFC.

4.9 Number of VSAT Subscribers has been steadily growing over the last four quarters. Service Providers especially M/s BSNL, M/s Hughes Communications Ltd and M/s Bharti Airtel Limited have reported good increase in their Subscriber base during this quarter.

4.10 The number of subscribers of each service provider from quarter ending June, 2007 to September, 2008 along with the Market Share in terms of Percentage of Subscribers as on 30.09.2008 is given in Table 37.

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# CHAPTER FIVE

## QUALITY OF SERVICE (QoS) PERFORMANCE
## Quality of Service performance of Wireline Service Operators:

5.1 Based on Quality of Service Parameters reported by all the Wireline Service Operators for the quarter ending September 2008, the information on QoS performance is attached to this report at Annex K.

5.2 The summary of status of the service providers who have not met the benchmarks in this quarter as compared to previous quarter is given in the Table below:

**Table 17: The status of Wireless Service Providers who have not met the benchmarks**

| Sr. No. | Parameters | Benchmark | No. of operators not meeting the benchmarks | | | |
|---|---|---|---|---|---|---|
| | | | June, 2008 | | September, 2008 | |
| | | | Out of 78 In Nos | Out of 78 In %age | Out of 84* In Nos | Out of 84* In %age |
| 1 | **Provision of Telephones after registration of demand** | 100% within 7 Days | 52 | 66.67% | 35 | 41.67% |
| 2 | **Fault incidences per 100 subs/month** | <3 | 46 | 58.97% | 43 | 51.19% |
| 3 | **Fault repaired by next working day** | >90% | 17 | 21.79% | 21 | 25.00% |
| 4 | **MTTR** | <8Hrs | 21 | 26.92% | 29 | 34.52% |
| 5 | **Call Completion Rate (in local network)** | >55% | 4 | 5.13% | 3 | 3.57% |
| 6 | **Metering & billing credibility - % of bills** | <0.1% | 1 | 1.28% | 6 | 7.14% |
| 7 | **Customer Care Service (95% of requests)** | | | | | |
| (i) | Shifts | <3 Days | 18 | 23.08% | 12 | 14.29% |
| (ii) | Closures | <24 hrs. | 8 | 10.26% | 5 | 5.95% |
| (iii) | Additional Facilities | <24 hrs. | 9 | 11.54% | 12 | 14.29% |
| 8 | **Response time to the customer for assistance** | | | | | |
| (i) | %age of calls answered (electronically) | | | | | |
| | Within 20 sec = 80% | 80% | 1 | 1.28% | 1 | 1.19% |
| | within 40 sec = 95% | 95% | 2 | 2.56% | 2 | 2.38% |
| (ii) | %age of calls answered by operator (voice to voice) | | | | | |
| | Within 60 sec = 80% | 80% | 2 | 2.56% | 4 | 4.76% |
| | within 90 sec = 95% | 95% | 8 | 10.26% | 22 | 26.19% |
| 9 | **Time taken for refund of deposits after closures** | 100% within 60 days | 2 | 2.56% | 7 | 8.33% |

**NOTE :** * M/s Tata Teleservices has commissioned its services in Orissa, Rajasthan, MP, UP-E, UP-W, HP service areas in June 2008. So, total no. of Licensees providing PMR is 84 .

### Table 18:The Parameter wise Performance ofWireline Service Providers

| Parameters | Benchmarks | Service Providers not meeting the benchmarks |
|---|---|---|
| **Provision of Telephones after registration of demand** | **100% within 7 Days** | **BSNL** = AP (88.73%), GJ (97.81%), MH (86.39%), PB (97.17%), HR (99.03%), KTK (99.44%), A&N (80.57%), Assam (96.60%), Chennai (99.44%), Jharkhand (97.59%), Kerala (97.69%), Kolkata (97.24%), NE-I (82.83%), Orissa (99.63%), UP-E (98.75%), UP-W (94.16%), Uttaranchal (96.93%)<br>**MTNL** = Delhi (98.72%), Mumbai (93.98%)<br>**Reliance** = Delhi (38.80%), HR (55.52%), KTK (42.30%), HP (0.51%), Kolkata (65.32%), Mumbai (24.76%), Orissa (0.00%), UP-E (97.01%), UP-W (47.72%), WB (81.23%)<br>**Tata** = GJ (99.02%), MH (92.74%), PB (99.00%), Mumbai (92.73%)<br>**HFCL** = Rajasthan (99.07%)<br>**Shyam** = Rajasthan (98.72%) |
| **Fault incidences per 100 subs/month** | **<3** | **BSNL** = AP (5.00), Bihar (5.00), GJ (6.60), Chhattisgarh (8.20), MP (4.10), MH (8.20), Punjab (10.20), RJ (6.10), Haryana (5.10), KTK (6.20), A&N (7.10), Assam (6.80), HP (9.70), Jharkahand (4.70), J&K (9.30), KR (8.00), Kolkata (4.70), NE-I (4.40), NE-II (5.30), Orissa (4.40), UP-E (5.80), UP-W (7.30), Uttaranchal (6.40), WB (5.80)<br>**MTNL** = Delhi (7.33), Mumbai (11.49)<br>**Reliance** = AP (3.46), GJ (5.22), MP (4.48), PB (3.47), UP –E (11.45)<br>**Bharti** = AP (6.00), Delhi (4.00), MP (6.50), TN (6.00), HR (5.00), KTK (5.00), KR (4.00), Kolkata (4.00), UP-E (5.00), UP-W (5.00)<br>**Shyam** = Rajasthan (6.70)<br>**HFCL** = Punjab (6.70) |
| **Fault repaired by next working day** | **>90%** | **BSNL** = AP (89.27%), Bihar (76.73%), Chhattisgarh (84.84%), MH (88.42%), Punjab (88.05%), A&N (79.28%), Assam (86.07%), HP (87.79%), J&K (65.56%), KR (86.03%), Kolkata (87.53%), UP-W (89.73%), WB (78.89%)<br>**MTNL** = Mumbai (87.16%) |

| | | |
|---|---|---|
| | | **Tata** = AP (85.77%), Delhi (87.81%), PB (52.78%), RJ (71.43%), HR (58.62%), Chennai (82.41%), UP-E (55.56%) |
| **MTTR** | **<8Hrs** | **BSNL** = AP (16.15 hrs.), Bihar (8.42 hrs.), GJ (8.44 hrs.), Chhattisgarh (10.75 hrs.), MH (9.07 hrs.), PB (16.62 hrs.), RJ (8.34 hrs.), KTK (10.24 hrs.), A&N (8.03 hrs.), Assam (12.89 hrs.), Chennai (8.20 hrs.), Jharkahand (8.16 hrs.), KR (15.45 hrs.), Kolkata (11.50 hrs.), NE-I (16.13 hrs.), NE-II (11.21 hrs.), Uttaranchal (8.26 hrs.), WB (8.98 hrs.)<br>**MTNL** = Delhi (8.71 hrs.) Mumbai (18.00 hrs)<br>**Bharti** = AP (9.00 hrs), TN (9.00 hrs.)<br>**Tata** = AP (12.30 hrs.), Delhi (8.80 hrs.), PB (38.80 hrs.), RJ (28.10 hrs.), HR (52.40 hrs.), Chennai (20.10 hrs.), UP (16.40 hrs.) |
| **Call Completion Rate (in local network)** | **>55%** | **BSNL** = Jharkhand (53.70%), J&K (50.46%)<br>**MTNL** = Delhi (49.76%) |
| **Metering & billing credibility - % of bills** | **<0.1%** | **Tata** = MH (0.500%)<br>**Bharti** =AP (0.460), TN (0.500), KTK (0.130), KR (0.500), Mumbai (0.220) |
| **Customer Care Service (95% of requests)** | | |
| Shifts | **<3 Days** | **BSNL** = AP (81.00%), MH (88.00%), A&N (83.33%), Assam (93.00%), Kerala (89.00%)<br>**MTNL** = Delhi (84.68%), Mumbai (87.83%)<br>**Tata** = AP (78.72%), Delhi (65.44%), PB (16.67%), KTK (13.41%), Chennai (33.33%) |
| Closures | **<24 hrs.** | **BSNL** = AP (91.41%), A&N (92.86%), NE-I (91.30%), WB (42.37%)<br>**Tata** = MH (91.65%) |
| Additional Facilities | **<24 hrs.** | **BSNL** = AP (88.16%), Bihar (85.51%), A&N (89.08%), HP (94.01%), J&K (88.79%)<br>**MTNL** = Delhi (91.33%)<br>**Tata** = Delhi (94.92%), Gujarat (82.35), HR (94.44%), UP-E (69.23%), UP-W (18.18%)<br>**Bharti** = HR (90.00%) |
| **Response time to the customer for assistance** | | |

| | | |
|---|---|---|
| %age of calls answered electronically | | |
| Within 20 sec = 80% | **80%** | **BSNL** - Uttaranchal (37.90%) |
| Within 40 sec = 95% | **95%** | **BSNL** - NE-II (90.53%), Uttaranchal (50.33%) |
| %age of calls answered by operator (voice to voice) | | |
| Within 60 sec = 80% | **80%** | **BSNL =**Uttaranchal (63.10%)<br>**Tata -** Delhi (65.00%), MH (76.00%), Mumbai (76.89%) |
| within 90 sec = 95% | **95%** | **BSNL =** Uttaranchal (82.43%)<br>**MTNL** = Mumbai (83.72%)<br>**Bharti =** Delhi (91.00%), GJ (94.00%), MH (94.00%), PB (92.00%), RJ (92.00%), HR (92.00%), Kolkata (92.00%), Mumbai (94.00%), UP-E (92.00%), UP-W (92.00%)<br>**Tata =** AP (92.00%), Delhi (72.00%), MH (81.00%), PB (90.00%), HR (88.00%), Chennai (93.00%), HP (90.00%), Mumbai (86.58%), UP-E (90.00%), UP-W (88.00%) |
| **Time taken for refund of deposits after closures** | **100% within 60 days** | **Bharti =** Delhi (97.00%), MP (98.00%), RJ (94.00%), Kolkata (83.00%), Mumbai (99.00%)<br>**Tata =** Delhi (83.00%), Gujarat (81.00%) |

## Quality of Service performance of Wireless Service Providers for quarter ending 30th September 2008: -

5.3 This report covers performance of 93 GSM and 44 CDMA service operators vis-à-vis the QoS benchmarks prescribed by TRAI. The summary of performance of service providers not meeting the benchmark as compared to previous quarter is given in the table below:

**Table 19: Performance of Wireless Service Providers not meeting the benchmarks**

| Sr.No. | Parameters | Benchmarks | No. Of Operators Not Meeting The Benchmarks | | | |
|---|---|---|---|---|---|---|
| | | | Quarter Ending June, 2008 | | Quarter Ending September, 2008 | |
| | | | Out Of 134 (Nos.) | Out Of 134 (in %) | Out Of 138* (Nos.) | Out Of 138* (in %) |
| **1** | **Accumulated down time of Community isolation** | **<24 hrs** | 0 | 0.00% | 0 | 0.00% |
| **2** | **Call Set-Up Success Rate (Within Licensee's Own network)** | **>95%** | 5 | 3.73% | 6 | 4.35% |
| **3** | **Service access delay** | **<15 Sec** | 2 | 1.49% | 1 | 0.72% |
| **4** | **Blocked call rate** (i) SDCCH/paging channel congestion | **<1%** | 6 | 4.48% | 8 | 5.80% |
| | (ii) TCH Congestion | **<2%** | 12 | 8.96% | 13 | 9.42% |
| **5** | **Call drop rate** | **<3.0%** | 0 | 0.00% | 0 | 0.00% |
| **6** | **%age of Connections with good voice quality** | **>95%** | 6 | 4.48% | 3 | 2.17% |
| **7** | **Response time to the customer for assistance** | | | | | |
| (i) | %age of calls answered (electronically); within 20 seconds = 80% | **80%** | 0 | 0.00% | 0 | 0.00% |
| (ii) | %age of calls answered (electronically); within 40 seconds = 95% | **95%** | 1 | 0.75% | 0 | 0.00% |
| (iii) | %age of calls answered by operator (voice to voice); within 60 seconds = 80% | **80%** | 22 | 16.42% | 13 | 9.42% |
| (iv) | %age of calls answered by operator (voice to voice); within 90 seconds = 95% | **95%** | 47 | 35.07% | 39 | 28.26% |
| **8** | **Complaints per 100 bills issued** | **<0.1%** | 2 | 1.49% | 3 | 2.17% |
| **9** | **% Of complaints resolved with 4 weeks** | **100%** | 1 | 0.75% | 0 | 0.00% |
| **10** | **Period of all Refunds/Payment due to Customers from the date of resolution of complaints As In (9) above** | **<4 Weeks** | 1 | 0.75% | 0 | 0.00% |

**NOTE : *** a) M/s Dishnet Wireless has commissioned its services in Kolkata circle on 05.05.2008 and has submitted PMR for the same.
b) M/s Vodafone has commissioned its services in Orissa on 28.07.2008, in Assam & NE on 09.09.2008 and submitted the PMR for these circles also. So, total no. of licensees providing PMR is 138.

## Table 20: The Parameter wise Performance of Wireless Service Providers

| Parameters | Benchmarks | Service Providers Not Meeting The Benchmarks |
|---|---|---|
| **Accumulated down time of Community isolation** | **<24 hrs** | **All the Operators meeting this Benchmark** |
| **Call Set-Up Success Rate (Within Licensee's Own network)** | **>95%** | **MTNL** - Delhi (94.35%)– GSM Service |
| **Service Access Delay** | **<15 sec.** | **BSNL - NE (16.00 sec)** |
| **Blocked call rate**<br>(i) SDCCH/paging channel congestion | **<1%** | **BSNL -** J&K (1.10%)<br>**Bharti Airtel** – KTK (2.18%), RJ (2.58%), WB (3.02%), Bihar (7.65%), Assam (2.42%), J&K (1.62%), NE (3.36%) |
| (ii) TCH Congestion | **<2%** | **BSNL -** MH (2.53%), AP (2.89%), KR (2.60%), PB (2.01%), MP (2.58%), J&K (2.50%)<br>**MTNL** - Delhi (3.13%) – GSM Service<br>**Bharti Airtel - KTK (4.39%), RJ (2.83%), WB (3.07%), Bihar (5.58%), Assam (2.13%), NE (5.15%)** |
| **Call Drop Rate** | **<3%** | **All the Operators meeting this Benchmark** |
| **%age of Connections with good voice quality** | **>95%** | **Bharti Airtel - KTK (87.18%), TN (93.48%)**<br>**RTL - Assam (94.60%)** |
| **Response time to the customer for assistance**<br>%age of calls answered **(electronically**) within 20 seconds = 80% | **80%** | **All the Operators meeting this Benchmark** |
| %Age of calls answered (**electronically**) within 40 seconds = 95% | **95%** | **All the Operators meeting this Benchmark** |
| %Age of calls answered by operator (**voice to voice**); within 60 seconds = 80% | **80%** | **BSNL -** AP (74.00%), Raj (76.00%)<br>**Bharti Airtel - UP-E (76.64%), Orissa (73.72%), Assam (73.65%)**<br>**Reliance Comm - AP (78.05%), UP-E (78.53%), WB (78.53%), Bihar (44.33%), Kolkata (67.28%)**<br>**RTL - HP (73.60%)**<br>**SPICE – KTK (75.00%)**<br>**Idea - GJ (75.00%)** |
| %Age of calls answered by operator (voice to voice); within 90 seconds = 95% | **95%** | **BSNL – AP (82.00%), KTK (92.00%), KR (93.00%), UP-E (94.00%), RJ (91.00%), Assam (93.00%), NE (92.00%), Kolkata (94.00%)**<br>**MTNL - Delhi (92.00%)– GSM Service**<br>**Bharti Airtel - TN (92.05%), KR (92.18%), UP-W (93.60%), UP-E (85.15%), RJ (94.87%), MP (94.77%), WB (91.65%), Orissa (79.13%), Assam (80.25%), NE (89.50%), Kolkata (91.65%)**<br>**Reliance Comm - AP (82.41%), KTK (94.63%), PB (92.59%), HR (83.16%), UP-E (82.58%), WB (78.36%), RJ (94.71%), HP (92.59%), Bihar (51.55%), Kolkata (78.36%)**<br>**RTL - Kolkata (87.00%)**<br>**Tata Tele - MH (84.99%), Delhi (89.00%), Mum (92.29%)**<br>**Vodafone - Kolkata (91.00%)**<br>**Idea – GJ (90.00%), UP-W (92.00%), RJ (92.00%), HP (90.00%)** |

| | | |
|---|---|---|
| **Complaints per 100 bills issued** | **<0.1%** | **Tata Tele** - **MH (0.110%), HR (0.120%)**<br><br>**Idea** - **GJ (0.140%)** |
| **% Of complaints resolved within 4 weeks** | **100%** | **All the Operators meeting this Benchmark** |
| **Period of all Refunds/Payment due to Customers from the date of resolution of complaints** | **<4 Weeks** | **All the Operators meeting this Benchmark** |

Some of the Service Providers are having problems in achieving the benchmarks in respect of parameters (i) %age of calls answered by operator (voice to voice); within 60 seconds (ii) %Age of calls answered by operator (voice to voice); within 90 seconds.

**Details of Quality of Service Parameters :**

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

## Quality of Service Performance of Internet Service Providers for quarter ending 30th September 2008: -

5.5 Annex M indicates the Quality of Service achieved by the ISPs during the quarter.

**The observations on QoS Benchmarks are as follows:**

5.6 **Service Activation Time (6 hrs):**

All the ISPs have met the TRAI benchmark of 6 hrs. M/s HFCL Infotel LTD and M/s Tata Teleservices (MH) have not provided the data.

5.7 **Time to Access ( 30 sec) :**

All the ISPs have met the TRAI benchmark of 30 sec

5.8 **Probability of Accessing the ISP Node**

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

5.9 **ISP Node Unavailability ( 30 min):**

ISP Nodes unavailability should not exceed 30 minutes in a month. All the ISPs have met the TRAI benchmark except M/s Tata Communications, M/s. HFCL Infotel Ltd. and M/s Tata Teleservices (MH) have not been provided data.

5.10 **Grade of Service ( 1 in 100):**

ISPs are required to maintain the Grade of Service on the link connecting PSTN Node to the ISP Node as 1 in 100. M/s.Reliance Comm. Infrastructure Ltd., has not provided data. M/s Tata Communications has informed that information not provided by BSO.

5.11 **Mean Time to Restore (MTTR) ( 3 days):**

As per clause 1.9 schedule "C" of ISPs license. ISPs are required to rectify 90% of faults resulting due to subscriber complaint within 24 hours and 99% within three days. All the Operators have met this benchmark.

## Quality of Service Performance of Internet Service Providers providing broadband service for quarter ending 30th September 2008

5.12 Broadband Regulations came into force with effect from 1st January of 2007. Total number of the Broadband Service providers was 72 at the end of quarter ending June, 2008. No new service provider is added in this quarter.

5.13 Out of 72 Broadband Service providers only 13 Service Providers are having subscriber base more than 10,000 subscribers and these 13 Service providers share the 98.64% of total subscriber base in this quarter. The total number of Broadband Subscribers of these 13 Service Providers have increased from 4320498 to 4846810 by adding 5,26,312 (12.18%) subscribers in the quarter ending September, 2008. This report covers performance of 13 broadband Service Providers vis-à-vis the QoS benchmarks prescribed by TRAI.

5.14 Broadband Regulations came into force with effect from 1st Jan 2007. Based on Quality of Service Parameters reported by Internet Service Providers providing broadband service for the quarter ending September 2008, the information on QoS performance is attached to this report as Annex N.

5.15 Following table indicates the status of non-compliance in respect of QOS benchmarks for Internet Service Providers providing broadband service:

**Table 21: Status of Non-Compliance of QoS benchmarks for Internet Service Providers providing Broadband Service.**

| Sl. No. | Parameters | Benchmarks | Name of Service Provider not Meeting the Benchmark |
|---|---|---|---|
| 1 | **Service Provisioning/ Activation Time** | 100% in =< 15 working days | **BSNL:-** AP(88.90%), Assam, (99.80%), Bihar(97.80%), Chhattisgarh (99.30%), HP(99.40%), J&K(84.20%), Jharkhand (99.50%) ,KTK (68.20%), KR (98.40%), Kolkata (64.60%), MH (88.60%), NE-I(89.40%), Orissa (91.70%), Punjab(99.60%) TN(81.80%), UP(W)(88.10%), Uttaranchal (69.50%) ,WB(93.30%). **MTNL:-** Delhi(81.02%), Mumbai(73.01%).<br>**Bharti Airtel:-** MP&CG(99.00%), MH(99.00%)<br>**Tata Communications:-** East(88.00%), North (99.00%) South1 (99.00%), South2 (98.00%), South 4(99.00%), West 1(98.00%)<br>**Hathway:-** Guj(92.50%), MH(92.00%)<br>**Reliance :-** All India (99.00%) |
| 2 | **Faults Repair /Restoration Time** | | |
| | % of faults repaired by next working day | >90% | **BSNL:-** Chennai (89.30%), Kolkata(48.20%), NE-I(89.70%)<br>**MTNL:-** Delhi (71.00%), Mumbai (62.56%)<br>**Tata Communications :-** Central Region(86.00%), East(84.00%) North(81.00%), South1(84.00%), South2(87.00%), South3(76.00%), West1(81.00%), West2(84.00%)<br>**You Telecom:** AP(89.68%), MH(86.00%) |

| | | | |
|---|---|---|---|
| | % of faults repaired within 3 working day | =>99% | **BSNL:-** Bihar(93.70%), Jharkhand((98.90%),Kol(74.40%), MH(98.20%), NEI(83.70%), TN(95.30%), UP(W)(97.20%), WB(97.60%) <br> **MTNL:-** Delhi (90.51%), Mumbai(84.68%) <br> **Bharti Airtel:-** KTK(98.00%), Delhi(98.00%). <br> **Tata Communications:-** Central Region (97.00%) <br> East (95.00%), <br> North (93.00%), South 1 (96.00%), South 2(97.00%), South 3(90.00%), South 4(98.00%) West 1 (93.00%), West 2(95.00%) <br> **You Telecom India Pvt Ltd.:** Guj(98.28%), MH(98.41%) |
| **3** | **Billing Performance** | | |
| | %age of bills disputed | <2% | |
| | %age of billing complaints resolved within 4 weeks | 100% within 4 weeks | **BSNL:-** AP(98.30%), Bihar(72.00%), HR(96.30%), Karnataka(99.70%), Kolkata(74.00%), Orissa(96.20%), Raj(99.90%), UP(W) (87.50%) <br> **Bharti Airtel:** AP(97.00%), KTK(97.54%) <br> **Hathway:** Delhi(99.00%) <br> **Ortel:** Orissa(00.00%) |
| | %age of cases to whom refund of deposits is made within 60 days of closures | 100% within 60 days | **BSNL:-** AP(99.90%), Bihar(73.20%), HR(96.30%), Kolkata(87.00%) <br> Orissa(85.50%), UP(W)(83.30%) <br> **Bharti Airtel:-** Delhi(96.00%), Kol(80.00%) <br> **You Telecom India Pvt. Ltd.:** Guj(99.00%) <br> **Ortel :** Orissa (00.00%) <br> **Asianet :** Kerala (99.56%) |
| **4** | **Response Time to the Customer for assistance** | | |
| | %age of calls answered by operator (voice to Voice) within 90 sec | >80% | **Bharti Airtel:-** Delhi(78.00%), Haryana(78.00%), Kolkata(78.00%), Punjab(78.00%), Raj(78.00%), UP-East(78.00%), <br> UP-West(78.00%) |
| **5** | **Bandwidth utilisation/throughput** | | |
| | No. of Intra network links having Bandwidth utilisation >90% during peak hours (TCBH) | | **Bharti Airtel:-** Delhi(14 Links), Raj (1 Link) |
| | % of International bandwidth utilization during peak hours (TCBH) Enclose MRTG) **Benchmark<90%** | | **Alliance :** Kolkata (93.00%) |
| **6** | Service availability /uptime (for all users) in %age | >98% | **BSNL:** J&K(96.50%), <br> NE I (94.10%), <br> NE II (96.20%) <br> **Tata Comm. Ltd.):-** North (97.21%), South 2(97.51%), South 3(95.34%), West 1 (97.29%), West 2 (96.29%) <br> **Reliance:** All India (68.02%) |
| **7** | Packet loss (for wired broadband access) in %age | <1% | **Bharti Airtel:** AP(55.67%), KTK(52.89%), TN(58.54%) |
| **8.1** | User reference point at POP/ISP Gateway node to IGSP/NIXI | <120ms | **Bharti Airtel:** MP&CG(162 ms) |

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# CHAPTER SIX

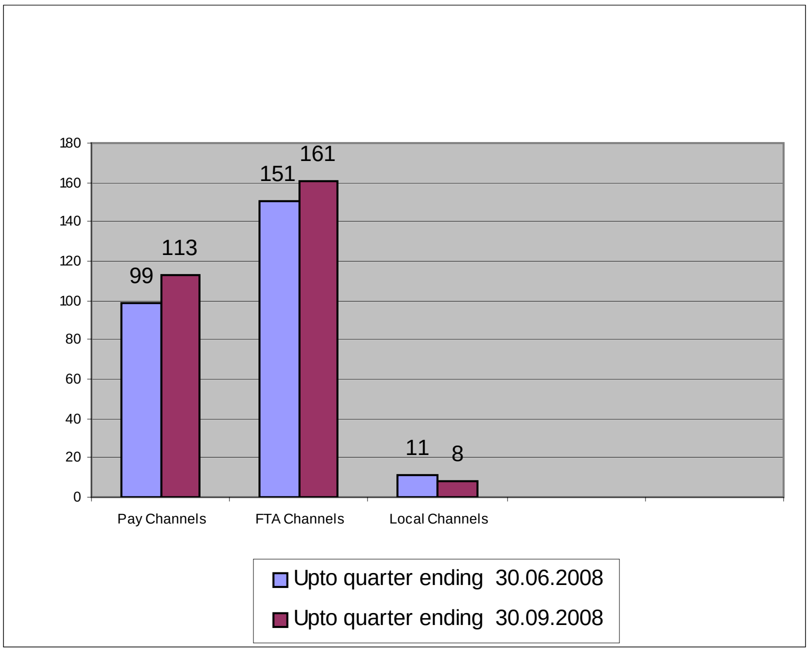
# PERFORMANCE OF CABLE TV, DTH AND RADIO BROADCASTING SERVICES

## Cable TV Services

6.1 Figure 30 depicts the maximum number of FTA channels, Pay channels and local channels being carried by the MSOs in their network across the country. This is based on the reports received from some of the major service providers regarding the number of channels being carried by them in their networks analogue and/or in digital form. These channels have been reported across different networks of the service providers having different combinations of pay, FTA and Local channels in their network.

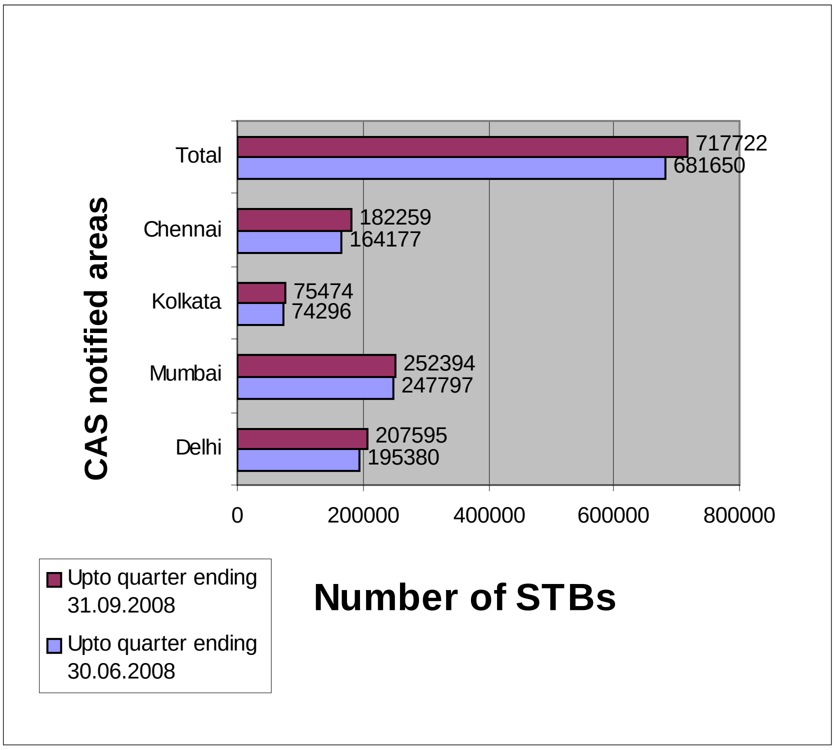
6.2 The maximum number of Free-to-Air (FTA) and Pay Channels reportedly being carried in the cable networks are 161 and 113 respectively in this quarter. However, these numbers relate to different networks and hence cannot be added for arriving at the total number of channels.

**Figure 30 : Maximum Number of Channels**




6.3 At the end of the quarter June, 2008, there were 681650 number of set top boxes (STBs) installed in the CAS notified areas of Delhi, Mumbai, Kolkata and Chennai. Now, at the quarter ending September 2008, the number has increased to 717722 in the CAS notified areas of Delhi, Mumbai, Kolkata and Chennai. The Figure 31 shows the city-wise status of STBs installed at these four places.

**Figure 31: Set Top Boxes (STBs)**




## Satellite TV Channels

6.4 At the end of September, 2008, there are reportedly 129 pay channels in existence. These 129 channels are being broadcasted / distributed by 19 broadcasters or their distributors. The list of broadcasters/distributors of pay channels alongwith the rates of pay channels for Non-CAS areas is at Table 38.

6.5 During the quarter ending September 2008, 4 pay channels were launched by the broadcasters and one channel namely "Reality TV" was deleted by the broadcaster (M/s Zee Turner Limited). The details of new pay channels are as under:-

**Table 22 : List of New Pay Channel Launched**

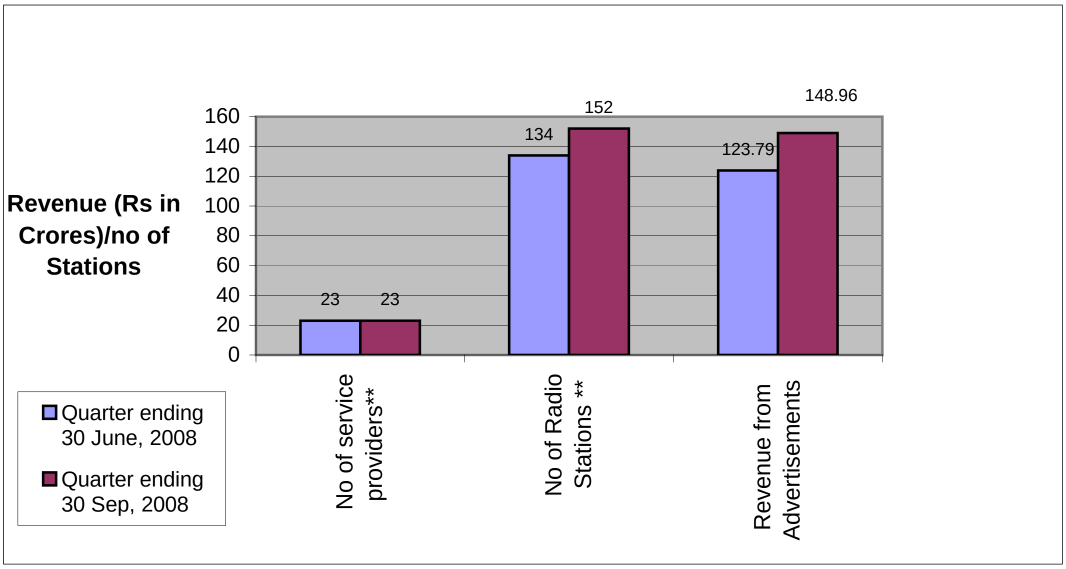
| S.No | Name of the Broadcaster | Name of the pay channel |
|---|---|---|
| 1 | M/s New Delhi Television Limited | NDTV Lumiere |
| 2 | M/s New Delhi Television Limited | NDTV Showbiz |
| 3 | M/s VIACOM 18 Media Private Limited | COLORS |
| 4 | M/s Star Den Media Services Pvt Ltd | The MGM Channel |

## FM Radio Services

6.6 Apart from All India Radio, there were 236 FM Radio station in operation as on June 30, 2008. During the quarter ending September 30, 2008, no private FM radio station came into operation. The list of these stations is at Table 39.

6.7 The total Advertisement Revenue up to the quarter ending June' 08 in respect of 23 FM Radio Service Providers and for quarter ending September, 2008 in respect of 23 FM Radio Service Providers who have given their reports is given in the Figure 32 below. However, the details do not pertain to the same set of service providers.

**Figure 32 : Comparative Position of Revenue of FM Radio Station**

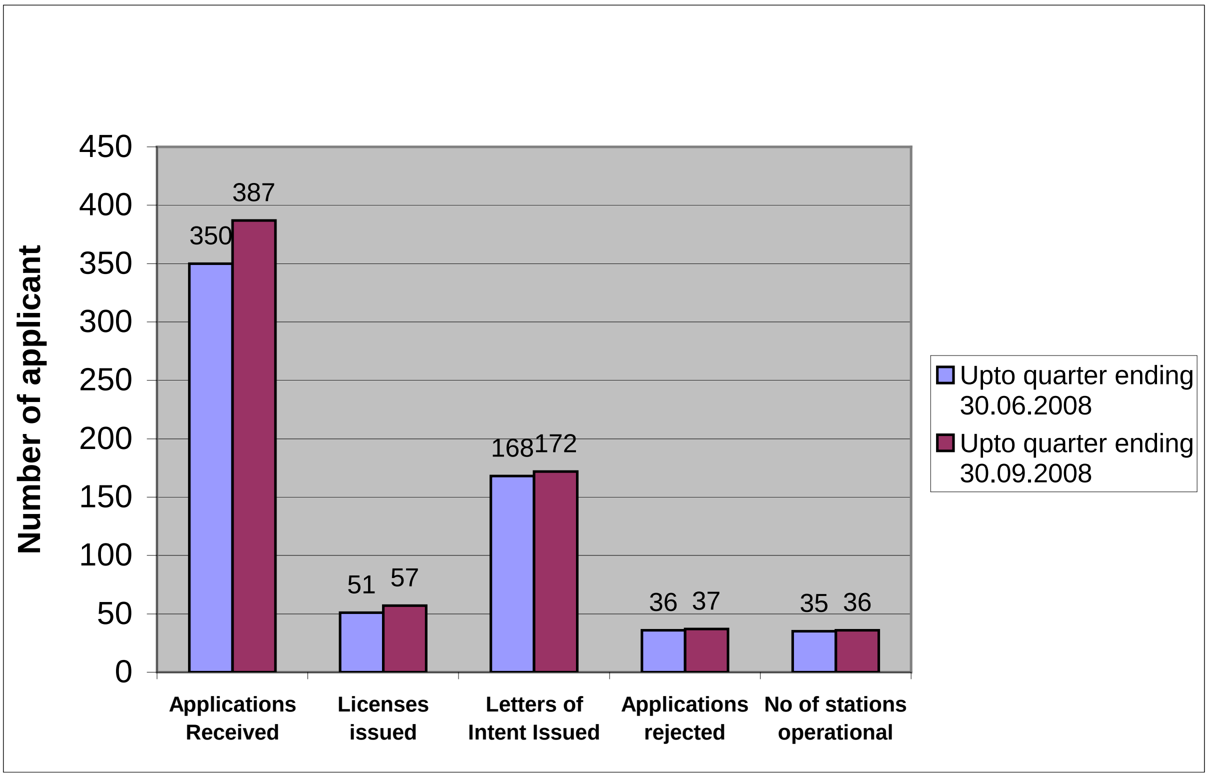



** Some of the service providers have not reported the advertisement revenue details.

## Community Radio

6.8 Upto quarter ending June 2008, there were 51 Community Radio Stations licensees and out of these, 35 were in operation. In the Quarter Ending September, 2008, 6 more licenses were issued At the quarter ending September, 2008, out of 57 licensees of community radio stations, 36 stations are in operation. The status of applications for community radio station licenses received in Ministry of Information and Broadcasting upto the end of September 2008 is at Table 40. The Figure 33 gives the status of applications for Community Radio licenses upto the quarter ending September 2008 received by Ministry of Information and Broadcasting:-

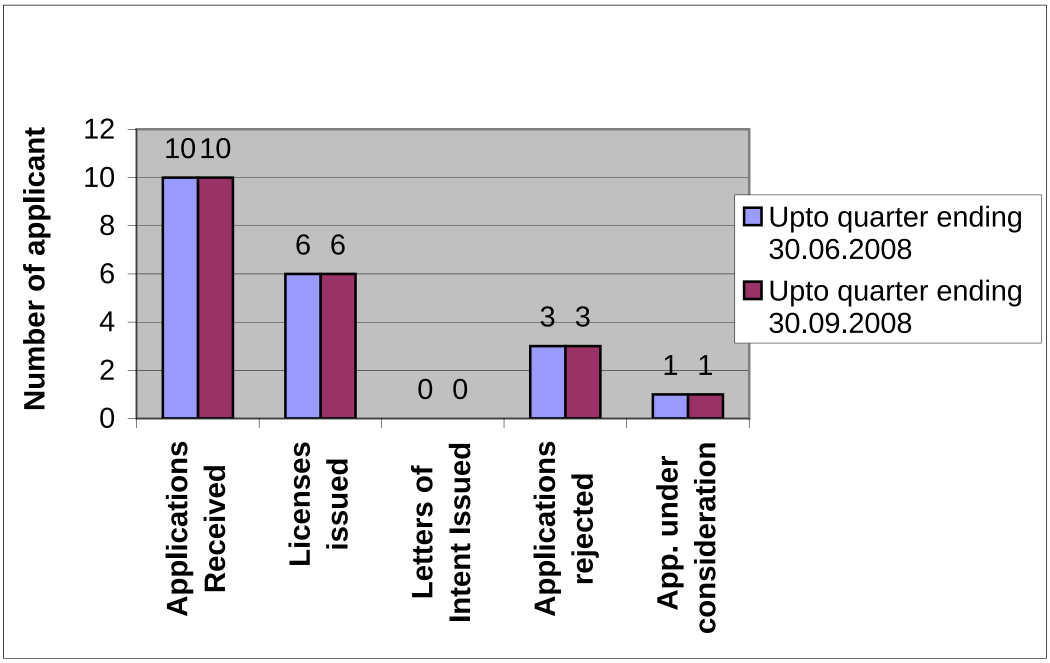
**Figure 33 : Status of Community Radio Stations Applications**




## DTH Services

6.9 No DTH license was issued during the quarter. Therefore, at present, apart from free to air DTH service of Doordarshan, there are 6 private DTH licensees. The Figure 34 below gives the status of applications for DTH licenses upto the quarter ending September 2008 received from the Ministry of Information and Broadcasting:-

**Figure 34: Status of DTH Applications**



6.10 Out of 6 DTH licensees, only 4 licensees are offering pay DTH services to the consumers as on 30.09.2008. Total number of reported registered subscribers being served by these 4 DTH operators as on 30.09.2008 is 7.99 million. The list of DTH licensees is at Table 41.

## Teleport Service

6.11 Upto quarter ending June, 2008, there were 50 Teleport Service Providers in operation in India. In the quarter ending September 2008, 4 more licenses were issued. At the quarter ending September, 2008, 54 Teleport Service Providers are in operation in India. The list of these stations is at Table 42**.**

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# CHAPTER SEVEN

## FINANCIAL DETAILS OF TELECOM SERVICE SECTOR

### Analysis of GR, AGR, License Fee & Spectrum Charges for the Quarter ending September 2008 (II$^{nd}$ Quarter of the fin. year 2008-09)

7.1 Figures for the Industry as a whole for Quarter II of F.Y 2008-09 are given below:

**Table 23: Figures for the Quarter II of F.Y 2008-09**

| Item | Amount (Rupees in crore) |
|---|---|
| Gross Revenue (GR) | 37196.21 |
| Adjusted Gross Revenue (AGR) | 27356.60 |
| License Fee | 2339.33 |
| Spectrum Charges | 754.65 |
| Pass through (GR – AGR) | 9839.60 |

7.2 Increase in Gross Revenue and AGR by 5.34% and 1.36% respectively over the previous quarter. Last Quarter, there was a decrease in GR and AGR by 1.30% and 3.17% respectively over the previous quarter.

7.3 Service Provider wise GR, AGR, LF & Spectrum Charges for quarter ending September 2008 are available at Table 43.

7.4 In Access services, GR is increased by 4.13%, AGR by 0.94%, License Fee (LF) by 0.70% and Spectrum charges by 1.34%. In NLD, GR is increased by 10.35%, AGR by 8.79% and LF by 8.83%. In ILD, GR is increased by 7.93% whereas AGR and LF are decreased by 7.02% and 7.03% respectively. The ILD Traffic (incoming & outgoing) has increased by 10.49% over the previous quarter with incoming increased by 11.49% and outgoing minutes by 7.90%.

7.5 In case of access services, the pass through as % of Shyam is the highest - 67.59%(37.96%). It is followed by Reliance – 33% (21.61%), Tata – 32.18% (28.92%), BPL – 28.56% (29.16%) and Spice – 27.68% (19.31%). Figures in brackets are for previous quarter.

7.6 In NLD, pass thru is highest of Idea –81.82%(76.92%) followed by Tulip –53.60% (47.09%), Reliance – 40.61% (42.16%), Vodafone –35.85% (43.50%) and Tata-29.55%(29.76%). Figures in brackets are for previous quarter. BSNL, Sify and HCL have not shown any pass thru.

7.7 In ILD, BSNL, Aircel, BT, AT&T and Sify have not shown any pass thru. Amongst the four SPs which have shown pass thru, pass thru % of GR is highest in case of Vodafone –76.11%(73.07%) followed by Tata-69.93%(61.91%), Bharti – 69.55%(62.55%) and Reliance – 64.63%(53.43%). Figures in brackets are for previous quarter.

7.8 As in the previous quarter, Bharti – Airtel Group again has the highest Gross Revenue (Rs. 10007.04 crore) followed by the BSNL (Rs. 8800.07 crore). However, in terms of AGR, BSNL is still No. 1 – Rs. 7449.58 crore against Rs. 7214.09 crore for Bharti Group, despite a higher GR of Bharti. Pass Thru component of Bharti is Rs.2792.95 crore (27.91% of GR) as against BSNL's Rs.1350.48 crore (15.35% of GR).

7.9 The AGR share of Public and Private sector is 31.23% and 68.77% respectively as against 31.37% and 68.63% respectively in the previous quarter.

7.10 The License Fee contribution of Bharti is 25.96% followed by BSNL (25.92%), Vodafone (15.01%) and Reliance (10.03%).

7.11 Overall % of License Fee to AGR is 8.55% as against 8.58% in previous quarter.

7.12 Vodafone has added data for Assam, North-East and Orissa Service Areas, all in Category – C. Idea has added data for Mumbai Service Area. Their services in Bihar were launched in October, 2008 for which Spectrum Charges have been indicated.

7.13 MTNL has shown a decrease in GR and AGR by 5.04% and 4.32% respectively from the previous Quarter. In last quarter, there was an increase of 3.87% and 2.55%.

7.14 Reliance has shown an increase in GR by 8.97%. However, there is a decrease of 5.46% in AGR. In last quarter, their GR decreased by 3.24% whereas AGR increased by 3.56%.

7.15 Shyam Telelink has shown a decrease in GR and AGR by 10.67% and 53.34% respectively from the previous Quarter. In last quarter, there was a decrease in GR by 2.83 and an increase in AGR by 10.79%.

7.16 Service Providers viz., Tata Teleservices, Aircel (in two circles only), Shyam, Tata Communications, HCL, Tulip and Railtel have included Service Tax in GR and also taken Service Tax billed/paid as deduction for AGR. An amount of Rs. 246.54 crore for Service Tax has been shown as deduction by them. Tata Teleservices has also shown an amount of Rs. 1.59 crore as deduction for Sales Tax. Shyam Telelink and Aircel have also shown Rs. 0.02 and 0.01 crore as Sales Tax Deduction respectively. Rest of the SPs, including Bharti, BSNL, Reliance, Vodafone and Idea have not shown any amount of service tax for GR or as deduction nor any Sales Tax as deduction.

**Table 24: Comparison of Gross Revenue, Adjusted Gross Revenue (AGR), Licence Fee and Spectrum Charges (I$^{st}$ Quarter & II$^{nd}$ Quarter of 2008-09)**

**(Rs. in Crore)**

| Gross Revenue | | % Change | AGR | | % Change | Licence Fee | | % Change | Spectrum Charges | | % Change |
|---|---|---|---|---|---|---|---|---|---|---|---|
| I$^{st}$ Qtr. | II$^{nd}$ Qtr. | | I$^{st}$ Qtr. | II$^{nd}$ Qtr. | | I$^{st}$ Qtr. | II$^{nd}$ Qtr. | | I$^{st}$ Qtr. | II$^{nd}$ Qtr. | |
| 35311 | 37196 | 5.34% | 26990 | 27357 | 1.36% | 2316 | 2339 | 1.01% | 744 | 755 | 1.38% |
| 129082* | | | 101484* | | | 8363* | | | 2665* | | |

* Figures for last financial year (2007-08)

## Table 25 : Service wise Gross Revenue, Adjusted Gross Revenue (AGR), Licence Fee and Spectrum Charges (IInd Quarter of 2008-09)

**(Rs. in Crore)**

| Service | IInd Qtr of F.Y. 2008-09 | | | | % Share | | | |
|---|---|---|---|---|---|---|---|---|
| | GR | AGR | LF | Spectrum Charges | GR | AGR | LF | Spectrum Charges |
| **Access Providers** | 30899.44 | 23672.36 | 2118.29 | 753.66 | 83.07 | 86.53 | 90.55 | 99.87 |
| **NLD** | 3514.15 | 2546.31 | 152.79 | 0.16 | 9.45 | 9.31 | 6.53 | 0.02 |
| **ILD** | 2017.45 | 842.77 | 50.56 | 0.00 | 5.42 | 3.08 | 2.16 | 0.00 |
| **Others (reported)** | 765.17 | 295.17 | 17.70 | 0.83 | 2.06 | 1.08 | 0.76 | 0.11 |
| **Total** | **37196.21** | **27356.60** | **2339.33** | **754.65** | 100% | 100% | 100% | 100% |

## Table 26: Category-wise Share in the Access Revenue (GR)

| Category | GR | % | Revenue (Last Quarter) | % (Last Qtr.) | % change |
|---|---|---|---|---|---|
| Metro | 6329 | 20% | 6193 | 21% | 2.20 |
| A | 12068 | 39% | 11805 | 40% | 2.23 |
| B | 9858 | 32% | 9208 | 31% | 7.06 |
| C | 2644 | 9% | 2468 | 8% | 7.13 |
| **Total** | **30899** | **100%** | **29675** | **100%** | **4.12** |

**Note:**

1. Source: Figures are un-audited and as submitted by the Operators.
2. The figures have been regrouped for analysis purpose.
3. The Spectrum charges are now reported on “Payment due for the Quarter” basis. However some operators are reporting on payment basis or on estimate basis on projected AGR for next quarter.
4. Metro area includes Delhi, Mumbai and Kolkata only. Chennai is clubbed with Tamilnadu.
5. VSNL indicates VSNL Broadband Ltd. Rest is now Tata Communications Ltd. and hence, included in Tata Group.

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