

# **Telecom Regulatory Authority of India**

**(ISO 9001 : 2000 Certified Organisation)**

## **Annual Report 2007-08**

Telecom Regulatory Authority of India  
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## Letter of Transmittal

**To the Central Government through Hon'ble Minister of Communications and Information Technology**

It is my privilege to forward the 11<sup>th</sup> Annual Report of the Telecom Regulatory Authority of India to be laid before each House of Parliament. The report is for the year 2007-08. Included in this report is the information required to be forwarded to the Central Government under the provisions of the Telecom Regulatory Authority of India Act, 1997, as amended by TRAI (Amendment) Act, 2000.

The report contains an overview of the Telecom Sector and a summary of the key initiatives of TRAI on the regulatory issues with specific reference to the functions mandated to it under the Act. The Audited Annual Statement of Accounts of TRAI has also been included in the report.



**(NRIPENDRA MISRA)  
CHAIRPERSON**

Dated: 10<sup>th</sup> October 08



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# A.

## COMPOSITION OF AUTHORITY

The Telecom Regulatory Authority of India Act, 1997, as amended vide the Telecom Regulatory Authority of India (Amendment) Act, 2000, specifies that the Authority shall consist of a Chairperson and not more than two whole-time Members and not more than two part-time Members.

As of 31<sup>st</sup> March, 2008, the Authority consisted of the following:

Name	Designation	Date of Charge Assumption
Shri Nripendra Misra	Chairperson	22.3.2006
Shri A.K. Sawhney	Member	30.6.2006
Shri R.N. Prabhakar	Member	27.2.2007
Prof. N. Balakrishnan	Part-Time Member	26.9.2006
Dr. Rajiv Kumar	Part-Time Member	23.1.2007

The Chairperson and other members shall hold office for a term not exceeding three years, as the Central Government may notify in this behalf, from the date on which they enter upon their offices or until they attain the age of sixty five years, whichever is earlier.



**NRIPENDRA MISRA  
CHAIRPERSON**

(From 22<sup>nd</sup> March, 2006 onwards)

Shri Nripendra Misra joined as Chairman, Telecom Regulatory Authority of India on 22<sup>nd</sup> March 2006. Earlier, he was Secretary, Department of Telecommunications & Chairman, Telecom Commission, Govt. of India up to March, 2005. As Secretary, Department of Telecommunications & Chairman, Telecom Commission, he was responsible for all matters relating to telecom sector in the country including licensing, public-private sector participation in growth of telecom services, telecom network policies, spectrum management, rural telephony etc. He held several senior executive and policy level positions during his career span of nearly 38 years in the U.P. State and Government of India. He served as Special Secretary, Finance, Government of Uttar Pradesh (1978-80) and as Director (World Bank-IMF Division) in the Department of Economic Affairs, Ministry of Finance (1981-84) and further as Joint Secretary, Fund Bank Division (1984-85) in the same Department. From August, 1985 to July, 1988, he served as Minister (Economic) in the Indian Embassy, Washington D.C. and was responsible for all aspects of trade and economic relations between India and USA including monitoring of Multilateral (World Bank, IFC & IMF) and bilateral aided programmes, and also for promotion of investment opportunities in India from US Private Sector.

He was Secretary in the Department of Institutional Finance, Taxation and Excise, Govt. of Uttar Pradesh (1988-89) and from January, 1990 to October, 1992 served as Principal Secretary to the Chief Minister,

Govt. of Uttar Pradesh. As Principal Secretary to the Chief Minister, he played a major role in the formulation and implementation of new industrial, trade and fiscal policies as well as agricultural and rural development policies of the State. During October, 1992 to January, 1994, he was the Chairman and Chief Executive Officer, Greater NOIDA industrial Development Authority and was responsible for integrated development of the new industrial town. During January, 1994 to July, 1995, he served as Member, Board of Revenue, Govt. of Uttar Pradesh and further as Principal Secretary, Home-II, Govt. of Uttar Pradesh during 1995-96.

From November, 1996 to January, 2002, he served in the Ministry of Commerce. He was responsible for all matters relating to WTO, Export-Import Policy, bilateral and regional trade agreements and bilateral trade relations with European Union and Member countries.

As Secretary to the Government of India in the Department of Fertilizers (January, 2002 to January, 2004), he was responsible for policies relating to fertilizer production, demand-supply of agricultural inputs in the country, pricing policy including policies for resource poor farmers, determination of efficient norms of production on an annual basis with key emphasis on fuel and energy indexes.

Shri Misra was a Member on the Board of Directors of National Co-operative Development Corporation, UP Finance Corporation, KRIBHCO and IFFCO and was

also a Member to the RBI Committee on Urban Co-operative Bank and the Internal Review Committee for National Bank of Agricultural Refinance and Development.

He did Masters in Public Administration from Harvard University in 1981. He has to his credit various published articles in noted journals and periodicals.

Under his leadership further impetus for growth in the telecom sector were provided through various regulatory measures. These measures have put the telecom sector in a path of very high growth rate, which is highest in the world. The success story of these regulatory measures taken under his guidance is demonstrated by India becoming the second largest wireless network in the world, more than doubling of the customer base in two years, touching 300 million telephone connections with tele-density of 26.22%, and addition of over 10 million telephone connections per month by March 2008. The total subscriber base of wireless and wireline services which was 140.32 million in March 2006 rose to 300.49 million in March 2008. The Broadband subscriber base also witnessed phenomenal increase from 1.35 million in March

2006 to 3.89 million in March 2008. Similarly in Broadcasting and Cable TV Services the landmarks are successful implementation of the Conditional Access System (CAS) in notified areas of Delhi, Kolkata and Mumbai and roll out of Direct to Home Service (DTH) and thereby bringing competition in this sector.

Alongwith infusing growth in the sector, under his leadership major regulatory initiatives were taken in the areas of consumer protection. These initiatives included establishment of 3-tier grievance redressal mechanism through the regulation on the Telecom Consumer Protection and Redressal of Grievances and establishment of Telecommunication Consumer Protection Fund. He also initiated capacity building programmes for Consumer Advocacy Groups (CAG) registered with TRAI and regional workshops for consumer education and to create awareness about the various steps taken by TRAI to protect the interest of consumers.

Shri Misra's tenure as Chairman of Telecom Regulatory Authority of India has been marked by TRAI putting in place National Do Not call Registry (NDNC) to curb the menace of Unsolicited Commercial Calls.



**A.K. SAWHNEY**  
**MEMBER**

(From 30<sup>th</sup> June, 2006 onwards)

Shri A.K. Sawhney joined as Member, Telecom Regulatory Authority of India on 30<sup>th</sup> June, 2006. Prior to his joining TRAI, he was Member (Finance) Telecom Commission and Ex-Officio Secretary to the Government of India. He got associated with telecom sector at a time when regulatory environment is rapidly evolving and his exposure to various licence and regulatory issues contributed in charting the future roadmap of the sector. As Member, Telecom Commission, he was involved in formulating the policies of the Department of Telecommunications and also implementation of the Government policies in all matters concerning telecom. Being Member (Finance) he was also exercising powers of Govt. of India in financial matters concerning Department of Telecom relating to budget formulation, handling of intricate revenue issues pertaining to telecom sector and also made contributions in policy analysis and implementation. He also had the opportunity of functioning on several occasions as Member (Technology) and Member (Production) which gave him exposure and experience in multiple-facets of telecom sector.

Shri Sawhney belongs to 1969 batch of the Indian Revenue Service. He was Chief Commissioner of Income Tax before being elevated to the post of Member (Finance). He held several challenging senior level positions during his career span of 34 years with the Income Tax Department which gave him enormous opportunities to handle diverse finance and complicated tax related issues involving sustained investigations and intricacies of law and accounts. Number of assignments held provided him enough

exposure to administrative, vigilance and consumer affairs also. He has also attended and participated in number of national and international seminars on tax administration and telecommunications. He is a regular observer in the ICCP Committee of OECD (Organization for Economic Co-operation and Development).

Shri Sawhney's tenure as Member of Telecom Regulatory Authority of India has been marked by TRAI making several recommendations to the Government in regard to Telecom Sector as well as Broadcasting & Cable Services, which are of far reaching consequences. During his tenure he has been able to further facilitate various policies which has led to accelerated competition, substantial reduction of tariffs, massive increase in subscriber base for cellular mobile services, resolving of interconnection issues and significant improvement in quality of services both in the telecom sector and also cable industry. In Broadcasting & Cable Services, TRAI has successfully implemented Conditional Access System (CAS) in parts of three metros (Delhi, Mumbai & Kolkata) and roll out of Direct to Home (DTH) services in addition to regulating sector by issuing various recommendations, tariff orders, directions and regulations and making it more affordable to common man.

He is also a keen sportsman having actively played tennis & badminton. He has represented and won number of All India Open Tennis tournaments organized by Central Revenue Sports Board. He also had the privilege of serving the Indian Army as Commissioned Officer for six years before joining the Civil Services.



**R.N. PRABHAKAR  
MEMBER**

(From 27<sup>th</sup> February, 2007 onwards)

Shri R.N. Prabhakar, an officer of 1968 batch of Indian Engineering Service, joined as a full time Member, TRAI on 27<sup>th</sup> February, 2007. He is graduate in Electrical Engineering from Delhi College of Engineering and postgraduate in Business Administration from Faculty of Management Studies, University of Delhi. He is fellow member of The Institution of Engineers (India).

Shri Prabhakar has 36 years of experience in the field of technical, administration and finance in telecom sector. He has held various senior level positions in the field organization of the Department of Telecommunications. While working in Telecom research, he had designed 600/1200 bps and 2400 bps modems during 1972-76. In Advanced Level Telecom Training Centre, Ghaziabad, he taught long

term planning concepts to Class I probationers and other trainees. He has been associated with planning, operations and management of Telecom Services in field posting as Head of Secondary Switching Area. Before retirement in January 2006, he was Advisor (Production), in the Department of Telecom, which has given him sufficient experience in the licensing and regulatory aspects. He also looked after the charge of Member (Production) in Telecom Commission.

He has participated in various international seminars and workshops and has presented technical papers related to Network Security, Regulation and Public Policy etc. He was also deputed for a period of about three years to Nigeria for imparting training to their telecom officers.



**PROF. N. BALAKRISHNAN**  
**(FTWAS, FNA, FASc, FNAE, FNASc, FIETE)**  
**MEMBER (PART-TIME)**

(From 26<sup>th</sup> September, 2006 onwards)

Prof. N. Balakrishnan, Member (Part-Time) w.e.f. 26<sup>th</sup> September, 2006 is a distinguished scientist of eminence in the country. He is currently the Associate Director of the Indian Institute of Science and a Professor at the Department of Aerospace Engineering and at the Supercomputer Education and Research Centre. Prof. N. Balakrishnan received his B.E(Hons) in Electronics and Communication from the Coimbatore Institute of Technology, University of Madras in 1972 and Ph.D. from the Indian Institute of Science in 1979. He then joined the Department of Aerospace Engineering as an Assistant Professor.

Prof. N. Balakrishnan was responsible for the creation of the Supercomputer Education & Research Centre, the National Centre for Science Information and the Centre for Microprocessor Applications at the Indian Institute of Science. He was the Chairman of Supercomputer Education and Research Centre till November 2001 and Associate Chairman of the Centre for Scientific and Industrial Consultancy. He was the Chairman of the Division of Information Sciences till 2006. He was Prof. Satish Dhawan Chair Professor at the Indian Institute of Science.

His areas of research where he has over 230 publications in the international journals and international and national conferences and reports, include Numerical Electro-magnetics, High Performance Computing and Networks, Polarimetric Radars and Aerospace Electronic Systems, Information Security, Digital Library and Speech processing.

In recognition of his distinguished contribution in the spheres of Science he has been awarded Padamshree by the President of India, in the year 2002. He has also

received numerous awards and recognition from National as well as International arena.

He was a member of the Scientific Advisory Committee to the Cabinet (SAC-C) and was a Member, Board of Governors of Indian Institute of Technology at Delhi.

He is a Member of the National Security Advisory Board and now a Member, Board of Governors of Indian Institute of Technology, Chennai.

He is a Fellow of the,

- The Academy of Sciences for Developing World (TWAS),
- Indian Academy of Sciences,
- Indian National Academy of Engineering,
- Indian National Science Academy (currently Vice President),
- Institution of Electronics & Telecommunication Engineers,
- National Academy of Sciences, India.

He is the editor of International Journal of Computational Science and Engineering and the International Journal on Distributed Sensor Networks. He is an Honorary Professor in Jawaharlal Nehru Centre for Advanced Scientific Research and National Institute of Advanced Studies. He is a consultant to several Governmental Agencies. He is one of the Directors of Bharat Electronics Limited (BEL), Director of CDOT- Alcatel Research Centre at Chennai, a member of the Council of CDAC, member of the council of many Universities and CSIR Laboratories.

He is the National Coordinator of the Indo-French Cyber University and Indo-US Digital Library Projects.



**DR. RAJIV KUMAR**  
**MEMBER (PART-TIME)**

(From 23<sup>rd</sup> January, 2007 onwards)

Dr. Rajiv Kumar joined TRAI as Member (Part-Time) on 23<sup>rd</sup> January, 2007. Since February 2006, he is Director and Chief Executive, of the Indian Council for Research on International Economic Relations (ICRIER), a New Delhi based economic policy think tank that was established in 1981. He is also a Member of the National Security Advisory Board since August 2006. From July 2004 to January 2006, Dr. Kumar was Chief Economist with the Confederation of Indian Industry (CII).

Dr. Kumar was with ADB, Manila for over 10 years as the Principal Regional Economist for Central Asia. He also worked in ADB's Research Department as well as Country Economist for Mongolia and China. He

worked as Economic Adviser in the Department of Economic Affairs, Ministry of Finance, Government of India from 1991-1995 and as Senior Consultant in-charge of the Economics Division with the Bureau of Industrial Costs and Prices, Ministry of Industry from 1989-1991.

Dr. Kumar was Professor at Indian Institute of Foreign Trade from 1987-89 and started his working career with ICRIER where he was earlier from 1982 – 1987. He completed his D.Phil. in Economics in 1982 from Oxford University and Ph.D. in Economics from Lucknow University in 1978. He has several books and publications to his credit and contributes regularly to newspapers and journals.



# B.

## MISSION, AIMS AND OBJECTIVES

### Preamble

The Telecom Regulatory Authority of India (TRAI) has always endeavoured to encourage greater competition in the telecom sector together with better quality and affordable prices in order to meet the objectives of New Telecom Policy, 1999. Vide a Notification dated 9<sup>th</sup> January, 2004 of the Government; Broadcasting and Cable Services also have been brought within the definition of 'telecommunication service' in terms of section 2(k) of the Telecom Regulatory Authority of India Act, 1997 as amended by the TRAI (Amendment) Act, 2000. A number of policy initiatives were taken in 2007-2008 to transform the telecom sector including the broadcasting and cable services to extend the scope, availability and reach of these services in India.

### Mission of TRAI

TRAI's mission is to create and nurture conditions for the growth of telecommunications including broadcasting and cable services in the country in a manner and at a pace which will enable India to play a leading role in the emerging global information society.

### Aims and Objectives of TRAI

The goals and objectives of TRAI are focused towards providing a regulatory regime that facilitates achievement of the objectives of the New Telecom Policy (NTP) 1999. As shown by the various initiatives mentioned later in this Report, the goals and objectives of TRAI are as follows:

- Making available telecommunication services which in terms of range, price and quality are comparable to the best in the world,
- Providing a fair and transparent policy environment which promotes a level playing field and facilitates fair competition,
- Establishing an interconnection regime that allows fair, transparent, prompt and equitable interconnection,
- Re-balancing tariffs so that the objectives of affordability and operator viability are met in a consistent manner,
- Protecting the interest of consumers and addressing general consumer concerns relating to availability, pricing and quality of service and other matters,
- Monitoring the quality of service provided by the various operators,
- Providing a mechanism for funding of net cost areas/ public telephones so that Universal Service Obligations are discharged by telecom operators for spread of telecom facilities in remote and rural areas,
- Preparing the grounds for smooth transition to an era of convergence of services and technologies,
- Promoting the growth of coverage of radio in India through commercial and non-commercial channels,
- Increasing consumer choice in reception of TV channels and choosing the operator who would provide television and other related services.
- Increasing tele-density and access to telecommunications in the country at affordable prices,



# C.

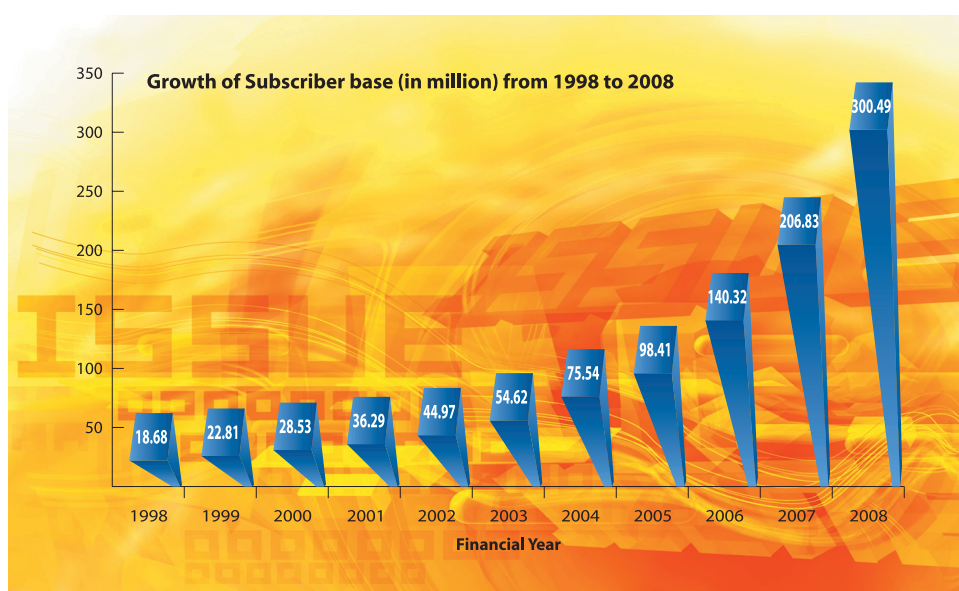
## OVERVIEW

The Journey towards excellence of Telecom Regulatory Authority of India in the regulation of Telecom Sector that commenced a decade back in 1997 continued during the Financial Year 2007-08 also. TRAI continued its work of regulating the telecom sector, as a forward looking regulator, and took number of initiatives which facilitated development of telecom sector including broadcasting and cable services in terms of growth of subscriber base, growth of telecom network and greater emphasis on protecting the interest of consumers. In this part of the report, an overview of the initiatives taken by TRAI in Telecom and Broadcasting Sectors; Developments in Tariff Regulation; Measures to protect the interests of Consumers; and Monitoring of Quality of Service have been discussed briefly. The details on these aspects have also been enumerated in Part I, Part II and Part III of this report.

### TELECOM SECTOR

The developments taken place during the year in terms of growth of various kinds of services have been incorporated in this Part of the report to give a flavor of the telecom sector during the financial year.

The total subscriber base (both wireless and wireline) of telecom sector in India during the financial year 2007-08 crossed 300 million mark with 300.49 million subscriber as on 31<sup>st</sup> March 2008. During the period, India became the second largest wireless network in the world after China by overtaking USA. The growth of subscriber base during the past decade (1998-2008) is indicated below in a chart.



## Box-1: A decade of journey towards excellence in telecommunications

- India became the second largest wireless network in the world, overtaking the USA and second only to China, with addition of about 8 million subscribers every month in the recent times
- Subscriber base reached 300.49 million as on 31<sup>st</sup> March 2008 as compared to 14.88 million for the same period in 1997
- Teledensity of 26.22 as on 31<sup>st</sup> March 2008 as compared to 2.30 for the same period in 1998 – much ahead of the teledensity target set under NTP, 1999 of 15 by the year 2010.
- Rural teledensity at the end of March 2008 was 9.20 as compared to 0.40 for the same period in 1998 – which too is much ahead of the NTP, 1999 target of 4 by the year 2010.
- Decline in Tariffs:
  - ✓ Local call tariff for mobile @ Rs. 15.00 is now less than Re. 1.00
  - ✓ One minute STD call between Delhi and Mumbai at the rate of Rs.37.00 now cost Re. 1.00 i.e. at the rate of local call
  - ✓ ISD call to American continent @ Rs. 75.00 now costs less than Rs. 7.00
- Subscriber base of internet reached 11.09 million on 31<sup>st</sup> March 2008 as compared to 0.09 million in 1997
- Putting in place Interconnection and Cost Based Interconnection Usage Charges regime
- Introduction, continuation and phasing out of Access Deficit Charges regime
- Introduction of Calling Party Pay regime
- Introduction of Mobile Termination Charges, which is lowest in the world
- Putting in place Tariff Order regime with the issue of Telecom Tariff Order 1999 and shift to a regime of tariff de-regulation in gradual manner
- Important Recommendations on USO, Spectrum issues, Broadband, Internet Telephony, Growth of Telecom Sector in Rural areas facilitating the Government to formulate policies on these issues
- Putting in place a regulatory framework in the Broadcasting & Cable Sector after the same was brought within the purview of TRAI in January 2004
- Successful roll out of Conditional Access System (CAS) in the metro city of Delhi, Mumbai, Chennai and Kolkata
- Introduction of Tariff and Interconnection regime for the Broadcasting & Cable Sector
- Tariff ceiling for cable subscribers in Non-CAS areas
- Ensuring orderly growth of the sector with a Consumer Centric approach
- Engaging consumer Advocacy Groups (CAGs) & NGOs in regulation of the telecom sector and regular interaction
- Establishment of three tier consumer grievances redressal mechanism
- Establishment of Telecommunication Consumers Education and Protection Fund
- Putting in place a mechanism for restricting unsolicited commercial communications

The major highlights of various services of the telecom sector during the financial year are indicated in the Box-2 and the growth pattern have been depicted in the graphs at Box-3.

An overview of the important activities in the telecom sector undertaken by TRAI during the year are enumerated in the following paragraphs:

### Recommendations on Infrastructure sharing

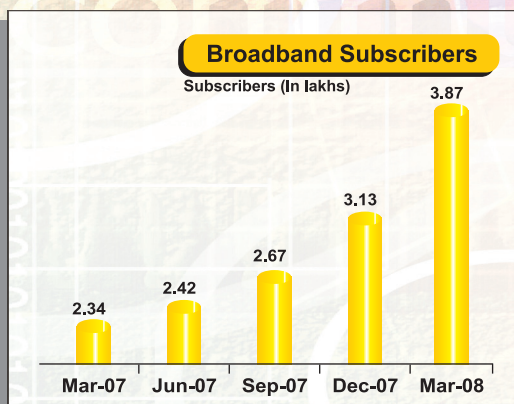
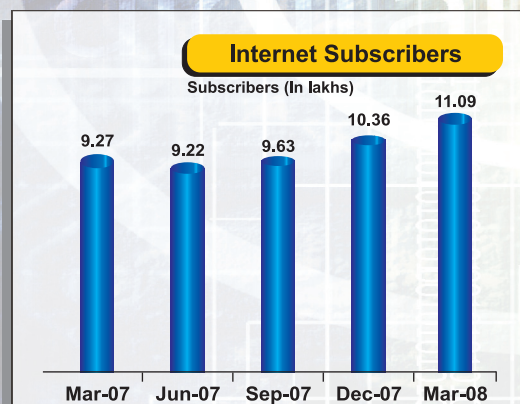
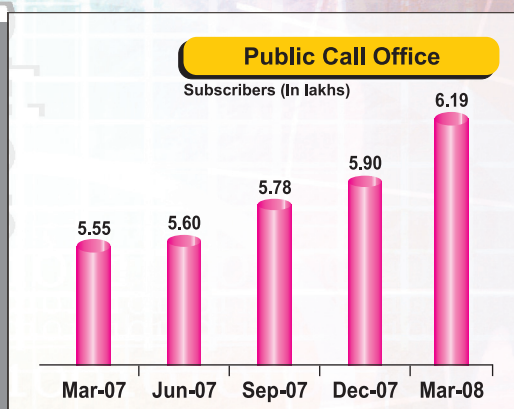
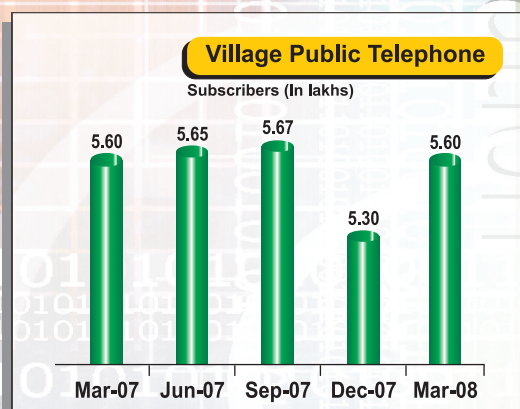
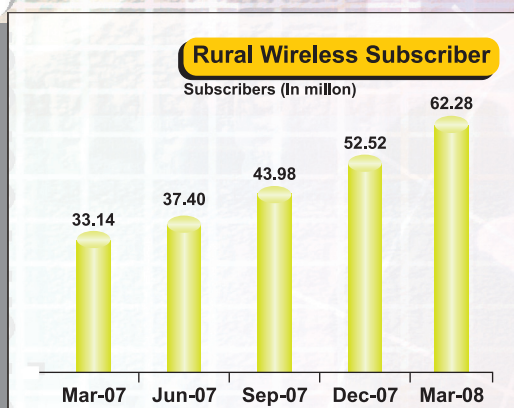
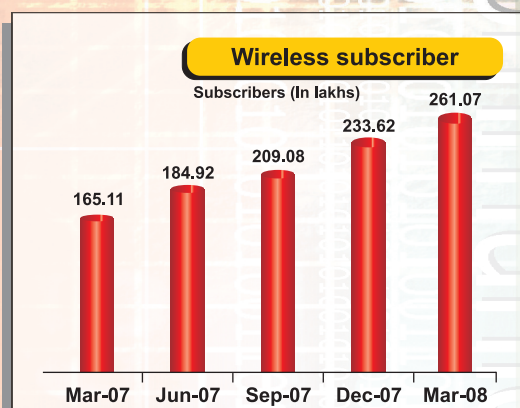
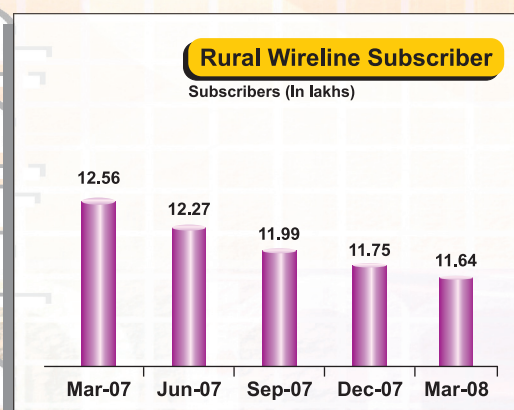
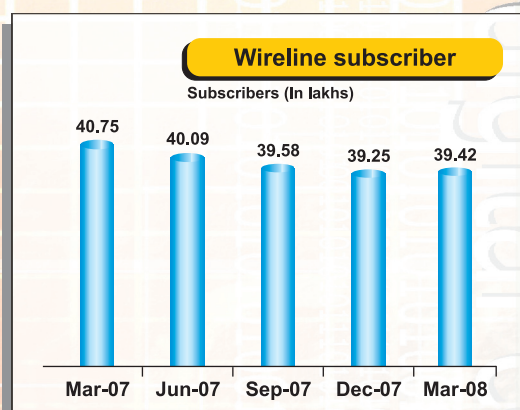
TRAI on 11<sup>th</sup> April 2007 made its backhaul on a *suo-motu* basis.

Recommendations on Infrastructure Sharing to the Government. Department of Telecommunication had sought recommendations from Telecom Regulatory Authority of India on effective sharing of passive infrastructure (towers etc.). Given the significance of infrastructure sharing the Authority had not only considered the issue of passive infrastructure sharing but also gave the recommendation regarding active infrastructure sharing and

## Box-2 : Major achievements in Telecom Sector during the Financial Year 2007-08

- The total wireless subscriber base {GSM, CDMA and WLL (F)} stood at 261.07 million at the end of financial year.
- The number of wireline subscribers on 31<sup>st</sup> March 2008 was 39.42 million.
- On an average, around 8 million subscribers were added every month during the financial year.
- The total number of PCOs in the country as on 31<sup>st</sup> March 2008 was 61,85,904 and the number of VPTs was 5,59,503.
- The overall teledensity at the end of March 2008 was 26.22% as compared to 18.23% ending March 2007
- The rural teledensity at the end of March 2008 was 9.20 as compared to 5.80 ending March 2007
- Institution of Telecommunications Consumers Education and Protection Fund and having a resource of Rs. 14.21 Crore in the Fund as on 31<sup>st</sup> March 2008, which is to be utilized, inter-alia, for
  - Study & Market Research Projects on matters relating to Protection of interests of Consumers
  - Organizing Seminars etc. on the subject of Telecommunication Consumer's Welfare and Education
- There were 11.09 million internet subscribers on 31<sup>st</sup> March 2008 as compared to 9.27 million on 31<sup>st</sup> March 2007.
- Besides the internet subscribers mentioned above, there are 66.09 million wireless data subscribers who are accessing internet through wireless (GSM and CDMA) networks.
- The number of broadband connections on 31<sup>st</sup> March 2008 was 3.87 million compared to 2.34 million for the same period during previous year.

## Box-3 : Telecom Sector in the year 2007-08 – A graphical display



In its recommendation, the Authority had reiterated the urgency of passive infrastructure sharing. The Authority had recommended amendment in the license condition to allow active infrastructure sharing limited to antenna, feeder cable, Node B, Radio Access Network and transmission systems. Considering the importance of backhaul sharing for mobile services in rural and far-flung areas, the Authority has recommended amendment in the license conditions to allow service providers to share their backhaul from Base Trans Receiver Station (BTS) to Base Station Controller (BSC). It has noted that such a sharing is permitted on optical fiber as well as radio medium at certain 'nodes'. It has been recommended that all the licensees in any service areas should qualify for financial subvention schemes meant for rural areas though at reduced scale compared to the winner in the tender process of USOF Administration. The Authority has also recognized the need to encourage use of non-conventional energy sources and has recommended to the DOT to finalise suitable schemes in consultation with the concerned Ministry so as to resolve the critical power availability issue.

It is expected that infrastructure sharing will help in faster growth of mobile services in rural & remote areas and thus reduce cost of service provisioning. Better mobile services, better reach at competitive costs will ultimately benefit subscribers.

### **Recommendations on improvement in the effectiveness of National Internet Exchange of India (NIXI)**

TRAI forwarded its recommendations on "Improvement in the Effectiveness of National Internet Exchange of India (NIXI)" on 20<sup>th</sup> April 2007 to the Ministry of Communication and Information Technology. Considering the issues impacting effectiveness of NIXI, the Authority made the recommendations to Ministry of Communication and Information Technology suo-motu in accordance with section 11 (i) (a) of TRAI Act 1997 for effective utilization of NIXI.

Major recommendations inter-alia include that all the ISPs or their upstream providers (ISP who is carrying the traffic to International Internet Bandwidth providers or NIXI) shall either connect to NIXI or with International Internet bandwidth providers through direct peering link. Compulsory announcement and acceptance of all the routes at NIXI nodes have been recommended. This will facilitate effective exchange of domestic Internet traffic at NIXI without requiring direct connectivity of ISPs at NIXI. Similarly Quality of Service parameters of NIXI nodes has been prescribed to ensure effective functioning of the NIXI.

It is expected that the initiative will substantially bring down ISP's expenditure on domestic bandwidth, which is likely to reduce content download charges resulting in net reduction in Internet and broadband usage charges. It is hoped that implementation of these recommendations will enable ISPs to effectively use NIXI platform for exchange of domestic traffic reducing content download charges and encouraging web hosting services in India. It will also result in better Quality of Service (QoS).

### **Regulation on "Telecom Consumers Protection and Redressal of Grievances Regulations, 2007"**

"Telecom Consumers Protection and Redressal of Grievances Regulations, 2007" which provide for the effective, speedy and inexpensive redressal of grievances of telecom consumers was issued on 4<sup>th</sup> May, 2007. As per this Regulation, Telecom Service Providers, who are providing Basic Telephone Service, Unified Access Services, Cellular Mobile Telephone Service and Broadband Service, are mandated, from the date of commencement of the Regulation, to establish Call Centers within 60 days, appoint or designate Nodal Officers for each service area within one month, so that they are easily accessible and available to consumers for redressal of the grievances and also appoint one or more appellate authorities in each licensed service area within three months. Service providers are also

mandated to publish "Manual of Practice for handling consumer complaints" which basically provides for consumer rights, obligation and resolution of grievances.

### **Recommendations on Review of Internet Services**

TRAI forwarded its Recommendation on Review of Internet Services to Department of Telecommunications (DoT) on 10<sup>th</sup> May 2007. DoT had requested TRAI for recommendations on Internet Service Providers (ISP) License. The reference from DOT further conveyed that the review should address the issue of a large number of ISP licenses and limited viability issues, illegal or grey market activities and level playing field vis-à-vis other telecom service providers. The Authority in its recommendations considered issues like grey market operations, provisions of various services under ISP license, steps to facilitate technological ingenuity and issues relating to level playing field vis-à-vis other telecom service providers. The Authority supported a liberal licensing framework for ISPs to boost Internet penetration but is also committed to provide framework which would curb grey market operations. The urgency of an expanded and unambiguous scope of ISP license, unrestricted Internet services including Internet Telephony, uniform rate of license fee was widely felt, as it would give ISPs better growth prospects and ensure level playing field among various service providers.

The Authority hopes that the recommendations would contribute to Internet penetration, curb grey market, effectively provide level playing field and above all serve the consumers interest.

### **Telecom Unsolicited Commercial Communications Regulations, 2007**

The Telecom Unsolicited Commercial Communications Regulations, 2007", was issued on 5<sup>th</sup> June 2007 for putting in place a mechanism for curbing the unwanted telemarketing calls. Through this Regulation, the Authority has facilitated setting

up of a national database, containing list of telephone numbers of all such subscribers who do not want to receive the UCC. This database will be called National Do Not Call Registry (NDNC). NIC has been contracted to design and maintain the NDNC. The telecom service providers will set up the call centers with "toll free telephone lines" to receive request from their subscribers who want to register in the NDNC. The service providers will periodically update the NDNC online and thus the NDNC will have the telephone numbers of all the subscribers from all over India who have opted not to receive any UCC. In the Regulation, maximum of 45 days have been given from the date of registration of request by a subscriber for inclusion of his telephone number in the NDNC. Telemarketers will have to register in the NDNC registry. The telemarketers would make online request by submitting the calling list to the NDNC registry and the registry will return the list of Do Not Call numbers to the requested telemarketer. In the Regulation, the Authority has mandated the Telemarketers to register themselves with the Department of Telecommunications, within three months of issue of the guidelines for Telemarketers by Department of Telecommunications. Otherwise, their telecom services may face disconnection.

To tackle the issue of violation of the Regulation by Telemarketers, the regulation has the following key provisions:

- Originating Access Provider to whom the complaint has been forwarded will examine and warn the guilty telemarketer / customer for the first time.
- If the UCC is repeated by the same telemarketer for the second time, his service provider shall charge a higher tariff. The Regulation provides for a special tariff on per call basis, which is Rs.500/-. Through Telecom Tariff Order (Forty-Fifth amendment) 2007 notified on 5<sup>th</sup> June 2008, prescribed tariff of Rs. 500/- for such Unsolicited Commercial Communication.

- The Telecom Service Providers have been directed to disconnect telephones connections of telemarketer if sending of such Unsolicited Commercial Communication is repeated.

It is expected that this Regulation will put a curb on the menace of Unsolicited Commercial Communication.

### **International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulations, 2007**

On 7<sup>th</sup> June 2007, International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulations, 2007 was issued. The Regulation provides for non-discriminatory, fair and open access at the cable landing stations. Access to submarine Cable Landing Stations (CLS) is considered an essential input for many telecom services needing international connectivity. Any access barriers to such facility can constrain the competitiveness of telecom operators and become

detrimental to healthy growth of international telecom market. Thus for the CLS, which are considered to be essential and critical telecom facilities, it needs to be ensured that any restriction on such facilities should not become a 'bottleneck' to international telecom services provision. The highlights of Regulation are:

- new service providers have access to the International bandwidth capacity in the same way as the consortium members;
- access facilitation is not unduly delayed by consortium members having control over CLS;
- transparent and non-discriminatory access at cable landing stations;
- well defined responsibilities in terms of functioning;
- transparent charges for access, Co-location and landing facilities;
- time limit for provision of access, Co-location and landing facilities.

## **Box-4 : Recommendations made during the year 2007-08**

- Recommendations on Infrastructure Sharing
- Recommendations on Improvement in the Effectiveness of National Internet Exchange of India (NIXI)
- Recommendations on Review of Internet Services
- Recommendations on Review of license terms and conditions and capping of number of access providers
- Recommendations on Headend In The Sky (HITS)
- Recommendations on Growth of Broadband
- Recommendation on Provision of IPTV Services
- Recommendations on issues relating to Mobile Television Service
- Recommendations on Interoperability and other issues relating to DTH
- Recommendations regarding existing Headend In The Sky (HITS) permission holder
- Recommendations on 3<sup>rd</sup> Phase of Private FM Radio Broadcasting
- Recommendation On Support for Rural Wireline Connections, Installed Before 1<sup>st</sup> April 2002 From USOF, on Phasing Out Of ADC

The Regulation would facilitate:

- provisioning of bandwidth to end consumers at competitive rates;
- boosting of competition and therefore reduction in the price of international private leased circuits (IPLCs);
- availability of International bandwidth at competitive price to ISPs for rapid growth of Broadband Service;
- options to ILDOs to purchase International bandwidth at competitive prices on a range of diversified submarine cables;
- carriage of voice / data at a competitive cost.

### **Telecommunication Consumers Education and Protection Fund Regulations, 2007**

Telecommunication Consumers Education and Protection Fund Regulations, 2007 was issued on 15<sup>th</sup> June, 2007 to establish a Fund for the telecom consumers' awareness, education and for protection of their interests. Telecom Service Providers, who may have charged their subscribers any amount in excess of the rates of telecommunication service determined under any regulation or order or direction made under the TRAI Act, or amount in excess of the rates announced by the service providers where the rates have been notified under market forbearance, which could not be refunded to the concerned subscribers and thus lying as unclaimed with the service providers, shall transfer the excess amount so collected to the credit of the Telecommunication Consumers Education and Protection Fund. The said amount shall be transferred within a period of thirty days after being so directed by the TRAI and in case where no direction has been issued by TRAI, within a period of thirty days after the expiry of 12 months from the date on which such amount became due for refund or after expiry of period of limitation specified under any law.

All expenditure from the Telecommunication Consumers Education and Protection Fund shall be

incurred on the recommendations of the committee constituted under these regulations which, inter alia, consist of the representatives of the service providers and the consumers' organizations to ensure transparency. The expenditure shall be incurred for the following purposes:-

- to undertake programmes to educate the consumers of the Telecommunication services about various measures taken by the Central Government or TRAI for protecting the interests of consumers of telecommunication services;
- to conduct studies and market research projects, either directly or through specialized agencies or institutions on matters relating to protection of the interests of consumers of telecommunication services;
- to organize seminars, symposia and workshops on the subject of consumer welfare and consumer education in the field of telecommunication.

The Authority expects that the measures for the consumers' education and their protection as envisaged in the regulation would:

- create awareness among the telecommunication consumers in different parts of India in respect of their rights;
- eventually reduce the amount which may remain unclaimed in future by such consumers;
- educate them regarding latest development in the telecommunication sector and telecom laws and steps taken by the Authority and Central Government to protect and promote the interests of the telecommunication consumers; and
- also prevent the avoidable events of excess charging of rates by the service providers at times which is often unintentional due to fast changes taking place in the telecommunication sector and other reasons.

As on 31<sup>st</sup> March 2008, the fund was having Resources of Rs. 14.21 crore.

### **Regulation on Guidelines for Registration of Consumer Organisations / Non-Government Organisation (NGOs) and their Interaction with TRAI (Second Amendment), 2007**

TRAI notified on 21<sup>st</sup> August 2007 Regulation on Guidelines for Registration of Consumer Organizations/Non-Government Organization (NGOs) and their Interaction with TRAI (Second Amendment), 2007. This Regulation amended the provisions of earlier Regulation on Guidelines for Registration of Consumer Organizations/ Non Government Organizations (NGOs) and their Interaction with TRAI issued in January 2001 and its first amendment in March 2001. The Authority reviewed the Regulation in view of inadequate number of Consumer Organizations / NGOs registered under the said regulation, and decided to amend some of the criteria for registration of consumer organizations. The main features of the amendment are mentioned below:-

- As against a minimum experience of three years in areas of representing views of consumers, the amended regulation prescribes an experience of one year in assisting the consumers in redressal of complaints regarding shortfall in the supplies and deficiencies in service.
- The amendment provides for automatic renewal of registration after period of three years, taking into account the usefulness of the organisation to protect the interest of consumers of telecom sector, their capacity to advocate the cause of consumers and on fulfillment of other conditions prescribed in the regulation.
- The amended regulation envisages inviting assistance of consumer organisations registered with TRAI in organizing seminars, symposia and workshops on the subject of consumer welfare and consumer education in the field of telecommunications.

### **Direction to Access Service Providers on Caller Line Identity Presentation (CLIP) charges**

Certain service providers were providing CLIP facility as a compulsory chargeable Value Added Service. Examination by the Authority showed that no significant amount of work is involved in presenting the caller line identity to the called subscriber and thus the incremental cost of providing CLIP facility is negligible. Thus the Authority found no justification in making CLIP facility a compulsory chargeable item. The Authority recalled its earlier Direction issued on 16<sup>th</sup> September, 2005 that all monthly fixed recurring charges including CLIP which are compulsory for a subscriber under any given tariff plan shall be shown under one head to make it easier for the consumer to make a choice from among all tariff plans available in the market.

Though the Authority has refrained from mandating a cost based tariff for CLIP facility keeping in line with the policy of tariff forbearance, in order to protect the interest of consumers, the Authority has re-emphasized the need for enhanced transparency with regard to the charging for CLIP.

Through this Direction issued on 23<sup>rd</sup> August 2007, the Authority has mandated that Charges for CLIP facility cannot be made a compulsory item of tariff for the subscribers in any tariff plan. Whenever CLIP charges are sought to be levied by Service Providers, this shall be optional for subscribers.

### **Recommendations on Review of license terms and conditions and capping of number of access providers**

TRAI on 29<sup>th</sup> August 2007 forwarded its recommendations on policies that should govern the licensing framework for access service provision, to the Department of Telecommunications (DOT). The recommendations contain proposals on a wide range of inter connected issues that formed the basis of the reference from the DOT dated 13<sup>th</sup> April, 2007. DoT's reference inter-alia required TRAI to

make recommendations on key issues like entry regulation in access service market, review of guidelines on Merger & Acquisitions including the provisions relating to cross holding of a licensee company in the same service area, use of combination of technologies (CDMA, GSM & and/or any other) under the same license, roll out obligations etc. After following the due process of consultation the Recommendation was sent to the Government.

The Authority has approached the issues keeping in view the power unleashed by the market forces in the past resulting in unprecedented growth of the sector particularly in the wireless space. In making these recommendations, the Authority has been guided by the following principles:-

- Maximize socio-economic benefits for the country making use of the technological developments of the sector.
- Remove barriers to competition and efficiency in the market.
- Affordability of services to common man and protection of consumer interest.
- Enhance efficiency in utilization of scarce resources of radio spectrum.
- Predictability, transparency and scientific approach in entry regulation.
- Technology-neutrality and level playing field by affording opportunity for equal competition.

The recommendations made by the Authority covers issues like Entry Limit in Access Service Provision, Merger and Acquisition Guidelines, Access Service using Combination of Technologies, Roll-out Obligations etc.

### **Domestic Leased Circuits Regulations, 2007**

Regulation on Domestic Leased Circuits (DLC) was issued by TRAI on 14<sup>th</sup> September, 2007. Domestic Leased Circuits (DLC) are important elements in the telecom market that telecom service providers provide to connect two or more customer sites or

customers to their own or other service providers networks.

DLC could be set up as one or more point-to-point links or as Virtual Private Network (VPN). DLC may use terrestrial or satellite facilities; use any media copper, fiber or wireless and may be provided through passive links, circuit switched or packet switched network.

The highlights of these regulations are:

- Provision of Domestic Leased Circuits (DLC) and local lead for DLC by a service provider to another who in turn would use it for providing leased circuits to the customer.
- These regulations cover DLC and local Lead provided on any media i.e. copper, fiber, wireless etc. and using any transmission technology.
- Imposition of obligation on all service providers who have the capacity of copper, fiber or wireless, and who have been allowed under the license to provide DLC, to share it with other service providers.
- Provide a framework to ensure transparency, predictability and reasonableness and allow provision of DLC/local lead in a non-discriminatory manner.
- Mandates service providers to confirm availability or otherwise to requesting service providers within 30 days. If such provision is not feasible then the service provider would also give an option of providing the DLC/Local lead on Rent and Guarantee/Special Construction basis.
- Prime service providers who have contract with the subscriber would be responsible for the security arrangements.

These regulations would facilitate:

- making available to the customer choice of service provider of DLC /VPN without artificial and anti-competitive constraint limiting their choices.
- Exploitation of full potential of DLC/VPN segment, thereby creating a win-win situation for both customers and the service provider.

- boosting of competition and consequent reduction in the price of DLC for the end customer.
- availability of national bandwidth at competitive price to ISPs for rapid growth of Broadband Service;
- increase in efficiency of businesses and growth of country's economy

### **Direction to Access Service Providers on provision of Value Added Services for enhanced transparency with regard to explicit consent and unsubscribing.**

TRAI issued direction to the Access Service Providers on provision of value added services for enhanced transparency with regard to explicit consent and unsubscribing. TRAI after due deliberation of the matter issued the following directions to protect the interest of the consumers:

- To provide the facility of unsubscribing of any value added service through telephone calls and SMS, free of charge, and through e-mail or FAX or any other means and also give adequate publicity to such facilities through their websites and by communication through SMS and other means.
- In case of any offer for any value added services made to the customer in writing or through SMS or FAX or e-mail, such offer shall contain all relevant details of the value added service offered, including the charges thereof, and before activation of such value added service the explicit consent of the customer shall be obtained through telephone or SMS or FAX or e-mail or by other electronic means.
- In case of offer for any value added service made through tele-calling or through any unwritten means, such offer shall be subsequently made in writing or through SMS or FAX or e-mail, containing all relevant details of the value added service offered, including the charges, and before activation of such

value added service the explicit consent of the customer shall be obtained through telephone or SMS or FAX or e-mail or by other electronic means.

- The explicit consent given by the customer shall be acknowledged through SMS before or immediately after activation of the value added service and also such explicit consent shall be reflected in the next bill issued to the customer.
- The complete records of the explicit consent obtained from the customer and records of the acknowledgements of such explicit consent by the service provider shall be kept by the service provider for verification, for a period of one year from the date of such explicit consent.

### **Issues of guidelines to Telecom Service Providers prescribing procedure/ practice and code of conduct for outsourced agencies**

TRAI on 16<sup>th</sup> November 2007 issued guidelines to all Telecom Service Providers emphasizing that they should have a transparent policy on mode of recovery of dues from their consumers. The guidelines lay broad parameters and also code of conduct to be adhered to by the service providers in respect of outsourced agencies engaged by them for collection of dues, without affecting the rights of consumer.

TRAI has been receiving complaints from consumers about the procedures being adopted by service providers for collection of outstanding dues. In this background, Authority examined the practices being followed by the service providers after seeking the relevant information from the service providers on the outstanding dues, recovery methods/practices and arrangement with third parties for recovery/ collection of dues from consumers to see whether the collection processes, in any way, violate the obligation of service providers under the license or are against the interest of consumers. A meeting was also held with all the Telecom service providers

in the month of October, 2007 and various issues including the code of conduct, provisions in the contracts/agreements with outsourced agencies for collection of dues were discussed. The proposed guidelines were also shared with the service providers during the said meeting. The service providers expressed their sensitivity towards consumers concern and in general, there was consensus for adoption of such guidelines in a self-regulatory manner and also uniformity of procedures.

After considering the views of the service providers during the meeting and also examination of the various practices followed by the different service providers, the Authority, keeping in line with the principles of soft touch regulation focusing primarily on self regulation issued these guidelines for voluntary adoption by the service providers for the recovery / collection of dues from telecom consumers through outsourced arrangements.

### **Recommendations on 'Growth of Broadband'**

TRAI on 2<sup>nd</sup> January, 2008 issued its Recommendations on 'Growth of Broadband'. To identify various impediments affecting the growth of broadband and to adopt forward looking approach to address all such impediments, the Authority had issued its draft recommendations on 'Growth of Broadband' on 17<sup>th</sup> September 2007 and sought the comments of stakeholders. Based on the feedback of stakeholders and best international practices, recommendations have been finalized. The recommendations highlight issues like availability of spectrum for 3G & WiMax, streamlining Right of Way procedure, subsidy from USO etc.

### **Telecommunication Tariff Order (46<sup>th</sup> Amendment)**

TRAI on 24<sup>th</sup> January, 2008 issued a Tariff Amendment Order mandating telecom access service providers to provide Hard Copy of the Bill

Free of Cost to their Post Paid Subscribers. TRAI had mooted a consultation process on 1<sup>st</sup> January, 2008 by circulating the draft Tariff Order along with a press release and a background note inviting comments of stakeholders on the issue of mandating access service providers to provide hard copy of the bill free of cost to its post paid customers. Stakeholders in general overwhelmingly welcomed the proposal of the Authority for mandating provision of hard copy / printed copy of the summary bill to the post paid consumers free of cost. The Authority after careful consideration of the provisions relating to billing in the Indian Telegraph Rules, 1951, license agreements for Cellular, Unified Access, NLD and ILD licenses, views expressed by stakeholders and based on certain guiding principles and practices, issued the 46<sup>th</sup> Amendment to the Telecommunication Tariff Order mandating provision of hard copy of bill free of cost to the postpaid Subscribers of Telecom Access Service. Salient features of the Telecommunication Tariff Order (46<sup>th</sup> Amendment) effective from 24<sup>th</sup> January, 2008 are:

- Hard copy of the bill / printed copy of the bill to be supplied free of cost for all post paid customers of telecom access service.
- The Order is applicable across all types of tariff plans of Mobile (GSM and CDMA) and fixed line services in respect of post paid subscribers.
- Itemized bills for long distance calls will continue to be supplied free of cost by the access service providers.
- Itemized bill for local call remains under forbearance.

### **Telecom Unsolicited Commercial Communications (UCC) (Amendment) Regulations, 2008**

TRAI notified the "Telecom Unsolicited Commercial Communications (UCC) (Amendment) Regulations, 2008" on 17<sup>th</sup> March 2008. The Amendment Regulation was issued after initiating a consultation

process on 16<sup>th</sup> January 2008 and after taking into consideration the responses received from stakeholders in writing and the meeting held with the service providers including their associations. The objective of the amendment is to increase the effectiveness of compliance of these regulations by providing financial disincentive to non-compliant Telecom Service Providers and thereby reducing the nuisance and inconvenience to the subscribers of telephone/mobile services from the unsolicited tele-marketing calls / messages. The Authority has set up the National Do Not Call (NDNC) Registry which is operational since October 2007. For giving wide publicity, the Authority, had advertised in the leading National dailies, the procedure for registering in NDNC. The Authority also held a series of meetings with the service providers to ensure effective implementation of the Regulations.

The Authority decided to make service provider liable to pay an amount by way of financial disincentive, not exceeding five thousand rupees for the first non-compliance of the Telecom UCC Regulations, 2007 (4 of 2007) and in case of second or subsequent such non-compliance, an amount not exceeding twenty thousand rupees for each such non-compliance. Apart from the above financial disincentive on the service providers, and in order to discourage the registered telemarketers from sending Unsolicited Commercial Communications, the Telecommunication Tariff Order, 1999 was also amended simultaneously by the TTO (Forty- seventh Amendment) so as to provide that five hundred rupees shall be payable as tariff for each unsolicited call for every first unsolicited commercial communication and rupees one thousand for every subsequent unsolicited commercial communication. The notification also prescribes that the complaint regarding Unsolicited Commercial Communication shall be made by the subscriber to the Service Provider within fifteen days of the receipt of such Unsolicited Commercial Communication.

## **The Telecommunications Interconnection Usage Charges (Ninth Amendment) Regulations, 2008 – Final Phasing out of the Access Deficit Charges**

The Telecommunications Inter-connection Usage Charges (Ninth Amendment) Regulations, 2008 was issued by TRAI on 27<sup>th</sup> March 2008 which, inter alia, deals with the Access Deficit Charge (ADC) payable by private service providers to BSNL. The process of review and consequent amendment led to simultaneous issue of "Recommendation on Support for Rural Wireline Connections, installed before 1<sup>st</sup> April 2002 from USOF, on Phasing Out Of ADC" to DOT for continuation of support to BSNL's rural Wireline network through Universal Service Obligation Fund (USOF). These steps are expected to address issues like promoting competition, removing market distortions, minimizing grey market in international calls and providing comprehensive benefit to all consumers,.

The issue of the regulation and the recommendations mentioned above marks the culmination of the process that commenced with the issue of the consultation paper on ADC on 21<sup>st</sup> January, 2008. The main issues of the Consultation process were grouped into 3 categories:

- Issue 1:** Operationalizing phasing out of ADC from 1.4.2008
- Issue 2:** Providing support for BSNL wireline rural network from USOF
- Issue 3:** Induction of positive features including possible reduction in charges for rural mobile subscribers

In the context of the first issue the Authority vide the IUC amendment Regulation mentioned above decided to phase out ADC as a percentage of AGR from 1<sup>st</sup> April 2008 which is charged from domestic sector. The component on the international incoming calls would be payable at a reduced rate of Rs 0.50 (paise fifty only) for the period from 1<sup>st</sup>

April 2008 to 30<sup>th</sup> September 2008. After 30<sup>th</sup> September 2008, this component of ADC would also stand phased out. Thus from 30<sup>th</sup> September 2008 there would be no ADC.

On the second issue the Authority has been of the view that ADC was instituted for a limited purpose of supporting incumbent at the time of transition from monopoly to competitive environment and allow them to rebalance tariff. ADC puts unfair burden on new entrants and distorts market conditions. It is also a source of arbitrage and thereby results in grey market operations in international incoming calls. The Authority had therefore communicated to the Government in February 2006 and a couple of time thereafter that ADC would be phased out at the end of 2007-08 and further support may be considered from USO. Support to the incumbent may be necessary for their rural wireline operations as about 99.87% rural lines belong to BSNL and this legacy fixed wireline network is an important national asset that offers a number of advantages. Digital Subscriber Line (DSL), the current dominant broadband technology, works on copper and would also ultimately be key to pushing forward broadband penetration. Though proliferation of broadband in rural areas will take some time to build-up but when it does, BSNL may be able to increase ARPU by offering value added services like IPTV, telemedicine, e-learning etc and make these line self sustaining. To make this happen it needs to be ensured that wireline connections are supported and their maintenance is taken care of through an appropriate subsidy. The Authority accordingly decided to recommend to the Government that from 1<sup>st</sup> April, 2008 an amount of Rs 2000 crore per annum may be given to BSNL from USOF as subsidy for sustaining wire lines installed before 1<sup>st</sup> April 2002 for a period of 3 years.

On the third issue Authority noted that it is difficult to establish a direct and transparent nexus between the savings on account of ADC and reduction of tariff. For instance, it is not possible to establish a correlation between reduction of ADC on incoming international

calls and the direct and immediate benefits to telecom consumers in India, as this is paid by users in other countries calling Indian consumers. Increasingly it is seen that while mobile operators have contributed to enhanced levels of competition in the local call segment, as far as long distance calls are concerned competition does not appear to be very effective despite several favourable regulatory and policy measures. However, the Authority expects that the service providers shall utilize whatever savings accrue from phasing out of ADC for the overall growth of telecom sector especially for rural areas that are still awaiting concrete steps from the service providers.

### **Status Paper on 'Broadband Speed'**

A Status Paper on 'Broadband Speed' was released on 1<sup>st</sup> January 2008. High speed Internet is commonly known as broadband worldwide. The minimum prescribed speed for a broadband connection has been defined by various countries and International organizations differently according to the parameters being considered while finalizing such benchmarks. There is no uniform benchmark for broadband speed being followed universally.

As per Broadband Policy 2004 announced by the Government of India, the broadband connection has been defined as an 'always-on' Internet access with a minimum speed of 256 Kbps from the Internet Service Provider's (ISP) Node to the customer premises equipment (CPE). Incidences had come to the notice of TRAI where service providers are using words like "up to" to define broadband speed without indicating minimum committed speed of the packages. In certain cases packages of Internet speed less than 256 Kbps have also been marketed as broadband connections. TRAI has already written to all the service providers not to use words like "up to" and unambiguously indicate minimum committed speed of the plan which must be at least 256 Kbps in case of broadband. Service providers have also been asked to bring to the notice of subscribers the definition of the broadband while

offering high speed Internet connections. While efforts are being made to ensure minimum 256 Kbps speed for broadband connections, some stakeholders have also suggested for raising the minimum speed of broadband connections. The speed of the broadband is generally defined to indicate average speed which can support different applications. Broadband speed is a relative concept and bandwidth requirements are different for different applications. Broadband speed is related both to the availability of the network access infrastructure as well as to availability of appropriate content which requires such high Internet speeds.

The Authority is of the view that there is a need to highlight the status of the speed of the broadband and accordingly this paper has been prepared. The status paper has analysed broadband speed as defined in various countries, the prevailing environment and impact of growth of broadband on the economy of the country. The paper also analyses the present broadband infrastructure existing in the country and implications of redefining broadband speed. The International experiences in this regard have also been compiled. It is expected that this status paper would clarify the issues and will help appreciating the definition of broadband particularly in relation to its speed.

## **BROADCASTING & CABLE SECTOR**

An overview of the important activities in the broadcasting sector undertaken by TRAI during the year are enumerated in the following paragraphs:

### **The Direct to Home Broadcasting Services (Standards of Quality of Service and Redressal of Grievances) Regulations, 2007**

TRAI on 31<sup>st</sup> August, 2007 issued the Regulation which essentially covers regulatory provisions relating to protection of the interests of DTH subscribers.

With the growth of DTH services a need was felt by TRAI to initiate a consultation process on the quality of service (QoS) issues so that the interests

of DTH subscribers could be protected, and also to ensure that the new DTH operators gear up their operations accordingly from the very beginning. After following the consultation process, TRAI issued the Regulation.

The Regulation makes provisions inter alia on issues like formulation of schemes to offer customer premises equipments (including the set top box) to its subscribers on outright purchase basis, hire-purchase basis and rental basis; format for application form, assignment of a customer identification number to each such application received; time limit for complying with requests relating to shifting, disconnection and reconnection; notice for discontinuing a channel or for disconnecting a subscriber; time limit for subscription package offered to a subscriber; issue of bills containing details such as charges for subscription package, value added services, customer premises equipments, taxes etc to post paid subscribers if possible; establishment of call centers with sufficient number of telephone lines with "toll free" numbers; assignment of docket number for each complaint received in the Call Center; time limit for complaint resolution; nomination of Nodal Officers for redressal of grievances of those subscribers who are not satisfied with the redressal at the call centre etc.

It is expected that these regulations will effectively protect the interests of the DTH subscribers without hampering the growth of DTH operations in the country.

### **The Telecommunication (Broadcasting and Cable Services) Interconnection (Fourth Amendment) Regulation, 2007**

The Regulation was issued on 3<sup>rd</sup> September 2007 which essentially covers regulatory provisions on interconnection issues relating to DTH services. The salient features of the Interconnection Amendment Regulation are as follows:

- Every broadcaster will publish, within 90 days of these amendments taking effect, its reference

## Box-5 : The major highlights of the Broadcasting Sector during Financial Year 2007-08

- As on 31<sup>st</sup> March 2008, the maximum number of Free-to-Air (FTA) Channels and Pay Channels being carried in the Cable Networks were 133 and 95 respectively.
- The total number of Set-Top Boxes (STB) installed in CAS notified areas of Delhi, Kolkata, Mumbai and Chennai at the end of March 2008 were 6,07,883
- As on 31<sup>st</sup> March 2008 there were 6 private DTH licensees apart from free-to air DTH service of Doordarshan
- Apart from All India Radio, there were 205 FM Radio station in operation as on 31<sup>st</sup> March, 2008.
- As on 31<sup>st</sup> March 2008, there were 49 Licensed Community Radio Station and out of these 35 stations were in operation.

- interconnect offer (RIO) for the DTH operators containing technical and commercial terms for interconnection.
- Such RIO shall inter alia contain the details like Rates of channels and bouquets; Details of discounts; Payment terms; Security and anti-piracy requirements; Subscriber base reports and audit; Tenure of agreement; Termination of agreement etc.
- The RIO will be published on the broadcaster's website and also communicated to each DTH operator. RIOs existing, if any, prior to these regulations will be modified to conform to the RIO now published under these regulations.
- If a DTH operator makes a request to a broadcaster to enter into an interconnection agreement based on the published RIO, then the broadcaster will be obliged to do so within 45 days of the request.
- The broadcasters and DTH operators may also enter into mutual agreements on non-discriminatory basis by deviating from the RIO.
- If the broadcaster and the DTH operator fail to enter into an interconnection agreement after negotiations, then both of them may jointly request TRAI to facilitate in arriving at an agreement. This will be without prejudice to the legal recourse available to them.
- All broadcasters will compulsorily offer all their channels on a-la-carte basis to DTH operators. Additionally, they may also offer bouquets, but they will not compel any DTH operator to include the entire bouquet in any package being offered by DTH operators to their subscribers.
- In case a DTH operator includes various pay channels of a broadcaster's bouquet in different DTH packages for its subscribers, then the payment for the bouquet will be made by the DTH operator to the broadcaster based on the highest subscriber base for any pay channel from that bouquet.
- The a-la-carte rates of pay channels and the rates of the bouquets offered by the broadcasters to DTH operators shall be so related that
  - a) the sum of a-la-carte rates of pay channels in a bouquet does not exceed 1.5 times the bouquet rate; and
  - b) no a-la-carte rate of a pay channel in a bouquet will be more than 3 times the average pay channel rate of that bouquet.
- TRAI will have the power to intervene and ask any broadcaster to modify its published RIO, on ground of protecting the interests of consumers or service providers, orderly growth of the

sector, or for not being in conformity with these regulations.

It is expected that these amendments to the existing Interconnection Regulations will go a long way in resolving the interconnection issues between the broadcasters and the DTH operators, which will in turn lead to greater competition between the two delivery platforms of cable TV and DTH service, bringing considerable benefit to the consumers.

### **Telecommunication (Broadcasting and Cable) Services (Second) Tariff (Eighth Amendment) Order, 2007**

The Telecommunication (Broadcasting and Cable) Services (Second) Tariff (Eighth Amendment) Order, 2007, was issued on 4<sup>th</sup> October 2007, aimed at protecting the interests of the consumers in a more transparent and effective manner. This order amends some of the provisions of existing tariff order for cable services in non-CAS areas. The existing tariff order issued in 2004 essentially froze the cable charges payable at different levels of the distribution chain at the rates prevailing as on 26<sup>th</sup> December 2003, while making provisions for increases on account of new pay channels and inflation. The implementation of the existing Tariff Order was difficult because there was no uniform ceiling in absolute terms. The ceiling was in terms of freezing whatever cable charges that were being paid individually by each of the millions of consumers or service providers. Therefore, a consultation process was initiated by issuing a consultation paper inviting comments from all the stakeholders. This was followed by open house discussions at Jaipur, Hyderabad, Kolkata and Lucknow. This led to the issuance of the Tariff amendment Order.

This Amendment Order effective from 1<sup>st</sup> December, 2007, is applicable to non-addressable cable TV services throughout the country except those areas which have been notified for implementation of conditional access system (CAS).

### **Recommendations on the Headend In The Sky (HITS)**

TRAI on 17<sup>th</sup> October 2007 forwarded its recommendations to the Ministry of Information and Broadcasting, Government of India, on various policy issues related to Headend In The Sky (HITS) service. HITS is a satellite based delivery platform for delivering multi channel television signals to cable operators across the country. It is capable of delivering TV signals in digital form with addressability features. The HITS operator uplinks signals of TV channels of different broadcasters to his HITS satellite in the sky. The cable operators across the country can then downlink these TV channels from this HITS satellite for further distribution to the subscribers through their cable network in digital form. Since the HITS satellite will have country-wide footprint, it will benefit about 60,000 cable operators who serve nearly 70 million cable TV homes.

While framing the guidelines for policy framework on HITS, TRAI has been guided by the basic objective of digitalization of cable TV network in India. The consumer's interests have been paramount because it is the consumer who needs digital transmission with addressability.

### **Report on Digitalization and Introduction of Voluntary CAS**

TRAI on 27<sup>th</sup> December 2007 forwarded a report on "Digitalization and Introduction of Voluntary CAS in Cable TV network in India" along with the comments of 16 stakeholders on this report to Ministry of Information and Broadcasting. It is expected that this report of the Group will be useful in deciding the roadmap for bringing about addressability in the cable TV sector.

Earlier, a round table meeting was convened by TRAI on 1<sup>st</sup> February 2007, at Delhi with various stakeholders on the subject of digitalization and Introduction of Voluntary CAS in the country. Industry experts as well as representatives of consumer organizations, multi system operators

(MSOs), cable operators, DTH operators, broadcasters and equipment manufacturers participated in the round table. One of the major issues that was discussed with the stakeholders in the round table related to exploring alternative models for voluntary CAS.

Consequently, a small Group consisting of members drawn from TRAI, Ministry of Information and Broadcasting, Prasar Bharti, consumer organizations, Broadcasters, MSOs, DTH operators, Cable operator / Distributor associations and technical experts was constituted to deliberate on the issues relating to digitalization and introduction of voluntary CAS. The Group after extensive deliberations submitted its recommendations to the Authority on 12<sup>th</sup> June 2007.

The report of the group was placed on TRAI's website on 13<sup>th</sup> June 2007 inviting comments of the stakeholders. The report (available on TRAI's website [www.traigov.in](http://www.traigov.in)) alongwith the comments received from 16 stakeholders was sent to Ministry of Information & Broadcasting for further action.

### **Recommendation on 'Provision of Internet Protocol Television (IPTV) services'**

TRAI on 4<sup>th</sup> January 2008 forwarded its recommendation on provisioning of IPTV services. IPTV is a new method of delivering and viewing television programs using an IP network and high speed broadband technology. It is fast becoming a popular value added service in many countries. The fast development in telecom technologies, enormous capabilities of IP platform and increasing digitalization in broadcasting sector is driving services like Internet Protocol TV (IPTV). The issue of provisioning of IPTV services was discussed in detail in TRAI's Position paper released on 6<sup>th</sup> September, 2007 and in the subsequent draft recommendation released on 28<sup>th</sup> November, 2007. Comments were invited from stakeholders on these papers issued by TRAI.

The Authority has deliberated at length on all the relevant issues regarding provision of IPTV services and brought out the final recommendations. The recommendations cover issues like licensing, content regulation, down linking policies etc.

### **Recommendations on issues relating to Mobile Television Service**

On 23<sup>rd</sup> January, 2008, TRAI sent its recommendations on issues relating to mobile television service to the Ministry of Information & Broadcasting. The Ministry had earlier sought the Authority's recommendations on various issues relating to proposed licensing policy for mobile television service. The Authority had issued a Consultation Paper on these issues on 18<sup>th</sup> September, 2007. This was followed up with an Open House Discussion in Delhi on 26<sup>th</sup> October, 2007. The Authority had also released its draft recommendations for a second round of short consultation on 3<sup>rd</sup> January, 2008.

There are broadly two routes for providing mobile television services, viz, one using the telecom network with spectrum already allotted to UASL/ CMTS licensees, and the other using broadcasting method using separate spectrum. The Authority is of the view that telecom operators having CMTS or UASL license will not require any further license or permission for offering mobile television services on their own network using spectrum already allotted to them. Providing mobile TV services through broadcasting method will require separate license. Therefore, these recommendations now provide for policy guidelines for mobile television operators using broadcast method. The recommended policy guidelines for such mobile television services cover technology, spectrum and licensing issues. The recommendations discuss issues like choice of Technology, allocation of spectrum, licensing etc.

It is felt that with the advent of mobile television services in the country, the consumers will get more choice in watching television in terms of what they watch, how they watch and when they watch

## **Recommendations on Interoperability and other issues relating to Direct to Home (DTH) Service**

TRAI on 30<sup>th</sup> January, 2008 sent its recommendations to the Ministry of Information & Broadcasting on certain issues relating to Direct to Home (DTH) service. A consultation process was earlier initiated by the Authority by issue of a Consultation Paper on "Issues Relating to DTH" on 2<sup>nd</sup> March, 2007. The consultation paper covered interconnection issues, quality of service issues and other regulatory issues relating to DTH services. The Authority subsequently held an Open House Discussion in Bhubaneswar on 18<sup>th</sup> May, 2007 on the subject. The Ministry of Information and Broadcasting had also sought recommendations of the Authority on Technical Interoperability of Set-top Boxes (STB) and the possibility of allowing DTH operators to provide signals to cable operators in KU-Band.

Based on the outcome of the Consultation Process the Recommendations were sent to Government which covered issues like technical interoperability of the Set Top Boxes, continuity of existing arrangement of the supply of DTH operators' signals only to the consumers directly and not to any other intermediary, permitting band neutrality to DTH operator and allowing DTH operator to operate in both the bands by amending the DTH guidelines, no amendment in clause 7.6 of the DTH license etc.

It is expected that these recommendations on DTH will further protect the interests of consumers, while leading to a healthy competition among the DTH operators as well as with other delivery platforms.

## **Recommendations on 3<sup>rd</sup> Phase of Private FM Radio Broadcasting**

Recommendations on "3<sup>rd</sup> Phase of Private FM Radio Broadcasting" were sent to the Government on 22<sup>nd</sup> February 2008. Ministry of Information & Broadcasting had sought recommendations of TRAI in terms of

Section 11(1)(a) of TRAI Act, 1997 on the modifications to be incorporated in the policy guidelines for FM Radio Broadcasting Phase-III.

The Authority had noted that the expansion of private FM Radio broadcasting in new cities will mainly depend on economic viability, sustainability and infrastructure readiness. In addition various related issues like ease of monitoring, importance to local content, tower location & frequency planning process etc. had been considered for arriving at recommendations.

After following the due process of Consultation with all the stake holders, the recommendations were finalized and while framing the recommendations, due consideration was given to stakeholders' comments and best international practices. The Recommendations covers issues like Need for Augmentation of Private FM Broadcasting, Additional channels in the same city, Restriction on Ownership of Channels in a district, FDI limit, Change in ownership of the permission to broadcast FM radio, Relaxation of fee structure for North-East and J&K, Networking of FM radio programs across entities, Co-channel spacing, Content Outsourcing, Auto Renewal of permission etc.

It is expected that these forward looking recommendations will enable fast growth of FM Radio broadcasting and will provide better listening experience with increased variety of content to Indian populace.

## **DEVELOPMENTS IN TARIFF REGULATION**

TRAI has been given the mandate to regulate tariffs for telecommunication services in the country. Availability of affordable and effective communications is at the core of the vision and goal of the New Telecom Policy (NTP, 1999). This function is discharged through Telecommunication Tariff Orders issued by TRAI from time to time. In the recent past, the Telecommunication Sector in India has witnessed the highest growth rates in the world, propelled largely by the unprecedented growth in

mobile telephony and expects achieving more in the coming years. This high growth rate of telecommunication was achieved in major part due to a sharp fall in tariffs. The tariff level for voice telephony in India is among the lowest in the world which has enabled us to achieve tele-density targets exceeding expectations.

The Telecommunication Sector in India has achieved a lot in the recent years. This momentum has not only rapidly expanded the subscriber base, it has attracted important global manufacturers of telecom equipment to consider investing in India, paved the way for extensive provision of modern communication services in rural areas, and has provided a strong boost to government revenues from the growth in sales of services and equipment. Whether it is in the matter of providing affordable telephony services, adoption of world class technologies, scope of service provided or penetration level, the story of Telecom Sector in India is that of success – success made possible by policy initiatives of the Government, the Sector Regulator and the innovations of the Service Providers in service offerings. One of the major developments on the tariff front that took place in the year 2007-08 relates to specifying tariffs for Unsolicited Commercial Communications.

In the Broadcasting Sector, there were nearly 78 Million home in analog mode in 2007, where there was a lack of tariff protection for the subscribers. Moreover, these subscribers were served by monopolistic Cable TV Operators in the last mile of distribution chain. Therefore, to protect the interests of such a large number of subscribers, the Authority issued Tariff (Amendment) Order applicable for Non-addressable Cable TV throughout the country except those areas, which have been notified for CAS. This tariff order provides specific ceiling on the monthly charges payable by the ordinary subscriber and residual commercial subscriber based on number of channels transmitted for different categories of cities / towns etc.

## MEASURES TO PROTECT THE INTEREST OF CONSUMERS

The Authority had been issuing Orders / directions to the service providers to enhance consumer transparency in the matters of service provision. The following consumer protection measures were taken during the year.

- (i) Telecom Consumers Protection and Redressal of Grievances Regulations, 2007 was issued on 4<sup>th</sup> May, 2007 for effective, speedy, and inexpensive redressal of grievances of consumers.
- (ii) To bring transparency in Billing, a direction was issued to all Service Providers to include certain information in the telephone bills such as the name of the applicable tariff plan, methodology applied for calculation of bill including pulse rate and charge for various calls, applicable credit limit etc.
- (iii) Guidelines were issued on 23<sup>rd</sup> May, 2007 to all Telecom Access Service Providers to follow certain principles to ensure transparency in the charging of SMS on certain specified days which happen to be social, cultural/ festival days which are generally termed as 'SMS blackout' days.
- (iv) The Authority issued guidelines on 4<sup>th</sup> June, 2007 to all Access Service Providers that while offering and implementing handset bundled tariff schemes, hike in any item of tariff during the period which a customer is locked-in to a network will be inconsistent with the provisions of the 43<sup>rd</sup> Amendment to TTO. Thus, no hike in tariff is permissible at any time during the lock-in period.
- (v) The Telecommunications Consumers Education and Protection Fund Regulations, 2007 was issued on 15<sup>th</sup> June, 2007 to establish Telecommunication Consumers Education and Protection Fund for consumers' awareness, education and protection of their interest.

- (vi) Guidelines were issued on 14<sup>th</sup> August, 2007 to all IPLC & Domestic Leased Line Service Providers advising to provide details of the discount criteria on the ceiling tariff, i.e., the basis on which the discounts are to be offered to the buyers of domestic and international bandwidth and other related services in their websites, so as to ensure that the consumers of these services have access to information on prices including discount criteria.
- (vii) The Authority has issued instructions on 21<sup>st</sup> August, 2007 to all Access Service Providers advising them not to offer any plans which

## Box-6 : Highlights of Consumer Centric Initiatives

- Establishment of a three-tier system for redressal of consumer grievances at the Call Center, Nodal Officer and Appellate Authority of the service providers.
- Bills to include tariff plan; methodology of calculation; pulse rate; charge for various calls; applicable credit limit etc.
- Guidelines to be followed by SPs for charging of SMS on certain specified days like social, cultural/ festival days which are generally termed as 'SMS blackout' days.
- No hike in tariff is permissible at any time during the lock-in period in the case of 'handset bundled tariff schemes'.
- Establishment of 'Telecommunication Consumers Education and Protection Fund' for consumers' awareness, education and protection of their interest.
- Guidelines prohibiting prescription of separate charges for rectification of defects
- Relaxation of eligibility criteria for registration of Consumer Organizations/Non Government Organizations (NGOs) with TRAI
- Direction regarding CLIP facility not to be made a compulsory item of tariff for the subscribers in any tariff plans.
- Directions were issued to Service Providers to refund the charges levied for the provisioning of Value Added Services without the explicit consent of the consumers.
- Direction for enhanced transparency with regard to explicit consent for subscribing Value Added Service and also for its unsubscribing.
- Guidelines stipulating the broad parameters and Code of Conduct to be followed by outsourced agencies engaged for collection of dues.
- Mandate to furnish hard copy of the bill free of cost to all the post-paid subscribers.
- Mechanism for restricting Unsolicited Commercial Calls.
- Regional Workshops at Chennai, Pune and Shillong to generate awareness amongst Consumer Advocacy Groups
- Capacity Building Workshop on Audit of the metering and Billing system of telecom service providers
- Tariff Order providing specific ceiling on the monthly Cable charges payable by cable subscriber in non-CAS areas
- Regulation to protect the interests of Direct to Home subscribers

prescribe separate charges for rectifying the defects etc.

- (viii) Regulation on Guidelines for Registration of Consumer Organizations/Non Government Organizations (NGOs) and their interaction with TRAI (Second Amendment) 2007 was issued on 21<sup>st</sup> August, 2007 to enable representation of more organization.
- (ix) Direction dated 23<sup>rd</sup> August, 2007 was issued to all Service Providers wherein it was mandated that CLIP facility cannot be made a compulsory item of tariff for the subscribers in any tariff plans. This Direction aims at enhancing the transparency for subscribers.
- (x) To generate awareness amongst the consumer organizations about the initiatives taken by TRAI, three Regional Workshops one each at Chennai, Pune and Shillong were organized on 25<sup>th</sup> May, 2007, 16<sup>th</sup> November, 2007 and 24<sup>th</sup> November, 2007 respectively. Also a two day orientation programme for the newly registered Consumer Advocacy Groups (CAGs) was also organized in TRAI office at on 13<sup>th</sup> and 14<sup>th</sup> March, 2008.
- (xi) Directions were issued to Service Providers to refund the charges levied for the provisioning of Value Added Services without the explicit consent of the consumers.
- (xii) A direction was issued on 30<sup>th</sup> October, 2007 to all Access Service Providers for enhanced transparency with regard to explicit consent for subscribing Value Added Service and also for its unsubscribing.
- (xiii) A guidelines was issued on 16<sup>th</sup> November, 2007 to all Telecom Service Providers stipulating the broad parameters and Code of Conduct to be adhered by the Service Providers in respect of the outsourced agencies engaged by them for collection of dues.
- (xiv) Authority has notified the Telecommunication Tariff (Forty-Sixth Amendment) Order, 2008 on 24<sup>th</sup> January, 2008 mandating all the Telecom Service

Providers to furnish hard copy of the bill free of cost to all the post-paid subscribers.

- (xv) Capacity Building Workshop on Audit of the metering and Billing system of telecom service providers was held at New Delhi on 4<sup>th</sup> & 5<sup>th</sup> March, 2008.

## **MONITORING OF QUALITY OF SERVICE (QOS)**

TRAI is mandated to lay down the parameters of quality of service to be provided by the various service providers and to ensure the quality of service. Accordingly, TRAI had issued Regulation on Quality of Service for Basic and Cellular Mobile Services, Dial-up and Leased Line Internet Access Services, Broadband Services, prescribing QoS benchmarks. To regulate the Quality of Service to be observed by the MSOs/Cable Operators in CAS notified areas of Delhi, Chennai, Mumbai and Kolkata, TRAI has issued the Standards of Quality of Service (Broadcasting and Cable Services) (Cable Television – CAS) Regulation, 2006 in the year 2006. During the financial Year, 2007-08 certain Standards of Quality of Service benchmarks have been prescribed for Direct to Home (DTH) Broadcasting Services vide Direct to Home Broadcasting Services (Standards of Quality of Service and Redressal of Grievances ) Regulation 2007 dated 31<sup>st</sup> August, 2007.

Performance of Basic and Cellular Mobile service are monitored against the benchmarks prescribed by TRAI vide Regulation on Quality of Service for Basic & Cellular Mobile Services through quarterly performance monitoring report (PMR) received from service provider. TRAI also monitors Point of Interconnection (POI) congestion through monthly reports received from cellular mobile service provider (CMSP). Follow up meeting with the service providers were held for improving their performance with regard to quality of service. TRAI also monitors the level of congestion at the POI between various Service Providers on Monthly basis. This parameter signifies the ease by which a customer of one network is able to communicate with a customer of another network. This parameter also reflects as to how effective is the

interconnection between two networks. The benchmark notified by the TRAI in the QoS Regulations of July 2005 for this parameter is <0.5%. The Cellular Mobile Service Providers have been submitting their POIs Congestion Reports on monthly basis to TRAI. These POI Congestion reports were analyzed, and the finding of the analysis are brought to the notice of general public. The findings of the analysis were also placed on the TRAI's website for the information of all stakeholders/Public. The brief findings have been discussed in subsequent Part of this Report.

With a view to have audit of network parameter reported by the Basic and Cellular Service providers, an independent agency, M/s TUV South Asia Ltd., was appointed to carry out an objective assessment of quality of service provided by Basic and Cellular Service providers. The reports received for the quarter ending December, 2006 were analysed and reports

were placed on the TRAI Website on 20<sup>th</sup> April, 2007 for information of all stake holders. TRAI Act and QoS regulations provide for assessment of customer perception of service against the QoS benchmark through survey. TRAI has appointed independent Agencies namely, M/s IMRB International in South, East, North Zone for Audit and South & East for Survey; M/s Voluntary Organisation in Interest of Customer Education (VOICE) in North Zone for survey; Market Pulse in West Zone for survey and M/s TCIL in West Zone for Audit. These agencies have been entrusted with the work of assessment of (i) Implementation and Effectiveness of Telecom Consumers Protection and Redressal Grievances Regulations, 2007 (ii) Customer Perception of Service through Survey and (iii) Audit and Assessment of Quality of Service.

## Box-7 : Roadmap for the Future

To fulfill its goals and objectives the Authority proposes to take up following issues during the financial year 2008-09:

1. Restructuring of Cable TV services
2. Recommendations on Foreign Investment limits for Broadcasting Sector
3. Policy Guidelines for Television Audience Measurement (TAM)/Television Rating Points (TRPs)
4. Recommendations on issues relating to entry of certain entities into broadcasting and distribution activities.
5. Monitoring of channel prices filed by the broadcasters for non-CAS areas
6. Issues on Satellite Radio
7. Policy Guidelines and Terms & Conditions of the license for Mobile TV
8. Policy Guidelines for Third Phase of FM Radio services and Terms & Conditions of the license for this service
9. Issues relating to Internet Telephony
10. Broadband Speed
11. Licensing Issues in Next Generation Networks
12. Study Paper on "Convergence & Regulatory issues and its impact"
13. Review of "IPv6 Implementation in the country"
14. Review of Licensing Framework in view of Convergence
15. Tariff order amendments on Regulatory issues on transparency of tariff offers
16. Information paper on Second based billing in access service
17. To identify issues that may arise out of convergence of telecom services
18. To evolve regulatory principles, guidelines, Tariff Orders, Directions etc. based on tariff analysis and feedback through consumer complaints.
19. Accounting Separation Reports of telecom service providers of the year 2007-08
20. Carrier Selection
21. Interconnection issues in NGN
22. RIO Regulation review
23. Study paper on National Numbering plan
24. Consultation Paper on Rural Telephony
25. Consultation Paper on allocation and pricing for Broadband Wireless Access
26. Regulation on Mobile Number Portability
27. Spectrum Trading Management
28. Study Paper on issues relating to content providers
29. Study on Quality of Service Parameter and Benchmarks for Next Generation Networks (NGN)/3G
30. Review of Performance of Panel of Auditors for metering and billing audit of service providers
31. Review of Quality Of Service Regulation on Basic & Cellular Mobile Telephone Service Regulation 2005
32. Regional Workshop on Consumer Education and Capacity Building of Consumer Advocacy Group.
33. Recommendations on Mobile Virtual Network operators
34. Field visits to check / assess compliance of Telecom Consumers Protection and Redressal of Grievances Regulations, 2007 and Quality of Service (Code of Practice for Metering and Billing Accuracy)
35. Consultation Paper on Cross-holding in Media Ownership.
36. Hosting 10<sup>th</sup> South-Asia Telecom Regulators Council (SATRC) meeting at New Delhi

# **PART – I**

## **POLICIES AND PROGRAMMES**

- 1.1. Review of General Environment in the Telecom Sector**
- 1.2. Review of Policies and Programmes**



# 1.1

## Review of General Environment in the Telecom Sector

The year 2007-08 also witnessed a phenomenal growth in the subscriber base for mobile services which includes subscribers of WLL (F), thus building on the growth trend in subscriber base experienced since mid-1990s. As per the data available on CTIA (International Association for the wireless Telecommunications Industry) website, India has become second largest wireless network in the world after China by overtaking USA.

### Wireline Subscriber

The subscriber base of Wireline services as on 31<sup>st</sup> March 2008 was 39.42 million as compared to 40.75 million subscribers on 31<sup>st</sup> March, 2007 registering a decrease of 1.33 million subscribers during the year 2007-08. Out of the 39.42 million wireline subscribers, 27.78 million are Urban wireline subscribers and 11.64 million Rural Subscribers. The status of the wireline subscribers during the last five years are depicted below:

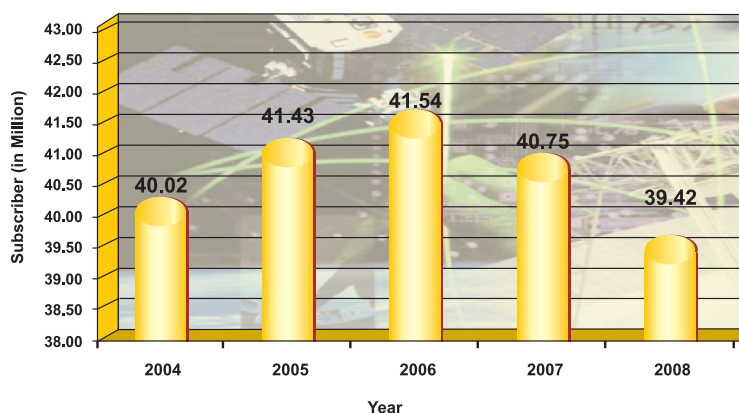


Figure 1.1: Wireline Subscriber

## Wireless Subscriber

The wireless subscriber crossed the 261 million subscriber mark at the end of the financial year in comparison to the subscriber base of 165.11 million at the end of March, 2007. It added 95.96

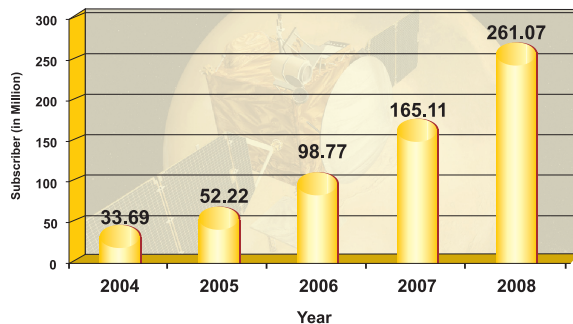


Figure 1.2: Wireless Subscriber

million subscribers in the financial year 2007-08 registering an annual growth rate of about 58.12%. The total subscriber base of wireless services has grown from 33.69 million in March, 04 to 261.07 million in March, 08.

## Internet Subscriber

The Internet subscriber base in the country as of 31<sup>st</sup> March 2008 stood at 11.09 million as compared to

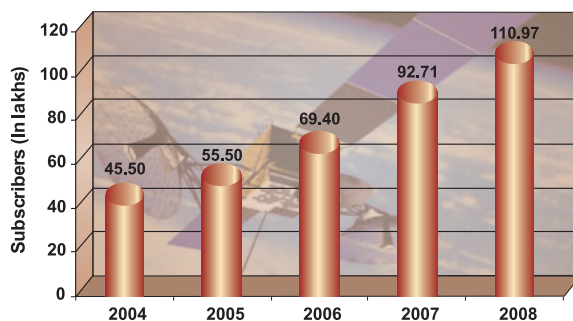


Figure 1.3: Internet Subscribers

9.27 million during the previous year, registering an annual growth rate of about 19.63%.

## Broadband Subscriber

The total Broadband subscriber base has reached 3.87 million by the end of March, 2008 as compared to 2.34 million by the end of March 2007 thereby registering a net addition of 1.56 million

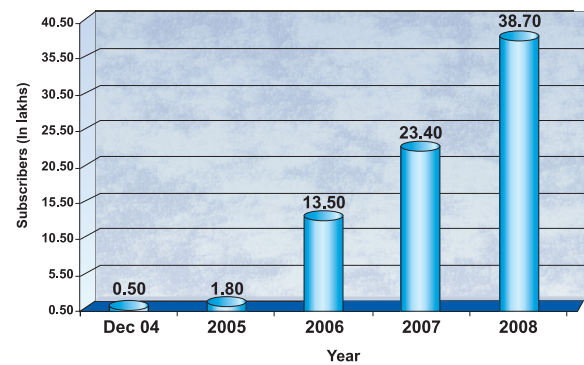


Figure 1.4: Broadband Subscribers

broadband subscriber during the financial year 2007-08.

## Teledensity

The tele-density at the end of March, 2008 reached to the mark of 26.22% as compared to 18.23% at

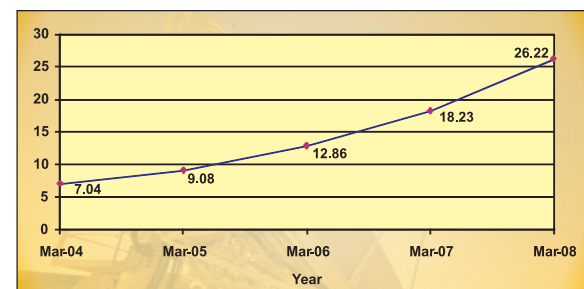


Figure 1.5: Growth of Teledensity

the end of previous year recording an increase of nearly 8%.

Competition driven by regulatory initiatives, technological advancements and policy initiatives

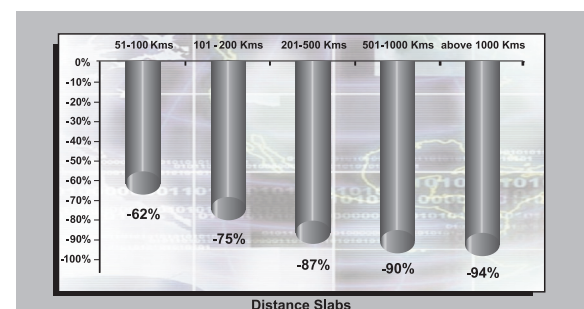
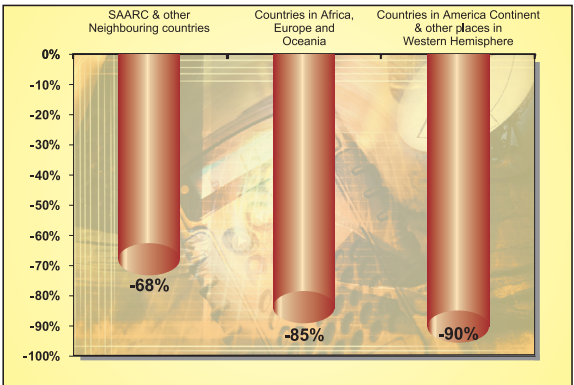


Figure 1.6 : National Long Distance service - Percentage decline in tariffs during the period prior - 1/5/99 to 31/3/08

Note: The percentage decline shown above takes into account the current STD rate of Rs. 2.40 per minute in BSNL's General plan. The decline would be even more if the comparison is made with India One plan where the STD rate is Re. 1 per minute irrespective of the distance slab.

continue to push the growth to newer levels. This trend was more visible in mobile and long distance services. The competitive pressures also made the service providers to be more innovative in their tariff offerings. The reduction in tariffs for Long Distance Services can be seen in Figure 1.6 & Figure 1.7.



**Figure 1.7: International Long Distance service - Percentage decline in tariffs during the period prior - 1 May 1999 to 31 March 2008**

Note: The percentage decline would be even more if the comparison is made with India One plan where the International Long Distance (ILD) charges are Rs. 6/Rs. 8/Rs. 10 instead of Rs. 7.2/Rs. 9.6/Rs. 12 respectively.

As compared to many countries of the world, Indian consumers have been immensely benefited from lower tariffs, which have also been a major factor for explosive growth in the sector. Considering intense competition in various segments of telecommunications sector and continuous decline in the tariff, TRAI has moved to a regime of tariff deregulation in a gradual manner. Currently, TRAI is following ‘Hands Off’ approach in deciding tariffs except in areas where competition is perceived to be insufficient. Thus, tariffs for some key areas like rural telephony, roaming services and leased lines continue to be in the regulated regime, while all other tariffs are under forbearance. The total number of licenses issued for the different services in

various circles and the actual services started by 31<sup>st</sup> March 2008 (other than BSNL and MTNL) has been indicated in **Table 1.1** in Annexure at the end of this Part of the Report. The licensing regime in India is Circle Based with the country divided into 23 Circles, namely, Delhi, Mumbai, Chennai, Kolkatta, Maharashtra, Gujarat, Andhra Pradesh, Karnataka, Tamil Nadu, Kerala, Punjab, Haryana, Uttar Pradesh (West), Uttar Pradesh (East), Rajasthan, Madhya Pradesh, West Bengal and Andaman & Nicobar Islands, Himachal Pradesh, Bihar, Orissa, Assam, North East and Jammu & Kashmir.

### REVIEW OF BASIC SERVICES

As on 31<sup>st</sup> March 2008, wireline connections are being provided by 5 licensed private operator groups in addition to the incumbent BSNL and MTNL. The list of Service Providers providing wireline services along with their area of operation is given in the table below.

The subscriber base of basic services (Wireline) recorded a decrease of 3.28% in 2007-08 over the previous year. The Operatorwise and service area wise details of subscriber base as on 31<sup>st</sup> March, 2008 is furnished in the **Table 1.2** in Annexure at the end of this Part of the Report. In comparison, the private BSOs, recorded an annual increase of 43.14% in the subscriber base during the year 2007-08. As on 31<sup>st</sup> March 2008, the incumbents BSNL and MTNL had 80% and 9% market share respectively in the subscriber base, while all the five

BSNL	<b>21 Circles</b> (Except Delhi & Mumbai)
MTNL	<b>2 Circles</b> (Delhi & Mumbai circles only)
Bharti Airtel Ltd	<b>17 Circles</b> – Except Assam, Orissa, Jammu & Kashmir, Bihar, North East and Himachal Pradesh
Tata Teleservices (Maharashtra) Ltd.	<b>2 Circles</b> – Only Maharashtra and Mumbai
Tata Teleservices Ltd.	<b>20 Circles</b> – Except Assam, Jammu & Kashmir and North East
HFCL Infotel Ltd	<b>1 Circle</b> (Punjab circle only)
Shyam Telelink Ltd	<b>1 Circle</b> (Rajasthan circle only)
Reliance Communications Ltd.	<b>21 Circles</b> – Except Assam and North East)

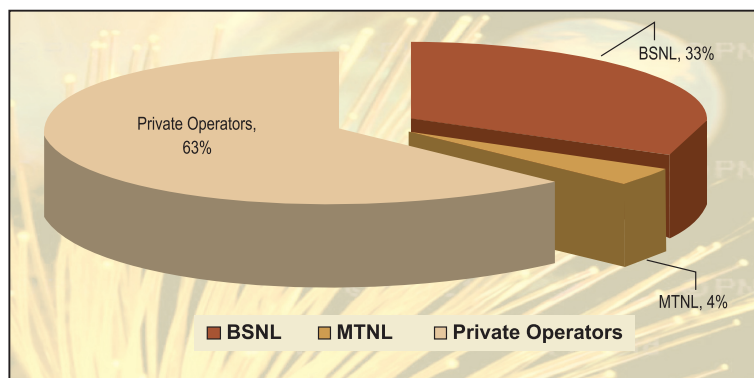
private BSOs had only 11% of the total subscriber base. During the previous year, at the end of March 2007, the market share of the BSNL and MTNL was 83% and 9% respectively, while the share of all the private operators taken together was 8%. Thus the market share in terms of subscriber base of the incumbents BSNL and MTNL has slightly decreased, whereas the market share of private BSOs has increased by 3%.

The 5 private BSOs have added 8.96 lakhs new Direct Exchange Lines (DELs). However, BSNL has recorded a reduction of 21.86 lakhs DELs, whereas MTNL has also registered an annual decline of 0.47 Lakhs DELs. Thus Private operators have contributed to provide most of the new additions in DELs. The total subscriber base however has been recorded an annual decline of 13.37 lakhs DELs in comparison to previous year

### (a) Equipped Switching Capacity

As on 31<sup>st</sup> March 2008 the total equipped switching capacity was 18.55 crores. During the year 2007-08, 28.2 lakhs capacity was added taking the total capacity to 18.55 crores as on 31<sup>st</sup> March 2008. **Table 1.3** in Annexure at the end of this Part of the Report gives the details of equipped switching capacity, net capacity addition etc. in respect of Basic Service Providers.

Operator-wise details of total DELs installed as on 31<sup>st</sup> March 2008 is given in the **Table 1.4** in Annexure at the end of this Part of the Report.



**Figure 1.8: Share of Public Call Office as on 31<sup>st</sup> March 2008**

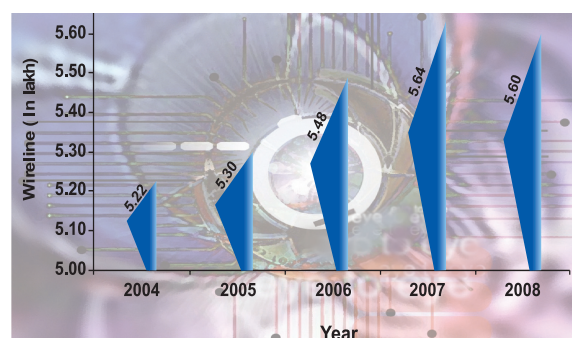
### (b) Public Call Office (PCO)

The number of public call offices (PCOs) in the country as on 31<sup>st</sup> March, 2008 stood at 6.19 million. During the year 2007-08, 6.39 lakhs PCOs were added, recording an annual growth rate of 11.51%. The Service Provider-wise share of PCOs as on 31<sup>st</sup> March 2008 is depicted in Figure 1.8.

The data relating to Operator-wise and Circle-wise details of Public Call Offices as on 31<sup>st</sup> March 2008 vis-à-vis 31<sup>st</sup> March 2007 is given in **Table 1.5** in Annexure at the end of this Part of the Report.

### (c) Village Public Telephone (VPT)

Out of the 5,93,485 villages in the country, 5,59,503 villages have been provided with Village Public



**Figure 1.9: Status of VPTS during the last Five years**

Note: The total number of villages in India has been shown as per census 2001 (as reported by BSNL). In census 1991 total number of villages were 607491 which have been reduced to 5,93,485 as per census 2001).

Telephone (VPT) and 33,982 villages are yet to be connected with a VPT. In percentage terms approximately 94% villages have been covered by

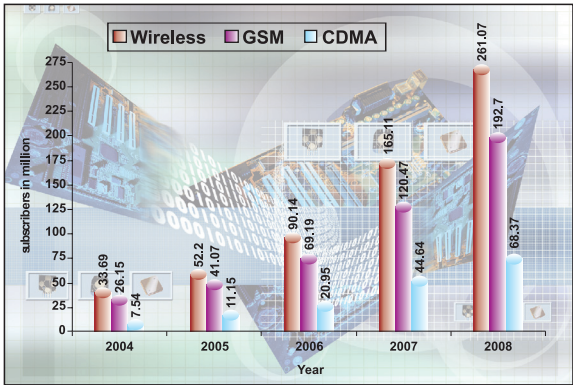
VPTs and the remaining 6% villages are yet to be covered. **Table 1.6** in Annexure at the end of this Part of the Report shows the operator-wise and circle-wise status of VPTs as on 31<sup>st</sup> March 2008.

The Table 1.6 shows that there was a decrease of 4572 VPTs during the financial year 2007-08. The private operators share in these VPTs is very negligible and almost the entire

VPTs have been installed by BSNL. The total number of VPTs of BSNL was recorded at 5,19,616 in March 2008 and the number of VPTs of private operators stood at 39,887 in March 2008. In percentage terms, BSNL's contribution was 94% and private BSO's contribution was 6%. The Status of VPTs during the last five years is depicted in Figure 1.9.

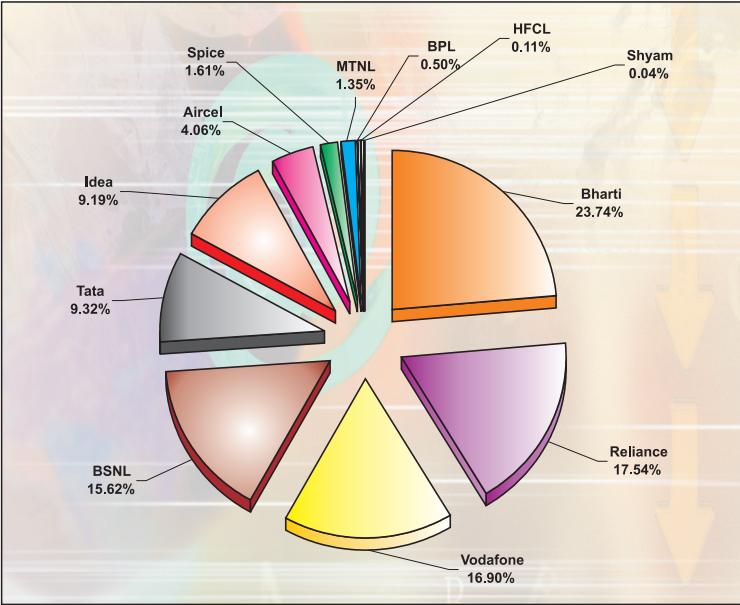
### REVIEW OF WIRELESS (GSM AND CDMA) SERVICES

The Wireless Industry crossed 261 million-subscribers mark at the end of the financial year 2007-08. This total subscribers base of 261.07 million comprise of 192.7 million GSM and 68.37 million CDMA subscribers. During the financial year 2007-08 around 95.96 million subscribers were added with a growth rate of 58.12% as compared to 67.17% growth during the year 2006-07. The growth of subscriber base of Wireless (including GSM and CDMA) Services from March 2004 to March 2008 is depicted in Figure 1.10.



**Figure 1.10: Subscriber Growth of Wireless Services(GSM & CDMA)**

The subscribers base of Wireless Service Providers (both GSM and CDMA) from March 2004 to March, 2008 along with their percentage growth over the financial year 2006-07 is given in **Table 1.7** in Annexure at the end of this Part of the Report.



**Figure 1.11: Market share of Wireless Service Providers (as on 31st March 2008)**

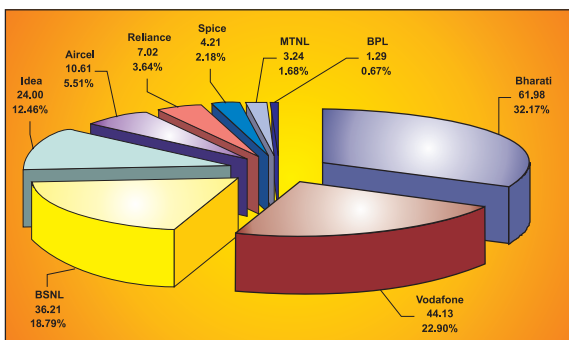
The subscriber base & market share of different mobile operators as on March 2008 is displayed in Figure 1.11.

The list of licensed service providers in various service areas are shown in **Table 1.8** and the list of licensed wireless Service Providers in various service areas is mentioned in the **Table 1.9** in Annexure at the end of this Part of the Report.

In the wireless segment, GSM services has reached the 192.70 million subscriber mark at the end of financial year 2007-08, as compared to 120.47 million during the previous year. It added around 72.23 million subscribers during the year, registering an annual growth of 59.96%.

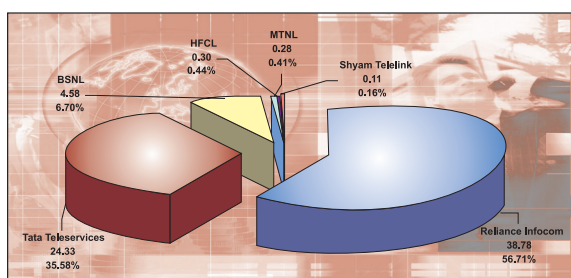
In terms of subscriber base and market share of GSM services, M/s Bharti with 61.98 million subscriber base remains the largest GSM operator followed by M/s Vodafone, M/s BSNL, and M/s Idea with subscriber base of 44.13 million, 36.21 million and 24.00 million respectively. The market share of different GSM operators as on March 2008 is displayed in Figure 1.12.

In Cellular CDMA services, in terms of subscriber base and market share, M/s Reliance Infocom with 38.78 million subscriber base remains the largest CDMA operator followed by M/s Tata and M/s BSNL with subscriber base of 24.33 million, and 4.58 million



**Figure 1.12: Market share of different GSM Operators in terms of subscriber base as on 31<sup>st</sup> March 2008.**

respectively. The market share of different CDMA operators as on March 2008 is displayed in Figure 1.13.



**Figure 1.13: Market share of different CDMA Operators in terms of subscriber base as on 31<sup>st</sup> March 2008**

The Table below indicates the number of licensees (Cellular and Unified) and their subscriber base for GSM services at the end of March, 2008.

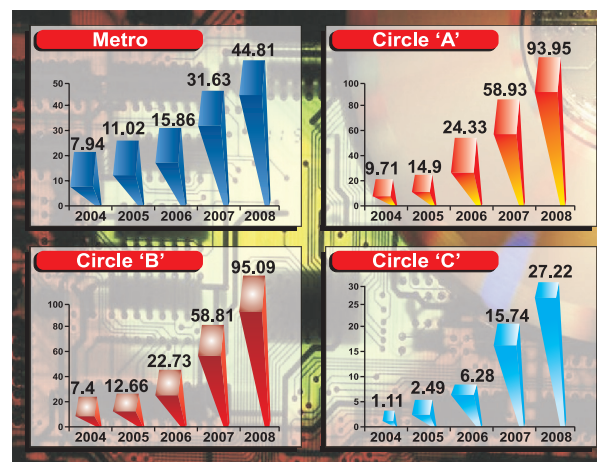
**Number of Licensees (Cellular and Unified) and their Subscriber Base for Cellular Wireless (GSM) Services as on 31<sup>st</sup> March, 2008.**

Number of Service Areas	23
Number of private licensees	254
<b>Total Number of subscribers</b>	261.07 million
- Metros (including MTNL)	44.81 million
- Circles	216.26 million

**Source: DoT & Service Providers**

The subscriber base for Cellular Wireless (GSM) services in different categories of service areas for the period March, 2004 to March 2008 is indicated graphically in Figure 1.14.

The addition of GSM mobile subscribers and annual growth rates for different categories of service areas during the years, 2005-06, 2006-07 and 2007-08 is



**Source: Reports of Service Providers**

Note: Data for 2001 & 2002 include CDMA Subscribers

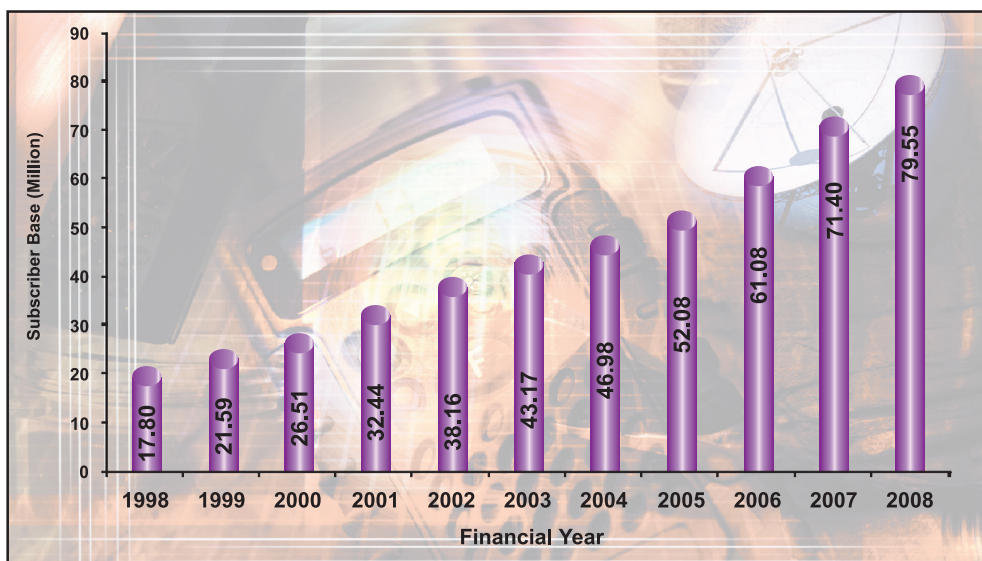
**Figure 1.14: Subscriber Base for Wireless (GSM) Service in Metros and Circles from March, 2004 to March, 2008 (Figures in Million)**

indicated in the **Table 1.10** in Annexure at the end of this Part of the Report. The subscriber base for GSM cellular wireless services has registered annual growth of 59.96% and maximum growth of 74.18% was observed in 'C' Circle during 2007-08.

## PUBLIC AND PRIVATE SECTOR CONTRIBUTION IN THE GROWTH OF FIXED AND MOBILE SERVICES

Before opening up of the Telecom Sector for the private players, growth in telecom services was primarily driven by public sector monopoly, showing very marginal growth, as the incremental tele-density between 1948 and 1998, a 50 year period, was only 1.92%. Telecommunication development in the initial stage of the reforms process beginning with NTP'94 started at a slow pace, but accelerated later on under NTP'99, which provided for migration from fixed license fee to revenue share regime. Cost-oriented Telecom tariffs were also introduced by TRAI in 1999. From 2003 onwards, as a result of certain pragmatic decisions by the Government and the Regulator, viz., introduction of Calling Party Pay (CPP) regime, Unified Access licensing regime, lowering of access deficit coupled with introduction of revenue share regime in ADC triggered further growth.

The policy and regulatory regime established by the Government and the Regulator has led to speedy



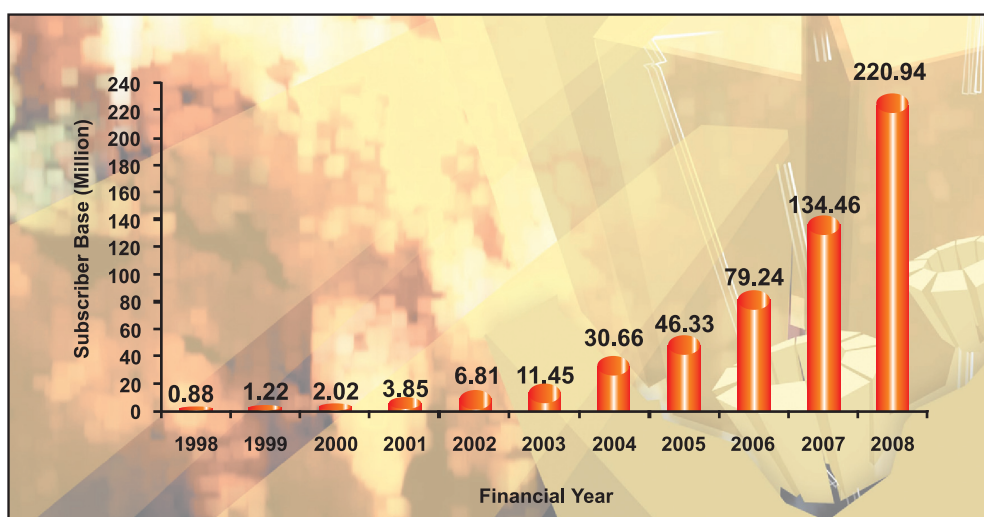
**Figure 1.15: PSU Operators Subscriber Base (1998-2008)**

growth of subscriber base of the incumbent Public Sector Undertakings as well as that of the private sector operators. During the period 1998-2008, the absolute growth in subscriber base of PSU operators was 61.7 million comprising of 19.5 million fixed subscribers and 42.2 million mobile subscribers. The PSU Operators have shown remarkable growth in the competitive environment, while in the pre-reform non-competitive environment, their performance was slow. Figure 1.15 shows growth in subscriber base of PSU Operators.

Private operators have also shown remarkable growth in a highly competitive environment. The overall

growth in the subscriber base of private operators during 1998-2008 was 220.94 million comprising of 9.81 million fixed subscribers and 211.13 million mobile subscribers. Private operators have contributed very largely to post 1998 growth primarily in mobile services due to the obvious cost and fast deployment advantages. The Figure 1.16 shows the growth in subscriber base of private operator.

It may be seen from the two graphs at Figure 1.15 and Figure 1.16 that in comparison to Private Sector, the growth of subscriber base of PSUs have been very low during the last five years.



**Figure 1.16 Private Operators Subscribers Base (1998-2008)**

## VERY SMALL APERTURE TERMINALS (VSATS)

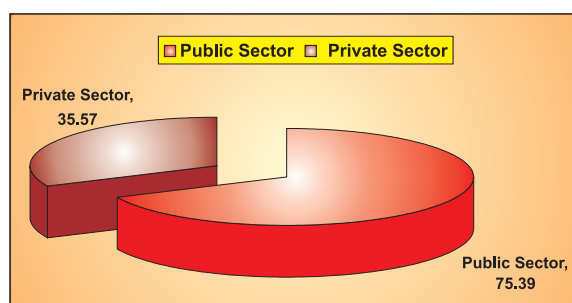
At present VSAT Service are being provided by 9 VSAT Service Providers. VSAT industry added 20,584 VSAT connections during the year 2007-08. The total number of VSAT connections increased from 60,811 in March 2007 to 81395 in March 2008, registering a growth of 33.84% as compared to growth rate of 21.44% in 2006-07. The number of VSAT connection as on 31<sup>st</sup> March 2008, is given in **Table 1.11** in Annexure at the end of this Part of the Report. The number of VSAT subscribers has been growing steadily in year 2007-08. Service Providers especially M/s Bharti Airtel Limited, M/s Hughes Communications Ltd., M/s HCL Comnet, M/s Bharti Broadband, M/s Essel Shyam and M/s Tatanet have reported good increase in their subscriber base.

## PUBLIC MOBILE RADIO TRUNKED SERVICES

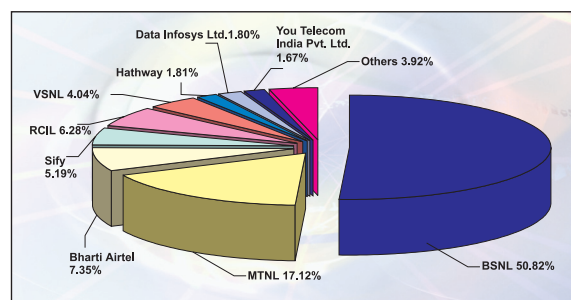
Public Mobile Radio Trunked Service (PMRTS) was opened for private sector in the year 1995. As on 31<sup>st</sup> March 2007, PMRTS is being provided by 12 operators. The subscriber base of PMRTS has recorded a growth rate of 15.04% during 2007-08 over the previous year. Its subscriber base increased from **31501** at the end of March 2007 to **36240** at the end of March 2008. Number of PMRTS customers as on 31<sup>st</sup> March, 2008 is given in **Table 1.12** in Annexure at the end of this Part of the Report.

## INTERNET SERVICES

TRAI is constantly monitoring the growth of the Internet and Broadband services in the country by



**Figure 1.17: Share of Public and Private Sector ISPs (In lakhs)**



**Figure 1.18: Internet Subscribe base of 8 leading ISPs**

way of Performance Monitoring Reports being submitted by Internet Service Providers (ISP). Issues raised by ISPs, from time to time, were successfully resolved by TRAI to create conducive environment and to encourage the growth of the service during the financial year. Total 138 ISPs reported data to TRAI, which indicates 11.09 million Internet Subscribers at the end of 31<sup>st</sup> March 2008. There was an increase of 19.63% in the subscribers base as compared to March 2007. A list of ISPs who have already started Internet service and their subscriber base as on 31<sup>st</sup> March 2008 is furnished at **Table.1.13** in Annexure given at the end of this Part of the Report.

The distribution of Internet Subscribers among Govt. ISPs & Private ISPs as on 31<sup>st</sup> March 2008 is at Figure 1.17.

The market share of top eight Internet Service Providers (ISPs), including BSNL, in terms of subscriber base as on 31<sup>st</sup> March 2008 is at Figure 1.18. The BSNL has maximum of 50.82% of total internet subscriber base.

Among PSUs owned ISPs, M/s BSNL and M/s MTNL have reported a subscriber base of 5.64 Million and 1.89 Million respectively. Amongst the Private Sector ISPs M/s Bharti Airtel Limited has a subscriber base of 0.81 Million and stood third overall.

## BROADBAND

The number of Broadband subscribers (with a download speed of 256 kbps or more) was 3.87 Million on 31<sup>st</sup> March 2008 as compared to 2.34 Million subscribers on 31<sup>st</sup> March 2007 registering an annual growth of 65.38%. The distribution of Broadband subscribers among Government ISPs and Private ISPs as on 31<sup>st</sup> March 2008 is as below:

### Number of Broadband Subscribers as on 31<sup>st</sup> March 2008.

Public Sector ISPs	2.60
Private Sector ISPs	1.27
<b>Total</b>	<b>3.87 Million</b>

## INTERNET TELEPHONY

On the recommendation of TRAI, Government issued the guidelines on 24<sup>th</sup> August 2007 for further opening of Internet Telephony by permitting all ISPs signing new ISP License to provide Internet Telephony. The restrictions on devices being used for Internet Telephony have also been removed. As on 29<sup>th</sup> February 2008, DOT has given permission to 149 ISPs (Category 'A' – 56; Category 'B' – 64; and Category 'C' – 29) to offer Internet Telephony services. At the end of 31<sup>st</sup> March 2008 30 ISPs have reported the provisioning of Internet Telephony Services. The total minutes of usage of internet telephony are 115 million at the end of 31<sup>st</sup> March 2008. These ISPs are listed in the **Table 1.14** in Annexure at the end of this Part of the Report.

## BROADCASTING AND CABLE TV SERVICES

In order to regulate the 'carriage' of Broadcasting and Cable Services, the Government of India issued a Notification dated 9<sup>th</sup> January, 2004 by which broadcasting and cable services have been brought within the purview of TRAI in terms of section 2(k) of the Telecom Regulatory Authority of India Act, 1997. The Government also issued an order dated 9<sup>th</sup> January, 2004 under section 11(d) of the TRAI Act, which mandated TRAI to make recommendations regarding terms and conditions on which the "Addressable Systems" shall be provided to the customers and the parameters for regulating maximum time for advertisements in pay channels as well as other channels. The order also entrusted to TRAI, the function of specifying the standard norms for, and periodicity of revision of rates of pay channels, including interim measures.

### (a) Cable TV Service

At present, as per latest estimates there are 127 million households in India having television sets. Out of this, there are 71 million household subscribers of cable television services. The maximum number of Free-to-Air (FTA) Channels, pay channels and local channels being carried by MSOs in their networks across the country as on Quarter ending 31<sup>st</sup> March 2008 was 133, 95 and 8 respectively. These figures are based on the reports received from some of the major service providers regarding the number of channels being carried by them in their Networks, analog 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.

As on 31<sup>st</sup> March 2008, the total number of set-top box installed in the CAS notified areas of Delhi, Mumbai, Kolkata and Chennai was 6,07,883. A break-up of the set top boxes in the four metropolitan cities has been depicted in the graph below:

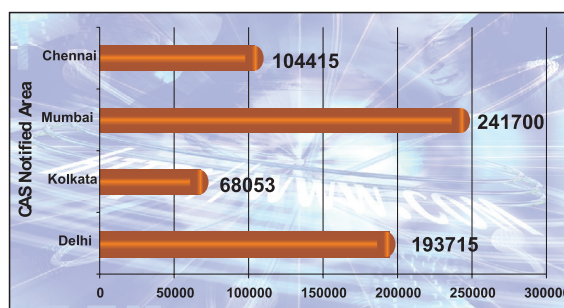


Figure 1.19: Set Top Boxes in CAS notified areas

### (b) Satellite TV Channel

At the end of March 2008, there are reportedly 114 pay channels in existence and these channels are being broadcasted / distributed by 17 broadcasters or their distributors. The list of broadcasters / distributors of pay channels alongwith rate of pay channels for non-CAS areas is indicated in **Table 1.15** in Annexure at the end of this part of the Report.

### **(c) DTH Services**

Apart from Free-to-Air DTH service of Doordarshan, there were six private DTH licensees and out of these six licensees, only three licensees are offering paid DTH Service to customers as on 31<sup>st</sup> March 2008. The following are the six private DTH licensees:

1. Dish TV
2. Tata Sky Limited
3. Sun Direct TV Private Limited

4. Reliance Blue Magic Limited
5. Bharati Telemedia Limited
6. Bharat Business Channel Limited

### **(d) FM Radio / Community Radio Service**

Apart from FM Radio Stations of All India Radio (AIR), there are 205 private FM Radio Stations in operation across the country as on 31<sup>st</sup> March 2008. For the quarter ending March 2008 out of 49 licensees of Community Radio Stations, 35 Stations are in operation.

## 1.2

# Review of Policies and Programmes

The main guiding policy for the telecom sector is the New Telecom Policy ("NTP") 1999. The objectives of the policy are as follows:-

- Access to telecommunications is of utmost importance for achievement of the country's social and economic goals. Availability of affordable and effective communications for the citizens is at the core of the vision and goal of the telecom policy.
- Strive to provide a balance between the provision of universal service to all uncovered areas, including the rural areas, and the provision of high-level services capable of meeting the needs of the country's economy,
- Encourage development of telecommunication facilities in remote, hilly and tribal areas of the country,
- Create a modern and efficient telecommunications infrastructure taking into account the convergence of IT, media, telecom and consumer electronics and assist emergence of India as an IT superpower,
- Convert PCOs, wherever justified, into Public Tele-info Centres having multimedia capability like ISDN services, remote database access, and assist emergence of community information systems etc.,
- Transform the telecommunications sector in a time bound manner to a greater competitive environment in both urban and rural areas providing equal opportunities and level playing field for all players,
- Strengthen research and development efforts in the country and provide an impetus to build worldclass manufacturing capabilities,

- Achieve efficiency and transparency in spectrum management,
- Protect defence and security interests of the country,
- Enable Indian Telecom Companies to become truly global players.

The specific targets mentioned in the NTP 1999 are:

- Make telephone available on demand by the year 2002 and sustain the position thereafter so as to achieve a tele-density of 7 by the year 2005 and 15 by the year 2010,
- Encourage development of telecom in rural areas making it more affordable by modifying the tariff structure suitably and making rural communication obligatory for all fixed service providers,
- Increase rural tele-density from the current level of 0.4 to 4 by the year 2010 and provide reliable transmission media in all rural areas,
- Achieve telecom coverage of all villages in the country and provide reliable media to all exchanges by the year 2002,
- Provide internet access to all district headquarters by the year 2000,
- Provide high speed data and multimedia capability using technologies including ISDN to all towns with a population greater than 2 lakhs by the year 2002.

## RURAL TELEPHONE NETWORK

The objectives and targets of NTP 1999 for rural telephone network are as follows:

- Encourage development of telecom in rural areas by making it more affordable through tariff restructure and making rural communication obligatory for all fixed service providers,
- Rural tele-density to be raised to 4 per hundred by the year 2010,
- Achieve 100% telecom coverage of villages by the year 2002 and provide reliable transmission media in all rural areas.

Out of the 5,93,485 villages in the country, 5,59,503 villages have been provided with Village Public Telephone (VPT). 33,982 villages are yet to be connected with a VPT. In percentage terms 94% villages have been covered by VPTs and 6% villages are yet to be covered. There was a decrease of 4572 VPTs during the financial year. The private operators share in these VPTs is very negligible and almost the entire VPTs have been installed by BSNL. The total no. of VPTs of BSNL was recorded at 5,19,616 in March 2008 as compared to 39,887 VPTs of private operators as on March 2007. Out of total 39.42 million subscriber base of wireline, the Rural Subscriber base was 11.64 million on 31<sup>st</sup> March 2008. The Rural tele-density as on 31<sup>st</sup> March 2008 was 9.20.

## EXPANSION OF TELEPHONE NETWORK

The main objectives and targets of NTP 1999 with respect to expansion of telephone network, other than rural network, which has been discussed above, are as follows:

- make telephone available on demand by year 2002 and achieve tele-density of 7 percent by the year 2005 and 15 percent by the year 2010,
- Provide internet access to all Districts Headquarters by the year 2000,
- Provide high speed data and multimedia capability using technologies including ISDN to all towns with population greater than 2 lakhs by the year 2002,
- Conversion of PCOs wherever justified, into Public Tele-Information Centres having multimedia capabilities like ISDN services, remote database access and information systems etc

The subscriber base of basic services (Wireline) recorded marginal decrease by 3.28% in 2007-08 over the previous year. The mobile industry has witnessed annual growth rate of 58.12%. The growth in absolute numbers in mobile subscribers during 2007-08 was 95.96 million as compared to 66.34 million in 2006-07. The total number of subscriber crossed 261

million mark by the end of financial year 2007-08. The total subscribers comprises of 192.7 million GSM and 68.37 million CDMA subscribers. Another service within the telecom sector, which recorded substantial growth, was Internet and Broadband services. While the total number of subscribers of Internet services increased from 9.27 million in March 2007 to 11.09 million at the end of March 2008 recording a growth rate of about 19.63%, the subscriber base of Broadband increased from 2.34 million in March 2007 to 3.87 million at the end of March, 2008.

There has been significant expansion of the telecom network in the country as may be seen from the growth of various kinds of services mentioned above. The overall tele-density during the year rose to 26.22 on 31<sup>st</sup> March 2008 as compared to 18.23 on 31<sup>st</sup> March 2007.

## **ENTRY OF PRIVATE SECTOR IN BOTH BASIC AND VALUE ADDED SERVICE**

### **(a) Basic Service**

After the announcement of the NTP-94, in September, 1994, the Department of Telecommunications issued Guidelines for private sector entry into basic telecom service. In early 1995, bids were called for basic service and were received in August, 1995. By March, 1996, the successful bidders were short-listed for providing basic services and in 1997, license agreements with private basic service operators were signed for six circles. However, unlike other services, the Basic Service did not take off soon after the licenses were awarded.

Subsequent to the announcement of the NTP 1999, TRAI's recommendations were sought for grant of fresh licenses for basic telecom service in the 15 vacant telecom Circles and for additional licenses in six Circles where licenses had already been issued. TRAI had given its Recommendations to the Government on 31<sup>st</sup> August 2000.

In line with the TRAI's Recommendations, the Government issued the Guidelines for issue of Licence

for Basic Service on 25th January, 2001. These Guidelines provided for opening the Basic Telephone Service without any restriction on the number of operators.

By the end of March 2008, 5 private BSO Groups namely, M/s Reliance Infocom Ltd. (21 circles), M/s Tata Teleservices Ltd. (20 circles), M/s Tata Teleservices (Maharashtra) Limited (2 circles), M/s Bharti Airtel Ltd. (17 circles), M/s Shyam Telelink Ltd. (Rajasthan circle) and M/s HFCL Infotel Ltd. (Punjab circle) are licensed operators providing wireline service. All the five private operators had migrated to Unified Access Service Regime during 2003-04.

### **(b) Value Added Services**

Telecommunications had traditionally been a voice communication service. The services today have moved beyond their fundamental role of voice communications to a spectrum of non-core services, which in telecommunication parlance is called Value Added Service (VAS).

VAS are provided either directly by the telecom operators themselves or by a third party Value Added Service Provider (VASP). VASP connects to the core equipment of telecom operators through inter-working units using protocols like short message peer-to-peer protocol (SMPP), connecting either directly to the short message service centre (SMSC) or to a messaging gateway that allows the telecom operators to have control of the content.

Unlike the core or basic services, the VAS have unique characteristics and they relate to other services in different ways. They also provide benefits which the core services cannot provide. Basically, there are two types of Value Added Services – (i) Value Added Services that stand alone from operational perspective and (ii) Value Added Services provided as an optional service along with voice service. Non-Voice services like SMS are examples of stand alone value added services. The Value Added Services presently being provided by the telecom operators are in the following areas:

Sl. No.	Type of Value Added Service	Description
1.	News	National, International, Business, Entertainment, Sports News
2.	Finance	Stocks (NSE, BSE, NASDAQ), Forex
3.	Entertainment	Games, Mobile TV and Jokes
4.	Travel	Railways, Airlines
5.	Downloads	Logos, Ringtones, Caller tones etc.
6.	Astrology service	Personal Horoscope / Personalized prediction
7.	Cricket	Cricket scores, Match clippings, cricket commentary
8.	Missed call alerts	Subscriber to get a SMS alert of incoming calls when the subscriber's mobile phone is switched off / not reachable and busy
9.	E-mail	E-mail through SMS
10.	Music on demand	Dial a song
11.	Contest	Reality shows
12.	GPRS / WAP	Mobile Internet, Mobile Chat, Mobile TV
13.	MMS	Picture messages, picture clippings
14.	Health	Health tips, Beauty tips
15.	M-commerce	Transactions based services with multiple payment modes and support in multiple domains like WAP, GPRS, SMS, IVR and Web
16.	Miscellaneous	Devotional, Movies & Music, Fun, Navigation etc.

## TECHNICAL COMPATIBILITY AND EFFECTIVE INTERCONNECTION BETWEEN SERVICE PROVIDER

### Background

In a Multi-Operator environment, it is important to specify an Interconnection Usage Charges (IUC) regime to give greater certainty to the inter-operator settlements and facilitate interconnection agreements. TRAI notified the Interconnection Usage Charges (IUC) Regulation on 24<sup>th</sup> January, 2003, which contained inter-alia the charges for origination, carriage and termination of calls in a Multi-Operator environment as well as the Access Deficit Charges (ADC) to cover the access deficit for BSOs on account of below cost access tariff. As per this Regulation, IUC were determined based on minutes of usage for various Unbundled Network Elements and the cost of these elements. The IUCs for Origination, Transit and Termination were based

on the principles of element based charging, i.e., one operator charging the other for the resources consumed for carriage of its calls in terms of minutes of use. The IUC regime has been reviewed from time to time, mainly to gradually reduce the ADC Charges and to review the beneficiaries of ADC regime. In the year 2006, the IUC Regulation issued on 23<sup>rd</sup> February 2006 marked a shift in the ADC regime from the earlier minute based charges to revenue share concept.

### Initiatives during the year

As part of Annual Review TRAI issued on 27<sup>th</sup> March, 2008 The Telecommunication Interconnection Usage Charges (Ninth Amendment) Regulations, 2008 which deals, among other things, with the Access Deficit Charge (ADC) payable by private service providers to BSNL. The process of review and consequent amendment has led to simultaneous issue of a set of recommendations to DOT for

continuation of support to BSNL's rural wireline network through Universal Service Obligation Fund (USOF). The issue of the regulation and the recommendations mentioned above marks the culmination of the process that commenced with the issue of the consultation paper on ADC on 21<sup>st</sup> January 2008.

Regulation on Domestic Leased Circuits (DLC) was issued by TRAI on 14<sup>th</sup> September, 2007 which will facilitate making available to the customer choice of service provider of DLC /VPN without artificial and anti-competitive constraint limiting their choices; Exploitation of full potential of DLC/VPN segment, thereby creating a win-win situation for both customers and the service provider; boosting of competition and consequent reduction in the price of DLC for the end customer; availability of national bandwidth at competitive price to ISPs for rapid growth of Broadband Service; increase in efficiency of businesses and growth of country's economy.

On 7<sup>th</sup> June 2007, International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulations, 2007 was issued which provides for non-discriminatory, fair and open access at the cable landing stations. The Regulation would, inter alia, facilitate provisioning of bandwidth to end consumers at competitive rates; boosting of competition and therefore reduction in the price of international private leased circuits (IPLCs); availability of International bandwidth at competitive price to ISPs for rapid growth of Broadband Service; options to ILDOs to purchase International bandwidth at competitive prices on a range of diversified submarine cables; carriage of voice/data at a competitive cost etc. During the year the Authority took decisive action for implementation of the IN Services to implement its Intelligent Network Services in Multi Operator Multi Service Scenario Regulations, 2006 (13 of 2006) issued on 27<sup>th</sup> November 2006. The details of these Regulations and decisions have been discussed in **Part II and Part III** of this Report

## TELECOMMUNICATION TECHNOLOGY

TRAI follows technology neutral approach in its policies.

### (a) Basic Service

Competition generated in basic telephony has forced BSOs to adopt efficient and modern technology to upgrade their existing networks so as to offer new features and value added/ supplementary services to the consumers. Billing is a major area where technological innovations are taking place to accommodate on the one hand the various new features and value added/supplementary services and on the other hand the inter-operator charging in the new multi-operator environment. The multi-operator scenario has forced the operators to go for new billing system to handle inter-operator settlements

### (b) Cellular Mobile Services

Cellular Mobile service provider in the country are at present primarily providing voice services along with various value added services and supplementary services such as Short Message (SMS), mobile Internet Service, E-mail services, Chatting services, Conferencing, etc. Most of the operators have started providing General Packet Radio Service (GPRS), EDGE Data services to their customers. Various innovative services considering the need of the customers have been evolved. Services like Closed User Group, Video Conferencing etc. are available to mobile customers.

### (c) Broadband

Broadband is high speed; always-on Internet access, which is widely recognized as catalyst for economic and social development of a country. Availability of Broadband services at affordable tariff can have significant impact on Gross Domestic Product (GDP) and attract new investment, generate more employment in addition to increasing productivity.

Government announced Broadband Policy in 2004 and made certain projections for broadband

subscribers' growth and it was expected that broadband growth would accelerate. However, the growth of broadband in the country is slow and below expected level. Therefore the Authority felt an urgent need to identify various impediments affecting growth of broadband and adopting a forward looking approach and sent its recommendations on "Growth of Broadband" to Department of Telecom on 2<sup>nd</sup> January, 2008.

TRAI also released a status Paper on 'Broadband Speed' on 1<sup>st</sup> January, 2008. The paper analyzed broadband speed as defined in various countries, the prevailing environment and impact of growth of broadband on the economy of the country. The paper also analyzed the present broadband infrastructure existing in the country and implications of redefining broadband speed.

#### (d) Next Generation Network

Historically telecommunication network have evolved from a simple telephone network to a multi-service, multi-technology layered networks. With the advent of IP-based technologies the hierarchical

architectures of new networks become simpler, cheaper, and converged in nature. Next Generation Networks (NGN) broadly relates to IP-based networks which facilitate real-time multimedia communications and service quality management functionality to customers in addition to existing fixed and mobile telephone service. This convergence of network is aimed to save cost and simplify day-to-day management and provide flexibility to launch new value added services and content easily.

TRAI had released a Study Paper on Next Generation networks (NGN) in July 2005 with an objective of initiating awareness building and thought process among various stakeholders. A consultation process was initiated to deliberate upon various issues in January 2006. On the basis of comments received TRAI sent its recommendations to the government in March 2006. As a follow-up action, TRAI setup an expert committee named 'NGN-eCO' involving experts from DOT, TEC, C-DOT, service providers, vendors and academicians to deliberate upon the various migration issues on 20<sup>th</sup> June, 2006. The Terms-of-Reference of 'NGN-eCO' was:



Seminar on NGN

- NGN awareness building program.
- Timetable for NGN migration in the country.
- Background documents to be used for consultation on Interconnection and QoS issues by TRAI.

NGN-eCO further constituted three core sub-groups to study the Licensing, Interconnection and Quality of services (QoS) issues in detail. Based on the reports of these core groups, NGN-eCO submitted its final report to the Authority on 24<sup>th</sup> August 2007. In order to create further awareness on NGN among stakeholders, a one day national seminar was organized by TRAI on 'Awareness Building on NGN' on 4<sup>th</sup> December, 2007 at New Delhi.

### **(e) National Internet Exchange of India (NIXI)**

The National Internet Exchange of India (NIXI) was set up by Department of Information Technology (DIT) in the year 2003 on the basis of earlier recommendations of TRAI. The main purpose of NIXI was to ensure that Internet traffic, originating and destined for India, should be routed within India at domestic bandwidth cost. Failure to ensure this is resulting in outflow of revenue to companies abroad for International Internet Bandwidth. The basic purpose to set up NIXI could not be served as only few ISPs (27 out of 135 functional ISPs) have joined NIXI nodes. Such under utilization of NIXI's infrastructure is not only resulting in poor domestic bandwidth utilization, high bandwidth cost and degradation in Quality of Services of Internet in terms of latency, number of hops etc., but also impacting the financial viability of NIXI.

Telecom Regulatory Authority of India (TRAI) had forwarded the recommendations on "Improvement in the effectiveness of National Internet Exchange of India (NIXI)" *suo-motu*, in accordance with section 11 (1) (a) of TRAI Act, 1997, to Department of Telecom (DOT) on 20<sup>th</sup> April, 2007.

These recommendations are expected to bring effective functioning of NIXI for exchange of domestic

Internet traffic as well as result in reduction of content download prices which may eventually encourage use of broadband and web hosting service in the country.

### **(f) Infrastructure Sharing**

Telecom market is growing in our country at a faster pace. Every month about 8 million subscribers are being added in the wireless segment. The main aim of the Govt. is to ensure higher penetration of telecom services in rural and remote areas. This will in turn require additional resources and time to roll out the services. In order to maintain the affordability of telecom services and faster rollout, leveraging on the existing infrastructure is necessary. Presently, infrastructure sharing is taking place on voluntary basis between the service providers.

As per the information available, world over infrastructure sharing has provided impetus to growth of telecom subscribers and also for covering rural & remote areas. Applying the same analogy in India will help boost the growth of telecom services in rural, remote and densely populated urban areas.

Department of Telecommunication had sought recommendations from Telecom Regulatory Authority of India on effective sharing of passive infrastructure (towers etc.). Accordingly, Telecom Regulatory Authority of India sent its recommendations on "Infrastructure sharing" to DoT on 11<sup>th</sup> April 2007. Given the significance of infrastructure sharing the Authority has not only considered the issue of passive infrastructure sharing but also gave recommendations regarding active infrastructure sharing and backhaul sharing on a *suo-motu* basis.

### **(g) Internet Protocol Television (IPTV)**

Internet Protocol TV (IPTV) is a new method of delivering and viewing television programs using an IP network and high speed broadband technology. It is fast becoming popular value added service in many countries. The fast

development in telecom technologies, enormous capabilities of IP platform and increasing digitalization in broadcasting sector is driving services like IPTV.

Under the existing licensing conditions Unified Access Services license (UASL) and Cellular Mobile Telephony Service (CMTS) License are permitted to provide triple play service and IPTV is permitted under this provision. The government also permitted ISPs having net worth of more than 100 crores to provide IPTV services after obtaining permission from the licensor. The main issue being raised time and again in view of the provision of Cable Television Network (Regulation) Act 1995 is whether these operators needed any other regulatory clearances or registration to provide IPTV to their subscribers. Cable Television Network (Regulation) Act 1995 provides that no person shall operate a cable television network unless he is registered as a cable operator under this act.

The Authority deliberated at length on all the relevant issues regarding provision of IPTV services and sent its recommendations on "Provision of IPTV services" on 3<sup>rd</sup> January 2008.

### **(h) Internet Services**

After the announcement of NTP-1994 (New Telecom Policy), Internet services were made available to public with effect from 15<sup>th</sup> August, 1995 when VSNL, the state-owned ILD operator started offering Internet services in 6 cities. New ISP policy was announced on 6<sup>th</sup> November, 1998 to facilitate and encourage entry of private second and other players in this field as ISPs. A supportive policy regime with light regulatory approach was adopted with no license fee, no entry fee, a very liberal roll out obligations and no cap on the number of operators in a licensed service area.

The New Telecom Policy (NTP-99) envisaged opening up of Internet Telephony whereupon Government decided to permit ISPs to process and carry voice

signals (Restricted Internet Telephony Service) with effect from 1<sup>st</sup> April, 2002. This policy was based on TRAI's recommendations on "Introduction of Internet Telephony" dated 20<sup>th</sup> February 2002. Only existing ISPs were permitted to offer Internet Telephony service by migrating to this license within their service area.

Department of Telecommunications (DoT) vide its letter No.820-01/2006-LR dated 17<sup>th</sup> November 2006 requested the Telecom Regulatory Authority of India (TRAI) for recommendations on Internet Service Provider (ISP) license addressing the issues of large number of ISP licenses, limited viability, illegal or grey market activities and level playing field vis-à-vis other telecom service providers.

The Authority accordingly considered issues like grey market operations, provision of various services under ISP license, steps to facilitate technological ingenuity and issues relating to level playing field vis-a-vis other telecom service providers and sent its recommendations on "Review of Internet Services" to DoT on 10<sup>th</sup> May 2007

## **IMPLEMENTATION OF NEW TELECOM POLICY**

The New Telecom Policy 1999 (NTP'99) aims at opening up the telecom sector paving the way for rapid development of the telecom industry. It also envisages that conditions must be created for the telecom industry to adopt new and efficient technologies, provide a wide variety of affordable services, manage transition to converged environment, efficient allocation of frequency spectrum and strengthening of R&D efforts. For achieving these objectives, NTP '99 requires the Government to seek TRAI's views and recommendations. Several such requests were received by TRAI in respect of a number of telecom services. The details of the TRAI's decisions relating to the implementation of the New Telecom Policy are enumerated in Part II and III of this report.

## UNIVERSAL SERVICE OBLIGATION (USO)

The Government of India has established Universal Service Obligation Fund (USOF) headed by an Administrator, based on recommendation of TRAI on USO to Government on 3.10.2001. TRAI in its recommendations on "Growth of Telecom Services in Rural India" dated 27<sup>th</sup> October, 2005 suggested that present policy should shift from its focus on subsidy based on individual connections (DELs, VPTs, etc.) to network infrastructure expansion approach. TRAI recommended that mobile services should be brought under the ambit of USO Fund and sharing of infrastructure may receive support from USO. Subsequently, the Indian Telegraph (Amendment) Act, 2006 was passed on 29<sup>th</sup> December 2006 to bring inter alia mobile services and Broadband connectivity within the ambit of Universal Services. Department of Telecommunication (DoT) has launched a scheme for extending financial support from USOF for setting up of Infrastructure for mobile services in rural and remote areas of the Country. TRAI forwarded its views on areas of concern, which need to be addressed for successful implementation of this scheme.

## QUALITY OF SERVICE

Section 11 (b) (v) of TRAI Act stipulates that TRAI has to lay down the standards of quality of service to be provided by the service providers and has to ensure the quality of service and conduct the periodical survey of such service provided by the Service Providers so as to protect interest of the consumers of telecommunication service. TRAI had issued Regulation on Quality of Service for Basic and Cellular Mobile Services, Dial-up and Leased Line Internet Access Services, Broadband Services, prescribing QoS benchmarks. To regulate the Quality of Service to be observed by the MSOs/Cable Operators in CAS notified areas of Delhi, Chennai, Mumbai and Kolkata, TRAI has issued the Standards of Quality of Service (Broadcasting and Cable Services) (Cable Television – CAS) Regulation, 2006 in the year 2006. During the financial Year, 2007-08 certain Standards of Quality

of Service benchmarks have been prescribed for Direct to Home (DTH) Broadcasting Services vide Direct to Home Broadcasting Services (Standards of Quality of Service and Redressal of Grievances) Regulation 2007 dated 31<sup>st</sup> August, 2007. The performance reports of each operator against these parameters are obtained on a quarterly basis and these are monitored closely to ensure compliance with the parameters specified in the Regulation. Whenever there is a shortfall in achievement of the parameters, these are taken up with the service providers for compliance.

With a view to have audit of network parameter reported by the Basic and Cellular Service providers, an independent agency, M/s TUV South Asia Ltd., was appointed to carry out an objective assessment of quality of service provided by Basic and Cellular Service providers. The reports received for the quarter ending December, 2006 were analysed and reports were placed on the TRAI Website on 20<sup>th</sup> April, 2007 for information of all stake holders. TRAI Act and QoS regulations provide for assessment of customer perception of service against the QoS benchmark through survey. TRAI has appointed independent Agencies namely, M/s IMRB International in South, East, North Zone for Audit and South & East for Survey; M/s Voluntary Organisation in Interest of Customer Education (VOICE) in North Zone for survey; Market Pulse in West Zone for survey and M/s TCIL in West Zone for Audit. These agencies have been entrusted with the work of assessment of (i) Implementation and Effectiveness of Telecom Consumers Protection and Redressal Grievances Regulations, 2007 (ii) Customer Perception of Service through Survey and (iii) Audit and Assessment of Quality of Service.



# ANNEXURES



**TABLE 1.1**

**Total Number of Licenses issued for Service Areas and Number of Licensees offering services as on 31<sup>st</sup> March 2008 (other than BSNL and MTNL)**

Sl.No.	Name of service	Private Sector Licensees	Offering Services as on March 2008
1.	UASLs	224	83
2.	NLD Service	16	5
3.	ILD Service	13	4
4.	Cellular	30	30
5.	Very Small Aperture Terminal (VSAT) Service	8	8
6.	Public Mobile Radio Trunked Services (PMRTS)	12	12
9.	ISP Licence	357	136

**Source: DOT / Service Providers**

Table 1.2

Subscriber Base of Basic Services (wireline) as on 31<sup>st</sup> March, 2008

S. No.	Name of the Circle/ Service Area	Service Provider	No. of DELs as on 31 <sup>st</sup> March 2007		Total DELs as on 31 <sup>st</sup> March 2007	No. of DELs as on 31 <sup>st</sup> March 2008		Total DELs as on 31 <sup>st</sup> March 2008	Annual Growth Rate %
			Urban	Rural		Urban	Rural		
			Wireline			Wireline			
1	Andaman & Nicobar	BSNL	14282	17341	31623	12043	12813	24856	-21.40
2	Andhra Pradesh	BSNL	1605989	1168358	2774347	1451412	1007823	2459235	-11.36
		TATA	114201	0	114201	122452	1	122453	7.23
		Reliance	41559	3	41562	68012	3	68015	63.65
		Bharti	40168	0	40168	61173	0	61173	52.29
3	Assam	BSNL	363472	138916	502388	307306	123004	430310	-14.35
4	Bihar (including Jharkand)	BSNL	931960	503238	1435198	914699	504385	1419084	-1.12
		Reliance	686	0	686	1348	0	1348	96.50
		TATA	150	0	150	4369	0	4369	2812.67
5	Delhi	Bharti	606278	0	606278	716755	0	716755	18.22
		MTNL	1586418	0	1586418	1576918	0	1576918	-0.60
		TATA	18789	0	18789	23313	0	23313	24.08
		Reliance	64941	0	64941	106156	0	106156	63.47
6	Gujarat	BSNL	1566712	776283	2342995	1490183	638036	2128219	-9.17
		Reliance	63077	0	63077	90203	0	90203	43.00
		Bharti	15961	0	15961	23055	0	23055	44.45
		TATA	23767	0	23767	35279	0	35279	48.44
7	Haryana	BSNL	586416	414910	1001326	545814	377624	923438	-7.78
		Bharti	19253	0	19253	20961	0	20961	8.87
		Reliance	4408	30	4438	7844	31	7875	77.44
		TATA	180	0	180	1992	0	1992	1006.67
8	Himachal Pradesh	BSNL	89981	366589	456570	81341	332567	413908	-9.34
		Reliance	499	0	499	3217	0	3217	544.69
		TATA	0	0	0	390	0	390	0.00
9	Jammu & Kashmir	BSNL	244314	51145	295459	211087	48397	259484	-12.18
		Reliance	1	0	1	1	0	1	0.00
10	Karnataka	BSNL	1683408	793685	2477093	1609802	704779	2314581	-6.56
		Bharti	295823	0	295823	365957	0	365957	23.71
		TATA	56104	0	56104	81628	0	81628	45.49
		Reliance	58997	0	58997	81617	0	81617	38.34
11	Kerala	BSNL	1104255	2526312	3630567	1069063	2517056	3586119	-1.22
		Reliance	20572	30	20602	43855	151	44006	113.60
		TATA	554	0	554	3656	0	3656	559.93
		Bharti	26790	0	26790	38917	0	38917	45.27
12	Madhya Pradesh (Including Chattisgarh)	BSNL	1183352	374888	1558240	1109055	358172	1467227	-5.84
		Bharti	290084	0	290084	298396	0	298396	2.87
		Reliance	16430	0	16430	25441	0	25441	54.84
		TATA	131	0	131	1119	0	1119	754.20
13	Maharashtra (including Mumbai)	BSNL & MTNL	4491416	1451949	5943365	4256791	1308805	5565596	-6.36
		Reliance	119944	224	120168	179242	338	179580	49.44
		Bharti	88094	0	88094	181791	0	181791	106.36
		TATA	295852	30	295882	389322	11461	400783	35.45

S. No.	Name of the Circle/ Service Area	Service Provider	No. of DELs as on 31 <sup>st</sup> March 2007		Total DELs as on 31 <sup>st</sup> March 2007	No. of DELs as on 31 <sup>st</sup> March 2008		Total DELs as on 31 <sup>st</sup> March 2008	Annual Growth Rate %
			Urban	Rural		Urban	Rural		
			Wireline			Wireline			
	Mumbai	MTNL	2138728	0	2138728	2101452	0	2101452	-1.74
		Reliance	82684	0	82684	124095	0	124095	50.08
		Bharti	70037	0	70037	150692	0	150692	115.16
		TATA	234483	0	234483	308870	0	308870	31.72
	Maharashtra (excluding Mumbai)	BSNL	2352688	1451949	3804637	2155339	1308805	3464144	-8.95
		Reliance	37260	224	37484	55147	338	55485	48.02
		Bharti	18057	0	18057	31099	0	31099	72.23
		TATA	61369	30	61399	80452	11461	91913	49.70
14	North East	BSNL	266371	97076	363447	245228	97046	342274	-5.83
15	Orissa	BSNL	477552	294644	772196	472865	295378	768243	-0.51
		Reliance	1729	0	1729	3722	0	3722	115.27
		TATA	0	0	0	1192	0	1192	0.00
16	Punjab	BSNL	856073	732396	1588469	789416	635890	1425306	-10.27
		HFCL	168646	0	168646	147595	0	147595	-12.48
		Reliance	24597	0	24597	43480	0	43480	76.77
		Bharti	51528	0	51528	26171	0	26171	-49.21
		TATA	899	0	899	4512	0	4512	401.89
17	Rajasthan	BSNL	1036658	619525	1656183	980736	582855	1563591	-5.59
		Bharti	11866	0	11866	22186	0	22186	86.97
		Shyam	141198	12996	154194	143262	14194	157456	2.12
		Reliance	4828	0	4828	14609	0	14609	202.59
		TATA	0	0	0	615	0	615	0.00
18	Tamil Nadu (including Chennai)	BSNL	2678089	914898	3592987	2499527	847379	3346906	-6.85
		TATA	14329	0	14329	26212	0	26212	82.93
		Bharti	369723	0	369723	84202	0	84202	-77.23
		Reliance	76209	0	76209	99897	0	99897	31.08
	Chennai	BSNL	955455	54037	1009492	959676	50383	1010059	0.06
		Reliance	54248	0	54248	70965	0	70965	30.82
		TATA	12983	0	12983	23894	0	23894	84.04
		Bharti	242659	0	242659	20766	0	20766	-91.44
	Tamil Nadu (excluding Chennai)	BSNL	1722634	860861	2583495	1539851	796996	2336847	-9.55
		TATA	1346	0	1346	2318	0	2318	72.21
		Bharti	127064	0	127064	63436	0	63436	-50.08
		Reliance	21961	0	21961	28932	0	28932	31.74
19	Uttar Pradesh (East)	BSNL	1084988	423818	1508806	1050425	403890	1454315	-3.61
		Reliance	18649	0	18649	30638	3	30641	64.30
		TATA	0	0	0	1295	0	1295	0.00
		Bharti	18705	0	18705	134060	0	134060	616.71
20	Uttar Pradesh (West) (including Uttranchal)	BSNL	1097915	264169	1362084	1026110	242880	1268990	-6.83
		Reliance	3158	0	3158	7344	0	7344	132.55
		Bharti	16369	0	16369	270631	0	270631	1553.31
		TATA	0	0	0	1444	0	1444	0.00
21	West Bengal (including Kolkata)	BSNL	1965052	618937	2583989	1918188	573878	2492066	-3.56
		Reliance	47608	0	47608	66816	1	66817	40.35
		Bharti	20745	0	20745	39071	0	39071	88.34
		TATA	2270	0	2270	12699	0	12699	459.43

S. No.	Name of the Circle/ Service Area	Service Provider	No. of DELs as on 31 <sup>st</sup> March 2007		Total DELs as on 31 <sup>st</sup> March 2007	No. of DELs as on 31 <sup>st</sup> March 2008		Total DELs as on 31 <sup>st</sup> March 2008	Annual Growth Rate %
			Urban	Rural		Urban	Rural		
			Wireline			Wireline			
	Kolkata	BSNL	1374310	0	1374310	1374363	0	1374363	0.00
		Reliance	46022	0	46022	62212	0	62212	35.18
		Bharti	20745	0	20745	39071	0	39071	88.34
		TATA	2270	0	2270	12470	0	12470	449.34
West Bengal (excluding Kolkata)	BSNL	590742	618937	1209679	543825	573878	1117703	-7.60	
	Reliance	1586	0	1586	4604	1	4605	190.35	
	TATA	0	0	0	229	0	229	0.00	
Total			28191022	1256290	40753412	27777123	11638840	39415963	-3.28

Table 1.3

**Details of Equipped Switching Capacity, Net Capacity addition, etc. in respect of Basic Service Providers as on 31<sup>st</sup> March, 2008**

Name of the Circle/Service Area	Service Provider	Equipped Capacity as on		Capacity added in the year (in crores)
		31 <sup>st</sup> March 2007	31 <sup>st</sup> March 2008	
Andaman & Nicobar	BSNL	59496	60096	600
Andhra Pradesh	BSNL	3942505	3890327	-52178
	TATA	2008000	4150	-2003850
	Reliance	9435136	9435136	0
	Bharti	38973	74856	35883
Assam	BSNL	713208	714684	1476
Bihar (including Jharkand)	BSNL	2013833	1337532	-676301
	Reliance	3875840	3875840	0
	TATA	512690	1315000	802310
Delhi	Bharti	696610	808976	112366
	MTNL	2809729	2810129	400
	TATA	2280000	3330000	1050000
	Reliance	10037968	10037968	0
Gujarat	BSNL	3645452	3614182	-31270
	Reliance	5974320	5974320	0
	Bharti	62496	240000	177504
	TATA	42856	45180	2324
Haryana	BSNL	1541222	1515388	-25834
	Bharti	25855	23672	-2183
	Reliance	1788832	1788832	0
	TATA	647976	978267	330291
Himachal Pradesh	BSNL	644002	642514	-1488
	Reliance	233320	233320	0
	TATA	257160	420000	162840
Jammu & Kashmir	BSNL	416132	417104	972
	Reliance	0	0	0
Karnataka	BSNL	3443485	3372201	-71284
	Bharti	381000	503800	122800
	TATA	92072	77864	-14208
	Reliance	5370192	5370192	0
Kerala	BSNL	4267815	4269131	1316
	Reliance	4788400	4788400	0
	TATA	141000	50000	-91000
	Bharti	93248	93248	0
Madhya Pradesh (Including Chattisgarh)	BSNL	2101091	1652244	-448847
	Bharti	393688	407640	13952
	Reliance	3887040	3887040	0
	TATA	0	0	0
<b>Maharashtra (including Mumbai)</b>	BSNL&MTNL	9864865	9857587	-7278
	Reliance	15713856	15713856	0
	Bharti	124992	174990	49998
	TATA	4137583	6344916	2207333

Name of the Circle/Service Area	Service Provider	Equipped Capacity as on		Capacity added in the year (in crores)
		31 <sup>st</sup> March 2007	31 <sup>st</sup> March 2008	
Mumbai	MTNL	4717143	4734081	16938
	Reliance	7174704	7174704	0
	Bharti	109368	145470	36102
	TATA	2014833	2509166	494333
Maharashtra (excluding Mumbai)	BSNL	5147722	5123506	-24216
	Reliance	8539152	8539152	0
	Bharti	15624	29520	13896
	TATA	2122750	3835750	1713000
North East -I	BSNL	281320	284800	3480
North East -II	BSNL	211392	218668	7276
Orissa	BSNL	965720	968004	2284
	Reliance	892848	892848	0
	TATA	577000	620000	43000
Punjab	BSNL	2769541	2707853	-61688
	HFCL	321095	328835	7740
	Reliance	3905408	3905408	0
	Bharti	65012	76624	11612
	TATA	34979	60782	25803
Rajasthan	BSNL	2274618	2258942	-15676
	Bharti	20480	25248	4768
	STL	350000	350000	0
	Reliance	4459424	4459424	0
	TATA	1166996	1808097	641101
Chennai	BSNL	1430893	1303427	-127466
	Reliance	3341894	3341894	0
	TATA	443368	443368	0
	Bharti	357882	357882	0
Tamil Nadu (excluding Chennai)	BSNL	3506324	3499296	-7028
	TATA	370096	4096	-366000
	Bharti	175538	589728	414190
	Reliance	4774704	4774704	0
Uttar Pradesh (East)	BSNL	2323473	2312348	-11125
	Reliance	6501520	6501520	0
	TATA	2100425	2135675	35250
	Bharti	8704	29538	20834
Uttar Pradesh (West) (including Uttranchal)	BSNL	2235022	1718322	-516700
	Reliance	15378744	15378744	0
	Bharti	11280	24038	12758
	TATA	2206650	1671908	-534742
Kolkata	BSNL	1684161	1602113	-82048
	Reliance	3912576	3912576	0
	Bharti	12927	44490	31563
	TATA	93391	1722000	1628609
West Bengal (excluding Kolkata)	BSNL	1703851	1705447	1596
	Reliance	3240000	3240000	0
	TATA	143000	143000	0
<b>TOTAL</b>		<b>182756194</b>	<b>185572229</b>	<b>2816035</b>

Source: BSNL/MTNL /Private Service Operators

**Table 1.4****The total DELs installed by Basic Service Operators as on 31<sup>st</sup> March, 2008**

Sr. No.	Basic Service Providers (wireline)	Area of Operation	DELs installed
1	BSNL	All India	31552296
2	MTNL	Delhi & Mumbai	3678370
3	Bharti Airtel Ltd	AP,MP, Delhi, Haryana, TN , Chennai, Karnataka, Kerala, Gujarat, Punjab, Maharashtra, Mumbai, U.P. (W) including Uttaranchal, West Bengal and Kolkata	2283326
4	Tata Teleservices (Maharashtra) Ltd	Maharashtra & Mumbai	400783
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	322168
6	HFCL Infotel Ltd	Punjab	147595
7	Shyam Telelink Ltd	Rajasthan	157456
8	Reliance Communications Ltd	AP, Bihar, Delhi, Gujarat, Haryana, HP, KN, Kerala, MP, MH, Mumbai, Orissa, Punjab, Rajasthan, TN Chennai ,UP(E), UP(W), WB, Kolkata	873969
<b>Grand Total</b>		<b>39,415,963</b>	

**Source: BSNL/MTNL & Private Service Operators.**

Table 1.5

**Operator-wise and Circle-wise details of Public Call Offices as on 31<sup>st</sup> March, 2008  
vis-à-vis 31<sup>st</sup> March 2007**

Public Call Office						
S. No.	Name of the Circle / Service Area	Service Provider	31 <sup>st</sup> March '07	31 <sup>st</sup> March '08	Net PCO added during the Year	Percentage Growth for the year Ending 31 <sup>st</sup> March 2008
1	Andaman & Nicobar	<b>BSNL</b>	620	963	343	55.32
2	Andhra Pradesh	<b>BSNL</b>	271327	241212	-30115	-11.10
		<b>TATA</b>	175288	45842	-129446	-73.85
		<b>Reliance</b>	270178	364385	94207	34.87
		<b>Bharti</b>	3894	3964	70	1.80
3	Assam	<b>BSNL</b>	33083	34518	1435	4.34
4	Bihar (including Jharkhand)	<b>BSNL</b>	92420	87499	-4921	-5.32
		<b>Reliance</b>	37400	74844	37444	100.12
		<b>TATA</b>	37148	52563	15415	41.50
5	Delhi	<b>Bharti</b>	37112	27497	-9615	-25.91
		<b>MTNL</b>	91510	82692	-8818	-9.64
		<b>TATA</b>	50865	25809	-25056	-49.26
		<b>Reliance</b>	59467	66225	6758	11.36
6	Gujarat	<b>BSNL</b>	124948	106021	-18927	-15.15
		<b>Reliance</b>	95435	99295	3860	4.04
		<b>TATA</b>	105770	5846	-99924	-94.47
		<b>Bharti</b>	992	574	-418	-42.14
7	Haryana	<b>BSNL</b>	30411	28218	-2193	-7.21
		<b>Bharti</b>	3472	2760	-712	-20.51
		<b>Reliance</b>	25293	24177	-1116	-4.41
		<b>TATA</b>	17302	48998	31696	183.19
8	Himachal Pradesh	<b>BSNL</b>	12048	12020	-28	-0.23
		<b>Reliance</b>	4610	5579	969	21.02
		<b>TATA</b>	0	133591	133591	—
9	Jammu & Kashmir	<b>BSNL</b>	16057	14395	-1662	-10.35
10	Karnataka	<b>BSNL</b>	267044	256305	-10739	-4.02
		<b>Bharti</b>	45351	46262	911	2.01
		<b>TATA</b>	123710	105321	-18389	-14.86
		<b>Reliance</b>	156921	191183	34262	21.83
11	Kerala	<b>BSNL</b>	125316	129135	3819	3.05
		<b>Reliance</b>	101490	103562	2072	2.04
		<b>Bharti</b>	5261	8120	2859	54.34
		<b>TATA</b>	29126	69730	40604	139.41
12	Madhya Pradesh (Including Chattisgarh)	<b>BSNL</b>	61230	65688	4458	7.28
		<b>Bharti</b>	46490	40888	-5602	-12.05
		<b>Reliance</b>	40558	63741	23183	57.16
		<b>TATA</b>	27144	46508	19364	71.34

Public Call Office						
S. No.	Name of the Circle / Service Area	Service Provider	31 <sup>st</sup> March '07	31 <sup>st</sup> March '08	Net PCO added during the Year	Percentage Growth for the year Ending 31 <sup>st</sup> March 2008
13	Maharashtra (including Mumbai)	<b>BSNL&amp;MTNL</b>	496667	470423	-26244	-5.28
		<b>TATA</b>	346971	251311	-95660	-27.57
		<b>Bharti</b>	873	1311	438	50.17
		<b>Reliance</b>	268009	320281	52272	19.50
	Mumbai	<b>MTNL</b>	168567	156643	-11924	-7.07
		<b>TATA</b>	130317	65000	-65317	-50.12
		<b>Bharti</b>	873	812	-61	-6.99
		<b>Reliance</b>	74150	119057	44907	60.56
	Maharashtra excluding Mumbai	<b>BSNL</b>	328100	313780	-14320	-4.36
		<b>Tata</b>	216654	186311	-30343	-14.01
		<b>Bharti</b>	0	499	499	—
		<b>Reliance</b>	193859	201224	7365	3.80
14	North East	<b>BSNL</b>	15635	17967	2332	14.92
15	Orissa	<b>BSNL</b>	30280	28848	-1432	-4.73
		<b>Reliance</b>	24306	30975	6669	27.44
		<b>TATA</b>	18388	40082	21694	117.98
16	Punjab	<b>BSNL</b>	33345	27837	-5508	-16.52
		<b>HFCL</b>	42978	36794	-6184	-14.39
		<b>Reliance</b>	33597	32234	-1363	-4.06
		<b>Bharti</b>	3471	3970	499	14.38
		<b>TATA</b>	22608	251403	228795	1012.01
17	Rajasthan	<b>BSNL</b>	67878	63132	-4746	-6.99
		<b>Bharti</b>	889	1543	654	73.57
		<b>STL</b>	41698	41700	2	0.01
		<b>Reliance</b>	68632	81346	12714	18.52
		<b>TATA</b>	27040	157995	130955	484.30
18	Tamil Nadu (including Chennai)	<b>BSNL</b>	301737	319128	17391	5.76
		<b>TATA</b>	131570	74550	-57020	-43.34
		<b>Bharti</b>	67148	58550	-8598	-12.80
		<b>Reliance</b>	204734	305734	101000	49.33
	Chennai	<b>BSNL</b>	88170	82711	-5459	-6.19
		<b>Reliance</b>	40910	59074	18164	44.40
		<b>TATA</b>	25930	46853	20923	80.69
	Tamil nadu (excluding Chennai)	<b>BSNL</b>	213567	236417	22850	10.70
		<b>TATA</b>	105640	27697	-77943	-73.78
		<b>Bharti</b>	67148	58550	-8598	-12.80
		<b>Reliance</b>	163824	246660	82836	50.56
19	Uttar Pradesh (East)	<b>BSNL</b>	110562	122849	12287	11.11
		<b>Reliance</b>	76324	85553	9229	12.09
		<b>Bharti</b>	3483	2848	-635	-18.23
		<b>TATA</b>	47715	44842	-2873	-6.02
20	Uttar Pradesh (West) (including Uttranchal)	<b>BSNL</b>	62709	56294	-6415	-10.23
		<b>Reliance</b>	78950	91511	12561	15.91
		<b>Bharti</b>	3198	2679	-519	-16.23
		<b>TATA</b>	34962	133291	98329	281.25

Public Call Office						
S. No.	Name of the Circle / Service Area	Service Provider	31 <sup>st</sup> March'07	31 <sup>st</sup> March '08	Net PCO added during the Year	Percentage Growth for the year Ending 31 <sup>st</sup> March 2008
21	West Bengal (including Kolkata)	<b>BSNL</b>	124633	125709	1076	0.86
		<b>Reliance</b>	61962	104875	42913	69.26
		<b>Bharti</b>	1314	1484	170	12.94
		<b>TATA</b>	66779	80925	14146	21.18
	Kolkata	<b>BSNL</b>	59810	60024	214	0.36
		<b>Reliance</b>	22329	27419	5090	22.80
		<b>Bharti</b>	1314	1484	170	12.94
		<b>TATA</b>	39550	43677	4127	10.43
	West Bengal (excluding Kolkata)	<b>BSNL</b>	64823	65685	862	1.33
		<b>Reliance</b>	39633	77456	37823	95.43
		<b>TATA</b>	27229	37248	10019	36.80
	<b>TOTAL</b>		<b>5547336</b>	<b>6185904</b>	<b>638568</b>	<b>11.51</b>

Source: BSNL/MTNL & Private Service Operators.

Table 1.6

Operator-wise and Circle-wise status of VPTs as on 31<sup>st</sup> March 2008

Village Public Telephones						
S.No.	Name of the Area Circle/Service	Service Provider	31st March' 07	31st March' 08	Achievement during the Year Ending Mar'08	Percentage Growth for the year Ending 31.03.2008
1	Andaman & Nicobar	<b>BSNL</b>	198	179	-19	-9.60
2	Andhra Pradesh	<b>BSNL</b>	23936	20396	-3540	-14.79
		<b>TATA</b>	1358	1358	0	0.00
		<b>Reliance</b>	0	0	0	0.00
3	Assam	<b>BSNL</b>	24265	22407	-1858	-7.66
4	Bihar (including Jharkhand)	<b>BSNL</b>	66068	63154	-2914	-4.41
		<b>Reliance</b>	0	0	0	0.00
		<b>TATA</b>	0	0	0	0.00
5	Delhi	<b>Bharti</b>	0	0	0	0.00
		<b>MTNL</b>	0	0	0	0.00
		<b>TATA</b>	0	0	0	0.00
		<b>Reliance</b>	0	0	0	0.00
6	Gujarat	<b>BSNL</b>	14488	14978	490	3.38
		<b>Reliance</b>	4115	4115	0	0.00
		<b>TATA</b>	0	0	0	0.00
7	Haryana	<b>BSNL</b>	6811	6369	-442	-6.49
		<b>Bharti</b>	0	0	0	0.00
		<b>Reliance</b>	0	0	0	0.00
		<b>TATA</b>	0	27883	27883	—
8	Himachal Pradesh	<b>BSNL</b>	16814	15945	-869	-5.17
		<b>Reliance</b>	0	0	0	0.00
		<b>TATA</b>	0	680	680	—
9	Jammu & Kashmir	<b>BSNL</b>	6064	5642	-422	-6.96
10	Karnataka	<b>BSNL</b>	27066	26425	-641	-2.37
		<b>Bharti</b>	0	0	0	0.00
		<b>Reliance</b>	0	0	0	0.00
		<b>TATA</b>	0	0	0	0.00
11	Kerala	<b>BSNL</b>	1468	1372	-96	-6.54
		<b>Reliance</b>	0	0	0	0.00
		<b>TATA</b>	0	0	0	0.00
12	Madhya Pradesh (Including Chattisgarh)	<b>BSNL</b>	66481	66821	340	0.51
		<b>Bharti</b>	0	0	0	0.00
		<b>Reliance</b>	0	0	0	0.00
		<b>TATA</b>	0	0	0	0.00
13	<b>Maharashtra (including Mumbai)</b>	<b>BSNL&amp; MTNL</b>	36691	35245	-1446	-3.94
		<b>TATA</b>	2542	2542	0	0.00
		<b>Reliance</b>	0	0	0	0.00
	Mumbai	<b>MTNL</b>	0	0	0	0.00
		<b>TATA</b>	126	126	0	0.00
	Maharashtra Excluding Mumbai	<b>BSNL</b>	36691	35245	-1446	-3.94
		<b>TATA</b>	2416	2416	0	0.00

Village Public Telephones						
S.No.	Name of the Area Circle/Service	Service Provider	31st March' 07	31st March' 08	Achievement during the Year Ending Mar'08	Percentage Growth for the year Ending 31.03.2008
14	North East	BSNL	8463	7917	-546	-6.45
15	Orissa	BSNL	41268	38835	-2433	-5.90
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
16	Punjab	BSNL	12687	12000	-687	-5.41
		HFCL	417	299	-118	-28.30
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
17	Rajasthan	BSNL	33767	33998	231	0.68
		Shyam	3010	3010	0	0.00
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
18	Tamil Nadu (including Chennai)	BSNL	17899	14810	-3089	-17.26
		TATA	0	0	0	0.00
		Reliance	0	0	0	0.00
		Bharati	0	0	0	0.00
	Chennai	BSNL	1730	1459	-271	-15.66
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
	Tamil Nadu (excluding Chennai)	BSNL	16169	13351	-2818	-17.43
		TATA	0	0	0	0.00
		Reliance	0	0	0	0.00
		Bharti	0	0	0	0.00
19	U P (East)	BSNL	76006	70457	-5549	-7.30
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
20	UP (West) (incl. Uttaranchal)	BSNL	34450	31989	-2461	-7.14
		Reliance	0	0	0	0.00
		Bharti	0	0	0	0.00
		TATA	0	0	0	0.00
21	West Bengal (including Kolkata)	BSNL	37743	30677	-7066	-18.72
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
	Kolkata	BSNL	437	567	130	29.75
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
	West Bengal (excluding Kolkata)	BSNL	37306	30110	-7196	-19.29
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
Total			564075	559503	-4572	-0.81

Note: The Total number of villages in India has been shown as per census 2001 as reported by BSNL, i.e., in Census 1991 total number of villages were 6,07,491 which have been decreased to 5,93,485 in census 2001

Source: BSNL/MTNL & Private Service Operators.

**Table 1.7****Subscriber Base of Mobile (GSM and CDMA) Services from March, 2004 to 31<sup>st</sup> March, 2008**

Service Providers	FY 2004	FY 2005	FY 2006 (in Million)	FY 2007*	FY 2008*	%age growth over FY 2007
Bharti	6.5	10.98	19.58	37.14	61.98	66.89%
BSNL	5.53	9.9	17.65	30.99	40.79	31.63%
Reliance	7.26	10.45	17.31	28.01	45.79	63.51%
Vodafone (Formerly Hutch)	5.15	7.8	15.36	26.44	44.13	66.88%
Tata	0.63	1.09	4.85	16.02	24.33	51.83%
Idea	2.73	5.07	7.37	14.01	24.001	71.31%
Escotel	0.99					
Aircel	1.29	1.76	2.61	5.51	10.61	92.41%
MTNL	0.46	1.08	2.05	2.94	3.53	19.84%
Spice	1.21	1.44	1.93	2.73	4.21	54.30%
BPL	1.88	2.58	1.34	1.07	1.29	20.91%
HFCL	0.03	0.05	0.06	0.15	0.30	98.59%
Shyam	0.03	0.03	0.03	0.10	0.11	12.49%
<b>Total</b>	<b>33.69</b>	<b>52.23</b>	<b>90.14</b>	<b>165.11</b>	<b>261.07</b>	<b>58.12%</b>

Source: Service Provider

\* Data includes WLL (F) subscribers.

Table 1.8

**List of Licensed Cellular (GSM & CDMA) Service Providers as on 31<sup>st</sup> March, 2008.**

SLNo.	Service Provider	Licensed Service Area	No. of Circles
1	BSNL	All India (except Delhi & Mumbai)	21
2	Bharti	All India	22*
3	Reliance	All India	23
4	Aircel	All India	23
5	Vodafone	All India	23
6	Tata Teleservices	All India	23
7	Idea	All India	22*
8	Shyam Telelink	All India	22*
9	BPL/Loop Telecom Private Ltd	All India	22*
10	M/s Volga Properties Pvt. Ltd., M/s Hudson Properties Ltd., M/s Unitech Infrastructure Pvt. Ltd M/s Azare Properties Ltd. M/s Aska Projects Ltd., M/s United Builders & Estates Private Ltd., M/s Adonis Projects Pvt. Ltd, M/s Nahan Properties Pvt. Ltd.,	All India	22*
11	Datacom Solutions Pvt. Ltd	All India (except Punjab)	21*
12	Swan Telecom Pvt. Ltd	Delhi, Mumbai, Mah., Guj, AP, Kar, TN & Chennai, KR, Punjab, Har, UP (W), UP(E), Raj	13*
13	Spice Communications	Punjab, Karnataka, AP, Delhi, Haryana, Mah	6
14	S Tel Ltd.,	HP, Bihar, Orissa, Assam, NE, J&K	6
15	MTNL	Delhi, Mumbai	2
16	HFCL	Punjab	1

**Note \*** = Only One licence for Tamil Nadu & Chennai  
**Source:** DoT and Service providers

Table 1.9

List of Wireless Service Providers Service Area wise as on 31<sup>st</sup> March, 2008

Sl. No.	Service Area	Circle	Access Service Provider
1	<b>Metros</b>	Delhi	Bharti Vodafone MTNL Idea Cellular Ltd Aircel Ltd* Swan Telecom Pvt. Ltd* Datacom Solutions Pvt. Ltd* Hudson Properties Ltd* Spice Communications Ltd* Loop Telecom Private Ltd* Shyam Telecom Ltd* Reliance Infocomm Tata Teleservices
2		Mumbai	BPL Vodafone MTNL Bharti Aircel Ltd* Idea Cellular Ltd* Swan Telecom Private Ltd* Datacom Solutions Pvt. Ltd* Unitech Infrastructures Pvt. Ltd* Shyam Telecom Ltd* Reliance Infocomm Tata Teleservices
3		Chennai	Aircel Cellular Ltd BSNL Vodafone Reliance Infocomm Tata Teleservices Bharti# Datacom Solutions Pvt. Ltd*# Idea Cellular Ltd*# Unitech Builders & Estates Pvt. Ltd*# Swan Telecom Pvt. Ltd*# Loop Telecom Private Ltd*# Shyam Telelink Ltd*#
4		Kolkata	Bharti Vodafone BSNL Reliance Telecom Dishnet Wireless Ltd* Datacom Solutions Pvt. Ltd* Idea Cellular Ltd* Azare Properties Ltd* Loop Telecom Private Ltd* Shyam Telecom Ltd* Reliance Infocomm Tata Teleservices

Sl. No.	Service Area	Circle	Access Service Provider
5	'A' Circle	Maharashtra	Vodafone Idea Cellular Ltd BSNL Bharti Aircel Ltd* Datacom Solutions Pvt. Ltd* Volga Properties Pvt. Ltd* Spice Communications Ltd* Swan Telecom Pvt. Ltd* Loop Telecom Private Ltd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices
6		Gujarat	Vodafone Idea Cellular Ltd BSNL Bharti Aircel Ltd* Datacom Solutions Pvt. Ltd* Volga Properties Pvt. Ltd* Swan Telecom Pvt. Ltd* Loop Telecom Private Ltd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices
7		Andhra Pradesh	Idea Cellular Ltd Bharti BSNL Vodafone Aircel Ltd* Datacom Solutions Pvt Ltd* Aska Projects Ltd* Spice Communications Ltd* Swan Telecom Pvt. Ltd* Loop Telecom Priovate Ltd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices
8		Karnataka	Bharti Spice BSNL Vodafone Aircel Ltd* Datacom Solutions Pvt Ltd* Idea Cellular Ltd* Aska Project Ltd* Swan Telecom Ltd* Loop Telecom Pvt Ltd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices

Sl. No.	Service Area	Circle	Access Service Provider
9		Tamil Nadu	Vodafone Aircel Ltd BSNL Reliance Infocomm Tata Teleservices Bharti# Datacom Solutions Pvt. Ltd*# Idea Cellular Ltd*# Unitech Builders & Estates Pvt. Ltd*# Swan Telecom Pvt. Ltd*# Loop Telecom Private Ltd*# Shyam Telelink Ltd*#
10	<b>'B' Circle</b>	Kerala	Idea Communications Ltd Vodafone BSNL Bharti Dishnet Wireless Ltd* Datacom Solutions Pvt. Ltd* Aska Project Ltd* Swan Telecom Pvt. Ltd* Loop Telecom Pvt. Ptd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices
11		Punjab	Spice Bharti BSNL Vodafone Dishnet Wireless Ltd* Idea Cellular Ltd* Adonis Projects Pvt. Ltd* Swan Telecom Pvt. Ltd* Loop Telecom Pvt. Ltd* Shyam Telelink Ltd* Reliance Infocomm HFCL Infocom Tata Teleservices
12		Haryana	Idea Communications Ltd Vodafone BSNL Bharti Dishnet Wireless Ltd* Datacom Solutions Pvt. Ltd* Adonis Projects Pvt. Ltd* Spice Communications Ltd* Swan Telecom Pvt. Ltd* Loop Telecom Private Ltd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices

Sl. No.	Service Area	Circle	Access Service Provider
13		Uttar Pradesh (West)	Idea Communications Ltd Bharti BSNL Vodafone Dishnet Wireless Ltd* Datacom Solutions Pvt Ltd* Adonis Projects Pvt. Ltd* Swan Telecom Pvt Ltd* Loop Telecom Private Ltd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices
14		Uttar Pradesh (East)	Vodafone BSNL Bharti Idea Telecommunications Ltd Dishnet Wireless Ltd* Datacom Solutions Pvt Ltd* Nahan Properties Pvt. Ltd* Swan Telecom Ltd* Loop Telecom Pvt. Ltd* Shyam Telecom Ltd* Reliance Infocomm Tata Teleservices
15		Rajasthan	Vodafone Hexacom(Bharti) BSNL Idea Telecommunications Ltd Dishnet Wireless Ltd* Datacom Solutions Pvt. Ltd* Adonis Projects Pvt. Ltd* Swan Telecom Pvt. Ltd* Loop Telecom Private Ltd* Reliance Infocomm Shyam Telelink Tata Teleservices
16		Madhya Pradesh	Idea Reliance Telecom BSNL Bharti Dishnet Wireless Ltd* Datacom Solutions Pvt. Ltd* Volga Properties Pvt. Ltd* Loop Telecom Pvt. Ltd* Shyam Telelink Ltd* Essar Spacetel Pvt. Ltd (Vodafone)* Reliance Infocomm Tata Teleservices
17		West Bengal and Andaman & Nicobar Islands	Reliance Telecom BSNL Bharti Vodafone Dishnet Wireless Ltd

Sl. No.	Service Area	Circle	Access Service Provider
			Datacom Solutions Pvt Ltd* Idea Cellular Ltd* Nahan Properties Pvt Ltd* Loop Telecom Private Ltd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices
18	<b>'C' circle</b>	Himachal Pradesh	Bharti Reliance Telecom BSNL Idea Telecommunications Ltd Dishnet Wireless Ltd Essar Spacetel Pvt. Ltd (Vodafone)* Datacom Solutions Pvt. Ltd* Adonis Projects Pvt. Ltd* S Tel Ltd* Loop Telecom Private Ltd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices
19		Bihar	Reliance Telecom BSNL Bharti Dishnet Wireless Ltd Essar Spacetel Pvt. Ltd (Vodafone)* Aditya Birla Telecom Ltd (Idea)* Datacom Solutions Pvt. Ltd* Nahan Properties Pvt. Ltd* S Tel Ltd* Loop Telecom Pvt. Ltd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices
20		Orissa	Reliance Telecom BSNL Bharti Dishnet Wireless Ltd Essar Spacetel Pvt. Ltd (Vodafone)* Datacom Solutions Pvt. Ltd* Idea Cellular Ltd* Nahan Properties Pvt. Ltd* S Tel Ltd* Loop Telecom Pvt. Ltd* Shyam Telelink Ltd* Reliance Infocomm Tata Teleservices
21		Assam	Reliance Telecom BSNL Bharti Dishnet Wireless Ltd Essar Spacetel Pvt. Ltd (Vodafone)* Datacom Solutions Pvt Ltd* Idea Cellular Ltd*

Sl. No.	Service Area	Circle	Access Service Provider
			Nahan Properties Pvt. Ltd* Tata Teleservices Ltd* S Tel Ltd* Loop Telecom Private Ltd* Shyam Telelink Ltd*
22		North East	Reliance Telecom Bharti BSNL Dishnet Wireless Ltd Essar Spacetel Pvt. Ltd (Vodafone)* Datacom Solutions Pvt Ltd* Idea Cellular Ltd* Nahan Properties Pvt Ltd* Tata Teleservices Ltd* S Tel Ltd* Loop Telecom Private Ltd* Shyam Telelink Ltd*
23		Jammu & Kashmir	BSNL Bharti Dishnet Wireless Ltd Essar Spacetel Pvt. Ltd (Vodafone)* Datacom Solutions Pvt. Ltd* Idea Cellular Ltd* Adonis Project Pvt. Ltd* Tata Teleservices Ltd* S Tel Ltd* Loop Telecom Pvt. Ltd* Shyam Telelink Ltd* Reliance Infocomm

Source DOT/Service Providers

\* Services not started

# Single Licence for TN and Chennai

**Table 1.10**

**Additional GSM Wireless Subscribers added and annual growth rate in different circles during 2005-06, 2006-07 and 2007-08**

Circles	No. of Subscribers added during 2005-06 (in million)	% Growth during year 2005-06	No. of Subscribers added during 2006-07 (in million)	% Growth during period 2006-07	No. of Subscribers added during 2007-08 (in million)	% Growth during year 2007-08
<b>Metro</b>	4.84	43.94%	5.99	32.77%	8.39	38.38%
<b>Circle 'A'</b>	9.44	63.34%	18.35	75.42%	27.36	64.11%
<b>Circle 'B'</b>	10.06	79.51%	20.39	89.74%	26.97	62.55%
<b>Circle 'C'</b>	3.79	152.28%	6.55	104.30%	9.51	74.18%
<b>All India</b>	<b>28.13</b>	<b>68.47%</b>	<b>51.28</b>	<b>74.11%</b>	<b>72.23</b>	<b>59.96%</b>

Source: Quarterly Reports of Service Providers

**Table 1.11****Number of VSAT Customers as on 31<sup>st</sup> March, 2008**

Sr. No.	Name of Service Provider	Period Ending	
		March,2007	March,2008
1	<b>HCL Comnet</b>	20250	23050
2	<b>Hughes Communications Ltd.</b>	20317	25464
3	<b>Bharti Airtel Limited, Bangalore</b>	8917	18193
4	<b>Bharti Broadband</b>	4862	5276
5	<b>Essel Shyam *</b>	2441	2647
6	<b>Tatanet Services</b>	3969	5069
7	<b>ITI</b>	49	45
8	<b>GNFC</b>	6	0
9	<b>BSNL</b>	0	1651
<b>Total</b>		<b>60811</b>	<b>81395</b>

**Table 1.12****Number of PMRTS Customers as on 31<sup>st</sup> March 2008**

Sr. No.	Name of the Service Provider	Subscriber Base	
		as on 31 <sup>st</sup> March 2007	as on 31 <sup>st</sup> March 2008
1	Aryadoot Transport Pvt Limited	1536	1649
2	Jet-Aiu Skyline Transport Pvt Ltd.	436	511
3	Container Movement (Bombay) Transport Pvt Ltd.	5	5
4	Arya Offshore Services Pvt Ltd.	1263	1368
5	German Express Shipping Agency (India) Pvt Ltd. (Hapag Llyod)	880	887
6	United Liner Agencies of India (Pvt) Ltd	1932	2100
7	Procall Limited	8129	9192
8	The Arvind Mills Ltd.	9675	11817
9	Smartalk Pvt Limited	1631	2449
10	QuickCall	4572	4668
11	Bhilwara Telenet Services Pvt Limited	1158	1392
12	India Satcom Ltd.	284	202
<b>Total</b>		<b>31501</b>	<b>36240</b>
<b>Growth in % age</b>			<b>15.04%</b>

Source: Quarterly Reports of Service Providers.

Table 1.13

## Subscriber Base and other details as reported by ISPs:

File S.No.	Name of the Service Provider	Category	Geographical area of operation	Mar-08
Category 'A'				
1	Bharat Sanchar Nigam Ltd.	A	All India	5640191
2	Bharti Airtel Ltd. (Bharti Televentures Ltd.)	A	All India	815360
3	Reliance Communications Infrastructure Limited	A	All India	696440
4	Sify Technologies Ltd.	A	All India	576047
5	Tata Communications Limited (Videsh Sanchar Nigam Ltd.)	A	All India	448146
6	Hathway Cable & Datacom Pvt. Ltd.	A	All India	201212
7	Data Infosys Ltd.	A	All India	199854
8	YOU Telecom India Pvt. Ltd.	A	All India	185450
9	HCL Infinet Ltd.	A	All India	42600
10	Punj Lloyd (Spectra Net Ltd.)	A	All India	31116
11	Tata Teleservices (Maharashtra) Ltd. (Hughes Telecom)	A	All India	22606
12	Hughes Communications India Ltd.	A	All India	22504
13	Broadband Pacenet (I) Pvt. Ltd.	A	Mumbai	12470
14	In2cable (I) Ltd.	A	All India	9206
15	Swiftmail Communications Ltd.*	A	All India	6388
16	Trak Online Net India Pvt.Ltd	A	All India	4580
17	VSNL Internet Services Ltd. (DIL Internet Ltd. (Primus Telecommunications))	A	All India	3791
18	HCL Comnet Systems & Services Ltd.	A	All India	3243
19	Wire & Wireless (I) Ltd. (Siti Cable Network Ltd)	A	All India	3096
20	Dishnet Wireless Ltd.	A	All India	1329
21	ERNET India	A	All India	1020
22	Tulip IT Services Ltd.	A	All India	920
23	Software Technology Park of India (STPI)	A	All India	588
24	NetMagic Solutions(P) Ltd.	A	All India	523
25	Pacific Internet India Pvt. Ltd.	A	All India	222
26	Verizon Communications India Pvt. Ltd. (Worldcom Communications)	A	All India	193
27	BT Global Communications India Pvt. Ltd. (i2i Enterprise Ltd.)	A	All India	165
28	Primenet Global Ltd.	A	All India	150

File S.No.	Name of the Service Provider	Category	Geographical area of operation	Mar-08
29	DCT Networks Pvt Ltd (Manipal Software Pvt. Ltd.)	A	All India	106
30	Guj Info Petro Ltd. (GIPL)	A	Gujarat	106
31	Reach Network India Pvt. Ltd.	A	All India	95
32	World Phone Internet Services Pvt Ltd	A	All India	84
33	Karuturi Telecom Private Limited (Estel Communications Pvt. Ltd).	A	All India	80
34	Bharti Broadband Ltd	A	ALL INDIA	54
35	Gateway Systems (I) Ltd.	A	All India	53
36	Nextgen Communications Ltd (RPG Infotech Ltd. (Sprint RPG India))	A	All India	53
37	Power Grid Corporation of India Ltd.	A	All India	30
38	Nelco Ltd.*	A	All India	23
39	Global One India Pvt Ltd	A	All India	21
40	Tata Internet Services Ltd.	A	All India	20
41	Opto Network Pvt. Ltd.	A	All India	13
42	GTL Ltd.	A	All India	8
43	National Stock Exchange of India Ltd	A	All India	3
44	L&T Finance Ltd. (L&T Netcom Ltd.)	A	All India	1
45	Gujrat Narmada Valley Fertilizer Co. Ltd. (GNFC)	A	All India	0
46	VSNN Broadband Ltd.	A	All India	0
<b>Category 'B'</b>				
47	Mahanagar Telephone Nigam Ltd.	B	Delhi & Mumbai	1899747
48	Asianet Satellite Communications Ltd.	B	Kerala	55435
49	HFCL Infotel Ltd.	B	Punjab Telecom Circle	46602
50	Shyam Internet Services Ltd	B	Rajasthan	25523
51	Beam Cable System Pvt. Ltd.	B	Andhra Pradesh	24387
52	Ortel Communication Ltd.	B	Orissa	19329
53	Vodafone Essar Gujarat Ltd. (Fascel Ltd.)	B	Gujarat	18001
54	Alliance Broadband Services Pvt. Ltd.	B	Kolkata	13903
55	West Bengal Electronics Industry Development Corp. Ltd.	B	Kolkata, WB	6710
56	Trikon Electronics Pvt. Ltd.	B	Mumbai	6016
57	Ankhnet Informations Pvt. Ltd.	B	Mumbai	5465
58	Rajesh Multi Channel Pvt. Ltd.	B	Mumbai	4737
59	WWW Communications Ltd.	B	Delhi	4198

File S.No.	Name of the Service Provider	Category	Geographical area of operation	Mar-08
60	Spacenet Internet Services Pvt Ltd	B	Delhi	3559
61	Hathway Bhawani Cabletel & Datacom Pvt. Ltd.	B	Mumbai	2501
62	Geocity Network Solutions Pvt. Ltd.	B	Delhi	2008
63	CJM Consultancy Services Pvt. Ltd.	B	Delhi	1618
64	Value Healthcare Ltd.	B	Mumbai	1598
65	Icenet.net Limited*	B	Gujarat	1490
66	Star Broadband Services (I) Pvt Ltd*	B	Delhi	1407
67	Digital2Virtual ISP Pvt. Ltd.	B	Gujarat	1039
68	Space Online Ltd	B	Gujarat	1023
69	Pioneer eLabs Ltd (Pioneer Online Pvt. Ltd)	B	Andhra Pradesh	908
70	North East Dataa Network Pvt Ltd	B	Karnataka	883
71	Blazenet Ltd.*	B	Gujarat	834
72	Southern Online Bio Technologies Ltd.	B	Andhra Pradesh	594
73	Ice Network Private Limited	B	Bangalore	527
74	F/X Wireless Technology Solutions Pvt Ltd	B	Mumbai	469
75	Amber Online Services Ltd.*	B	Andhra Pradesh	453
76	Netcom Online Solutions India Pvt Ltd	B	Tamil Nadu	268
77	Karuturi Networks Ltd.*	B	Karnataka	230
78	Atria Convergence Technologies Pvt. Ltd.*	B	Karnataka	202
79	Vainavi Industries Ltd. (MAC Info Pvt. Ltd.)	B	Andhra Pradesh	175
80	R.S. Broadband Service Pvt Ltd *	B	Tamil Nadu SSA	144
81	City Online Services Ltd.	B	Andhra Pradesh & Karnataka	123
82	Mylai Karpagambal Information Systems (P) Ltd.	B	Chennai	69
83	Nettlinx Ltd.	B	Andhra Pradesh	61
84	Swastik Netvision Telecom P. Ltd.	B	Gujarat	37
85	Chemical And Metallurgical Design Co. Ltd	B	Delhi	24
86	Online Media Solutions Ltd.	B	Andhra Pradesh	22
87	Godrej Infotech Ltd.*	B	Mumbai	13
88	Pan India Network Infravest Pvt. Ltd. (Cyquator Technologies Ltd.)	B	Mumbai, Navi Mumbai	5
89	Manipal Ecommerce Ltd.*	B	Karnataka	3
90	Gujarat State Petroleum Corporation Ltd. (GSPC)	B	Gujarat	0
91	Sab Industires Ltd. (Sab Infotech)	B,C	Punjab, Karnal, Ambala, Hisar	655

File S.No.	Name of the Service Provider	Category	Geographical area of operation	Mar-08
92	delDSL Internet Pvt Ltd	B & C	Delhi & Gurgaon	335
93	Descon Ltd.	B&C	Kolkata & Burdwan District	197
94	Virtela India Pvt. Ltd.	B&C	Mumbai, Bangalore, Gurgaon	26
95	Pulse Telesystems Pvt. Ltd.	B & C	Chennai & Pondicherry	24
96	Direct Internet Ltd.	B&C	Delhi, Gurgaon, Noida	10
<b>Category 'C'</b>				
97	Bhupati Hotels Pvt Ltd	C	Visakhapatnam	1904
98	Broadlane Networks Pvt. Ltd.	C	Dombivli, Maharashtra	1249
99	Cable Combine Communication Pvt. Ltd.	C	Siliguri SSA	1235
100	Kelnet Communication Services Pvt. Ltd	C	Trivandrum	993
101	Sanchar Telenetwork Pvt Ltd	C	Bhavnagar SSA	880
102	Rajesh Patel Net Services Pvt. Ltd.	C	Indore(MP)	851
103	ISP Solutions India Pvt. Ltd.	C	Coimbatore SSA	748
104	Gomti Cable Network Pvt. Ltd.*	C	Lucknow SSA	631
105	Speed Online.net Pvt. Ltd.	C	Rajkot	529
106	Quest Consultancy Pvt. Ltd.	C	Valsad SSA	495
107	Bohra Pratisthan Pvt. Ltd.	C	Udaipur SSA	460
108	iPath India Pvt. Ltd.	C	Ernakulam SSA	442
109	Bhiwani Communications Pvt. Ltd.	C	Rohtak	408
110	Rida Communication Pvt. Ltd.	C	Aligarh SSA	360
111	Micky Online Pvt Ltd.	C	Moradabad	310
112	Multinet (Udaipur) Pvt. Ltd.	C	Udaipur SSA	283
113	Khetan Cable Network (P) Ltd	C	Indore SSA	263
114	Rainbow Communications (India) Pvt Ltd	C	Salem SSA	228
115	Eastern Teleservices Pvt Ltd	C	Jamshedpur SSA	211
116	Quick Online Pvt. Ltd.	C	Ghaziabad SSA	194
117	Mynet Services India Pvt. Ltd.	C	Tamil Nadu SSA	186
118	Aeroway Networks Pvt Ltd	C	Mysore SSA	116
119	Tarang Communications Pvt. Ltd.	C	Guwahati SSA	83
120	Readylink Internet Services Corai Pvt Ltd*	C	Coimbatore SSA	79
121	Shri Vinayagaa Internet Pvt Ltd	C	Madurai SSA	79
122	Adya Tech One Services Pvt Ltd*	C	Ghaziabad SSA	73
123	ISP Services (India) Pvt. Ltd.	C	Trichy	68

File S.No.	Name of the Service Provider	Category	Geographical area of operation	Mar-08
124	Harisree Cable Net Pvt. Ltd.	C	Kanpur SSA	68
125	Konark Infocomm Pvt Ltd	C	Ghaziabad SSA	62
126	STN Communication & Advertising Pvt Ltd.	C	Guwahati	56
127	Eronet Broadband Service India Pvt. Ltd.*	C	Erode	37
128	CJ Online Pvt. Ltd.	C	Ghaziabad	31
129	Maple PC & Peripherals Pvt Ltd	C	Jamshedpur SSA	31
130	Conjoinix Technologies Pvt Ltd	C	J&K, Chandigarh	26
131	Kerala State Electronics Development Corp. Ltd.(Keltron)	C	Thiruvananthapuram	25
132	ABT Ltd.	C	Coimbatore SSA	18
133	United Villages Networks Pvt Ltd	C	Bhuvaneshwar	16
134	Centre for Development of Advanced Computing, C-DAC	C	Ghaziabad SSA	11
135	My Own Infotech Pvt. Ltd.	C	Surat SSA	10
136	Compucom (I) Pvt. Ltd.	C	Jaipur	2
137	Apna Telelink Ltd.	C	Jalandhar	1
138	Spectrum Softech Solutions Pvt. Ltd.	C	Ernakulam SSA	0
<b>TOTAL</b>				<b>11097499</b>

**Table 1.14****List of Internet Telephony Service Providers as on 31st March 2008  
who have reported the start of services**

S. No.	Name of ISP
1	Apna Telelink Ltd.
2	Asianet Satellite Communications Ltd.
3	Bharti Airtel Ltd. (Bharti Televentures Ltd.)
4	Broadband Pacenet (I) Pvt. Ltd.
5	City Online Services Ltd.
6	CJ Online Pvt. Ltd.
7	Data Infosys Ltd.
8	DeIDSL Internet Pvt. Ltd.
9	Digital2Virtual ISP Pvt. Ltd.
10	Dishnet Wireless Ltd.
11	Estel Communications Pvt. Ltd.
12	HCL Infinet Ltd.
13	In2cable (I) Ltd.
14	Mahanagar Telephone Nigam Ltd.
15	Manipal Ecommerce Ltd.
16	Mylai Karpagambal Information Systems (P) Ltd.
17	NetMagic Solutions(P) Ltd.
18	Nettlinx Ltd.
19	Opto Network Pvt. Ltd.
20	Pioneer Online Pvt. Ltd.
21	Pulse Telesystems Pvt. Ltd.
22	Sify Ltd.
23	Southern Online Bio Technologies Ltd.
24	Swastik Netvision Telecom P. Ltd.
25	Trak Online Net India Pvt.Ltd
26	Trikon Electronics Pvt. Ltd.
27	Value Healthcare Ltd.
28	Videsh Sanchar Nigam Ltd.
29	VSNL Internet Services Ltd. (Primus Telecommunications)
30	YOU Telecom India Pvt. Ltd.

**Table 1.15**

**List of Broadcasters, their pay channels alongwith their rates**

S. No.	Name of the Broadcaster	S.No	Name of the channel	Reported Rates(in INR)	Remarks
1	M/s Zee – Turner Limited	1	Zee TV	13.10	This channel was reported as distributed upto 31.03.2008.
		2	Zee Cinema	13.10	
		3	Cartoon Network	12.50	
		4	Zee Marathi	08.00	
		5	CNBC TV 18	07.50	
		6	Zee News	07.50	
		7	CNN	01.50	
		8	Zee Café	08.00	
		9	Zee Studios	07.00	
		10	Zee Bangla	08.10	
		11	Zee Gujrathi	01.50	
		12	Zee Punjabi	01.50	
		13	Zee Trendz	01.00	
		14	Reality TV	01.50	
		15	HBO	15.60	
		16	POGO	12.50	
		17	CNN-IBN	02.00	This channel was reported as distributed upto 31.03.2008. This channel was reported as distributed upto 31.03.2008.
		18	CNBC Awaaz	03.50	
		19	Zee Business	04.80	
		20	Zee Classic	10.00	
		21	Zee Action	10.00	
		22	Zee Premier	11.20	
		23	Zee Sports	10.40	
		24	Zee Telugu	10.40	
		25	Zee Kannada	07.46	
		26	Play TV	04.00	
		27	ETC Punjabi	09.00	
		28	ETC	03.00	
		29	Zee Music	05.00	
		30	Zee Jagran	02.00	
		31	Zee Smile	06.14	
		32	24 Ghante	06.00	
		33	24 Taas	08.50	
		34	Zee Talkies	15.50	
		35	Zee Next	20.00	
2	M/s MSM Discovery India Private Limited	36	SET(Sony Entertainment Television)	20.00	Acceptance of advised pricing at Rs. 17.00 is awaited from broadcaster. Acceptance of advised pricing at Rs. 15.00 is awaited from broadcaster.
		37	MAX	20.00	
		38	Discovery	20.00	
		39	Animal Planet	05.00	Acceptance of advised pricing at Rs. 14.50 is awaited from broadcaster.
		40	AXN	17.00	
		41	Animax	02.00	
		42	Discovery Travel and Living	09.00	

S. No.	Name of the Broadcaster	S.No	Name of the channel	Reported Rates(in INR)	Remarks
		43	SAB TV	15.00	Rs. 13.74 w.e.f. 1 <sup>st</sup> April, 2008.
		44	SET PIX	12.00	
		45	MTV	08.00	
		46	NICK	06.00	Acceptance of advised pricing at Rs. 07.00 is awaited from broadcaster.
		47	VH1	03.00	
		48	NDTV 24X7	09.00	
		49	NDTV Profit	06.00	Acceptance of advised pricing at Rs. 08.50 is awaited from broadcaster.
		50	Ten Sports	15.00	
		51	Aaj Tak	07.00	
		52	Headlines Today	03.00	
		53	Tez	02.00	
3	M/s Channel Plus	54	SUN TV	12.40	
		55	Gemini TV	10.30	
		56	Udaya TV	11.50	
		57	KTV	15.00	
		58	Teja TV	05.30	
		59	Udaya Movies	14.40	
		60	Sun Music	07.00	
		61	Gemini Music	07.00	
		62	Sun News	01.40	
		63	Gemini News	07.50	
		64	Udaya Varthegalu	07.35	
		65	Gemini Cable Vision	17.00	
		66	Adithya	03.00	
		67	Teja News	01.60	
		68	Ushe	15.00	
		69	Udaya News	01.50	
4.	M/s STAR DEN Media Services Private Limited The discounts if any, given on bouquet rate to existing affiliate(s) will also be extended to a-la-carte rate(s) in the same proportion as the discounted bouquet rate.	70	Star Plus	17.50	Rate of this channel is Rs. 11.80 in Tamilnadu
		71	Star Gold	16.50	
		72	Star Movies	16.50	
		73	Star World	04.55	
		74	Vijay TV	04.00	
		75	NGC	05.75	
		76	The History Channel	04.40	
		77	Channel (V)	01.00	
		78	Star One	20.50	
		79	The Disney Channel	08.90	
		80	Toon Disney	08.90	
		81	Hungama	07.80	
		82	Times Now	08.50	
		83	Zoom	07.80	
5.	M/s Ushodaya Enterprises Private Limited	84	ETV	10.00	
		85	ETV 2	05.60	
		86	ETV Bangla	10.40	
		87	ETV Marathi	10.40	
		88	ETV Kannada	10.40	
		89	ETV Gujarathi	10.40	
		90	ETV Oriya	10.40	

S. No.	Name of the Broadcaster	S.No	Name of the channel	Reported Rates(in INR)	Remarks
6.	M/s UTV Global Broadcasting Limited	91	Bindass	10.00	Newly launched channel, reported vide letter dated 11th February, 2008 Newly launched channel, reported vide letter dated 11th March, 2008
		92	Bindass Movies	10.00	
		93	World Movies	10.00	
		94	UTV Movies	15.00	
7.	M/s BBC World India Private Limited	95	BBC World	05.00	
		96	BBC Entertainment	06.50	
		97	Cbeebies	06.50	
8.	M/s ESPN Software India Private Limited	98	ESPN	33.13	
		99	Star Sports	33.13	
		100	Star Cricket	28.00	
9.	M/s Raj Television Limited	101	Raj TV	11.00	Rate is Rs. 07.72 in Andhra Pradesh Rate is Rs. 04.68 in Andhra Pradesh Rate is Rs. 11.00 in Andhra Pradesh
		102	Raj Digital Plus	07.72	
		103	Vissa TV	04.68	
10.	M/s INX Media Private Limited	104	9XM	07.00	Newly launched channel, reported vide letter dated 5th December, 2007 Newly launched channel, reported vide letter dated 1st April, 2008
		105	9X	20.50	
		106	NewsX	08.50	
11.	M/s Neo Sports Broadcast Private Limited	107	NEO Sports Plus	34.00	Acceptance of advised pricing at Rs. 33.13 or less is awaited from broadcaster.
		108	NEO Sports	24.00	
12.	M/s New Delhi Television Limited	109	NDTV 'Imagine'	20.50	Newly launched channel, reported vide letter dated 24th January, 2008
13.	M/s Sahara India TV Network	110	Firangi	15.00	Newly launched channel, reported vide letter dated 12th February, 2008
14.	M/s B4U Television Network (India) Private Limited	111	B4U Movies	06.00	
15.	M/s MAA Television Network Limited	112	MAA TV	05.50	
16.	M/s TV Today Network Limited	113	Dilli Aaj Tak	08.50	
17.	M/s Allied Infotainment Distribution Private Limited	114	E-24	15.00	Newly launched channel, reported vide letter dated 10th March, 2008

## **PART – II**

### **REVIEW OF WORKING AND OPERATION OF THE TELECOM REGULATORY AUTHORITY OF INDIA**





# REVIEW OF WORKING AND OPERATIONS OF THE TELECOM REGULATORY AUTHORITY OF INDIA

Part I of the Report has given a review of the general environment prevailing in the telecom sector including broadcasting and cable services and has highlighted the policies and programmes of the Government during 2007-08. The main thrust of TRAI's functioning is to create conditions for efficient competition and growth in the telecom sector including broadcasting and cable services together with better quality at affordable prices, in order to meet the objectives of New Telecom Policy, 1999 (NTP'99). In keeping with the mandate given under the TRAI Act, the TRAI has played a catalytic role in the development of the telecom, broadcasting and cable services. It has been its endeavour to provide an environment, which is fair and transparent, encourages competition, promotes a level- playing field for all service providers, protects the interest of consumers and enables technological benefits to one and all.

The Government of India issued a Notification dated 9<sup>th</sup> January, 2004 by which broadcasting and cable services have been brought within the ambit of telecommunication services in terms of section 2(k) of the Telecom Regulatory Authority of India Act, 1997 as amended by the TRAI (Amendment) Act, 2000. With this notification, the 'carriage' part of broadcasting and cable services has come under the purview of TRAI.

Under the TRAI Act, 1997 TRAI is mandated, inter-alia, to ensure compliance of the terms and conditions of license, lay down the

standards of quality of service to be provided by the service providers and ensure the quality of service, specify tariff policy and recommend conditions for entry of new service providers as well as terms and conditions of license to a service provider. TRAI's scope of work also includes consideration and decisions on issues relating to monitoring of tariff policy, commercial and technical aspects of interconnection, principles of call routing and call handover, free choice and equal ease of access for the public to different service providers, resolution of conflicts that may arise due to market developments and diverse network structures for various telecom services, need for up-gradation of the existing network and systems, and development of forum for interaction amongst service providers and interaction of the Authority with consumer organizations. The Government issued an order dated 9<sup>th</sup> January, 2004 under section 11(d) of the TRAI Act, which mandated TRAI to make recommendations regarding terms and conditions on which the "Addressable Systems" shall be provided to the customers and the parameters for regulating maximum time for advertisements in pay channels as well as other channels. The order also entrusted to TRAI, the function of specifying the standard norms for, and periodicity of revision of rates of pay channels, including interim measures.

To formulate its policies and recommendations, TRAI interacts with various stakeholders such as the service providers, their organizations, Consumer Advocacy Groups / Consumer Organizations and other experts in this field. It has developed a process, which allows all the stakeholders and the general public to participate in policy formulation by offering their views whenever sought for. This process involves holding Open House Meetings arranged in different parts of the country, inviting written comments over e-mails and through letters, and having interactive sessions with stakeholders and experts to obtain different views and clarifications on policy issues. The Regulations / Gazette Orders issued by TRAI also contains an Explanatory Memorandum which explains the basis on which the decisions are taken.

The participative and explanatory process adopted by TRAI has received wide acclaim.

TRAI also interacts with the consumer organizations / Non Government Organisation (NGO) in the telecom and broadcasting sector to obtain their views. It has a system of registering consumer organizations / NGOs connected with telecom functions and of interacting with them at regular intervals. TRAI has registered 40 Consumer organizations as on 31<sup>st</sup> March 2008 from all over the country and is constantly adopting measures for strengthening the consumer organizations. It also organizes Seminars and Workshops with the participation of International Experts on various technical issues and invites stakeholders, consumer organizations and other research institutes to attend these seminars.

#### **During the year 2007-08, TRAI notified the following Tariff Orders:**

- ❑ The Telecommunication Tariff (Forty-Fifth Amendment) Order, 2007 (2 of 2007) dated the 5<sup>th</sup> June 2007
- ❑ Telecommunication (Broadcasting and Cable) Services (Second) Tariff (Eighth Amendment) Order, 2007 (3 of 2007) dated the 4<sup>th</sup> October 2007
- ❑ The Telecommunication Tariff (Forty-Sixth Amendment) Order, 2008 dated the 24<sup>th</sup> January 2008
- ❑ The Telecommunication Tariff (Forty-Seventh Amendment) Order, 2008 dated the 17<sup>th</sup> March 2008

#### **Following Recommendations have been given by TRAI to the Government during the year 2007-08:**

- ❑ Recommendations on Infrastructure Sharing (11<sup>th</sup> April 2007)
- ❑ Recommendations on Improvement in the Effectiveness of National Internet Exchange of India (NIXI) (20<sup>th</sup> April 2007)
- ❑ Recommendations on Review of Internet Services ( 10<sup>th</sup> May 2007 )

- ❑ Recommendations on Review of license terms and conditions and capping of number of access providers (29<sup>th</sup> August 2007)
- ❑ Recommendations on Headend In The Sky (HITS) (17<sup>th</sup> October 2007)
- ❑ Recommendations on Growth of Broadband (2<sup>nd</sup> January 2008)
- ❑ Recommendation on Provision of IPTV services (4<sup>th</sup> January 2008)
- ❑ Recommendations on issues relating to Mobile Television Service (23<sup>rd</sup> January 2008)
- ❑ Recommendations on Interoperability and other issues relating to DTH (30<sup>th</sup> January 2008)
- ❑ Recommendations regarding existing Headend In The Sky (HITS) permission holder (15<sup>th</sup> February 2008)
- ❑ Recommendations on 3<sup>rd</sup> Phase of Private FM Radio Broadcasting (22<sup>nd</sup> February 2008)
- ❑ Recommendation on Support for Rural Wireline Connections, Installed Before 1<sup>st</sup> April 2002 From USOF, On Phasing Out Of ADC (27<sup>th</sup> March 2008)

TRAI also issued following important directions to the Service Providers during the year 2007-08 for compliance of its order:

- ❑ Direction on information to be included in the Telephone Bills issued to the consumers by the service providers dated 4<sup>th</sup> May 2007
- ❑ Direction regarding compulsory carriage of Doordarshan channels by all Multi System Operator and cable operators dated 29<sup>th</sup> May 2007
- ❑ Direction on issue of Docket Number for customer complaints and termination of service dated 11<sup>th</sup> July 2007
- ❑ Direction to comply with National Numbering Plan dated 27<sup>th</sup> August 2007
- ❑ Direction to access Service Providers on Caller Line Identity Presentation (CLIP) charges dated 23<sup>rd</sup> August 2007

- ❑ Direction on provision of value added services to customers on 30<sup>th</sup> October 2007
- ❑ Direction to provide billing information to the consumers by the MSOs who possesses valid permission granted by the Government of India dated 15<sup>th</sup> November 2007
- ❑ Direction to all Broadcasters, Multi System Operators and Cable Operators regarding Standard Interconnection Agreements in CAS notified areas dated 11<sup>th</sup> January 2008

During the year 2007-08 TRAI issued the following Regulations:

- ❑ Telecom Consumers Protection And Redressal of Grievances Regulations, 2007 (3 of 2007) dated 4<sup>th</sup> May 2007
- ❑ The Telecom Unsolicited Commercial Communications Regulations, 2007 (4 of 2007) dated 5<sup>th</sup> June 2007
- ❑ International Telecommunication Access To Essential Facilities at Cable Landing Stations Regulations, 2007 (5 of 2007) dated 7<sup>th</sup> June 2007
- ❑ Telecommunication Consumers Education And Protection Fund Regulations, 2007 (6 of 2007) dated 15<sup>th</sup> June 2007
- ❑ The Regulation On Guidelines For Registration Of Consumer Organisation/ Non-Government Organisations (NGOs) And Their Interaction With TRAI (Second Amendment), 2007 (7 of 2007) dated 21<sup>st</sup> August 2007
- ❑ The Direct to Home Broadcasting Services (Standards of Quality of Service and Redressal of Grievances) Regulations, 2007 (8 of 2007) dated 31<sup>st</sup> August 2007
- ❑ The Telecommunication (Broadcasting and Cable Services) Interconnection (Fourth Amendment) Regulation, 2007 (9 of 2007) dated 3<sup>rd</sup> Sep 2007
- ❑ Domestic Leased Circuits Regulations, 2007 (10 of 2007) dated 14<sup>th</sup> September 2007

- ❑ Telecom Unsolicited Commercial Communications (Amendment) Regulations, 2008(1 of 2008) dated 17<sup>th</sup> March 2008
- ❑ The Telecommunication Interconnection Usage Charges (Ninth Amendment) Regulations, 2008 dated 27<sup>th</sup> March 2008

The consultation Papers issued by TRAI during the year 2007-08 are as under:

- ❑ Consultation Paper on Access to Essential Facilities (Including Landing Facilities for Submarine Cables) at Cable Landing Stations dated 13<sup>th</sup> April 2007
- ❑ Consultation Paper on Issues relating to Tariff for Cable Television Services in Non-CAS areas dated 21<sup>st</sup> May 2007
- ❑ Consultation paper on Review of license terms and conditions and capping of number of access providers dated 12<sup>th</sup> June 2007
- ❑ Consultation Paper on Headend In the Sky (HITS) dated 24<sup>th</sup> July 2007
- ❑ Consultation paper on provisioning of Internet Protocol Television Services dated 6<sup>th</sup> September, 2007
- ❑ Consultation Paper on issues relating to Mobile Television Service dated 18<sup>th</sup> September 2007
- ❑ Consultation paper on Terms and Conditions for Publication of Integrated Telephone Directory for Fixed Line Telephones and National Integrated Directory Enquiry Service (NIDQS) for Fixed and Mobile Telephones dated 24<sup>th</sup> December 2007
- ❑ Short Consultation on the Issue of Providing Hard Copy of the Bill Free of Cost to Post Paid Subscribers of Telecom Access Service dated 31<sup>st</sup> December 2007
- ❑ Consultation Paper on 3rd Phase of Private FM Radio Broadcasting dated 8<sup>th</sup> January 2008
- ❑ Short Consultation on proposed Amendment to the Telecom Unsolicited Commercial

Communications (UCC) Regulations, 2007 dated 16<sup>th</sup> January 2008

- ❑ Consultation paper on Access Deficit Charge (ADC) dated 21<sup>st</sup> January 2008
- ❑ Consultation paper on Issues arising out of Plethora of Tariff Offers in Access Service Provision dated 29<sup>th</sup> January 2008
- ❑ Consultation paper on issues relating to entry of certain entities into broadcasting and distribution activities dated 25<sup>th</sup> February 2008
- ❑ Consultation paper on foreign investment limits for broadcasting sector dated 3<sup>rd</sup> March 2008
- ❑ Consultation Paper on Restructuring of Cable TV Services dated 4<sup>th</sup> March 2008
- ❑ Consultation Paper on Policy Guidelines for Television Audience Measurement/ Television Rating Points (TRP) dated 28<sup>th</sup> March 2008

In the process of providing its recommendations, framing of regulations or tariff orders and issue of directions during the financial Year 2007-08, the Authority conducted a total of 14 Open House Meetings in different parts of the country, which were attended by representatives of service providers, their associations, NGOs / Consumer Organizations in the telecom sector, telecom experts and the consumers. The Authority held 3 Regional Workshops – one each at Chennai, Pune and Shillong; aimed at Capacity Building and generating awareness amongst the Consumer Organisations about the initiatives taken by the Government and Telecom Regulatory Authority of India to protect their interests. Also, a meeting of all Consumer Organisations and NGOs registered with Telecom Regulatory Authority of India was held on 8<sup>th</sup> Sept. 2007. During the year, 15 new organization were registered with Telecom Regulatory Authority of India and accordingly a two-day orientation programme was held on 13<sup>th</sup> & 14<sup>th</sup> March 2008 in TRAI Office for the newly registered organisations.

# RURAL TELEPHONE NETWORK

It has been observed that despite several attempts over the last ten years, telecom infrastructure in rural areas is lagging behind the expected levels. There has been a phenomenal spurt in the growth of tele-density in the country with the evolution of new wireless technologies, but the gap between the urban and rural tele-density has been increasing. This is illustrated in the Figure 2.1.

TRAI has been committed since beginning to facilitate the process of rural penetration. It has time and again raised the issues related to the rural telecommunication development and included it as an integral part in its various relevant recommendations. TRAI in its Recommendations on Review of license terms and conditions and capping of number of access providers dated 29<sup>th</sup> August, 2007 has recommended financial incentive for spread of infrastructure in rural areas (Reduction of 2% in contribution to USOF on 75% of development blocks)

DoT has launched a scheme for extending financial support from USOF for setting up of infrastructure for mobile services in rural and remote areas of the country. The scheme, effective from 1<sup>st</sup> June 2007 has been divided into two phases.

## First Phase

The scheme will cover 7871 number of infrastructure sites (towers) in 500 districts spreading over 27 states for provision of mobile services in the specified rural and remote areas, where there is no existing fixed wireless or mobile coverage.

## Second Phase

The scheme will cover the other uncovered areas in the country through mobile services for which additional 11,000 towers have been identified by DoT through Infrastructure Support for Cellular Mobile Services. These towers will be installed in the second phase of the scheme to cover about 2,42,866 villages. The completion of this project will boost the coverage of the telecom facilities in rural and remote areas. Phase-II (under process) will cover 11049 towers. The

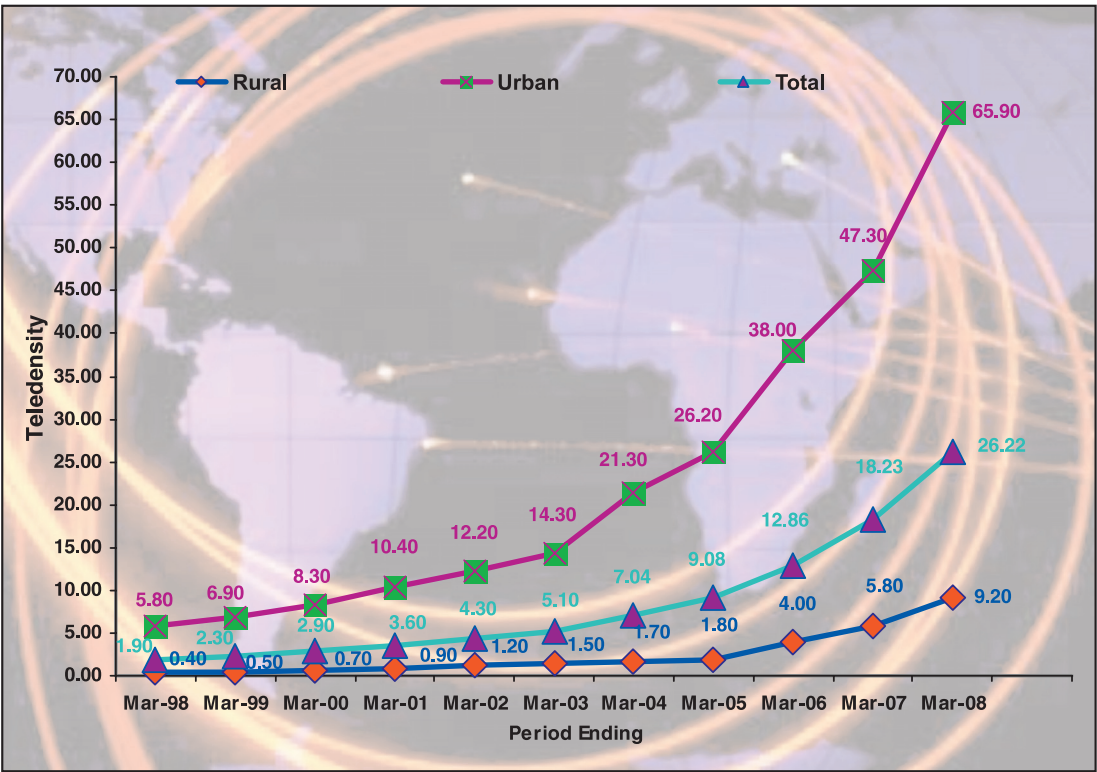


Figure 2.1: Rural and Urban tele-density

sites shall be shared with minimum three Telecom Service Providers for provision of mobile and other Wireless Access Services. The IP-1 will get 40% of the subsidy if the tower is installed within the roll out period of one year. If only one service provider shares and rolls out mobile services, then amount of subsidy shall be proportionally reduced (50%) and in the case of two service providers it is proportionally reduced (80%) as compared with amount when tower would be shared between three service providers.

## **EXPANSION OF TELEPHONE NETWORK**

As a Regulator, TRAI is concerned with maximizing the welfare of the consumers, healthy growth of telecom sector and financial viability of the telecom companies. These objectives have been largely addressed in TRAI's Recommendations on "Review of license terms and conditions and capping of number of access providers" sent to the Government on 29<sup>th</sup> August 2007.

The total subscriber base (both wireless and wireline) of telecom sector in India during the financial year 2007-08 crossed 300 million mark with the figure being 300.49 million subscriber as on 31<sup>st</sup> March 2008. The Wireline subscribers as on 31<sup>st</sup> March 2008 was 39.42 million as compared to 40.75 million subscribers on 31<sup>st</sup> March, 2007 registering a decrease of 1.33 million subscribers during the year 2007-08. Out of the 39.42 million wire line subscribers, 27.78 million are Urban wire line subscribers and 11.64 million Rural Subscribers. The wireless subscriber crossed the 261 million subscriber mark at the end of the financial year in comparison to the subscriber base of 165.11 million at the end of March, 2007. It added 95.96 million subscribers in the financial year 2007-08 registering an annual growth rate of about 58.12%. The Internet subscriber base in the country as of 31<sup>st</sup> March 2008 stood at 11.09 million as compared to 9.27 million during the previous year, registering an annual growth rate of about 19.63%. The total Broadband subscriber base has reached 3.87 million by the end of March, 2008 as compared to 2.34 million by the end of March 2007 thereby

registering a net addition of 1.56 million broadband subscriber during the financial year 2007-08.

## **ENTRY OF PRIVATE SECTOR IN BASIC AND VALUE ADDED SERVICES**

TRAI has provided recommendations for entry of new operators in several telecom segments such as Basic Services, Cellular Mobile Services, National Long Distance Service, International Long Distance Service, VSAT, PMRTS and GMPCS. The focus has been on facilitating entry and operations, as well as expansion of scope of services of various service providers. By the end of 31<sup>st</sup> March, 2008 apart from BSNL and MTNL, the Basic Services sector had five licensed private operator Groups in the different telecom circles. All these five private operator Groups had since migrated to Unified Access Service Regime during 2003-04. During the Financial Year 2007-08, 121 new Unified Access Service Licenses have been granted and thus at the end of the year total number of licensees providing wireless services has reached 277.

To supplement the various recommendations which facilitate entry and competition in telecom sector, the Authority has maintained a tariff framework which allows price competition to be fully reflected in the market. In all its activities, the effort of the TRAI has been to prepare a good ground for attracting efficient service providers and for the customers to benefit from competition among them.

## **TECHNICAL COMPATIBILITY AND EFFECTIVE INTERCONNECTION BETWEEN SERVICE PROVIDERS**

Interconnection has been one of the most pressing issues before TRAI and several of these issues were resolved proactively using the available regulatory tools. TRAI had issued several directions, determinations and regulations to facilitate interconnection.

On 24<sup>th</sup> January, 2003, TRAI issued the Telecommunication Interconnection Usage Charges (IUC) Regulation. This Regulation established a

framework of the Interconnection Usage Charge (IUC) Regime. As per the Regulation, IUC was to be determined based on minutes of usage of various Unbundled Network Elements and the cost of these elements. The IUCs for Origination, Transit/ Carriage and Termination were based on the principles of element based charging, i.e., one operator charging the other for the resources consumed for carriage of its calls in terms of minutes of usage. The IUC Regime also established an Access Deficit Charge (ADC) mechanism that would fund the deficits accruing on account of fixed lines rentals being below cost and provisioning of free calls and certain below cost local calls by BSOs providing fixed lines. The IUC regime has been reviewed from time to time, mainly to gradually reduce the ADC Charges and to review the beneficiaries of ADC regime. In the year 2006, the IUC Regulation issued on 23<sup>rd</sup> February 2006 marked a shift in the ADC regime from the earlier minute based charges to revenue share concept.

### Initiatives during the year

**The Telecommunication Interconnection Usage Charges (Ninth Amendment) Regulations, 2008 :** As part of Annual Review TRAI issued on 27<sup>th</sup> March, 2008 the ninth amendment to the Interconnection Usage Charges (IUC) Regulations which deals, among other things, with the Access Deficit Charge (ADC) payable by private service providers to BSNL. The process of review and consequent amendment has led to simultaneous issue of a set of recommendations to DOT for continuation of support to BSNL's rural wireline network through Universal Service Obligation Fund (USOF). These steps are expected to address issues like promoting competition, removing market distortions, minimizing grey market in international calls and providing comprehensive benefit to all consumers.

The issue of the regulation and the recommendations mentioned above marks the culmination of the process that commenced with the issue of the consultation paper on ADC on 21<sup>st</sup> January 2008. The main issues on which the comments were invited and subsequent discussions were held can be grouped into 3 categories:

**Issue 1:** Operationalizing phasing out of ADC from 1.4.2008

**Issue 2:** Providing support for BSNL wireline rural network from USOF

**Issue 3:** Induction of positive features including possible reduction in charges for rural mobile subscribers

The present consultation was meant to be a decisive review of the regime. Views of the stakeholders were discussed and analysed. While standing by its earlier stipulation of phasing out ADC by 31<sup>st</sup> March 2008, the Authority was conscious of the critical need to promote effective telecommunication services in rural areas. In earlier regulations the Authority had instituted the policy of exclusion of rural fixed line revenue from calculation of ADC. The Authority felt that the current state of rural telephony still demands special attention and is of the opinion that benefit of abolition of ADC should largely go towards improvement of telecommunications in rural areas. Through the instant amendment the Authority decided to phase out ADC as a percentage of AGR from 1<sup>st</sup> April 2008. Thus the ADC is no longer applicable in the domestic sector and all domestic calls are free from the incidence of ADC from 1<sup>st</sup> April 2008. The component on the international incoming calls would be payable at a reduced rate of Rs 0.50 (paise fifty only) for the period from 1<sup>st</sup> April 2008 to 30<sup>th</sup> September 2008 after this component of ADC would also stand phased out. Thus from 30<sup>th</sup> September 2008 there would be no ADC.

**International Telecommunication Access to Essential Facilities At Cable Landing Stations Regulations, 2007:** On 7<sup>th</sup> June 2007, International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulations, 2007 was issued. The Regulation provides for non-discriminatory, fair and open access at the cable landing stations. Access to submarine Cable Landing Stations (CLS) is considered an essential input for many telecom services needing international connectivity. Any access barriers to such facility can constrain the

competitiveness of telecom operators and become detrimental to healthy growth of international telecom market. Thus for the CLS, which are considered to be essential and critical telecom facilities, it needs to be ensured that any restriction on such facilities should not become a 'bottleneck' to international telecom services provision.

The Regulation would facilitate:

- provisioning of bandwidth to end consumers at competitive rates;
- boosting of competition and therefore reduction in the price of international private leased circuits (IPLCs);
- availability of International bandwidth at competitive price to ISPs for rapid growth of Broadband Service;
- options to ILDOs to purchase International bandwidth at competitive prices on a range of diversified submarine cables;
- carriage of voice/data at a competitive cost.

#### **Domestic Leased Circuits Regulations, 2007:**

Regulation on Domestic Leased Circuits (DLC) was issued by TRAI on 14<sup>th</sup> September, 2007. Domestic Leased Circuits (DLC) are important elements in the telecom market that telecom service providers provide to connect two or more customer sites or customers to their own or other service providers networks. ITU defines Leased Circuit as "a two-way link for the exclusive use of a subscriber regardless of the way it is used by the subscriber". Leased circuit does not involve central office switching operations. Unlike broadband, a leased line is not contended or shared but delivers dedicated guaranteed bandwidth. DLC could be set up as one or more point-to-point links or as Virtual Private Network (VPN). DLC may use terrestrial or satellite facilities; use any media copper, fiber or wireless and may be provided through passive links, circuit switched or packet switched network.

#### **Decision of the Authority on IN Services**

TRAI had issued Intelligent Network Services in Multi Operator Multi Service Scenario Regulations, 2006 (13

of 2006) on 27<sup>th</sup> November 2006. These Regulations mandate interconnection among all the eligible service providers so that subscriber of an access provider can access the Intelligent Network (IN) services provided by any other service provider. Having considered the opinion of various stakeholders, the Authority had left the commercial and technical arrangement for IN services for the mutual negotiation between the operators. In the Regulation it was also mentioned that in case service providers fail to enter into agreement or arrangement within stipulated time the Authority shall specify the interconnection arrangement. The Authority reviewed the position of interconnection agreements after specified time in Regulations and show-cause / explanation notices were issued to the service providers after taking note of the fact that few of the service providers had not entered into agreement. Meetings on implementation of IN Regulation were also held with all service providers. During the meeting service providers agreed to submit the signed IN agreements with all other service providers as per the time agreed with them.

In Explanatory Memorandum to the above Regulation, it was mentioned that IN services should be implemented quickly at least for free phone services and VCC. The Authority examined all the IN agreements filed by service providers for IN services and noted that all such service providers agreed to extend the access of their IN based free phone service. During the meeting it was also observed that main issue was regarding the access charges paid to the originating access provider by the telecom service provider who is extending its IN based free phone services to the subscriber of originating access provider. The Authority had also noted that all the service providers have mutually agreed to extend IN services on already existing point of interconnection established between the service providers as per the present licence condition and regulatory framework.

Therefore, the Authority decided to specify the access charges to be paid to the originating access provider by the telecom service provider who is providing Free Phone services and have not entered into agreement

till 5<sup>th</sup> December 2007. Since no other major hurdle was pointed out by any service provider during the meeting, all other clauses of agreement were required to be finalized by the service providers themselves and existing clauses of agreement / arrangement would remain intact. If both the service provider i.e. originating access provider and Free Phone service provider are not in the same service area, then apart from the access charges specified by TRAI on 5<sup>th</sup> December, 2007, other charges and sharing of revenue should be in accordance with the interconnection charges Regulation specified under the Telecommunication Usage Charges Regulation, 2003 (4 of 2003).

The Authority deliberated upon the various aspects of the matter and had made the following decision:

- (i) For all IN based free phone call from any network, free phone service provider shall pay Rs.0.52 to the originating service provider. It also includes calls originating from national / international roaming subscribers. This access charge will be applicable to those service providers who have not entered into agreement till date. It will not affect in any manner the charges already mutually negotiated between the service providers.
- (ii) Originating service provider shall handover free phone call to free phone service provider at existing point of interconnection.
- (iii) All the service providers who had not entered into agreement for IN based free phone services were directed to enter into agreement in the framework of above decision or mutual agreement within 15 days of the decision i.e. before 20<sup>th</sup> December 2007 and submit agreement to the Authority for registration within 15 days from the date of entering into such agreement.
- (iv) All the service providers who had already entered into agreement on or before 15<sup>th</sup> November, 2007, were directed to send compliance of implementation to the Authority

on or before 15<sup>th</sup> December, 2007. Compliance of implementation of agreement signed after 15<sup>th</sup> November, 2007 to reach the Authority within 30 days from the date of entering into such agreement.

## TELECOMMUNICATION TECHNOLOGY

TRAI follows a technology-neutral approach. It, however, aims to provide conditions under which service providers are able to adopt modern and efficient technologies and can address the constraints imposed by the legacy network and practices. Some important steps taken in this direction are steps for implementation of Mobile Number Portability and Mechanism for Unsolicited Commercial Communication(UCC)/ setting up of National Do Not Call Registry (NDNC).

### Mobile Number Portability

Mobile Number Portability enables customer to retain the same mobile number while switching over from one operator to another within the same service area. Keeping in view the interest of consumers, TRAI had submitted its Recommendations on Mobile Number Portability to DoT on 8<sup>th</sup> March 2006 and vide Press Release dated 12<sup>th</sup> November 2007, Govt. has decided to introduce mobile number portability in the four metro cities i.e. Delhi, Mumbai, Kolkata and Chennai/ Tamilnadu in the initial phase. In order to chart out the roadmap for effective and smooth implementation of Mobile number Portability and to deliberate on various issue, a Steering Committee was set up in TRAI. The scope of work of the steering committee was as below:

- Evolve the methodology for the selection of the neutral third party or parties to act as Mobile Number Portability Clearing House Administrator (MCHA) (including MNP Database)
- Decide the ownership of MCHA
- Determine whether one or multiple MCHA are required
- Define the duties of the MCHA and its selection / composition

- Determine the modalities for sharing of common setup cost such as MCHA etc. and operational costs
- Determine the geographic coverage of the regional databases
- Develop technical standards, including interoperability operational standards, network interface standards and technical & billing specifications
- Develop guidelines by which DoT and the MCHA share numbering information
- Examination of existing Interconnection agreements for incorporation /modification of necessary clauses in view of MNP implementation
- Operational aspects of MNP
  - Timelines for implementation
  - Eligibility criteria for subscribers to take the Number Portability
  - Rights and Obligations of subscribers
  - Donor Operators rights and Obligations
  - Recipient Operator rights and Obligations
  - Procedure for Porting
  - Dispute resolution between donor and recipient
  - Method of Tariff transparency for on-net and off-net calls considering the cost aspects of different solutions and porting fee
- The above aspects may be seen in accordance with the international best practices
- Any other issue the committee feels necessary for the implementation of MNP

The facility of the MNP is expected to be available to customers by the end of year 2008 or early 2009.

### **UCC / NDNC Registry**

With a view to regulate the unsolicited calls from the telemarketers, "The Telecom Unsolicited Commercial Communications Regulations, 2007 dated 5<sup>th</sup> June, 2007" was issued, where by "National Do Not Call

Registry (NDNC)" has been put into place. Through the Regulation, the Authority has facilitated setting up of a national database, containing list of telephone numbers of all such subscribers who do not want to receive the UCC. This database will be called National Do Not Call Registry (NDNC). NIC has been contracted to design and maintain the NDNC. The telecom service providers have set up the call centers with "toll free telephone lines" to receive request from their subscribers who want to register in the NDNC. The service providers will periodically upload these telephone numbers to the NDNC registry and thus the NDNC contains the telephone numbers of all the subscribers (country wide) who have opted not to receive any UCC. In the Regulation, maximum of 45 days have been given from the date of registration of request by a subscriber to inclusion of his telephone number in the NDNC.

On the other side, Telemarketers will have to register in the NDNC registry. The telemarketers would make online request by submitting the calling list to the NDNC registry and the registry will return the list of Do Not Call numbers to the requested telemarketer. The regulation has a provision to charge higher tariff for service providers so as to discourage telemarketer to call the numbers, which are registered with NDNC. Consequent upon implementation of this regulation, there has been a considerable reduction in the number of unsolicited calls to the numbers, which are registered in the NDNC.

As on 31<sup>st</sup> March 2008, around 22,839 Telemarketers had applied for registration with the Department of Telecommunications. Out of these, around 14,736 Telemarketers had been registered. Around 2,362 Telemarketers' applications were under process. Since 12<sup>th</sup> October 2007, the NDNC is being accessed daily by about 900-1000 Telemarketers for scrubbing their calling list. As on 31<sup>st</sup> March 2008, 2047 Million telephone numbers have been uploaded in the NDNC database by the various Telemarketers for scrubbing. Out of this list, a total of 126 million numbers were in the category of Do Not Call Numbers which these Telemarketers were not allowed to call. As per the data available with TRAI, by 31<sup>st</sup> March 2008,

around 10.65 million subscribers have registered their telephone numbers with the NDNC.

## IMPLEMENTATION OF NEW TELECOM POLICY (NTP'99)

New Telecom Policy, 1999 (NTP-99) has provided TRAI with the requisite policy framework envisaged by the Government. TRAI Act empowers TRAI to make Recommendations either Suo Moto or on a request from Licensor on matters specified therein. Accordingly, TRAI either suo-moto or on request of the Government provided its recommendations on a number of important issues till now, which include:

- Issues relating to cellular mobile service
- Licensing of Basic Service Providers
- Licensing of National Long Distance service
- Filling up of vacant slots of cellular mobile telephone service license
- Universal Service Obligations (USO)
- License fee for Radio Paging Service (RPS)
- Issue of fresh Licences for Radio Paging Service
- INSAT MSS Reporting Service
- Issue of fresh licenses for VSAT service providers
- Licensing issues related to Public Mobile Radio Trunked Services
- Cellular Mobile Service Providers (CMSPs)- induction of fourth operator.
- Provision of mobile community phone services
- Voice Mail/ Audiotex Services
- Introduction of internet telephony
- Unified messaging service
- Unified Licensing Access Regime
- Intra-circle Mergers and Acquisitions
- Waiving off of License Fee and Bank Guarantee for Infrastructure Providers- II (IP-II)
- Accelerating Growth of Internet and Broadband Penetration
- Establishment of the Office of Ombudsman in the Telecom Sector
- Fully Unified Licensing Regime for all telecom services
- Spectrum related issues
- Growth of Telecom Services in Rural India
- Telephone Directory and Directory Enquiry Services
- Mobile Number Portability
- Next Generation Networks
- Virtual Private Network (VPN)
- Transition from IPv4 to IPv6 in India
- Licensing Issues relating to DTH
- Allocation and pricing of spectrum for 3G and broadband wireless access services
- Effectiveness of National Internet Exchange of India
- Permitting usage of \* and # in provisioning of value added intra-network services like USSD (Unstructured Supplementary Service Data) by Access Providers
- review of policy of Internet services
- review of license terms and conditions and capping of number of access service providers for detailed policy framework required for DTH
- various issues related to mobile television services
- amendment in license conditions of DTH about technical interoperability
- issue of modification to be incorporated in the policy of FM Radio Broadcasting Phase III
- Provision of Internet Protocol Television Services (IPTV)

## QUALITY OF SERVICE

### (a) Quarterly reports received from service providers for Basic and Cellular Mobile Services

TRAI monitors the performance of Basic and Cellular Mobile service against the benchmarks prescribed by TRAI vide Regulation on Quality of Service for Basic & Cellular Mobile Services dated 1<sup>st</sup> July 2005 through quarterly performance monitoring report (PMR) received from service provider. TRAI also monitors POI congestion through monthly reports received from

cellular mobile service provider (CMSP). TRAI had earlier issued show cause notices in March 2006 to six cellular mobile operators in whose network the number of POI's having congestion had increased during the period October to December, 2005. The Cellular Mobile Service Providers had challenged this in TDSAT and the matter is under adjudication. Authority held meetings individually with service providers on 9<sup>th</sup>, 11<sup>th</sup> and 12<sup>th</sup> July 2007 and expressed its concern for poor quality of service provided by them in respect of certain parameters both for Basic and Cellular Mobile Services. In these meetings, the Authority made it amply clear to the service providers that they must work out their action plan to meet the quality of service benchmarks by September 2007.

The analysis of the PMRs for the quarter ending March, 2008 for Basic and Cellular Mobile Services shows that performance of basic and cellular services providers has improved with respect to the following QoS parameters as compared with the March, 2007

#### **Basic Services:**

- Provision of telephones after registration of demand
- Mean time to Repair (MTTR)
- Call completion rate
- Metering and Billing credibility
- Customer Care Service (Shift and closure)
- Response time to the Customer for Assistance(%age of Calls answered – Electronically – within 20 seconds, voice to voice)
- Time taken for refund of deposits after closure

#### **Cellular Mobile Services**

- Accumulated down time of community isolation
- Service access delay
- Call drop rate
- Percentage of connection with good voice quality

- Response time to the customer for assistance – (%age of calls answered – Electronically within 40 seconds and voice to voice – within 60 seconds)
- Complaints per 100 bills issued
- %age of the complaints resolved within 4 weeks

### **(b) Network/Point of Interconnection (POI) reports**

TRAI is vigorously monitoring the level of congestion at the POI between various Service Providers on Monthly basis. This parameter signifies the ease by which a customer of one network is able to communicate with a customer of another network. This parameter also reflects as to how effective is the interconnection between two networks. The benchmark notified by the TRAI in the QoS Regulations of July 2005 for this parameter is <0.5%. The POI Congestion Report analysis for the months of January, 2008 to March, 2008 shows that the performance of the CMSPs with respect to the congestion on POIs has improved for the quarter ending March, 2008 as compared with the performance for the quarter ending December, 2007. The number of POIs having congestion has decreased from 499 in March, 2007 to 275 in March, 2008. During year 2007-08 Cellular Mobile Telephone Subscriber base has increased from 165.11 million in March, 2007 to 261.07 million in March, 2008. TRAI has held several meeting with BSNL & other private service providers to resolve the issue of congestion on POI. By continuous efforts of TRAI, the degree of congestion at the number of places has decreased.

### **(c) Broadband Service**

TRAI vigorously monitors the performance of Broadband service providers against the benchmarks provided by TRAI vide Regulation on Quality of Service of Broadband Service dated 6<sup>th</sup> October, 2006. The quarterly reports submitted by Broadband service providers are analysed for assessing their performance with regard to the QOS benchmark.

#### **(d) Monitoring of Quality of Service Parameters of ISPs:**

TRAI notified Regulation on Quality of Service of Dial-up And Leased Line Internet Access Service in December, 2001, fixing benchmarks for Internet Dial-up Access. Accordingly, ISPs are required to comply with the benchmarks as per the QoS Regulations. TRAI receives quarterly Performance Monitoring Reports from ISPs and these are analyzed for assessing their performance with regard to Quality of Service benchmarks.

#### **(e) Objective Assessment of QOS and Customer perception of service through Independent Agencies.**

With a view to check the authenticity of network parameter reported by the Basic and Cellular Service providers, an independent agency was appointed to carry out an objective assessment of quality of service provided by Basic and Cellular Service providers. The reports received for the quarter ending December 2006 were analyzed and the reports were put on the TRAI website for the information of all stakeholders on 20<sup>th</sup> April 2007.

#### **(f) Appointment of independent agency for survey and audit of Quality of Service.**

TRAI Act as well as the QoS regulations provide for assessment of customer perception of service against the QoS benchmark through survey. TRAI has appointed independent Agencies namely, M/s IMRB International in South, East, North Zone of the country for Audit and South & East zone for Survey; M/s Voluntary Organisation in Interest of Customer Education (VOICE) in North Zone for survey; Market Pulse in West Zone for survey and M/s TCIL in West Zone for Audit. These agencies have been entrusted with the work of assessment of (i) Implementation and Effectiveness of Telecom Consumers Protection and Redressal Grievances Regulations, 2007 (ii) Customer Perception of Service through Survey and (iii) Audit and Assessment of Quality of Service.

### **MEASURES TO PROTECT THE INTERESTS OF THE CONSUMERS**

TRAI holds half yearly meetings with the registered consumer organizations for better understanding of the problems of consumers across the country, as provided in the Regulation. In order to acquaint the consumer organizations about various developments in the telecom sector, TRAI also invites them to seminars, workshops and conferences on telecommunication issues. Such exposures help them build their capacity and develop consumer advocacy skills. One important development resulting from the various consultations TRAI had with the NGOs / Consumer Advocacy Groups and telecom service providers, was finalization of a common charter for adoption by all Telecom service providers. The common charter is a written voluntary declaration by the service providers about the various dimensions of service. It is an open invitation to the consumers to demand quality of service. The charter would be reviewed and upgraded at regular intervals to match the changing expectations of the consumers.

During the year 2007-08, TRAI took several steps to protect the interests of consumers which are enumerated below:

- (i) Telecom Consumers Protection and Redressal of Grievances Regulations, 2007 was issued on 4<sup>th</sup> May, 2007 for effective, speedy, and inexpensive redressal of grievances of consumers.
- (ii) To bring transparency in Billing, a direction was issued to all Service Providers to include certain information such as the name of the applicable tariff plan, methodology applied for calculation of bill including pulse rate and charge for various calls, applicable credit limit, etc.
- (iii) Guidelines were issued on 23<sup>rd</sup> May, 2007 to all Telecom Access Service Providers to follow certain principles to ensure transparency in the charging of SMS on certain specified days which happen to be social, cultural/ festival days which are generally termed as 'SMS blackout' days.

- (iv) The Authority issued guidelines on 4<sup>th</sup> June, 2007 to all Access Service Providers that while offering and implementing handset bundled tariff schemes, hike in any item of tariff during the period which a customer is locked-in to a network will be inconsistent with the provisions of the 43<sup>rd</sup> Amendment to TTO. Thus, no hike in tariff is permissible at any time during the lock-in period.
- (v) The Telecommunication Tariff (Forty-fifth amendment) Order, 2007 was issued on 5<sup>th</sup> June, 2007 specifying call charges of Rs.500/- each for unsolicited commercial communication with a view to discourage and dis-incentivise unsolicited commercial communications.
- (vi) The Telecommunications Consumers Education and Protection Fund Regulations, 2007 was issued on 15<sup>th</sup> June, 2007 to establish Telecommunication Consumers Education and Protection Fund for consumers' awareness, education and protection of their interest.
- (vii) Guidelines were issued on 14<sup>th</sup> August, 2007 to all IPLC & Domestic Leased Line Service Providers advising to provide details of the discount criteria on the ceiling tariff, i.e., the basis on which the discounts are to be offered to the buyers of domestic and international bandwidth and other related services in their websites, so as to ensure that the consumers of these services have access to information on prices including discount criteria.
- (viii) The Authority has issued instructions on 21<sup>st</sup> August, 2007 to all Access Service Providers advising them not to offer any plans which prescribe separate charges for rectifying the defects etc.
- (ix) Regulation on Guidelines for Registration of Consumer Organizations/Non Government Organizations (NGOs) and their interaction with TRAI Second Amendment 2007 was issued on 21<sup>st</sup> August, 2007 to enable representation of more organization.
- (x) Direction dated 23<sup>rd</sup> August, 2007 was issued to all Service Providers wherein it was mandated that CLIP facility cannot be made a compulsory item of tariff for the subscribers in any tariff plans. This Direction aims at enhancing the transparency for subscribers.
- (xi) To generate awareness amongst the consumer organizations about the initiatives taken by TRAI, three Regional Workshops one each at Chennai, Pune and Shillong were organized on 25<sup>th</sup> May, 2007, 16<sup>th</sup> November, 2007 and 24<sup>th</sup> November, 2007 respectively. Also a two day orientation programme for the newly registered Consumer Advocacy Groups (CAGs) was also organized in TRAI office on 13<sup>th</sup> and 14<sup>th</sup> March, 2008.
- (xii) Directions were issued to service providers to refund the charges levied for the provisioning of Value Added Services without the explicit consent of the consumers.
- (xiii) A direction was issued on 30<sup>th</sup> October, 2007 to all Access Service Providers for enhanced transparency with regard to explicit consent for subscribing Value Added Services and also for unsubscribing.
- (xiv) Guidelines were issued on 16<sup>th</sup> November, 2007 to all Telecom Service Providers stipulating the broad parameters and Code of Conduct to be adhered by the Service Providers in respect of the outsourced agencies engaged by them for collection of dues.
- (xv) Authority has notified the Telecommunication Tariff (Forty- sixth amendment) Order, 2008 on 24<sup>th</sup> January, 2008 mandating all the Telecom Service Providers to furnish hard copy of the bill free of cost to all the post-paid subscribers.
- (xvi) Capacity Building Workshop on Audit of the metering and Billing system of telecom service providers was held at New Delhi on 4<sup>th</sup> & 5<sup>th</sup> March, 2008.
- (xvii) The Telecommunication Tariff (Forty-seventh amendment) Order, 2008 was notified on 17<sup>th</sup> March, 2008 specifying call charges of Rs.500/- for the first unsolicited commercial

communication and Rs.1000/- for the subsequent unsolicited commercial communication

The detailed measures taken to protect the interest of the Consumers have been elaborated in Part III of this report.

## UNIVERSAL SERVICE OBLIGATION

The New Telecom Policy 1999 gives major emphasis on provision of universal services. It has defined universal service objectives as under:

- Universal service to all areas in the country including rural with special emphasis on encouraging telecommunication development in remote, hilly and tribal areas;
- Provide voice and low speed data service to the balance uncovered villages in the country by the year 2002;
- Achieve Internet access to all district headquarters by the year 2000;
- Achieve telephone on demand in urban and rural areas by 2002; and
- Achieve rural tele-density of 4% by 2010

To achieve these objectives, NTP 1999 provides for raising resources through the imposition of a universal services levy (USL) which would be a percentage of the revenue earned by the operators

under various licences. To work out the details of the universal services levy, the government sought recommendations from TRAI on the following points:

- a) class of operators to fund the USL,
- b) various possible cost models/approaches to determine:
  - Percentage contribution from revenue of the operators and the mechanism for computing it;
  - Per unit subsidy for VPTs and rural DELs separately to cover capital and recurring expenditure;
  - Whether per unit subsidy will be the same or different in different geographical areas/ tribal and non-tribal areas of the country; and
  - Per unit subsidy for low calling urban DELs.

TRAI submitted its recommendation on USO to the Government on 3<sup>rd</sup> October 2001. The Government of India had issued USO guidelines on 27<sup>th</sup> March 2002. Subsequently TRAI has forwarded its Recommendations on "Growth of telecom Services in Rural India" wherein it was emphasized that infrastructure sharing should receive support from USOF. TRAI continues to interact, participate and contribute in Inter-Ministerial Advisory Committee on USO.



## **PART – III**

### **FUNCTIONS OF TELECOM REGULATORY AUTHORITY OF INDIA IN RESPECT OF MATTERS SPECIFIED IN SECTION 11 OF TELECOM REGULATORY AUTHORITY OF INDIA ACT**



# FUNCTIONS OF THE TELECOM REGULATORY AUTHORITY OF INDIA IN RESPECT OF MATTERS SPECIFIED IN SECTION 11 OF THE TRAI ACT

**T**he Authority, in pursuance of achieving the objectives of New Telecom Policy 1999, has notified a number of decisions on tariffs, provided its recommendations on several matters either suo moto or on matters referred to it by the Government, notified Regulation to carry out purposes of the Act, taken action to enforce licence terms and conditions and initiated work on several issues including review of Access Deficit Charges (ADC). By discharging various recommendatory & regulatory functions, TRAI has contributed a lot in growth of telecom services in terms of increased number of service providers, consumer growth and vast network of the telecom services across the length and breadth of the country. These continued measures have resulted in overall benefits to the consumer in terms of choice of services, reduced tariff of telecom service better quality of service etc.

## TELECOMMUNICATION RATES BOTH WITHIN INDIA AND OUTSIDE INDIA INCLUDING THE RATES AT WHICH MESSAGES SHALL BE TRANSMITTED TO ANY COUNTRY OUTSIDE INDIA

Section 11(2) of the Telecom Regulatory Authority of India Act, 1997 as amended by TRAI (Amendment) Act, 2000, empowers the Authority to notify in the Official Gazette the rates at which telecommunication services within India and outside India shall be provided, including the rates at which the messages shall be transmitted to any country outside India. It also provides that the Authority may notify different rates for different persons or class of persons for similar telecommunication services. Besides specifying the tariff regime applicable to various services, TRAI is also required to ensure that tariffs prevailing in the market are consistent with the specified tariff regime. For this purpose, the Authority monitors the rates at which the various telecom services are provided by the service providers.

In addition, the Government of India vide order dated 9<sup>th</sup> January, 2004 has entrusted to TRAI, the function of specifying the standard norms for, and periodicity of revision of rates of pay channels, including interim

measures. Thus, the function of specifying norms for fixation of rates for pay channels as well as fixation of tariff for cable services is also assigned to TRAI.

## TELECOMMUNICATION TARIFF ORDERS

The Authority's Telecommunication Tariff Order (TTO) 1999, implemented with effect from 1<sup>st</sup> April 1999 has been used as an instrument to achieve regulatory goals and to promote competition in the telecom sector, providing protection to consumer interests and to serve as a signal to promote investment. During the year 2007-08 the Authority with a view to restrict telemarketers who make Unsolicited Commercial Communications to the subscribers who have not given explicit prior consent to the calling party for making calls for such activities specified higher call charges for such communications vide amendment to the Telecommunication Tariff Order, 1999. Further, the Authority with the intention to curb the practice of service providers who send bills through SMS and charging a fixed amount to provide hard copy of the bill and to mandate the service providers to provide hard copy of the bill free of cost to the postpaid subscribers, made amendment to Telecommunication Tariff Order, 1999. In addition, amendments to tariff orders have also been issued

**Table 3.1 : Telecommunications Tariff Orders (Amendments)**

Sl. No.	Telecom Tariff Order	Date of issue	Brief particulars
1.	The Telecommunication Tariff (Forty Fifth Amendment) Order, 2007 (2 of 2007).	5 <sup>th</sup> June 2007	Specified a higher tariff of Rs.500/- for each Unsolicited commercial communication made from BS & CMTS
2.	Telecommunication (Broadcasting and Cable) Services (Second) Tariff (Eighth Amendment) Order, 2007 (3 of 2007)	4 <sup>th</sup> October 2007	1. Specified ceiling of rates to be charged from the consumers of the Non-CAS areas for Cable TV services 2. A-la-carte offering of channels being broadcasted
3.	The Telecommunication Tariff (Forty-Sixth Amendment) Order, 2008	24 <sup>th</sup> January 2008	Provision of Hard copy of the bill free of cost to all the post-paid subscribers
4.	The Telecommunication Tariff (Forty-Seventh Amendment) Order, 2008.	17 <sup>th</sup> March 2008	Specified a tariff of Rs.500/- for first Unsolicited commercial communication and Rs.1000/- for each subsequent Unsolicited commercial communication

for broadcasting and cable services during the year. The amendments to TTO' 99 and tariff orders for broadcasting and cable services are listed in Table 3.1.

### The Telecommunication Tariff (Forty Fifth Amendment) Order, 2007

The telemarketing activities, as per known practice prevailing in India, inter alia, include making of Unsolicited Commercial Communications to the subscribers who have not given explicit prior consent to the calling party for making calls for such activities. A large number of subscribers are of the opinion that such unsolicited commercial communications are inconvenient and a nuisance as they encroach upon their time and often interfere with their activities at the time when such calls are made besides disturbing their privacy. The Telecom Regulatory Authority of India had, therefore, initiated on 20<sup>th</sup> November 2006 a consultation process to seek the views of all stakeholders for a comprehensive solution to prevent receiving of the unsolicited commercial communications by the subscribers who do not wish to do so and to address their grievance in this regard.

After consultation process, the Authority issued the Telecom Unsolicited Commercial Communications Regulation, 2007 specifying several measures to curb unsolicited commercial communication. In order to discourage and disincentivies unsolicited commercial communication, the Authority separately issued The

Telecommunication Tariff (Forty Fifth Amendment) Order, 2007 on 5<sup>th</sup> June, 2007 notifying higher rate of tariff (i.e. at Rs.500/- for each such communications) for unsolicited commercial communications.

### Telecommunication (Broadcasting and Cable) Services (Second) Tariff (Eighth Amendment) Order, 2007

The Telecommunication (Broadcasting and Cable) Services (Second) Tariff (Eighth Amendment) Order, 2007, was issued on 4<sup>th</sup> October 2007. The salient features of the amendment tariff orders are:

- (i) This Amendment Order effective from 1<sup>st</sup> December, 2007, is applicable to non-addressable cable TV services throughout the country except those areas which have been notified for implementation of conditional access system (CAS).
- (ii) Further, the tariff amendment order provides specific ceilings for ordinary subscribers and residual commercial subscribers based on number of channels transmitted for different categories of cities, towns and other habitations. The order also provides that the charges payable by a subscriber will not exceed the ceiling provided in Table 3.2. *(The list of cities and towns falling in 'A-1', 'A', 'B-1' and 'B-2' categories is available on TRAI's website at [www.trai.gov.in](http://www.trai.gov.in)) :*

Table 3.2 : Tariff Rates

No. of channels	'A-1' & 'A' class cities	'B-1' & 'B-2' class cities	Others
Only free to air channels (min.30 FTA channels)	Rs. 77	Rs. 77	Rs. 77
Minimum 30 FTA channels plus upto 20 pay channels	Rs. 160	Rs. 140	Rs. 130
Minimum 30 FTA channels plus more than 20 and upto 30 pay channels	Rs. 200	Rs. 170	Rs. 160
Minimum 30 FTA channels plus more than 30 and upto 45 pay channels	Rs. 235	Rs 200	Rs.185
Minimum 30 FTA channels plus more than 45 pay channels	Rs. 260	Rs. 220	Rs. 200

- (iii) Requirements of mandatory billing with necessary details, issue of receipts for payments made etc. have been provided to empower the consumers.
- (iv) There will be forbearance in tariff in respect of 3-star hotels and above and for commercial establishments having more than 50 rooms, and treatment like ordinary subscribers in respect of other residual commercial subscribers.
- (v) Broadcasters must provide all their channels on a la carte basis and declare a la carte rates to the multi system operators (MSOs)/cable operators. Bouquets of channels can also be offered. But to prevent perverse pricing of bouquets and to make the a-la-carte choice effective, it has been provided that the bouquet rates and a la carte rates of channels forming part of a bouquet should satisfy the following conditions:
  - a) Sum of a la carte rates not to exceed 1.5 times the bouquet rate.
  - b) A la carte rate of each channel cannot be more than three times the average rate of the pay channel in the bouquet.

The above measure is expected to enable the MSOs/cable operators to choose channels in tune with the liking of their subscribers in the localities being served by them, and consequently to reduce the burden of cable charges on the subscribers on account of unwanted channels.

- (vi) The rates of bouquets and stand alone channels as existing on 1<sup>st</sup> December 2007 cannot be increased by more than 4% by the broadcasters. The composition of bouquets as existing on 1<sup>st</sup> December, 2007 cannot also be changed. Appropriate provisions have been made to address situations such as non-availability of channel for distribution due to termination of contractual obligations, conversion of a pay channel to FTA or vice versa.
- (vii) Broadcasters can introduce new pay channels and also new bouquets consisting of new or existing pay channels and decide the prices

thereof. But this will be subject to conditions for preventing perverse pricing as indicated above, and will be further subject to interventions by TRAI, based essentially on the existing principle that rates of new channels should be similar to similar channels.

- (viii) Detailed reporting requirements have been prescribed for the broadcasters in regard to existing channels and new channels, bouquets and changes therein.

It is expected that this order will effectively protect the interests of the Cable TV subscribers.

### **The Telecommunication Tariff (Forty-Sixth Amendment) Order, 2008**

Instances have come to the notice of the Telecom Regulatory Authority of India (TRAI) that mobile service providers offer post-paid tariff plans in which the subscribers are being given bills through SMS or email. The hard copy of the bill is available to the subscribers only on payment of a fixed amount as determined by the operator. In this regard, Authority had initiated a limited consultation process on 1<sup>st</sup> January, 2008 by circulating a draft Tariff Amendment Order, alongwith a background note and a press release, inviting comments of stakeholders on the proposal for amending the Telecommunication Tariff Order to incorporate an explicit provision for providing bill in hard copy free of cost to all post paid subscribers. Consumers and Consumer Organisations have generally commented in favour of the proposal of the Authority by stating that such a move would go a long way in educating and informing laymen – consumers to know the details of their bills. The Authority carefully considered the provisions relating to billing in the Indian Telegraph Rules, 1951, license agreements for Cellular, Unified Access, NLD and ILD licenses and also the views expressed by stakeholders. It was felt necessary to mandate the service providers to provide hard copy of the bill to its post-paid subscribers free of cost. Accordingly, Authority has notified the 46<sup>th</sup> Amendment to the TTO on 24<sup>th</sup> January, 2008 mandating all the Telecom Service Providers to furnish hard copy of the bill free of cost to all the post-paid subscribers.

## The Telecommunication Tariff (Forty-Seventh Amendment) Order, 2008

The Authority has received several complaints with regard to the harassment of the consumers even after specifying a tariff of Rs.500/- for each Unsolicited Commercial Communication. In order to further discourage the registered telemarketers from sending Unsolicited Commercial Communications, the Telecommunication Tariff Order, 1999 has been amended by the Telecommunication Tariff (Forty-Seventh amendment) Order, 2008 on 17<sup>th</sup> March, 2008 so as to provide that five hundred rupees shall be payable as tariff for every first unsolicited commercial communication and rupees one thousand shall be payable as tariff for every subsequent unsolicited commercial communication.

## REGULATIONS

Section 11(1)(c) of the Telecom Regulatory Authority of India Act, 1997 empowers the Authority to levy fees and other charges at such rates and in respect of such

services as may be determined by regulations. Further, Section 11(1)(b) of the above Act empowers the Authority to ensure technical compatibility and effective interconnection between different service providers and also to regulate arrangement amongst service providers of sharing their revenue derived from providing telecommunication services. Section 11(1)(b) of the TRAI Act also empowers the Authority to lay down the standards of quality of service to be provided by the service providers and ensure the quality of service and conduct the periodical survey of such service so as to protect the interest of the consumers. During the year 2007-08, the Authority notified the Regulations listed in Table 3.3 in pursuance of the above provisions of the TRAI Act to carry out the purposes of the Act.

## Telecom Consumers Protection and Redressal of Grievances Regulations, 2007

The regulation provides for the effective, speedy and inexpensive redressal of grievances of telecom

**Table 3.3 : Regulations issued by TRAI during 2007-2008**

Sl. No	Regulation	Date
1.	Telecom Consumers Protection And Redressal of Grievances Regulations, 2007 (3 of 2007)	4 May 2007
2.	The Telecom Unsolicited Commercial Communications Regulations, 2007 (4 of 2007)	5 Jun 2007
3.	International Telecommunication Access to Essential Facilities At Cable Landing Stations Regulations, 2007 (5 of 2007).	7 Jun 2007
4.	Telecommunication Consumers Education and Protection Fund Regulations, 2007 (6 of 2007)	15 Jun 2007
5.	The Regulation On Guidelines for Registration of Consumer Organisation/ Non-Government Organisations (NGOs) and their Interaction With TRAI (Second Amendment), 2007	21 Aug 2007
6.	The Direct To Home Broadcasting Services (Standards of Quality Of Service And Redressal Of Grievances) Regulations, 2007 (8 of 2007).	31 Aug 2007
7.	The Telecommunication (Broadcasting and Cable Services) Interconnection (Fourth Amendment) Regulation, 2007 (9 of 2007).	3 Sep 2007
8.	Domestic Leased Circuits Regulations, 2007 (10 of 2007).	14 Sep 2007
9.	Telecom Unsolicited Commercial Communications (Amendment) Regulations, 2008(1 of 2008)	17 Mar 2008
10.	The Telecommunication Interconnection Usage Charges (Ninth Amendment) Regulations, 2008.	27 Mar 2008

consumers. As per this Regulation, Telecom Service Providers, who are providing Basic Telephone Service, Unified Access Services, Cellular Mobile Telephone Service and Broadband Service, are mandated, from the date of commencement of the Regulation, to establish Call Centres within 60 days, appoint or designate Nodal Officers for each area within one month, so that they are easily accessible and available to consumers for redressal of the grievances and also appoint one or more appellate authorities in each licensed service area within three months. Service providers are also mandated to publish "Manual of Practice for handling consumer complaints" which basically provides for consumer rights, obligation and resolution of grievances.

In the background of increasing consumer grievances with the exponential growth of services the Authority had undertaken public consultation on the Redressal of Consumer Grievances and Consumer Protection in Telecommunications by issuing a consultation paper including draft regulations on the proposed institutional mechanism on 3<sup>rd</sup> January 2007. The Authority after following the due process of consultation with all the stakeholders issued the regulation. The Authority framed the Regulation without affecting the consumers' legal right to approach the courts at any time. The institutional mechanism specified in the Regulation is on the principles of soft touch regulation focusing primarily on self-regulation by service providers for the redressal of grievances of telecom consumers.

The salient features of the Regulation on "Redressal of Grievances of Telecom Consumers and their Protection" are summarized below:

- a) The institutional mechanism provides for resolution of consumers' grievances within the company and is subscriber centric. It mandates structural framework at the level of Call Centre, Nodal Officer and appellate authority. It also mandates the procedures and time limits for redressal of grievances.
- b) Consumers may contact the Call Centre of service provider on toll free number at the first

instance for redressal of their grievances. All the complaints, pertaining to fault repair, service disruption and disconnection of service shall be attended within a maximum period of 3 days and all other complaints shall be attended by the Call Centre within a maximum period of 7 days, subject to time limits laid down in Regulations on Quality of Service. The Service Provider shall ensure that Call Centre:-

- (i) register each complaint by allotting a unique identification number to be called the docket number and communicate docket number to the consumer.
  - (ii) intimate the action taken on the complaint to the consumer through telephone or other electronic means or any other means within the time limit specified.
  - (iii) intimate contact details of the Nodal Officer (including his name, telephone number and address) to the consumer in case a consumer is not satisfied with the redressal of his grievance or when requested by him
- c) In case the consumer is not satisfied with the redressal of his grievance at the Call Centre level or in case the Call Centre within the above time limit does not attend to the complaint, he may approach the Nodal Officer for redressal of his grievance. All grievances received by the Nodal Officer with respect to fault repair, service disruption and disconnection of service shall be got redressed within a maximum period of 3 days and other grievances shall be redressed by the Nodal Officer within a maximum period of 10 days of the registration of the grievance. The Service Provider shall ensure that Nodal officers:-
- (i) communicate within three days from date of the receipt of the complaint, the unique complaint number to the consumer.
  - (ii) intimate after taking the remedial measure for redressal of the grievance or decision thereon within the time limit specified to the consumer.

- d) In case the consumer is still not satisfied with the redressal of his grievance by the Nodal Officer or in case his complaint is not redressed by the Nodal Officer within the time limit specified or no reply is received regarding resolution of the complaint from Nodal Officer, he may appeal to the appellate authority for redressal of his grievance and the appellate authority shall decide every appeal within 3 months.
- e) The service provider shall publish a "Manual of Practice for handling consumer complaints" outlining the various provisions, time limits, benchmarks and procedures for seeking redressal of grievances including information which affects the consumers.
  - (i) The Manual shall be available for reference at every office of the service provider, the Nodal Officer and the appellate authority; at the Call Centres, Sales outlets and Website of the service provider.
  - (ii) A copy of the Manual or its abridged version (containing salient features such as terms and conditions of service, contact details of Call Centre, the Nodal Officer and the appellate authority, procedure and time limit for redressal of grievances) shall be provided by the service provider or his agent to each consumer at the time of his subscription for service.
- f) **Providing usage details in respect to Pre-paid mobile connections:** The service providers on request from any consumer, at a reasonable cost, shall provide information relating to the itemized usage charges showing actual service usage details in terms of all call data records including value added services, premium rate services and roaming charges, and their monetary value.

### **The Telecom Unsolicited Commercial Communications Regulations, 2007**

Considering the complaints of number of telecom consumers regarding telemarketing, the Authority had initiated a consultation process in November

2006 seeking the views of all stakeholders for a comprehensive solution that prevents the bulk of such unsolicited commercial communications. Based on responses to the above mentioned consultation paper, the discussions and meetings conducted, the Authority issued the Telecom Unsolicited Commercial Communications Regulations, 2007

Through the Regulation, the Authority has facilitated setting up of a national database, containing list of telephone numbers of all such subscribers who do not want to receive the UCC. This database is called National Do Not Call Registry (NDNC). NIC had been contracted to design and maintain the NDNC. The telecom service providers had set up call centers with "toll free telephone lines" to receive request from their subscribers who want to register in the NDNC. The service providers will periodically update the NDNC online and thus the NDNC contains the telephone numbers of all the subscribers (countrywide) who have opted not to receive any UCC. In the Regulation, maximum of 45 days have been given from the date of registration of request by a subscriber to inclusion of his telephone number in the NDNC.

On the other hand, Telemarketers will have to register in the NDNC registry. The telemarketers would make online request by submitting the calling list to the NDNC registry and the registry will return the list of Do Not Call numbers to the requested telemarketer.

The DoT has formulated separate guidelines for "Telemarketers". All the agencies making voice calls or sending SMSs for marketing of products, including those content providers who offer various services through SMS and voice using short codes fall in the category of telemarketers and such telemarketers are required to register with DOT.

To tackle the issue of violation of the Regulation by Telemarketers, the regulation has the following key provisions:

- Originating Access Provider to whom the complaint has been forwarded will examine and warn the guilty telemarketer /customer for the first time.

- If the UCC is repeated by the same telemarketer for the second time, his service provider shall charge a higher tariff. The Authority has provided for a special tariff on per call basis, which is Rs.500/-. The Authority through Telecom Tariff Order (Forty Fifth amendment) 2007 has notified tariff of Rs. 500/- for such Unsolicited Commercial Communication.
- The Telecom Service Providers have been directed to disconnect telephones connections of telemarketer if sending of such Unsolicited Commercial Communication is repeated.

### **International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulations, 2007**

Telecom Regulatory Authority of India (TRAI) notified Regulation on "International Telecommunication Access to Essential Facilities at Cable Landing Stations Regulations, 2007" which provides for the non-discriminatory, fair and open access at the cable landing stations.

A number of submarine cables are landing or terminating in India. These submarine cables terminate at cable landing stations operated and managed by few ILDOs. As such the facilities are predominantly owned by limited number of ILDOs. TRAI considers that access to these cable landing stations by other licensees is necessary for creating a conducive environment and boosting competition in the international bandwidth connectivity / leased circuits segment.

Access to submarine Cable Landing Stations (CLS) is considered an essential input for many telecom services needing international connectivity. Any access barriers to such facility can constrain the competitiveness of telecom operators and become detrimental to healthy growth of international telecom market. Thus for the CLS, which are considered to be essential and critical telecom facilities, it needs to be ensured that any restriction on such facilities should not become a 'bottleneck' to international telecom services provision. In pursuance

of the recommendations on "Measures to promote competition in International Private Leased Circuits (IPLC) in India", the Department of Telecommunications, after accepting the recommendations, amended the relevant clauses in International Long Distance (ILD) Service Licence to ensure efficient, transparent and non-discriminatory access facilities for submarine cables at Cable Landing Stations.

International leased circuits are used by exporters, BPO units/ Call centers, banks, small and medium enterprises (SMEs), ISPs and other information technology enabled service providers. In addition, ILDOs also require international bandwidth connectivity for carrying international voice calls. The Regulation would facilitate:

- Provisioning of bandwidth to end consumers at competitive rates;
- Boosting of competition and therefore reduction in the price of international private leased circuits (IPLCs);
- Availability of International bandwidth at competitive price to ISPs for rapid growth of Broadband Service;
- Options to ILDOs to purchase International bandwidth at competitive prices on a range of diversified submarine cables;
- Carriage of voice/data at a competitive cost.

The owners of Cable Landing Stations are mandated, from the date of commencement of the Regulation, to submit "Cable Landing Station – Reference Interconnect Offer (CLS-RIO)" containing the terms and conditions of Access Facilitation and Co-location facilities including landing facilities at cable landing stations for International submarine cable capacity in accordance with the specified schedule and provisions in the Regulation within 30 days to the Authority for its approval. The Authority shall approve the CLS – RIO within 60 days. However, if it requires modifications so as to protect the interests of service providers or consumers or to promote orderly growth of the telecom, the Authority will give

an opportunity to the owner of Cable Landing Station (CLS) to make necessary modifications and submit within 15 days of receipt of requirement for such modifications in the CLS-RIO for the approval. The owner of CLS shall publish the approved CLS-RIO within 15 days from the date of approval by the Authority. The Regulation would enable the timely provision of International bandwidth connectivity at cable landing stations in a fair, equitable, transparent and non discriminatory manner to eligible International Telecommunication Entities i.e. International Long Distance Operators (ILDOS) and Internet Service Providers (ISPs) with International Gateway permission.

The Regulation provides the time limits for owner of Cable Landing Station for various activities in access facilitation including the provision for co-location facility and the Regulation also provides the time limits for eligible Indian International Telecom Entity to enter into agreement, make payments and arrange backhaul circuits to its premises from Cable Landing Station. The Regulation has a provision for a minimum commitment period of three years for Co-location facility and its renewal till the term of lease of International capacity on submarine cable at cable landing station subject to no default and breach by eligible Indian International Telecom Entity.

The Authority holds the view that there is a need for standard/published access facilitation agreement, which the new service providers can make use of for availing of access to international submarine cable capacity. In the absence of such regulation, there is a scope for delay, in provisioning of access to the capacity acquired by the competing operators, from incumbent International Long Distance Operator (ILDO) and other ILDOs with Significant Market Power (SMP) who own cable landing stations. The Authority also noted that problems have been faced by some of the ILDOs, who had acquired capacity in a submarine cable system from foreign carriers or International Telecom carriers, and desired to

access such capacity at the cable landing station of an existing operator.

The highlights of Regulation are:

- (a) new service providers have access to the International bandwidth capacity in the same way as the consortium members;
- (b) access facilitation is not unduly delayed by consortium members having control over CLS;
- (c) transparent and non-discriminatory access at cable landing stations;
- (d) well defined responsibilities in terms of functioning;
- (e) transparent charges for access, Co-location and landing facilities;
- (f) time limit for provision of access, Co-location and landing facilities.

### **Telecommunication Consumers Education and Protection Fund Regulations, 2007**

Telecommunication Consumers Education and Protection Fund Regulations, 2007 was issued on 15<sup>th</sup> June, 2007 to establish a Fund for the telecom consumers' awareness, education and for protection of their interests. Telecom Service Providers, who may have charged their subscribers any amount in excess of the rates of telecommunication service determined under any regulation or order or direction made under the TRAI Act, or amount in excess of the rates announced by the service providers where the rates have been notified under market forbearance, which could not be refunded to the concerned subscribers and thus lying as unclaimed with the service providers, shall transfer the excess amount so collected to the credit of the Telecommunication Consumers Education and Protection Fund. The said amount shall be transferred within a period of thirty days after being so directed by the TRAI and in case where no direction has been issued by the TRAI within a period of thirty days after the expiry of 12 months from the date on which such amount became due for refund

or after expiry of period of limitation specified under any law.

Refunds to a large number of consumers of different service providers became due under various Directions or Orders issued by the Authority from time to time, but a significant amount of these excess moneys could not be refunded to the consumers for different reasons by the concerned service providers and accordingly, such sums of moneys are lying with the service providers in separately earmarked accounts. The retention of such excess charged moneys, which actually belong to the consumers, by the service providers would amount to undue or unjust enrichment and, therefore, these moneys are required to be ploughed by an institutionalised mechanism for utilising such moneys for activities aimed at promotion of telecommunication consumer's education and protection.

It has been provided in the regulation that only the income from such amount credited to the corpus of the Telecommunication Consumers Education and Protection Fund shall be utilised for consumers' education and protection. However, as the generation of income by way of interest may take some time and, in the mean time to undertake activities related to telecommunication consumers' education and protection, it has been provided that during the initial period of 18 months a small portion limited to five per cent of the initial corpus of the Telecommunication Consumers Education and Protection Fund shall be utilized for said purposes.

All expenditure from the Telecommunication Consumers Education and Protection Fund shall be incurred on the recommendations of the committee constituted under these regulations which, inter alia, consist of the representatives of the service providers and the consumers' organizations to ensure transparency. The expenditure shall be incurred for the following purposes:-

- a) to undertake programmes to educate the consumers of the Telecommunication services about various measures taken by the Central Government or TRAI for protecting the

interests of consumers of telecommunication services;

- b) to conduct studies and market research projects, either directly or through specialized agencies or institutions on matters relating to protection of the interests of consumers of telecommunication services;
- c) to organize seminars, symposia and workshops on the subject of consumer welfare and consumer education in the field of telecommunication.

The regulations provide that no amount in respect of which a claim has been filed before any court of law, tribunal or consumer forum or in respect of which an order has been made by any court of law, tribunal or consumer forum shall be transferred to the Fund. The regulations further provide that any person, becoming entitled to refund of any amount in pursuance of an order made by a Consumer Forum under the Consumer Protection Act, 1986 or by any court or tribunal, subsequent to the transfer of such amount to the Telecommunication Consumers Education and Protection Fund shall be paid such amount by the service provider in accordance with the order made under that Act or the court or tribunal, as the case may be, and the service provider may apply to the Authority for reimbursement of such amount.

The Authority expects that the measures for the consumers' education and their protection as envisaged in the regulation would:

- (i) Create awareness among the telecommunication consumers in different parts of India in respect of their rights;
- (ii) Eventually reduce the amount which may remain unclaimed in future by such consumers;
- (iii) Educate the consumers regarding latest development in the telecommunication sector and telecom laws and steps taken by the Authority and Central Government to protect and promote the interests of the telecommunication consumers; and

- (iv) Also prevent the avoidable events of excess charging of rates by the service providers at times which is often unintentional due to fast changes taking place in the telecommunication sector and other reasons.

### **The Regulation on Guidelines for Registration of Consumer Organisation/ Non-Government Organisations (NGOs) and their Interaction with TRAI (Second Amendment), 2007**

Telecom Regulatory Authority of India (TRAI) had notified the Regulation on Guidelines for Registration of Consumer Organisations/ Non Government Organisations (NGOs) and their Interaction with TRAI in January 2001 and it was amended in March 2001. A review of the organisations registered with TRAI indicated that more than eleven States in the country were not represented in the registered group of consumer organisations.

During the course of the Open House Discussions and interactions with the registered organisations, it was revealed that one of the reasons for not having adequate representations from the states was on account of certain eligibility conditions imposed in the guidelines for registration. The Authority having undertaken an in-house review of the Regulation, decided to amend some of the criteria for registration of consumer organisations. The main features of the amendment are mentioned below:-

- a) As against a minimum experience of three years in areas of representing views of consumers, the amended regulation prescribes an experience of one year in assisting the consumers in redressal of complaints regarding shortfall in the supplies and deficiencies in service.
- b) The amendment provides for automatic renewal of registration after period of three years, taking into account the usefulness of the organisation to protect the interest of consumers of telecom sector, their capacity to advocate the cause of consumers and on

fulfillment of other conditions prescribed in the regulation.

- c) The amended regulation envisages inviting assistance of consumer organisations registered with TRAI in organizing seminars, symposia and workshops on the subject of consumer welfare and consumer education in the field of telecommunications.

### **The Direct to Home Broadcasting Services (Standards of Quality of Service and Redressal of Grievances) Regulations, 2007**

The Direct to Home Broadcasting Services (Standards of Quality of Service and Redressal of Grievances) Regulation, 2007, issued by TRAI on 31<sup>st</sup> August 2007 essentially covers regulatory provisions relating to protection of the interests of DTH subscribers.

To protect the interest of DTH subscribers and also to ensure that the new DTH operators gear up their operations accordingly from the very beginning, a need was felt by TRAI to initiate a consultation process on the quality of service (QoS) issues. TRAI had already issued QoS regulations prescribing benchmarks for different parameters of QoS for telecom services and for cable services in CAS notified areas. Accordingly, a Consultation process covering QoS issues for DTH was initiated and after its completion, TRAI issued the Regulation.

The salient features of the DTH QoS Regulation effective from 1<sup>st</sup> December, 2007 are as follows:

- (i) The DTH operator to formulate schemes to offer customer premises equipments (including the set top box) to its subscribers on outright purchase basis, hire-purchase basis and rental basis. The Authority may also prescribe suitable schemes in this regard in future if necessary.
- (ii) The DTH operator, while formulating its scheme for hire-purchase, will make provision for refund to be given to subscribers if they choose to return the customer premises equipment. This facility, together with rental scheme, is expected

to provide commercial interoperability to DTH subscribers in addition to technical interoperability which is already there in DTH licensing conditions.

- (iii) The DTH operator will devise the format for application form, and will assign a customer identification number to each such application received.
- (iv) A time limit of 5 working days has been prescribed for complying with requests relating to shifting, disconnection and reconnection.
- (v) DTH operator will give notice for discontinuing a channel or for disconnecting a subscriber.
- (vi) DTH operator will not disable the set top box (STB) if the subscriber has opted out of his service. This will enable the DTH subscriber to use the STB for receiving other DTH services.
- (vii) The subscription package offered to a subscriber will not be changed for 6 months. However, the subscriber can opt out of a particular package for any other package at any time.
- (viii) Post paid subscribers, if any, will be issued bills containing details such as charges for subscription package, value added services, customer premises equipments, taxes etc.
- (ix) DTH operator will establish call centres with sufficient number of telephone lines with "toll free" numbers, such that the benchmarks relating to response time are met (e.g., 80% calls to be answered within 60 seconds in case of voice operators and within 20 seconds if answered electronically, etc.).
- (x) Each request or complaint to a call centre to be assigned a docket number.
- (xi) 90% of complaints regarding non-receipt of signals to be redressed within 24 hrs., and 90% of other type of complaints to be redressed within 48 hrs. No complaint to remain pending beyond 5 days. All billing complaints to be redressed within 7 days.
- (xii) DTH operators will nominate Nodal Officers for redressal of grievances of those subscribers who

are not satisfied with the redressal at call centre level.

- (xiii) The Nodal Officer will redress the grievances within 10 days of registering of the complaint.
- (xiv) Complaints received by TRAI and forwarded to DTH operator will be redressed within 15 days of forwarding, and outcome intimated both to the subscriber as well as to TRAI.
- (xv) DTH operator will prepare a manual containing details such as benchmarks for grievance redressal, call centres, Nodal Officers, operating instructions for STB, etc. A copy of the same to be supplied to each subscriber.

### **The Telecommunication (Broadcasting and Cable Services) Interconnection (Fourth Amendment) Regulation, 2007**

The Telecommunication (Broadcasting and Cable Services) Interconnection (Fourth Amendment) Regulation, 2007 was issued on 3<sup>rd</sup> September, 2007. The salient features of the Interconnection Amendment Regulation effective from 1<sup>st</sup> December 2007 are as follows:

- (i) Every broadcaster will publish, within 90 days of these amendments taking effect, its Reference Interconnect Offer (RIO) for the DTH operators containing technical and commercial terms for interconnection.
- (ii) Such RIO shall contain the following details, among others,
  - Rates of channels and bouquets,
  - Details of discounts,
  - Payment terms,
  - Security and anti-piracy requirements,
  - Subscriber base reports and audit
  - Tenure of agreement,
  - Termination of agreement.
- (iii) The RIO will be published on the broadcaster's website and also communicated to each DTH operator. RIOs existing, if any, prior to these regulations will be modified to conform to the RIO now published under these regulations.

- (iv) If a DTH operator makes a request to a broadcaster to enter into an interconnection agreement based on the published RIO, then the broadcaster will be obliged to do so within 45 days of the request.
- (v) The broadcasters and DTH operators may also enter into mutual agreements on non-discriminatory basis by deviating from the RIO.
- (vi) If the broadcaster and the DTH operator fail to enter into an interconnection agreement after negotiations, then both of them may jointly request TRAI to facilitate in arriving at an agreement. This will be without prejudice to the legal recourse available to them.
- (vii) All broadcasters will compulsorily offer all their channels on a-la-carte basis to DTH operators. Additionally, they may also offer bouquets, but they will not compel any DTH operator to include the entire bouquet in any package being offered by DTH operators to their subscribers.
- (viii) In case a DTH operator includes various pay channels of a broadcaster's bouquet in different DTH packages for its subscribers, then the payment for the bouquet will be made by the DTH operator to the broadcaster based on the highest subscriber base for any pay channel from that bouquet.
- (ix) The a-la-carte rates of pay channels and the rates of the bouquets offered by the broadcasters to DTH operators shall be so related that
  - (a) the sum of a-la-carte rates of pay channels in a bouquet does not exceed 1.5 times the bouquet rate; and
  - (b) no a-la-carte rate of a pay channel in a bouquet will be more than 3 times the average pay channel rate of that bouquet.
- (x) TRAI will have the power to intervene and ask any broadcaster to modify its published RIO, on grounds of protecting the interests of consumers or service providers, orderly growth of the sector, or for not being in conformity with these regulations.

It is expected that these amendments to the existing Interconnection Regulations will go a long way in resolving the interconnection issues between the broadcasters and the DTH operators, which will in turn lead to greater competition between the two delivery platforms of cable TV and DTH service, bringing considerable benefit to the consumers.

### **Domestic Leased Circuits Regulations, 2007**

Domestic Leased Circuits Regulation, 2007 was issued on 14<sup>th</sup> September 2007. These regulations would benefit both the customers and the service providers. These regulations are expected to enhance competition, allow consumers a wider choice of service providers and make DLCs available at a reasonable price. For service providers these regulations open up the possibility of meeting customers' demand for end-to-end leased circuits by obtaining DLC or Local Lead from other service providers if such need arises.

Provision of DLCs was earlier mandated through "The Telecommunications Tariff (Thirty Sixth Amendment) Order, 2005". The tariff order prescribes tariff ceilings for DLC, based on the distance and the data rate. Tariff ceilings for local leads and ports are also prescribed. As the tariff prescribed are in the nature of ceilings the service providers are allowed to offer discounts on a transparent and non-discriminatory basis. Mandation of provision of DLCs as contained in the said tariff order and its modalities were not covered by earlier regulations. This is being achieved through these Domestic Leased Circuit regulations.

Domestic Leased Circuits (DLC) are important elements in the telecom market that telecom service providers provide to connect two or more customer sites or customers to their own or other service providers networks. ITU defines Leased Circuit as "a two-way link for the exclusive use of a subscriber regardless of the way it is used by the subscriber". Leased circuit does not involve central office switching operations. Unlike broadband, a leased line is not contended or shared but delivers dedicated

guaranteed bandwidth. DLC could be set up as one or more point-to-point links or as Virtual Private Network (VPN). DLC may use terrestrial or satellite facilities; use any media copper, fiber or wireless and may be provided through passive links, circuit switched or packet switched network.

The highlights of these regulations are:

- Provision of Domestic Leased Circuits (DLC) and local lead for DLC by a service provider to another who in turn would use it for providing leased circuits to the customer.
- These regulations cover DLC and local Lead provided on any media i.e. copper, fiber, wireless etc. and using any transmission technology.
- Imposition of obligation on all service providers who have the capacity of copper, fiber or wireless, and who have been allowed under the licence to provide DLC, to share it with other service providers.
- Provide a framework to ensure transparency, predictability and reasonableness and allow provision of DLC/local lead in a non-discriminatory manner.
- Mandates service providers to confirm availability or otherwise to requesting service providers within 30 days. If such provision is not feasible then the service would also give an option of providing the DLC/Local lead on Rent and Guarantee/Special Construction basis.
- Prime service providers who have contract with the subscriber would be responsible for the security arrangements.

Leased circuits are and will remain a key component for economic growth of the country. They are crucial building blocks for e-business, e-governance, Internet access, BPO and IT industry. They are used by business and other organizations that need high quality 24/7 links between their offices or branches to run critical applications. For remote workers accessing their office databases or applications, Business Process Outsourcing (BPO) or Knowledge Process Outsourcing (KPO) companies and businesses providing valued

added services to their customers, for large private or government organizations enabling their subordinate offices to access the head office these are a lifeline. As per conservative estimates the aggregate DLC market (including VPN) would be Rs 3000 crore by 2008 and grow to Rs 4500 crore by 2010.

The telecom services provided by the service providers to their end users largely depend on the quality and timely availability of such leased circuits. Competition in supply of all segments of end-to-end connectivity is vital to deliver retail products at a reasonable price to users. New entrants generally find it difficult to compete in leased circuit market because of non-availability of parts of DLC, specially the access part and financial non-viability of expanding network in greenfield areas. On the other hand the existing service providers have legacy networks and could benefit from the more innovative propensity of the new service providers leading to induction of new technologies like fiber or wireless in the access network.

Some policy initiatives taken by the Government have resulted in greater competition in DLC and IP VPN market. However, in markets where some service providers rely on essential facilities provided by others for delivery of their services, it is appropriate to establish a framework to ensure that the market functions effectively. These regulations are a step in this direction.

These regulations would facilitate:

- making available to the customer choice of service provider of DLC /VPN without artificial and anti-competitive constraint limiting their choices.
- exploitation of full potential of DLC/VPN segment, thereby creating a win-win situation for both customers and the service provider.
- boosting of competition and consequent reduction in the price of DLC for the end customer.
- availability of national bandwidth at competitive price to ISPs for rapid growth of Broadband Service;

- increase in efficiency of businesses and growth of country's economy

### **Telecom Unsolicited Commercial Communications (Amendment) Regulations, 2008**

Telecom Unsolicited Commercial Communications (UCC) (Amendment) Regulations, 2008 was issued on 17<sup>th</sup> March 2008 to improve the effectiveness and compliance of the principal regulations by providing financial disincentive to non-compliant Telecom Service Providers and thereby reducing the nuisance and inconvenience to the subscribers of telephone/mobile services from the unsolicited tele-marketing calls / messages. The Authority has set up the National Do Not Call (NDNC) Registry which is operational since October 2007. For giving wide publicity, the Authority, had advertised in the leading National dailies, the procedure for registering in NDNC. The Authority also held a series of meetings with the service providers to ensure effective implementation of the Regulations.

The telemarketing calls have engaged the attention of our Parliament, the Hon' Supreme Court of India, the Hon' High Court of Delhi and the Reserve Bank of India. Besides there have also been a number of consumer representations made to the Authority about telemarketing calls. Financial disincentive as an additional effective deterrent to non-compliance of the Telecom UCC Regulations, 2007 (4 of 2007) became a necessity.

The Authority decided, to make service provider liable to pay an amount by way of financial disincentive, not exceeding five thousand rupees for the first non-compliance of the Telecom UCC Regulations, 2007 (4 of 2007) and in case of second or subsequent such non-compliance, an amount not exceeding twenty thousand rupees for each such non-compliance.

Apart from the above financial disincentive on the service providers, in order to discourage the registered telemarketers from sending Unsolicited Commercial Communications, the Telecommunication Tariff Order, 1999 was also

amended simultaneously by the TTO (Forty Seventh Amendment) so as to provide that five hundred rupees shall be payable as tariff for each unsolicited call for every first unsolicited commercial communication and rupees one thousand for every subsequent unsolicited commercial communication.

The Regulation also prescribes that the complaint regarding Unsolicited Commercial Communication shall be made by the subscriber to the Service Provider within fifteen days of the receipt of such Unsolicited Commercial Communication.

### **The Telecommunication Interconnection Usage Charges (Ninth Amendment) Regulations, 2008**

The ninth amendment to the Interconnection Usage Charges (IUC) regulation deals, among other things, with the Access Deficit Charge (ADC) payable by private service providers to BSNL. The process of review and consequent amendment has led to simultaneous issue of a set of recommendations to DOT for continuation of support to BSNL's rural wireline network through Universal Service Obligation Fund (USOF). These steps are expected to address issues like promoting competition, removing market distortions, minimizing grey market in international calls and providing comprehensive benefit to all consumers.

The issue of the regulation and the recommendations mentioned above marks the culmination of the process that commenced with the issue of the consultation paper on ADC on 21<sup>st</sup> January 2008. The main issues on which the comments were invited and subsequent discussions were held can be grouped into 3 categories:

- Issue 1:** Operationalizing phasing out of ADC from 1<sup>st</sup> April 2008
- Issue 2:** Providing support for BSNL wireline rural network from USOF
- Issue 3:** Induction of positive features including possible reduction in charges for rural mobile subscribers

The ADC regime was first introduced by the Authority with its regulation on the Interconnection Usage Charges (IUC) dated 24<sup>th</sup> January, 2003. This was reviewed and superseded by the regulation issued on 29<sup>th</sup> October, 2003. ADC was critical in the early stages of transition smoothly from government monopoly to a liberalized competitive environment. The primary purpose of the ADC regime has been to facilitate the incumbent to transit from monopoly to competitive regime and give adequate time for tariff rebalancing. In keeping with the worldwide trend and sound economic principles, the Authority established a time bound ADC regime that would eventually be merged with USOF. To reflect the evolving telecom scenario this regulation has been amended annually with the last amendment being carried out on 21<sup>st</sup> March 2007. The Principal Regulation and its amendments established a regime for institution, continuation and phasing out of ADC. In this framework ADC was meant to be a time-limited, depleting regime that will be phased out in 2008-09 and any resultant responsibility of sustaining incumbents rural wireline network transferring on USOF.

A decisive review of the regime was carried out through elaborate consultation process. Views of the stakeholders were discussed and analysed. While standing by its earlier stipulation of phasing out ADC by 31.3.2008, the Authority was conscious of the critical need to promote effective telecommunication services in rural areas. In earlier regulations the Authority had instituted the policy of exclusion of rural fixed line revenue from calculation of ADC. The Authority felt that the current state of rural telephony still demands special attention and was of the opinion that benefit of abolition of ADC should largely go towards improvement of telecommunications in rural areas.

Through the instant amendment the Authority decided to phase out ADC as a percentage of AGR from 1<sup>st</sup> April 2008. Thus the ADC is no longer applicable in the domestic sector and all domestic calls are free from the incidence of ADC from 1<sup>st</sup> April 2008. The component on the international

incoming calls would be payable at a reduced rate of Rs 0.50 (paise fifty only) for the period from 1<sup>st</sup> April 2008 to 30<sup>th</sup> September, 2008 after this component of ADC would also stand phased out. Thus from 30<sup>th</sup> September 2008 there would be no ADC.

## MONITORING OF TARIFF

- a) Tariff regulation for the telecommunication services in India was initiated with the notification of a Telecom Tariff Order in the year 1999. This order provided the broad and long term policy framework for telecommunication services in the country. The tariff reforms initiated vide this order aimed to provide a consistent and transparent framework for regulating tariff which provided clear signals to the investors on the direction of tariff policy reform. The tariff policy acknowledged the fact that competition is the alternative and preferable way of achieving cost based tariffs. Under competition, not only are tariffs cost oriented, there is also a greater focus on introduction of new technologies and products.
- b) TRAI through appropriate regulatory policies and measures facilitating competition, has succeeded in achieving affordable tariffs and also putting in place a transparent subsidy mechanism for implementation of policies to meet social objectives. The policy has succeeded in providing the financial sustainability of the regulated operators, promoting the efficiency in the sector and meeting the social objectives. The results are evident from the phenomenal growth in subscriber base and the decline in tariffs. Indian telecommunications network is the fastest growing network in the world and currently the second largest in terms of size and also in usage.
- c) Consumers have benefited from substantial decline in tariffs that resulted from regulatory measures of TRAI. Recent years have witnessed sharp decline in telecom tariff in India

particularly in Mobile, National Long Distance and International Long Distance segments. The tariff decline which started with the notification of Telecommunication Tariff Order in 1999 by the Regulator has continued thereafter. Few years ago a Local Call from Mobile was charged at around Rs.15/- per minute. Similar charges were also payable for incoming calls received by the Mobile Subscribers. Today it has come down to even less than Re.1/- per minute for outgoing calls with absolutely no charge for incoming calls. A one minute call between Delhi and Mumbai that cost more than Rs.37/- in pre-TTO 1999 period can be currently made for almost at the price of a local call i.e. Re.1/-. Similarly the tariff for a call to American continent from India has come down from Rs.75 to less than Rs.7/- per minute within the same span of time. There are large number of options available for the subscribers to choose from the market depending upon their usage profile. There are schemes offered by most operators wherein the subscriber is assured connectivity for life without having to pay any fixed recurring charge. The tariff regulation of TRAI even resulted in having the unique option for the customers to avail a particular tariff for the entire licensing period of their service providers without the apprehensions of any tariff hike.

- d) The Telecommunication Tariff Order (TTO), 1999 makes it mandatory for service providers to report to the Authority all new tariff plans and changes made to the existing tariff plans within seven days from the date of implementation. The tariff reports received from the telecom service providers are scrutinized carefully to check for their consistency with the provisions of TTO, 1999 and other Regulatory prescriptions.
- e) The service providers are also required to submit quarterly report on revenue and existing tariff plans. These reports are analyzed with a

view to assess Average Revenue Per User (ARPU) and trend in tariff and conclusions derived from the analysis of quarterly reports are used as inputs for framing regulatory policies.

## OTHER TARIFF RELATED MATTERS

- a) The Authority has issued specific guidelines on 23<sup>rd</sup> May, 2007 to all Telecom Access Service Providers to follow certain principles to ensure transparency in the charging of SMS on certain specified days which happen to be social, cultural / festival days which are generally termed as 'SMS blackout' days.
- b) The Authority has issued guidelines on 4<sup>th</sup> June, 2007 to all Access Service Providers that while offering and implementing handset bundled tariff schemes, hike in any item of tariff during the period which a customer is locked-in to a network will be inconsistent with the provisions of the 43<sup>rd</sup> Amendment to TTO.
- c) The Authority has issued guidelines on 14<sup>th</sup> August, 2007 to all IPLC & Domestic Leased Line Service Providers advising to provide details of the discount criteria on the ceiling tariff, i.e., the basis on which the discounts are to be offered to the buyers of domestic and international bandwidth and other related services in their websites, so as to ensure that the consumers of these services have access to information on prices including discount criteria.
- d) The Authority has issued guidelines on 21<sup>st</sup> August, 2007 to all Access Service Providers advising not to offer any plans which prescribe separate charges for rectifying the defects etc., and if any such plans are under offer the same may be withdrawn forthwith and report compliance to the Authority
- e) Direction dated 23<sup>rd</sup> August, 2007 was issued to all Service Providers wherein it was mandated that CLIP facility cannot be made a compulsory item of tariff for the subscribers in any tariff plans.

## RECOMMENDATIONS ON THE NEED AND TIMING FOR INTRODUCTION OF NEW SERVICE PROVIDERS AND THE TERMS AND CONDITIONS OF LICENCE TO A NEW SERVICE PROVIDER

Under Section 11(1)(a) of the Telecom Regulatory Authority of India Act, 1997, the Authority is required to make recommendations either suo-moto or on a request from the licensor, i.e., Department of Telecommunications or the Ministry of Information and Broadcasting in the case of broadcasting and cable services. In 2007-2008, Recommendations enumerated in Table 3.4 were made by the Authority to the Government.

### Recommendations on Infrastructure Sharing

Department of Telecommunication had sought

recommendations from Telecom Regulatory Authority of India on effective sharing of passive infrastructure (towers etc.). Accordingly, Telecom Regulatory Authority of India after consultation process finalised the recommendations. Given the significance of infrastructure sharing the Authority has not only considered the issue of passive infrastructure sharing but has given the recommendation regarding active infrastructure sharing and backhaul on a suo-motu basis. The Authority also took into consideration of prevailing international practices and has opted for cooperative efforts amongst telecom service providers with least regulatory intervention.

TRAI recognises the critical contribution of infrastructure in wireless telecom services. The exponential growth in wireless telecom services calls for massive investment in infrastructure particularly passive, active and backhaul components. The

**Table 3.4 : List of Recommendations made by the Authority during the period 2007-2008**

Sl.No.	Title	Date of Release	Status
1.	Recommendations on Infrastructure Sharing	11 <sup>th</sup> April 2007	Accepted
2.	Recommendations on Improvement in the Effectiveness of National Internet Exchange of India (NIXI)	20 <sup>th</sup> April 2007	Pending
3.	Recommendations on Review of Internet Services	10 <sup>th</sup> May 2007	Accepted
4.	Recommendations on Review of license terms and conditions and capping of number of access providers	29 <sup>th</sup> August 2007	Accepted
5.	Recommendations on Headend-In-The-Sky (HITS)	17 <sup>th</sup> October 2007	Pending
6.	Recommendations on Growth of Broadband	02 <sup>nd</sup> January 2008	Accepted
7.	Recommendation on Provision of Internet Protocol Television (IPTV) services	04 <sup>th</sup> January 2008	Pending
8.	Recommendations on issues relating to Mobile Television Service	23 <sup>rd</sup> January 2008	Pending
9.	Recommendations on Interoperability and other issues relating to Direct-To-Home (DTH)	30 <sup>th</sup> January 2008	Pending
10.	Recommendations regarding existing Headend-In-The-Sky (HITS) permissions holders	15 <sup>th</sup> February 2008	Pending
11.	Recommendations on 3rd Phase of Private FM Radio Broadcasting	22 <sup>nd</sup> February 2008	Pending
12.	Recommendation on support for Rural Wireline Connections, Installed before 1.4.2002 from Universal Service Obligation Fund (USOF), on Phasing Out of Access Deficit Charges (ADC)	27 <sup>th</sup> March 2008	Pending

country would require approximately 3,30,000 towers by 2010 against the present number of approximately 1,00,000 towers. Apart from huge investments needed the time taken in roll out could be a major bottleneck in the achievement of 500 million subscribers by 2010. Even if the target is achieved, it will only be about 50 per cent of the tele-density with major gaps in the rural areas.

In its recommendation, the Authority has reiterated the urgency of passive infrastructure sharing. The Authority does not prefer any mandated passive infrastructure sharing but has required that the entire process should be transparent and non-discriminatory. The licensees should be required, according to the Authority, to announce on their website the details of existing as well as future infrastructure installations available for sharing by the other service providers. The mode of commercial agreement has been left to the telecom service providers but it has reserved the option of prescribing a standard commercial agreement format in future if the process of infrastructure sharing does not become a pattern of planning in the schemes of telecom service providers. It seeks conclusion of commercial agreements in four weeks time.

In a major recommendation, the Authority recognised the need for immediate identification of critical infrastructure sites. It had recommended a Joint Working Group under the Chairmanship of the District Magistrate to take spot decisions. The representatives of the Telecom Service Providers, Municipal Corporation/local bodies and a representative of Military Land Control Wing, where necessary would be its members.

In another major recommendation, the Authority has sought amendment in the license condition to allow active infrastructure sharing limited to antenna, feeder cable, Node B, Radio Access Network and transmission systems. However, the Authority has not favoured sharing of spectrum at this stage. Another major initiative is backhaul sharing. Considering the importance of backhaul sharing for mobile services in rural and far-flung areas, the Authority had

recommended amendment in the license conditions to allow service providers to share their backhaul from Base Trans Receiver Station (BTS) to Base Station Controller (BSC). It has noted that such a sharing is permitted on optical fibre as well as radio medium at certain 'nodes'. However, no sharing of spectrum at Access Network side has been recommended.

In order to provide level playing field and roll out opportunities to all the licensees, the Authority had expanded the scope of financial incentive for passive infrastructure sharing in rural and far-flung remote areas. Accordingly it recommended that all the licensees in any service areas should qualify for financial subvention schemes meant for rural areas though at reduced scale compared to the winner in the tender process of USOF Administration. The Authority has also recognised the need to encourage use of non-conventional energy sources and has recommended to the DOT to finalise suitable schemes in consultation with the concerned Ministry so as to resolve the critical power availability issue.

### **Recommendations on Improvement in the Effectiveness of National Internet Exchange of India (NIXI)**

National Internet Exchange of India (NIXI) was set up by DIT, Government of India in the year 2003. The main purpose of setting up of NIXI was to ensure that Internet traffic, originating and destined for India, should be routed within India. The Authority observed that NIXI's infrastructure has not been utilized optimally as only 27 ISPs out of 135 operational ISPs have joined NIXI at four nodes. Various reasons like high cost of leased line to connect to NIXI node, non availability of NIXI nodes at all state capitals, high cost to obtain Autonomous System (AS) number have been indicated for not joining the NIXI. It was also observed at times that pipe size of ISPs connecting to NIXI is inadequate to cater to the expected internet traffic. Many a time ISPs connected at NIXI are neither announcing nor accepting all the routes. Since data traffic flow is one way, hop by hop, routed by analyzing the destination addresses based on the routes learnt, announcement and acceptance

of all routes becomes crucial for effective exchange of the domestic Internet traffic. Considering these issues impacting effectiveness of NIXI, the Authority has made the recommendations to Ministry of Communication and Information Technology suo-motu in accordance with section 11 (i) (a) of TRAI Act 1997 for effective utilization of NIXI.

Various options of improving effectiveness for exchanging domestic traffic within the country have been explored, which include direct domestic peering of ISPs with International Internet Bandwidth providers. While finalizing the recommendations, the Authority is conscious that many of the stand-alone ISPs have limited resources and therefore recommendations to improve effectiveness of the NIXI should not unduly burden them. The interests of the Integrated ISPs who are providing International Internet bandwidth have also been protected. A light touch regulatory approach has been adopted and different options to improve effectiveness of NIXI have been recommended.

Major recommendations include that all the ISPs or their upstream providers (ISP who is carrying the traffic to International Internet Bandwidth providers or NIXI) shall either connect to NIXI or with International Internet bandwidth providers through direct peering link. Compulsory announcement and acceptance of all the routes at NIXI nodes have been recommended. This will facilitate effective exchange of domestic Internet traffic at NIXI without requiring direct connectivity of ISPs at NIXI. Similarly Quality of Service parameters of NIXI nodes has been prescribed to ensure effective functioning of the NIXI.

The initiative will substantially bring down ISP's expenditure on domestic bandwidth, which is likely to reduce content download charges resulting in net reduction in Internet and broadband usage charges. It is hoped that implementation of these recommendations will enable ISPs to effectively use NIXI platform for exchange of domestic traffic reducing content download charges and encouraging web hosting services in India. It will also result in better Quality of Service (QoS).

## Recommendations on Review of Internet Services

Recommendation on Review of Internet Services were sent to Department of Telecommunications (DoT) to enable them to finalize its position on ISP licensing regime, which has been under review for some time. In the recommendations, TRAI has considered key issues like licensing provision of various services under ISP licence, recent technological developments, enabling Internet services in India to scale global standards, financial viability, issues of grey market and competition including level playing field vis-à-vis other telecom service providers. The Authority not only fully supports liberal licensing framework for ISPs to boost Internet penetration particularly in rural areas but it also envisages a framework which will enable serious players in this sector to offer various services.

The policy evolved in 1998 envisaged no licence fee, no entry fee, liberal roll out obligations and no cap on number of Internet service providers in a licence area. However, the Authority observed that the primary objective of bringing about competition and boosting growth of Internet has been only partially successful. Out of 700 licences issued within 3 years of opening of ISP sector to private service providers, only 389 licensees exist today. As per the performance monitoring report with TRAI, only 135 Internet service licensees are functionally active.

The key message emerging from the recommendations is that Internet services in India should be at par with global standards and the interest of consumers in terms of affordability and reliability should be uppermost in the revised plan for Internet service providers. The Authority has significantly widened the functional scope of ISP licence and the restrictive provisions of the earlier license have been dropped in the recommendation. Some of the key recommendations are:

- Use of any Device/ technology / methodology to provide access to Internet has been permitted unless explicitly prohibited.

Restrictive Provision regarding usage of PC to make Internet telephony calls has been done away with.

- All content available without any access restriction on Internet and include web hosting, web collocation have been permitted. This does not include service providers' configured closed user group services.
- All ISPs have been permitted to provide Internet telephony without any additional license.
- The restrictions presently imposed for provision of the Internet telephony have been removed. Now any device or adopter conforming to the Standards of International Agencies can be used to make Internet telephony calls within India as well as abroad.
- ISPs are not permitted to have connectivity with PSTN/PLMN.
- Provision of Unified Messaging Service (UMS) has been permitted to ISP licensees without any additional Performance Bank Guarantee (PBG).
- The present charging mechanism based on hops, distance and Bandwidth for RF channels for use in back haul have been changed to charging mechanism based on percentage of Adjusted gross revenue (AGR). This will reduce upfront cost of radio backhaul and encourage its use in remote and far-flung areas.
- In order to encourage Web hosting in India, active interaction of DoT with foreign companies who have significant market share in global market has been advocated.

TRAI has also recommended major structural changes regarding functional area of ISP licence with a view to ensure viable business model. It has recommended that the ISPs should have a licence to operate at a national and state level. ISPs operating in smaller areas like districts have been recommended to migrate to national or state level

licence. The Authority is equally concerned with 254 ISP licensees who have nearly zero contribution to the growth of Internet. It is reported that approximately 85 such licensees do not even have the correct address on which the licence was issued. Taking a serious view, TRAI has recommended that these ISPs be immediately inspected by DoT Vigilance Monitoring Wing to ascertain their presence, nature of activities and financial viability. TRAI has also recommended a liberal exit policy for non-functional ISPs. The existing provisions have not been conducive for non-functional ISPs to surrender as it entails financial losses. A one-time relaxation for a period of 6 months has been recommended by the Authority.

There are major recommendations regarding financial and regulatory levies. Free entry has been replaced by an entry fee of Rs. 20 lacs for national level ISPs and Rs. 10 lacs for state level ISPs licenses. A uniform licence fee of 6 per cent of AGR has been recommended along with minimum annual licence fee of Rs. 50000, Rs. 10000 and Rs. 5000 respectively for national level, state level and district level service providers. The Authority has recommended reduction in financial bank guarantee amount and also recommended maximum FDI cap/equity of 74 per cent at par with other services of telecom sector. ISPs having 100 per cent FDI cap/equity have been given two years time for reduction to 74 per cent.

The Authority has also addressed the issue of unlicensed foreign entities providing Internet telephony at cheaper costs to lure Indian subscriber. The Authority is concerned with the activities of such companies, as they do not fall within the framework of discipline of telecom sector in India. Apart from security considerations there is also an apprehension that Indian subscriber is misled by such service providers. Although it was not within the purview of the term of reference given by DoT, the Authority has suggested urgent consultation with such companies to register them in Indian telecom domain and get such websites hosted on the Indian Territory.

## Recommendations on Review of license terms and conditions and capping of number of access providers

DoT vide their reference dated 13<sup>th</sup> April, 2007 requested TRAI to make recommendations on key issues like entry regulation in access service market, review of guidelines on Merger & Acquisitions including the provisions relating to cross holding of a licensee company in the same service area, use of combination of technologies (CDMA, GSM & and/or any other) under the same license, roll out obligations etc.

The major recommendations made by the Authority are given below:-

### Entry Limit in Access Service Provision:

- No cap be placed on the number of access service providers in any service area.
- GSM and CDMA operators may be given additional spectrum beyond 2X4.4 MHz and 2X2.5 MHz respectively after they achieve required subscriber base and subject to reporting compliance of roll-out obligation.
- Any licensee wishing to get additional spectrum beyond 10 MHz in the existing 2G bands i.e. 800, 900 and 1800 MHz after reaching the specified subscriber numbers shall have to pay a onetime spectrum charge at the rate mentioned below on prorata basis for allotment of each MHz or part thereof of spectrum beyond 10 MHz.

Service areas	Price (Rs. in million) for 2 X 5 MHz
Mumbai, Delhi and Category 'A'	800
Chennai, Kolkatta and Category 'B'	400
Category 'C'	150

- All spectrum excluding the spectrum in 800, 900 and 1800 bands should be auctioned in future so as to ensure efficient utilization of this scarce resource.

- Annual spectrum usage charges linked to the revenue of operators to be revised as given in table below:

Spectrum	Current	Proposed
Upto 2X4.4 MHz/2x5 MHz (CDMA)	2%	No Change
Upto 2X6.2MHz/2x6.25 MHz (CDMA)	3%	No Change
Upto 2X8MHz	4%	No Change
Upto 2X10MHz	4%	5.00%
Upto 2X12.5MHz	5%	6.00%
Upto 2X15 MHz	6%	7.00%
Beyond 2X15 MHz	-	8.00%

### Merger and Acquisition Guidelines:

- The relevant service market be defined as wire line and wireless services. Wireless service market shall include fixed wireless as well.
- For assessment of market power, market share of both subscriber base and revenue of licensee in the relevant market shall be considered to decide the level of dominance for regulating the M&A activity.
- Market share of merged entity in the relevant market shall not exceed 40% either in terms of subscriber base or in terms of revenue.
- No M&A activity shall be allowed if the number of wireless access service providers reduces below four in the relevant market consequent upon such an M&A activity under consideration.
- Existing cap of 2x15 MHz per operator per service area for metros and category A circle and 2x12.4 MHz per operator per service area in category B and C circle applicable for a post merger entity be removed for purposes of regulating M&A activity.
- For the purpose of payment of the spectrum charge, the spectrum held by the two licensees will be added/merged and the annual spectrum charge will be at the prescribed rate applicable on this total spectrum.

- Acquisition of equity capital up to 10% of the target licensee's enterprise shall be permitted by an automatic route and anything beyond that and up to 20% of the equity holdings of the target licensee company, shall be approved on a case by case basis and the process of such approvals will be based on the M&A guidelines contained in these recommendations.
- iii. Such a licensee should not be eligible to participate in any spectrum auction till the roll out obligation is met.
- iv. Any proposal of permission of merger and acquisition should not be entertained till the roll out obligation is met.

### Recommendations on Headend In The Sky (HITS)

#### Access Service using Combination of Technologies:

- In case a new licensee wishes to deploy any other advanced and efficient technology for providing mobile service, the DoT should allocate spectrum subject to its availability.
- An existing licensee may be permitted to use alternate technology to provide wireless access service subject to certain conditions.

#### Roll-out Obligations:

- The present provisions of roll out obligations should not be changed for the access service providers.
- TEC should give the required certificate of compliance or any other report of inadequacy within 90 days. This time limit should start from the date when the application has been submitted to TEC. It is necessary that this work is delegated by TEC to certain other technically qualified organizations.
- Without any change in the provision of liquidated Damage (LD), in case the roll out obligation is not met even after 52 weeks of the period prescribed for completing roll out obligations, the Authority recommends that the reference to termination of license in Cl. 35.2 of UASL may be replaced by the following:
  - i. The performance bank guarantee be forfeited and the service provider may be asked to resubmit PBG of the same amount.
  - ii. No additional spectrum may be allocated to licensee till he does not fulfill the roll out obligations.

HITS is a satellite based delivery platform for delivering multi channel television signals to cable operators across the country. It is capable of delivering TV signals in digital form with addressability features. The HITS operator uploads signals of TV channels of different broadcasters to his HITS satellite in the sky. The cable operators across the country can then download these TV channels from this HITS satellite for further distribution to the subscribers through their cable network in digital form. Since the HITS satellite will have countryside footprint, it will benefit about 60,000 cable operators who serve nearly 70 million cable TV homes.

Earlier, Ministry of Information and Broadcasting, Government of India had requested TRAI to formulate and recommend the policy guidelines for HITS operation. TRAI had issued a consultation paper on various policy issues involved in HITS operation on 24<sup>th</sup> July, 2007 seeking the comments of the stakeholders. After completion of the Consultation Process, the Authority finalised its recommendation on the subject.

While framing the guidelines for policy framework on HITS, the Authority was guided by the basic objective of digitalization of cable TV network in India. The consumer's interests have been paramount because it is the consumer who needs digital transmission with addressability.

The important recommendations on the policy framework of HITS operation, in brief, are as follows-

- HITS operator will provide digital signals of TV channels only to the registered MSOs/cable operators only and not directly to subscribers.

- To enable fast digitalization of cable services, no restrictions regarding transmission frequency band for HITS operation should be imposed.
  - Uplinking from outside India should also be permitted at the option of HITS operator.
  - Foreign investment upto 74% recommended in line with the telecom sector.
  - Entry fee of Rs. 10 crores and minimum networth requirement of Rs. 40 crores have been recommended to ensure that only serious players get HITS license.
  - No annual fee has been recommended to ensure level playing field with multi system operators and to ensure that HITS service competes effectively with other delivery platforms.
  - Condition for rolling out the service within a period of one year is recommended. Provision of refundable performance Bank Guarantee of Rs. 40 crores has also been made in the recommendations with the stipulation that it will be refunded on completion of roll out obligation and shall be forfeited in the event of failure to roll out the service.
  - To avoid vertical integration and to promote competition, cross holding restrictions among broadcasting company, DTH licensee and HITS operator has been recommended. Thus, no broadcasting company or DTH licensee can hold more than 20% of equity in HITS company and vice-versa.
  - Uplinking /downlinking guidelines need to be amended to enable HITS operators to get signals from the broadcasters.
  - HITS operator should pay spectrum fee similar to that paid by the DTH operators.
- been observed that the growth of broadband in the country is slow and below expected level. In order to identify various impediments affecting the growth of broadband and to adopt forward looking approach to address all such impediments, the Authority issued its draft recommendations on 'Growth of Broadband' on 17<sup>th</sup> September 2007 and sought the comments of stakeholders. Based on the feedback of stakeholders and best international practices, recommendations have been finalised. The salient features of TRAI's recommendations are as follows:
- BSNL and MTNL should be encouraged to appoint franchisees for providing broadband services to supplement their efforts. Any procedural restrictions/ limitations to be addressed immediately.
  - TEC should undertake certification of different CPEs model for interoperability for provisioning of the broadband. All CPEs conforming to specifications for interoperability should be displayed on TEC website for the information of customers.
  - Incumbents may declare future plans for providing broadband using DSL technology to encourage manufacturing of CPEs within country.
  - Government should expedite decision on TRAI's recommendations regarding mechanism and pricing of Spectrum for 3G & Broadband Wireless Access.
  - Spectrum for 3G & WiMAX should be made available at the earliest to boost the deployment of broadband using these technologies.
  - Streamlining RoW procedures
    - Central Government may take up with the state governments to adopt uniform Right of Way (RoW) procedures.
    - A district level committee may be formed to study RoW requirement and to take measures to encourage service providers to share ducts.

### **Recommendations on Growth of Broadband**

Government had announced Broadband Policy in 2004 and made certain projections for broadband subscribers' growth. It was expected that broadband growth rate would be stepped up. However, it has

- Govt. should ensure availability of more number of Ku band transponders to roll out broadband services through Direct to Home (DTH) platform.
- Cable TV operators should be encouraged to provide broadband over their network.
- Utilise Universal Service Obligation (USO) fund to provide subsidy for providing broadband services through satellite in remote and hilly areas.
- Utilise USO fund to subsidise backhaul charges initially for a period of 3 years to support the broadband rollout efforts.
- Precondition that service provider identified for USO Fund subsidy to provide broadband should have spectrum for suitable technology.
- In order to increase the competition to provide broadband in rural areas, more than two service providers seeking minimum subsidy should be identified with a rollout obligation to ensure the establishment of network.
- Encourage Municipal committees to include a clause for making Multiple Dwelling Units/ buildings broadband ready by adopting suitable internal wiring while giving clearance for the construction of all such buildings in future.

### **Recommendation on Provision of Internet Protocol Television (IPTV) services**

IPTV is a new method of delivering and viewing television programs using an IP network and high speed broadband technology. It is fast becoming a popular value added service in many countries. The fast development in telecom technologies, enormous capabilities of IP platform and increasing digitalization in broadcasting sector is driving services like Internet Protocol TV (IPTV). The issue of provisioning of IPTV services was discussed in detail in TRAI's Position paper released on 6<sup>th</sup> September, 2007 and in the subsequent draft recommendation released on 28<sup>th</sup> November, 2007. Comments were

invited from stakeholders on these papers issued by TRAI.

Under the existing licensing conditions Unified Access Services license (UASL) and Cellular Mobile Telephony Service (CMTS) Licensee are permitted to provide triple play service and IPTV is permitted under this provision. Recently the government has permitted ISPs having net worth of more than 100 crores to provide IPTV services after obtaining permission from the licensor. The question was being raised time and again in view of the provision of Cable Television Network (Regulation) Act 1995 whether these operators need any other regulatory clearances or registration to provide IPTV to their subscribers. It will be important to mention that Cable Television Network (Regulation) Act 1995 provides that no person shall operate a cable television network unless he is registered as a cable operator under this act.

The Authority deliberated at length on all the relevant issues regarding provision of IPTV services and brought out the final recommendations. The highlights of the final recommendations are mentioned below:

#### **Licensing Issues:**

- Telecom service providers (UASL, CMTS) having license to provide triple play services and ISPs with net worth more than Rs. 100 Crores and having permission from the licensor to provide IPTV can provide IPTV service under their licenses without requiring any further registration. DoT can permit any other telecom licensee to provide IPTV services as licensor. Similarly cable TV operators registered under Cable Television Network (Regulation) Act 1995 can provide IPTV services without requiring any further license.
- Telecom service providers providing IPTV service will be subjected to percentage of Adjusted Gross Revenue (AGR) as license fee as applicable from time to time which is presently 6%, 8%, and 10% for access service licensees in category "C", Category "B" and category "A" circles and 6% for ISPs.

- In case any telecom service provider register itself as cable operator and provides IPTV using its telecom resources, it shall be considered as service under telecom license. Such a service provider shall have to pay the license fee on IPTV revenue also as applicable to its telecom license.
- Any breach of the provisions of Act/ License/ Registration/ Permission by telecom service provider/ cable operator/ Broadcasters shall be dealt with by designated agencies which are responsible for administering such Acts/ License/ Registration/ Permissions.
- BIS may be requested to expedite standardization of IPTV Set Top Box specifications to help cable operators while designing their IPTV networks.
- No change in FDI cap envisaged for provision of IPTV services both by the telecom licensee and Cable TV operators.
- Ministry of Information & Broadcasting and Ministry of Communication & Information Technology are acting upon non compliance of content regulations related to their jurisdiction. It would therefore be appropriate that respective ministries regulate the content used by IPTV service providers. Operational procedures like time limit to keep a copy of the contents shown on IPTV, monitoring requirements etc can be worked out by DoT based on the feedback from respective ministries. Any violation of prevailing Acts/ Rules/ guidelines relating to content by telecom service providers in provisioning of IPTV service shall be reported to DoT by respective ministries. The decision of the respective ministries regarding violation of the law/ direction/ guidelines in respect to content shall be final. DoT may perhaps seek the guidance of the respective ministries to ascertain the penalties for the breach to maintain uniformity and shall initiate suitable action for imposing penalties for violations in time bound manner.

#### **Content Regulation:**

- Telecom licensees while providing TV channels through IPTV shall transmit only such channels in exactly same form (unaltered) for which broadcasters have received up-linking/down-linking permission from Government of India (Ministry of Information and Broadcasting). In such cases, the responsibility to ensure that content is in accordance with the extant laws, rules, regulations etc shall be that of the broadcaster and telecom licensee will not be held responsible.
- In case of contents other than TV Channels from broadcasters, the telecom licensee shall be responsible for observing program code and advertisement code and such program code and advertisement code shall be the same as provided in Cable Television Network (Regulation) Act 1995 and Rules there under. In addition to this, such licensees will also be bound by various Acts, instructions, directions, guidelines issued by the government from time to time including IT Act 2000 to regulate the contents.
- Telecom service provider providing IPTV will show only those news channels which have been approved by I & B Ministry.
- All telecom licensees/ Cable operators before providing IPTV will give a self certified declaration to I&B ministry, DoT and TRAI giving details such as license/ registration under which IPTV service is proposed, the start date, the area being covered, and details of the network infrastructure etc.
- Suitable modifications may be made in respective licenses of Telecom service providers to incorporate above provisions.

#### **Down linking Policy:**

- The up linking / down linking guidelines should be amended to enable the broadcasters to provide signals to all distributors of TV channels such as cable operators, multi-system operators, DTH operators, HITS operators, IPTV service providers.

## Recommendations on issues relating to Mobile Television Service

The Ministry of Information & Broadcasting had earlier sought the Authority's recommendations on various issues relating to proposed licensing policy for mobile television service. The Authority had issued a Consultation Paper on these issues on 18<sup>th</sup> September, 2007. This was followed up with an Open House Discussion in Delhi on 26<sup>th</sup> October, 2007. The Authority had also released its draft recommendations for a second round of short consultation on 3<sup>rd</sup> January, 2008.

There are broadly two routes for providing mobile television services, viz, one using the telecom network with spectrum already allotted to UASL / CMTS licensees, and the other using broadcasting method using separate spectrum. The Authority is of the view that telecom operators having CMTS or UASL license will not require any further license or permission for offering mobile television services on their own network using spectrum already allotted to them. For providing mobile TV services through broadcasting method will require separate license. Therefore, these recommendations now provide for policy guidelines for mobile television operators using broadcast method. The recommended policy guidelines for such mobile television services cover technology, spectrum and licensing issues. The major recommendations are as follows:

### Technology

- The choice of broadcasting technology should be left to the service provider with the condition that the technology to be deployed for providing mobile television should follow a standard approved by a recognized standardization body.
- In case the handset is provided by the licensee, it should be ensured that if the subscribers desire to migrate to any other licensee using the same technology and standards, they should be able to do so without changing the handsets.

- Licenses for the terrestrial transmission route only should be offered for the time being.

### Allocation of Spectrum

- Apart from Doordarshan, private mobile TV operators may be assigned at least 1 slot of 8 MHz each for mobile TV operation in UHF Band V from 585 MHz to 806 MHz. Such spectrum would enable each mobile TV operator to offer about 15 video channels through the terrestrial broadcast route.
- For better utilization of spectrum, the sharing of terrestrial transmission infrastructure of Doordarshan should be permitted on mutual agreement basis in a non-discriminatory manner. Similarly, the mobile TV operators will also be obliged to offer their infrastructure for sharing.
- The licenses for mobile television services should be granted through a Closed Tender System on the basis of One Time Entry Fees (OTEF) quoted by the bidders and the reserve OTEF for a particular license area should be 50% of the highest financial bid submitted for that particular license area.
- Allocation of spectrum to mobile television licensees should be automatic for successful bidders and should not require any further selection process. Such licensees would be required to pay the usual spectrum usage charges, as stipulated by the WPC in consultation with the Ministry of Information & Broadcasting.
- A mobile TV license may be made mandatory for any telecom licensees including UASL/ CMTS licensees, if such licensees wish to use broadcasting technologies for offering mobile television services. For this purpose, any telecom licensees (UASL/ CMTS or any other licensees) satisfying eligibility conditions would be permitted to participate in the bidding process, like any other eligible company.

## Licensing Issues

- There should be a new class of service providers for provision of mobile television services using broadcasting technologies.
- A state should be the license area for a mobile television terrestrial service license. Some of the smaller states can be combined to form an appropriate license area in order to enable financially and operationally viable model.
- The general disqualifications which have been adopted for Private FM Radio may be used for mobile television service also.
- The composite foreign investment limit including FDI of 74% for mobile television service has been recommended by the Authority.
- The tenure of mobile television licenses should be for 10 years. The tenure of the license should be automatically extended for a further period of 10 years at the option of the licensee with payment of additional fee.
- The Licensee should not either directly or indirectly assign or transfer its rights under the license in any manner to any other party except with prior approval of the Ministry of Information & Broadcasting.
- The license fee should be charged @ 4% of Gross Revenue for each year or @ 10% of the Reserve One Time Entry Fee limit for the concerned license area, whichever is higher.
- Any mobile television licensee should not allow any broadcasting company or group of broadcasting companies to collectively hold or own more than 20% of the total paid up equity in its company at any time during the License period.

## Recommendations on Interoperability and other issues relating to Direct-To-Home (DTH)

The Ministry of Information and Broadcasting had sought recommendations of the Authority on Technical Interoperability of Set top Boxes (STB) as

well as to examine the possibility of allowing DTH operators to provide signals to cable operators in KU-Band. Accordingly, the Authority has communicated its recommendations as follows:

- Clause 7.1 of DTH license agreement requires that the DTH operator must provide a set top box which is technically interoperable among different DTH service providers, and that the set top box should conform to the standards laid down by the Government from time to time. At present, these standards prescribed by the Government incorporate, among others, MPEG 2 compression format as a requirement for the set top box. Now, due to subsequent technological development, MPEG 4 compression format is available which results in considerable savings in the bandwidth and transponder requirement. However, a set top box based on MPEG 2 compression format cannot be used for receiving signals of another DTH operator who is employing MPEG 4 compression format, which affects the license condition relating to technical interoperability. After considering the need for protecting consumers' interests and also the difficulties associated with upgrading millions of set top boxes already sold to the subscribers, the Authority has made the following recommendations on the issue of technical interoperability:
  - The issue of revision of standards for DTH set top boxes should be taken up by the Government with the Bureau of Indian Standards (BIS) so that the standards laid down by BIS for DTH Set Top Boxes are updated for advanced technologies.
  - Revision of standards should be prospective and should apply to DTH subscribers who are enrolled after six months from the date of such revision. Such revision should not compulsorily require the DTH operators to upgrade the STBs of existing subscribers to conform to

revised standards, though they would be free to do so on their own.

- The second issue relates to allowing DTH operators to provide signals to cable operators in KU Band. The existing DTH license conditions permit DTH operators to provide signals in KU band only to consumers directly without any other intermediary. The Authority has looked at this issue from the point of maximizing competition among different delivery platforms so that the consumer has enough choice. In this regard, the Authority had recently sent its recommendations dated 17<sup>th</sup> October 2007 regarding transmission of digital signals to the cable operators through Head End in the Sky (HITS) both in C band and KU band, which will in turn enable the cable operators to supply digital signals to the consumers. Thus, the consumers will have enough choice from among DTH operators, digital cable operators through HITS and conventional analogue cable operators. It was, therefore, felt that it is necessary to maintain a clear distinction between DTH and HITS, and this distinction would have been blurred if DTH was also allowed to offer KU band signals to cable operators. Therefore, the Authority has recommended that DTH should continue to supply signals only to the consumers directly and not to any other intermediary. At the same time, in order to maintain level playing field with HITS operators who may use both C band and KU band for transmission, the Authority's recommendation is that the DTH operators should also be permitted band neutrality and should be allowed to operate in both the bands by amending the DTH guidelines.
- Further, the Authority has also examined clause 7.6 of the DTH license conditions which reads as follows:-  
"7.6 The Licensee shall provide access to various content providers/ channels on a non-discriminatory basis."

This clause is mistaken by some stakeholders to mean "must carry", i.e., the DTH operators must carry all the channels in a non-discriminatory manner when so approached by broadcasters. However, Hon'ble TDSAT in its order dated 31<sup>st</sup> March, 2007 in petition No. 189 (C) of 2006 (M/s. Tata Sky Ltd. v/s. M/s. Zee Turner Ltd. & ors.) has held that clause 7.6 of the DTH license agreement does not imply 'must carry'. The Authority has noted that the aforementioned judgment of TDSAT has clarified the position in this regard and no purpose will be served by amendment of the clause 7.6 of the DTH license conditions. The Authority is further of the view that the market forces and competition will ensure that the DTH platforms will select the channels in a non-discriminatory manner. The DTH operators should select the channels in a fair and equitable manner, which would enable various content providers to negotiate constructively. Accordingly, no amendment in clause 7.6 of the DTH license conditions has been recommended.

### **Recommendations regarding existing Headend In The Sky (HITS) permissions holders**

Recommendations on the issue of allowing the existing HITS permission holders to operate under the new licensing framework were forwarded to the Ministry of Information and Broadcasting on 15<sup>th</sup> February, 2008. The Authority felt that for faster roll out of digitalisation and conditional access system, in cable sector, it is essential to have a framework for these permission holders to operate and to migrate to the new licensing regime of HITS, as and when these are notified by the Government. The recommendations of the Authority in this regard are as under:

- (i) The Ministry of Information & Broadcasting should immediately inform the two existing permission holders of the Government's intention to bring out the new licensing framework for HITS, and that the present permission for HITS on their teleports will be "frozen" at the existing level. Thus, except under the circumstances, specified in para (ii) below,

no further approvals will be granted, among others, for change of satellite or for new satellite, or for turnaround of additional channels or for extension in tenure of teleport license in so far as its usage for HITS is concerned.

- (ii) However, the existing HITS permission holders will be allowed to commence the HITS operation on the basis of their existing HITS permission provided they give an undertaking to the effect that they shall migrate to the new HITS licensing regime within a period of three months from the date of notification of the new HITS licensing framework by fulfilling all the terms and conditions of the new license, and that in the event of their failure to do so after having given such an undertaking, their existing HITS permission shall be liable to be cancelled. After furnishing such an undertaking, the existing HITS permission holders will be allowed to commence their HITS operations on the basis of their existing HITS permission and to continue the same under the existing permission till such time that they successfully migrate to the new licensing regime, or for three months from the date of notification of the new HITS license, whichever is earlier. Further, after receiving such an undertaking, in order to facilitate the existing HITS permission holders to commence operations, the Government will also consider on merits any requests received from such HITS permission holder for approvals on issues such as change of satellite or for a new satellite, turn around of additional channels, etc. within the framework of the existing HITS permission.
- (iii) Further, if the existing HITS permission holder meets the rollout obligation as envisaged in the new HITS license even prior to his successful migration to the new HITS license, then such a HITS permission holder will not be required to furnish the performance bank Guarantee for migrating to the new licensing regime.

### **Recommendations on 3<sup>rd</sup> Phase of Private FM Radio Broadcasting**

Ministry of Information & Broadcasting had sought recommendations of TRAI in terms of Section 11(1)(a) of TRAI Act, 1997 on the modifications to be incorporated in the policy guidelines for FM Radio Broadcasting Phase-III. One of the barriers for further growth identified by the Authority during the consultation process relates to the restriction of existing guidelines that do not permit news and current affairs on FM Radio broadcast. Information requirements of large section of unserved population and those who lack access to information through other means like internet, television services, etc. can be conveniently met without any cost to the receiving population through FM Radio services.

Sustaining the growth witnessed in FM Radio sector is possible only if certain major policy decisions are taken and these include increasing the number of channels for FM Radio broadcast. One such area which is said to affect the viability of FM radio operations in the country is the restriction on multiple ownership of channels in a city and networking of FM radio programmes across entities. The Authority weighed the pros and cons of these restrictions and concluded that the benefits arising from the removal of these barriers are likely to be very large in terms of its direct and indirect impact.

Another major Recommendation that may remove barriers for consolidation and thus fuel further growth in the sector relates to a change of the unit for Private FM Radio broadcast licensing from city to district. This one step would effectively enhance the area of operations of FM Radio broadcasting to larger geographical area and thus covering a larger population. This again would result in reduction in the cost of operations for the broadcasters. Necessary flexibility has however been provided for retaining the existing area of operations. The gist of the recommendations are given below:

#### **Need for Augmentation of Private FM Broadcasting:**

- The geographical basis for Private FM radio bidding in future may be changed from City to District.

- The channels available in a district shall be auctioned to the eligible bidders and shall be allocated to successful bidders in descending order of the bid price.
- The existing operators/ licensees may be given the option to enlarge the area of operation for the same channel to provide coverage to full district after fulfilling certain conditions.
- The bidding for remaining 97 channels of Phase-II scheduled on city as operational area be rescheduled considering district as operational area to avoid complication of subsequent migration from city to district level.

#### **Additional channels in the same city:**

- Number of channels for FM Radio broadcast in Category A+, A, B, C cities, now changed to districts basis, which may have been reduced due to non availability of frequencies during Phase-II bidding, may be restored as envisaged in Phase-II, subject to technical feasibility.

#### **Restriction on Ownership of Channels in a district:**

- At least three channels excluding AIR in any district will be given to three different entities excluding AIR. Once this condition is met, the existing operator/ permission holder may be declared successful for any channel where his bid is highest subject to the condition that maximum number of channels to a permission holder in the district will not be more than 50% of total channels in the district.
- The existing ceiling limit of 15% of total FM Radio channels in the country permitted to a permission holder is no longer valid.

#### **FDI limit;**

- The FDI cap including FII for FM Radio broadcasting permission holders, who are interested to broadcast news, may be enhanced to 26% from present 20%. Similarly, the FDI cap including FII for FM Radio broadcasting permission holders, who do not opt for news

broadcasting, may be enhanced to 49% from present 20%.

#### **Change in ownership of the permission to broadcast FM radio**

- No change in holding pattern of the shares shall be permitted till start of the FM Radio broadcasting in any circumstances.
- Diluting the share holding by majority shareholders is allowed after start of FM radio operation, subject to condition that their share holding does not reduce below 51%, with the prior permission of Ministry of I&B. Any change in ownership or further dilution shall be permitted after a period of three years from the date of operationalisation, after obtaining written permission of the Ministry of Information & Broadcasting.

#### **Relaxation of fee structure for North-East and J&K:**

- The rate of Annual fee may be reduced to 50% of what is being charged from all existing permission holders in other areas for private FM Radio broadcasters in NE and J&K region for an initial period of three years.
- Networking of FM radio programs across entities
- All private FM Radio broadcasters may be permitted networking within their network. Networking across the permission holders should not be permitted.

#### **News and Current affairs on FM Radio:**

- FM Radio broadcasters may be permitted to broadcast news taking content from AIR, Doordarshan, authorized TV news channels, UNI, PTI and any other authorized news agency. No other source of news is permitted at present.

#### **Co-channel spacing:**

- Co-channel Spacing within district presently used may not be changed and kept at 800 KHz. Similarly 400 KHz channel spacing between two channels in adjacent districts is maintained.

#### **Co-location of transmitters:**

- All successful bidders may be mandated to co-locate their transmitters with existing facilities of All India Radio if available and technically feasible within a pre-defined period say 3 months. In the absence of AIR facilities, the successful bidders may form consortium and set up required infrastructure.

#### **Floor price of the bid:**

- The Reserve OTEF (One Time Entry Fee) should be fixed at 50% of the highest bid price in a District.
- Minimum annual fee for a district shall be calculated based on 5% of reserve OTEF.

#### **Content Outsourcing**

- In order to encourage diversified content development, there should be no restriction on the outsourcing of content production as well as leasing of content development equipment.

#### **Auto Renewal of permission**

- There should be provision for automatic renewal of permission to only district level permission holder of FM Radio broadcasting.
- Extension for renewal should be requested 4 months in advance of expiry of permission period.
- Permission holder shall pay the required amount within one month from the date of receipt of such request from Ministry of Information & Broadcasting
- Ministry shall issue permission for extension of operation period for another 10 years in one-month time from the date of receipt of such payment.

#### **Recommendation on support for Rural Wireline Connections, Installed before 1<sup>st</sup> April 2002 from Universal Service Obligation Fund (USOF), on Phasing Out of Access Deficit Charges (ADC)**

TRAI released its Recommendation on 27<sup>th</sup> March 2008 on Support for Rural Wireline Connections,

installed Before 1<sup>st</sup> April 2002 from USOF, on Phasing Out Of Access Deficit Charges (ADC). As mentioned earlier, ADC regime was put in place by the Telecom Regulatory Authority of India (TRAI) in 2003 through its Interconnect Usage Charge Regulations to compensate the incumbent for rental/local call charges and any other below cost tariffs with the objective of making the basic telecom services affordable to the common man and promoting both universal service and universal access. ADC, however, cannot be continued in perpetuity without causing distortions in the market and putting undue burden on consumers. References were made to DoT informing that ADC regime is slated to be phased out in 2008-09 and the Department of Telecommunications (DoT) may consider support from Universal Service Obligation Fund (USOF) to fixed lines in rural areas beyond 2007-08 to compensate for the below cost rentals and local call charges to keep the services provided through this network affordable for rural population.

In the process of carrying out its annual review of the "Telecommunications Interconnection Charges Regulations" a consultation paper was issued by the Authority on 21<sup>st</sup> January 2008. This consultation paper discussed role of ADC and USO in detail. It was mentioned that TRAI has been proposing phasing out of ADC and taking over of the responsibility of supporting rural wirelines by USOF mainly for two reasons:

- Firstly, to avoid an instrument like ADC, which creates market distortions and become undue burden on the consumers due to its overuse. Secondly, it is important to sustain and encourage incumbent's rural operation not only for bridging urban-rural divide but also for smooth introduction and proliferation of broadband services on wireline in rural areas. The Authority had therefore forwarded a copy of the Consultation Paper through letter dated 25<sup>th</sup> January, 2008 for necessary action by DoT. On the question of whether ADC should be abolished and BSNL should be given subsidy from USOF for sustaining its fixed wireline

operations in rural areas, the majority of stakeholders expressed their view in favour of abolition of ADC and supporting BSNL's fixed rural network through USOF.

- On the basis of the comments of the stakeholders, discussions in the open house and internal analysis TRAI finalized its recommendations in this regard and sent it to DoT. The Recommendations are summarized below:

- BSNL should be provided support for sustenance of fixed wirelines installed before 1<sup>st</sup> April 2002 through USOF. This amount should be Rs 2000 crores per year for a period of 3 years effective from 1<sup>st</sup> April 2008 and payable quarterly in advance. This support has to be reviewed in the third year for further continuation.
- BSNL should furnish a certificate for funds having been utilized towards operation and maintenance of RDELs provided prior to 1<sup>st</sup> April 2002, before the release of next quarterly instalment.
- Any amount that BSNL may receive on account of temporary continuation of ADC during this period of changeover shall not be adjusted against the amount payable from USO fund

## **ENSURING COMPLIANCE OF THE TERMS AND CONDITIONS OF LICENSE**

This function is discharged by TRAI through a multi pronged approach. One of these approaches is through analysing reports received from the service providers. Another approach is through feedback/ representations received from consumers/ consumer organizations, experts, Members of Parliament, etc. In certain cases, TRAI on its own initiative has taken action for ensuring compliance of terms and conditions of license.

TRAI gets quarterly reports from service providers of different telecommunication services regarding their

performance, network roll out, quality of service, etc. These reports provide an input to TRAI on the compliance by service providers of several parameters stipulated in the license. Wherever required, meetings are held with service providers for reviewing their performance and compliance with the license terms and conditions.

## **STEPS TAKEN TO PROTECT THE INTEREST OF CONSUMERS OF TELECOMMUNICATION SERVICES**

In January 2001, the TRAI issued a Regulation formalising the mode of its interaction with Consumer Organisations and NGOs related with telecom functions. This regulation provides the modalities for free registration of NGOs and Consumer Organizations with the TRAI to enable two-way interaction on a sustainable basis. The registered Consumer Organizations/NGOs are kept informed about the developments by providing them with consultation papers, involving them in the consultation process and arranging their meetings with the Authority. The consumer groups and NGOs contribute to the policy formulation process of TRAI by providing their comments on the issues under consideration and by bringing important consumer concerns to the notice of TRAI.

At the end of March 2007, 25 consumer organisations / NGOs were registered with TRAI. A review of the organisations registered with TRAI indicated that more than 11 states in the country had no representation in the registered group of consumer organisations. One reason for this was certain eligibility conditions imposed in the guidelines for registration. Accordingly in order to get more organisations registered from those states which are not represented or inadequately represented, the Authority amended the Regulation by notifying the Regulation on Guidelines for Registration of Consumer Organisations / Non Government Organisations (NGOs) and their Interaction with TRAI Second Amendment 2007 dated 21<sup>st</sup> August 2007. The Amendment provided for registration of those organisations with one year of experience in areas

representing the views of the consumers and assisting them in redressal of complaints regarding shortfall in the supplies and deficiency in services. After the Amendment, 15 more consumer organizations, of which 5 belonging to the North East were registered. Thus, at the end of March 2008, in all there were 40 consumer organisations registered from all over the country.

Though TRAI is not mandated to consider individual consumer complaints, it takes up such complaints if they relate to systemic problems/shortcomings. It also follows up complaints by consumer organizations. Based on such complaints, the Authority has addressed a number of issues relating to tariffs for cellular mobile services, the provision of fixed line phones in a non-discriminatory manner, unusually low call completion rates and failure of a network at specified place, etc.

In the present telecom scenario, when several service providers are competing to cater to the needs of different segments of consumers in this sector offering multiplicity of plans and packages, some difficulties to the consumers and their grievances are expected. To address the difficulties and redress their grievances, the Telecom Regulatory Authority of India has made regulations and issued several directions and orders under the Telecom Regulatory Authority of India Act, 1997. However, a large number of consumers are not aware of their rights and privileges under the regulations, directions and orders made or issued under aforesaid Act.

The Telecom Regulatory Authority of India has, therefore, decided to organize a series of workshops in different parts of the country as Capacity Building for Consumer Advocacy Groups (CAGs) & NGOs and to create awareness among the consumers about the initiatives taken by TRAI to protect their interest so that they are able to get qualitative service in the Telecom & Broadcasting sectors, exercise their rights and redress their grievances. The service providers are also invited to these workshops so that they can be partners in the process of protection of consumers' interest and redressal of their grievances and offering

qualitative services. Accordingly, 3 Workshops – one each at Chennai on 25<sup>th</sup> May, 2007; Pune on 16<sup>th</sup> November 2007; and Shillong on 24<sup>th</sup> November 2007; were organized aimed at Capacity Building and generating awareness amongst the consumer organizations about these initiatives. Apart from the Regional Workshops, a meeting of all the consumer organizations and NGOs registered with TRAI was held in New Delhi on 8<sup>th</sup> September 2007 as provided in the regulation on registration of consumer organizations, for better understanding of the problems of consumers across the country. Since, during the year 15 new organizations were registered with TRAI, a two-day orientation programme was also held in TRAI office on 13<sup>th</sup> and 14<sup>th</sup> March 2008. This provided an opportunity to the newly registered CAGs to interact with the various divisions of TRAI and also with the consumer organizations registered earlier.

With a view to protect the interest of Consumers the Authority apart from the initiatives mentioned above took number of consumer centric measures the details of which are mentioned below:

#### **(i) Mechanism for Protection of Telecom Consumers and Redressal of their Grievances**

Telecom Consumers Protection and Redressal of Grievances Regulations, 2007 was issued on 4<sup>th</sup> May 2007, which provides for effective, speedy and inexpensive redressal of grievances of telecom consumers. As per this Regulation, Telecom Service Providers, who are providing Basic Telephone Service, Unified Access Services, Cellular Mobile Telephone Service and Broadband Service, and certain ISPs providing Broadband service are mandated, from the date of commencement of the Regulation, to establish Call Centres appoint or designate Nodal Officers for each area so that they are easily accessible and available to consumers for redressal of the grievances and also appoint one or more appellate authorities in each licensed service area. Service providers are also mandated to publish "Manual of Practice for handling consumer complaints" which basically provides for consumer rights, obligation and

resolution of grievances. The details of the regulation have been discussed earlier in this part of the Report.

**(ii) Direction on information to be included in the Telephone Bills issued to the consumers by the service providers.**

For bringing transparency in billing the Authority vide direction dated 4<sup>th</sup> May 2007 directed all the service providers to include certain information, such as name of the applicable Tariff Plan methodology applied for calculation of bill including pulse rate and charge for various calls, applicable credit limit contract details of grievance redressal mechanism, gist of certain consumer oriented orders / Direction etc. in the telephone bills issued, on or after 1<sup>st</sup> August, 2007, to the consumers by the service providers.

**(iii) Guidelines for transparency in charging of SMS on certain specified days**

Several telecom operators are offering free/ discounted SMS Schemes. Such offers are made either as part of regular tariff plans with or without an additional monthly payment or are offered as packs valid for specified period or as promotional schemes. In the recent times some operators have reported to TRAI that such free/discounted SMS under various plans/packs shall not be available to customers on certain specified days which happen to be social, cultural/ festival days. The Authority asked the service providers to follow certain principles to ensure transparency in the charging of SMS on such days which is generally termed as 'SMS blackout' days. Under these Guidelines any operator implementing separate tariffs on blackout days has to ensure the following:

- The 'black out' days i.e. the days on which free/ concessional SMS are not available shall be clearly indicated in the package itself.
- The SMS charges applicable on these special days shall be explicitly conveyed to the subscribers.
- The dates corresponding to the black out day shall not be altered after the pack is subscribed by the customer.

- There shall be no addition to the list of black out days after the pack is subscribed by the customer.

**(iv) Guidelines for no Hike in tariff during the lock-in period**

The Authority issued guidelines on 4<sup>th</sup> June, 2007 to all Access Service Providers stating that while offering and implementing handset bundled tariff schemes, hike in any item of tariff during the period which a customer is locked-in to a network will be inconsistent with the provisions of the 43<sup>rd</sup> Amendment to TTO. Thus, no hike in tariff is permissible at any time during the lock-in period.

**(v) Disincentive for Unsolicited Commercial Communications**

The Telecommunication Tariff (Forty-Fifth amendment) Order, 2007 was issued on 5<sup>th</sup> June, 2007 specifying call charges of Rs.500/- each for unsolicited commercial communication with a view to discourage and disincentivise unsolicited commercial communications. Subsequently to increase the effectiveness, The Telecommunication Tariff (Forty-Seventh Amendment) Order, 2008 was issued on 17<sup>th</sup> March, 2008 specifying call charges of Rs. 500/- for the first unsolicited Commercial Communication and Rs. 1000/- for the subsequent Unsolicited Commercial Communication. The details of these Tariff orders have been discussed earlier in this part of the Report. By issuing Telecom Unsolicited Commercial Communications (Amendment) Regulation dated 17<sup>th</sup> March 2008, the service providers were made liable to pay an amount by way of financial disincentive, not exceeding Rs.5000/- (Rupees five thousand) for the first non-compliance of the Telecom UCC Regulation 2007 (4 of 2007) and in case of second or subsequent such non-compliance, an amount not exceeding Rs.20000/- (Rupees twenty thousand) for each such non-compliance.

**(vi) Establishment of Telecommunications Consumers Education and Protection Fund**

The Regulation titled 'Telecommunications Consumers Education and Protection Fund

Regulations, 2007' was issued on 15<sup>th</sup> June, 2007 to establish Telecommunication Consumers Education and Protection Fund for consumers' awareness, education and protection of their interest. The Fund shall be utilised inter alia to undertake programmes to educate the consumers of the Telecommunication services; to conduct studies and market research projects; and to organize seminars, symposia and workshops on the subject of consumer welfare and consumer education in the field of telecommunication. The details of the Regulation has been discussed earlier in this Part of the Report.

**(vii) Guidelines to all IPLC & Domestic Leased Line Service Providers regarding discount criteria on the ceiling tariff**

Guidelines were issued on 14<sup>th</sup> August, 2007 to all IPLC & Domestic Leased Line Service Providers advising to provide details of the discount criteria on the ceiling tariff, i.e., the basis on which the discounts are to be offered to the buyers of domestic and international bandwidth and other related services in their websites, so as to ensure that the consumers of these services have access to information on prices including discount criteria.

**(viii) Guidelines prohibiting prescription of separate charges for rectification of defects**

Telecom Regulatory Authority of India examined tariff plans of the telecom companies offering wire-line services which inter alia involves a new feature of charging separately from the consumers on account of rectification / defects / repair and visiting charges etc. for rectifying interruption in service. As per the terms and conditions of the license issued to the service providers, the responsibility for maintaining the performance and quality of service standards rests with the service providers and they must ensure an un-interrupted service with the quality standard prescribed by TRAI. The customer does not choose the quality of material being used in the network by the company and is not responsible for the bad workmanship in the cable, drop-wire, DP etc. and the customer has no say in determining the quality of the

network elements. The terms and conditions of the license impose an obligation to provide (transmitting and receiving) un-interrupted two way speech and ensure continuity of service to its customers. The service providers are expected to maintain quality of service. The interruptions and rectifying such interruptions are matters relating to service; and quality of such service; and customers cannot be charged to rectify such interruptions.

The Authority examined the tariff reports submitted by one of the Service Provider proposing additional charges for rectification of defects etc. The Authority held that such tariff packages are anti-consumer and cannot be permitted. There is no justification for any such charges where the up keep of the services is an integral part of the service itself. Such unjustified charges are detrimental to telecom consumers. The Authority also asked the service provider to refund such charges recovered, if any, from the consumers.

**(ix) Relaxation in the Eligibility Criteria for Registration of Consumer Organizations/Non Government Organizations (NGOs) with TRAI**

The amendment Regulation titled Regulation on Guidelines for Registration of Consumer Organizations/Non Government Organizations (NGOs) and their interaction with TRAI (Second Amendment) 2007 issued on 21<sup>st</sup> August 2007 provided for registration of even those organisations with one year of experience in areas representing the views of the consumers and assisting them in redressal of complaints regarding shortfall in the supplies and deficiency in services. After the Amendment, 15 more consumer organisations of which 5 belong to the North East were registered. Thus, at the end of March 2008, in all there were 40 consumer organisations registered from all over the country. The detailed background of the Regulation have been discussed earlier in this part of the Report.

**(x) Direction on Caller Line Identity Presentation (CLIP) facility**

The Authority had noticed that certain service providers were providing CLIP facility as a compulsory

chargeable Value Added Service. Examination by the Authority showed that no significant amount of work is involved in presenting the caller line identity to the called subscriber and thus the incremental cost of providing CLIP facility is negligible. Thus the Authority found no justification in making CLIP facility a compulsory chargeable item. The Authority recalled its earlier Direction issued on 16<sup>th</sup> September, 2005 that all monthly fixed recurring charges including CLIP which are compulsory for a subscriber under any given tariff plan shall be shown under one head to make it easier for the consumer to make a choice from among all tariff plans available in the market. Though the Authority refrained from mandating a cost based tariff for CLIP facility keeping in line with the policy of tariff forbearance, in order to protect the interest of consumers, the Authority re-emphasized the need for enhanced transparency with regard to the charging for CLIP.

Through this Direction the Authority mandated that Charges for CLIP facility cannot be made a compulsory item of tariff for the subscribers in any tariff plan. Whenever CLIP charges are sought to be levied by Service Providers, this shall be optional for subscribers.

**(xi) Direction to Access Service Providers on provision of Value Added Services with regard to explicit consent and unsubscribing.**

The Authority had received a number of complaints from consumers alleging charging by the service providers for the value added services without their consent. Also in some of these complaints it was alleged that some service providers do not accept any request for unsubscribing value added services at its customer care/help line/toll free call centre numbers and such consumers were directed to lodge their requests at some other telephone numbers which are chargeable at premium rates. Examination of these complaints revealed that in many cases the service provider has reported that the consent of the consumers were obtained through tele-calling while the consumers in their complaints have denied the fact of having given any such consent. Also the service

provider could not provide any record of the offer made to the consumers and the consent taken from consumers for the provision of value added services.

The reports of Audit of the Metering and Billing system of some of the service providers for the year 2006-07 submitted to TRAI by such service providers in accordance with the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 also revealed many instances of complaints wherein customers have been charged for dialer tones and other value added services activated without the explicit consent of the consumers and that waivers or adjustments have been given in only those cases where customers have complained and that in most cases, no action has been taken by the service providers to address all affected customers who have not complained.

The Authority, after due consideration of the matter, felt that any offer to the customer needs to be presented in such manner so as to ensure that the customer understands the implications of such offer by the service provider before giving his explicit consent for the value added services offered and such explicit consent should be verifiable with reference to records maintained by the service provider. Also, charging of premium rates for calls made for registering requests for unsubscribing any value added service is not in the interest of the consumers. In these circumstances, to protect the interest of consumers, the Authority issued the following directions.

- To provide the facility of unsubscribing of any value added service through telephone calls and SMS, free of charge, and through e-mail or FAX or any other means and also give adequate publicity to such facilities through their websites and by communication through SMS and other means.
- In case of any offer for any value added services made to the customer in writing or through SMS or FAX or e-mail, such offer shall contain all relevant details of the value added service offered, including the charges thereof, and

before activation of such value added service the explicit consent of the customer shall be obtained through telephone or SMS or FAX or e-mail or by other electronic means.

- In case of offer for any value added service made through tele-calling or through any unwritten means, such offer shall be subsequently made in writing or through SMS or FAX or e-mail, containing all relevant details of the value added service offered, including the charges, and before activation of such value added service the explicit consent of the customer shall be obtained through telephone or SMS or FAX or e-mail or by other electronic means.
- The explicit consent given by the customer shall be acknowledged through SMS before or immediately after activation of the value added service and also such explicit consent shall be reflected in the next bill issued to the customer.
- The complete records of the explicit consent obtained from the customer and records of the acknowledgements of such explicit consent by the service provider shall be kept by the service provider for verification, for a period of one year from the date of such explicit consent.

In line with the direction, some of the Service Providers were directed to refund the charges levied for the provisioning of Value Added Services without the explicit consent of the consumers.

#### **(xii) Guidelines regarding Code of Conduct in respect of the outsourced agencies for collection of dues.**

The Authority had been receiving complaints from consumers about the procedures being adopted by service providers for collection of outstanding dues. In this background, Authority examined the practices being followed by the service providers after seeking the relevant information from the service providers on the outstanding dues, recovery methods / practice and arrangement with third parties for recovery/ collection of dues from consumers to see whether the collection processes, in any way, violate the

obligation of service providers under the licence or are against the interest of consumers. A meeting was also held with all the Telecom service providers in the month of October, 2007 and various issues including the code of conduct, provisions in the contracts/ agreements with outsourced agencies for collection of dues were discussed. After considering the views of the service providers during the meeting and also examination of the various practices followed by the different service providers, the Authority, keeping in line with the principles of soft touch regulation focusing primarily on self regulation issued these guidelines for voluntary adoption by the service providers for the recovery/collection of dues from telecom consumers through outsourced arrangements. The salient features of the guidelines are given below:

#### **Dues Recovery Policy:**

- The service providers should have a transparent policy on mode of recovery of dues from consumers. Such policy should be put on the website of the service provider for information of consumers.
- In case the service provider has engaged outsourced agency, the service provider needs to ensure that outsourcing arrangement does not absolve them of their responsibility to fulfill their obligation to consumers.
- The service provider should have a formal Code of Conduct for outsourced agency and its employees/agents for collection of outstanding dues from consumers. Such Code of Conduct should also be put on the website of the service provider for information of the consumers.
- Outsourcing arrangement should not affect the rights of consumer against the service provider.

#### **Obligation of Telecom Service Providers:**

- Service provider need to ensure effective complaint handling mechanism for billing complaints.
- Service provider should ensure that before a collection case is given to an outsourced agency,

advance intimation is given to customer regarding his outstanding dues.

- Service Providers shall publish the names and telephone numbers of its outsourced agencies and their authorized staff in their website, service area wise.

#### **Appointment of Outsourced Agency and Contract Agreement:**

- Selection and eligibility criteria need to be specified.
- Agency appointed should have a clean record.
- Service provider should have written agreement with the outsourced agency which shall contain, amongst other things, the following:
  - Recovery Policy of the service provider, including collection of outstanding dues through collection agents.
  - Code of Conduct for the outsourced agency and its agents.
  - The procedures to be followed by agent of outsourced agency for collection of outstanding dues.
  - Penalties for contravention of the recovery policy, including collection through outsourced agency, and code of conduct by outsourced agency and its agents.
  - Termination of contract.
- Agreement / contract should provide for regular training programs for agents of outsourced agency.
- Agreement/ Contract should also incorporate mechanism for continuous monitoring and assessment by the service provider of outsourced agency.
- Service Providers shall make appropriate provisions in their agreements/contracts with outsourced agencies to ensure that individuals with criminal background are not engaged as agents/employees of the outsourced agency.

- Outsourced agency shall not issue any legal notice on behalf of the service provider to any telecom consumer.

#### **Identification and role of Agent of outsourced agency:**

- Agent of outsourced agency should have photo Identity card.
- Agent of outsourced agency shall never misrepresent as lawyer / police or anyone belonging to any government agency.
- Agent of outsourced agency shall not act as legal representative or lawyer of service provider.

#### **Procedures & Conduct for agent of outsourced agency:**

- Agent of outsourced agency shall conduct himself while undertaking collection of the outstanding dues as per the Code of Conduct for outsourced agency and agents.
- Agent of outsourced agency shall be polite towards the customer so as to avoid allegation of bad behaviour.
- Agent of outsourced agency shall not threaten the customer by using abusive language or following any criminal means.
- Agent of outsourced agency shall call the consumer only from the telephone numbers published in the Website of the Service Providers.
- Agent of outsourced agency shall make calls to the consumer or visit the premises of consumers for collection of dues during 8:00AM to 09:00 PM only or the appointed time.

#### **(xiii) Mandating furnishing of hard copy of the bill free of cost to all the post-paid subscribers.**

TRAI had initiated a consultation process on 31<sup>st</sup> December 2007 on the issue of mandating access service providers to provide hard copy of the bill free of cost to its post-paid customers. Stakeholders in general overwhelmingly welcomed the proposal of

the Authority for mandating provision of hard copy / printed copy of the summary bill to the post paid consumers free of cost. The Authority after careful consideration of the provisions relating to billing in the Indian Telegraph Rules, 1951, license agreements for Cellular, Unified Access, NLD and ILD licenses, the views expressed by stakeholders and based on certain guiding principles and practices issued the 46<sup>th</sup> Amendment to the Telecommunication Tariff Order mandating provision of hard copy of bill free of cost to the postpaid Subscribers of Telecom Access Service. Salient features of the Tariff Order, effective from 24<sup>th</sup> January 2008, are as below:

- Hard copy of the bill / printed copy of the bill to be supplied free of cost for all postpaid customers of telecom access service.
- The Order is applicable across all types of tariff plans of Mobile (GSM and CDMA) and fixed line services in respect of post paid subscribers.
- Itemized bills for long distance calls will continue to be supplied free of cost by the access service providers.
- Itemized bill for local call remains under forbearance.

While mandating these provisions vide this Amendment to TTO, the Authority was inter-alia guided by the following principles and prevalent practices:

- i) Provision of hard copy of the bill would enable the customers to understand and satisfy themselves about the genuineness of the bill, facilitate making payments, verify the charges incurred by the consumer and monitor usage or expenditure by consumer which would not be possible if the bill is sent through SMS / e-mail.
- ii) Most of the consumers who own a phone may not be having access to computer/internet to obtain bill through e-mail.
- iii) Service providers of other sectors such as Electricity Corporation, Water Utility Services, Financial Institutions are not charging any amount for providing the hard copy of the bill.

- iv) Provision of itemized bill in respect of long distance calls free of cost has already been mandated.

**(xiv)** The Authority has documented its key contributions to the overall growth and development of the telecommunication sector and the initiatives to protect the interests of consumers. The contributions and the initiatives have been summarized in the two booklets issued during the financial year :

- A Journey Towards Excellence in Telecommunications
- A Handbook for the Consumers from the Telecom Regulator

The Authority has also taken steps to get these two documents published in vernacular languages for dissemination amongst the masses

Besides, the above measures the Authority carried out a detailed advertisement in the leading national dailies in English, Hindi and Regional Newspapers in January 2008 in order to give wide publicity and create awareness about the initiatives taken by it,

## **STEPS TAKEN TO ENSURE COMPLIANCE OF UNIVERSAL SERVICE OBLIGATION**

TRAI continuously monitors the status of USOF (Collection, allocation & disbursement) and activities supported from the fund. TRAI furnishes its views/ comments for successful implementation of various schemes supported from USOF.

## **OTHER MATTERS**

### **(I) Institutional Capacity Building Project of TRAI**

Under the Institutional Capacity Building Project of TRAI, funded by 'plan' budget, following studies/ consultancies were pursued during the year 2007-08:

- (i) Regulatory and Licensing Requirement for Spectrum Trading in India

- (ii) Study on Impact of Conditional Access System.
- (iii) Consultancy Project on Forward Looking Long Run Incremental Cost (FLRIC) model for Telecom Sector.
- (iv) Objective Assessment of QoS and Consumer Satisfaction Survey through an Independent Agency.
- (v) Workshop/Seminar on Regulatory and Technical Issues related to Next Generation Network.
- (vi) Audit of Quality of Service Standard Performance of MSOs for the quarter of April.07 to June.07

51 officials of TRAI have attended various international trainings during the year 2007-08 under the Institutional Capacity Building Project of TRAI funded under the Plan budget. The trainings imparted to the officers in International Organizations of repute has enabled these officers to gain international exposures on emerging trends and techno-regulatory issues. The expertise thus gained by these officers are best utilized in discharge of the regulatory functions in the telecom and broadcasting sector in the emerging scenario.

## **(II) A comprehensive proposal for Amendment to the Telecom Regulatory Authority of India Act, 1997**

In order to make the functioning of TRAI more effective a comprehensive proposal for amendment to the TRAI Act has been sent to Department of Telecommunications on 28<sup>th</sup> March 2008. The major amendments proposed in the Act are:

### **(i) Empowering TRAI to impose penalty / fine for violations of its Regulations/orders/ Directions**

At present TRAI has no power to impose any penalty / fine for violation of any of its regulations, orders or directions. The cognizance of offences under the Act is to be taken by the Court (under section 34) upon a complaint made by the Authority. The process of

initiating regular prosecution proceedings is not only cumbersome but detrimental to the effective implementation of the Authority's regulations, orders and directions.

### **(ii) Power to determine the terms and conditions of service of officers and staff of TRAI**

Prior to amendment to the TRAI Act in the year 2000, the power to determine the terms and conditions of service of the officers and staff was vested with the Authority. With the amendment to the Act the terms and conditions of service is now being determined by Government. In other Regulatory Bodies like SEBI, IRDA and Pension Authority the power is vested with these Authorities. For the sake to maintain autonomy of the regulator it is necessary to allow power to determine the terms and conditions to the Regulator. The inferior terms and conditions of service has led to the large scale attrition of the human resources from TRAI and the deputationists from other organizations are unwilling to get absorbed in TRAI.

### **(iii) Rationalising the terms and conditions of Chairperson and Members of the Authority in line with other Regulatory Authorities**

The tenure of three years for the Chairperson and Members of the Authority is very short for fast changing sector like telecom. In the other Authorities like Competition Act and IRDA five year tenure has been prescribed for the Chairperson and Members. Further the provisions relating to the commercial employment after completion of tenure, removal from office needs to be amended to bring it in conformity with the provisions of other statutes.

## **(III) Bi-lateral meeting held with International Regulatory Authorities during the year**

### **i) OfCom, United Kingdom**

A high-level delegation from Ofcom, UK headed by Chairman Lord David Currie visited TRAI on 15<sup>th</sup> October 2007. Various developments in the telecom sector were discussed in the bilateral



**Chairman, TRAI welcoming Lord. David Currie,  
Chairman, OfCom**



**Interaction between Ofcom delegates and  
TRAI Officers**



**OfCom delegation with the officers of TRAI and DOT**

meeting. The main agenda for discussion included investment in communication industry, public grievance handling, competition in broadband, convergence, regulation of IPTV and mobile TV, monitoring quality of service etc.

## ii) European Union

A delegation of the European Union, headed by Commissioner for Information Society and Media, Ms. Viviane Reding, visited TRAI on 27<sup>th</sup> March 2008. The purpose of visit was to exchange views on various



**Chairman & Members, TRAI in discussion with  
delegates of European Union**



**Chairman and Members, TRAI with Mr. Nikolaos  
Koulouris, Vice President, EETT, Greece**

developments in the field of ICT between India and European Union.

### **iii) Hellenic Telecommunications and Post Commission (EETT) Greece**

Mr. Nikolaos Koulouris, Vice President, EETT, Greece visited TRAI on 28<sup>th</sup> December 2007. It was agreed to sign a Memorandum of Understanding (MoU) between the two regulatory bodies for bilateral exchange of information. After obtaining the clearance from Ministry of External Affairs (MEA), the MoU was forwarded to EETT for initiating the process of signing the MOU.

### **iv) National Telecommunication Corporation (NTC), Sudan**

A working-level delegation from NTC visited TRAI from 16<sup>th</sup> to 19<sup>th</sup> October 2007 on an attachment programme. The three member delegation was headed by the Head, Standardization (Specification & Type Approval). The main topics of interaction were mobile communication, spectrum allocation, quality of service, infrastructure sharing, ISP/VOIP regulation, Internet policies, NGN, Broadcasting services, International bandwidth pricing, cable landing stations & universal access. The delegation was also taken for field visits.

### **v) Visit of TRAI delegation to National Telecommunications Regulatory Authority (NTRA), Egypt**

On 28<sup>th</sup> March 2007, an MoU was signed between TRAI and NTRA, Egypt for co-operation in the field of

telecom regulation. This joint declaration paved the way for Annual Meeting of TRAI and NTRA to discuss various issues related to telecommunication regulations. To kick-start the process of implementation of MoU signed between the two Regulators, a two member delegation from TRAI visited NTRA, Egypt in July 2007 to deliberate on issues relating to (i) Quality of Service; (ii) Universal service; (iii) Consumers in the eyes of the Regulator; and (iv) management of frequency spectrum.

### **(IV) Participation of Chairman, TRAI in the Global Symposium for Regulators (GSR)**

Chairman, TRAI attended the 8<sup>th</sup> Annual Global Symposium for Regulators (GSR) held in Pattaya, Thailand from 11<sup>th</sup> to 13<sup>th</sup> March 2008. It was organized by International Telecommunication Union (ITU), a UN Body, in collaboration with Ministry of Information and Communication Technology and National Telecommunication Commission, Thailand. The symposium was held to explore new regulatory measures for encouraging investment and growth in information and communication technologies. Chairman TRAI held one-to-one meetings with the dignitaries namely, Ambassador Ronaldo Mota Sardenberg, Brazil President; Mr. Hamadoun Toure, Secretary General ITU; Mr. Sami Al Basheer, Director BDT; Mr. Kevin J. Martin, FCC Chairman.



# **PART-IV**

## **ORGANISATIONAL MATTERS OF TELECOM REGULATORY AUTHORITY OF INDIA AND FINANCIAL PERFORMANCE**





# 4.1

## Organizational matters of Telecom Regulatory Authority of India

**T**his section provides information on organizational matters of TRAI relating particularly to organization, funding, human resources covering the areas of recruitment, training and seminars and some general issues.

### ORGANIZATION

The Telecom Regulatory Authority of India was established under the Telecom Regulatory Authority of India Act, 1997. The TRAI Act, 1997 was subsequently amended vide Telecom Regulatory Authority of India (Amendment) Act, 2000. The Authority consists of Chairperson, two whole-time Members and two part time Members.

The Secretariat of TRAI is headed by the Secretary and works through ten functional divisions – Fixed Network, Mobile Network, Converged Network, Economic, Financial Analysis, Administration & Personnel, Quality of Service, Legal, Broadcasting & Cable Services and Regulatory Enforcement. A staff of 178 (as on 31.03.2008) is handling the work in the Secretariat, which performs the tasks assigned to it by the Authority in the discharge of its functions. Wherever necessary, Consultants are engaged on the following basis:

- Individual Consultants on retainership basis
- Consultants for specific projects
- Consulting Firms on retainership basis
- Consulting Firms for specific projects

Engagement of Consultants is either on secondment or assignment basis.

## Staff strength of TRAI (as on 31<sup>st</sup> March, 2008)

As on 31<sup>st</sup> March 2008, the staff strength of the TRAI was as detailed in Table 4.1 and Table 4.2.

**Table 4.1 : Secretary, Pr. Advisors / Advisors Level**

Sl. No.	Name of the Officer	Post Held
1.	Sh. R.K. Arnold	Secretary
2.	Smt. Sadhana Dikshit	Principal Advisor (financial analysis & ifa)
3.	Sh. R.N. Choubey	Principal Advisor (B&CS)
4.	Sh. V.K Bhasin	Principal Advisor (Legal)
5.	Sh. N. Parameswaran	Principal Advisor (Regulatory Enforcement)
6.	Sh. Lav Gupta	Principal Advisor (Fixed Network)
7.	Sh. M.C. Chaube	Advisor (QoS & Fixed Network)
8.	Sh. Sudhir Gupta	Advisor (Mobile Network)
9.	Sh, Binod Kumar	Advisor (Administration & Personnel)
10.	Sh. S.K. Gupta	Advisor (Converged Network)
11.	Sh. M. Kannan	Advisor (Economic)
12.	Sh. K.J.S. Bains	Advisor (Legal)

**Table 4.2 : Below Advisor Level**

S.No.	POSTS	Sanctioned	Actual
1.	Joint Advisor / Deputy Advisor	20	18
2.	Senior Principal Private Secretary	02	02
3.	Senior Research Officer	28	23
4.	Principal Private Secretary	07	03
5.	Technical Officer	12	07
6.	Section Officer	17	17
7.	Private Secretary	14	11
8.	Librarian	01	01
9.	Assistant	40	39
10.	Personal Assistant	18	17
11.	Stenographer Grade 'D'	02	0
12.	LDC	05	04
13.	Drivers	14	14
14.	PCM Operator	02	02
15.	Despatch Rider	01	01
16.	Group-D	25	08
<b>Total</b>		<b>208</b>	<b>166</b>

TRAI officials were initially drafted on deputation from the Government Departments. These deputationists with relevant experience in the fields of telecommunication,

economics, finance, administration, etc., are initially appointed for two years and thereafter, if required, requests are sent to different Government departments for extending their deputations. Seeking extension of deputations in respect of trained and experienced existing employees has often proved to be a time taking process and not always an effective process. While the scope, scale and complexity of Authority's functions continue to grow at a fast pace, the Authority is continuously facing the problem of losing trained and experienced personnel due to frequent repatriation of the existing personnel to their parent departments. The Authority, therefore, constituted a cadre of officers and staff with special expertise relevant to the new field of telecom regulation by offering them the option of taking permanent absorption in TRAI. However, many middle and senior level officers who are on deputation did not exercise option for

permanent absorption in TRAI on account of unattractive terms and conditions.

## Funding

TRAI is an autonomous body and it is wholly funded by grant received from the Consolidated Fund of India. The total expenditure on the functioning of TRAI in the year 2007-08 was Rs. 25.00 crores. This comprises of Rs.21.75 crores under the Non-Plan and Rs.3.25 crores under the Plan Budget – ‘Institutional Capacity Building Project’; covering consultancies and training programmes.

TRAI is of the view that in order to perform effectively as an independent regulator, it should be funded from a minor portion of the licence fees recovered as a cost of administration from those whom it regulates, and it should be empowered with the flexibility in determining the terms and conditions of its employees to enable it to recruit talents / professionals from non-government sources also at senior and other levels. It is worth mentioning that some other national regulatory bodies like IRDA and SEBI have been empowered to recover / levy fees from the sector they regulate and these authorities have the flexibility to use the amounts so realised as per the requirements of their functioning.

## HUMAN RESOURCE

### i) Recruitment

The Authority has constituted its own cadre of officers and staff by way of absorbing the officials who are

on deputation to TRAI from various Ministries and Departments. However, most deputationists, particularly in the senior and middle levels did not exercise option for permanent absorption. Therefore, the recruitment of personnel for its Secretariat by way of deputation from other Ministries / Departments / PSUs still continues. This is due to two reasons. One, the prevailing remuneration package does not attract independent talent with expertise and experience in the areas covered by the Authority. Two, among Government employees, the relevant expertise is available mainly in the Ministries or with the Government owned Telecom Operators. Even for this group, the remuneration package, which the Authority is in a position to offer, is not handsome enough to attract appropriate talent. Hence, the Authority is facing major difficulties in getting appropriate personnel for its secretariat.

As regards the terms and conditions of service in the TRAI, the opinion in the Government circles has mostly been that these should be the same or almost similar to the Government Service Rules. Such a view overlooks the fact that the TRAI is a specialised body, which requires expertise in different areas of telecommunication and therefore needs to attract persons not only from the Government but also from the market. To attract the appropriate talent, TRAI's terms and conditions of service must be competitive with the prevailing market terms and conditions. At the very least, TRAI should be able to provide terms and conditions applicable in general to the telecom companies and PSUs.



**Chairman, Telecom Regulatory Authority of India Addressing the Officers & Staff on New Year Day, 2008**

## ii) Training

The TRAI has given utmost importance to its HRD programme with a view to develop expertise and ability of its staff to handle vast amounts of data to monitor the various developments and proposals with respect to tariffs and quality of services standards, conduct and co-ordinate surveys on Quality of Service issues and other consumer related matters. This initiative has proved to be useful in organising and participating effectively in the consultative process for the Authority, both through the preparation of consultation papers and analysing the feedback and responses received in writing and also during the Open House Discussion meetings, and in developing the policy framework to address the various issues which arise in regulating the telecom sector. In selecting/designing training programmes/workshops, TRAI's endeavour is to impart diverse skills for macro level policy framing and handling of large mass of techno-economic operating details relevant for implementation and monitoring of the policies. The immense logistical as well as analytical preparation involved in this process imply the need for staff which is highly trained and knowledgeable and also adaptive and flexible in its approach and functioning. Since special programmes need to be identified or designed and run to meet the specific needs of TRAI staff to address the diverse specialised needs of their task, the Authority is working closely with a number of institutes and organizations such as Indian Institute of Management (IIM), National Productivity Council (NPC), Institute of Secretariat and Training Management (ISTM) etc. In addition, TRAI has also sponsored its officers for international training under the 'Institutional Capacity Building Project' for further developing their expertise within the organization.

A total number of 51 officers were deputed during the year to attend training programmes conducted by the various international organizations viz. InterConnect Communications Ltd., Public Utility Research Centre, Telecommunication Executive Management Instt. Of Canada, The Institute of Public-Private Partnership, International Telecommunication

Union, Royal Institute of Public Administration International, Goulet Telecom International and University of Florida. The officers have received valuable inputs through these trainings and have enriched their skills in their respective fields. Also, 32 officers / officials of TRAI were also deputed for training programmes conducted by various training institutions within the country.

TRAI also has a system of in-house training and workshops, where distinguished national and international experts are invited for interaction with its officers on latest development in the telecom sector which is another step for capacity building by TRAI of its officers and staff.

## SEMINAR / WORKSHOPS

In order to keep pace with the developments taking place globally, the Authority has deputed members of its staff to various international events, meetings and symposia to keep track of these developments and to gather valuable feedback/ inputs for its own policy formulation. TRAI's participation in deliberations at international level have not only contributed well to the international efforts being focused on issues, which are currently major regulatory concerns in India but have also helped in keeping the TRAI officials aware of International practices. During the year 23 officers were deputed to attend various seminars / conferences / meetings.

## WELFARE ACTIVITIES OF THE AUTHORITY FOR ITS EMPLOYEES

The working atmosphere within TRAI is infused with team spirit in which each and every member contributes willingly according to their competence in realizing the objective of TRAI to achieve the growth of telecom industry in India as well as to serve the telecom consumers to their utmost satisfaction. The work culture and ambience has contributed substantially in development of highly motivated and professionally competent workforce within the institutional framework of TRAI.

The HR related policies are framed by the Authority with a view to ensure Human Resource Management

in a fair and responsible manner for highest standard of conduct and adherence to TRAI's rules and policies. The policies are shaped to ensure satisfaction of staff members and implementation of adequate welfare measures for staff. In this direction, TRAI in the year 2007-08 made arrangement of transport for pick-up and drop of its staff to the nearest metro station; more reputed hospitals and labs were taken on panel of TRAI on CGHS rates. The Authority interacts with the officers and staff of TRAI regularly to understand their grievances.

Being a regulator of Telecom Sector, TRAI requires to keep itself abreast of the technological developments and emerging issues related to telecom regulation. Accordingly for maximum utilization of limited human resources available within the organization, TRAI gives utmost importance to imparting training to its officers and employees in national and International organizations of repute to hone their skills.

## **RIGHT TO INFORMATION ACT**

The Right to Information Act, 2005, which came into force from 12<sup>th</sup> October 2005 is also applicable to TRAI. Accordingly, in consonance with the provisions of the Act, the Authority has designated a Central Public Information Officer in TRAI assisted by a Central Assistant Public Information Officer. A Principal Advisor has been designated as the Appellate Authority under the Act. Name and designation of these officers and the information required to be published under Section 4 (1) of the RTI Act have been placed on the website of TRAI.

During the year 2007-08, 159 applications were received under the RTI Act. All these applications were promptly dealt with and replies have been sent within the stipulated period of 30 days.

## **ISO 9001 : 2000 CERTIFICATION TO TRAI**

TRAI had been awarded 2<sup>nd</sup> term of ISO 9001:2000 certificate, under License No.CRO/QSC /L-8002321.1, effective from 1<sup>st</sup> December, 2007 by Bureau of Indian

Standards (BIS) for a period of three years i.e. till 30<sup>th</sup> November 2010. To evaluate the implementation and effectiveness of Quality Management System (QMS) in TRAI, BIS has also conducted four surveillance audits and a renewal audit since December, 2004. The quality-auditors have found the QMS functioning satisfactorily and had recommended the continuance of the license issued by the BIS.

Conducting internal quality audit on a quarterly basis has also ensured the continual improvement in the system. TRAI has 43 internal quality auditors and 02 lead quality auditors for the purpose. The Quality Management System is also reviewed by the Secretary on a monthly basis and by the Top Management.

## **IMPLEMENTATION OF OFFICIAL LANGUAGE POLICY**

Under the supervision of Secretary, TRAI implementation of provisions of Official Language Act, 1963, Official Languages Rules, 1976 and other administrative instructions issued on the subject from time to time by the Department of Official Language (Ministry of Home Affairs) is ensured. Every effort is made to ensure the compliance of the Official Language policy of the Union Government in TRAI. All regulations, gazette notifications, Annual Report etc. are issued in bilingual form as per the requirement of the Government of India.

The implementation of Official Language policy of the Union Government by all the Divisions and Sections of TRAI is monitored by the Official Language Implementation Committee (OLIC) constituted under the Chairmanship of Advisor (A & P). Meetings of the OLIC are held regularly in every quarter. In these meetings, special emphasis is given on increasing the progressive use of Hindi in official work. Besides, a review of the current status of implementation of Official Language policy in TRAI is also done and future action-plan in this regard is drawn. Valuable suggestions of the members of the Committee are invited to gear up the work relating to Official

Language. During the period of the report, four meetings of OLIC were held on 28<sup>th</sup> June 2007; 13<sup>th</sup> September 2007; 7<sup>th</sup> December 2007 and 14<sup>th</sup> February 2008.

In compliance of the directives received from Department of Official Language (Ministry of Home Affairs) and Department of Telecommunications, "Hindi Pakhwara" was organized in TRAI from 14<sup>th</sup> to 28<sup>th</sup> September, 2007 during which various Hindi competitions viz. Hindi essay writing, poetry recitation, speech, noting/drafting, slogan writing, debate etc. were organized. A number of officers upto the rank of Joint Advisor and staff took part in the competition with great zeal and enthusiasm. On the occasion of Hindi Day viz. 14<sup>th</sup> September, 2007, a message from Chairman, TRAI for ensuring the compliance of OL rules/regulations was circulated among the officers/staff. Chairman, TRAI gave away the cash prizes and certificates of merit to the winners of the competitions in a function held on 29<sup>th</sup> October 2007. The "Hindi Pakhwara" proved successful in promoting and propagating the maximum use of Hindi in official work.

In order to increase the progressive use of Hindi in day-to-day official work, an annual incentive scheme viz. Varshik Protsahan Yojna has been introduced in TRAI for officers/employees for the last three years. Under this scheme, 10 cash prizes are given every year

to the officers/employees for doing their maximum official work in Hindi during the period of the scheme. This scheme has proved to be very popular among the staff and it has encouraged the staff to do their maximum of official work in Hindi throughout the year. With a view to facilitate officers/staff to do noting and drafting in Hindi and also to apprise them of the Official Language policy of the Union government, regular Hindi workshops are organized in TRAI. During these workshops dictionaries, administrative glossaries, help/reference books etc. are distributed to the participants which render them useful help while doing their official work in Hindi. During the period under report, two Hindi workshops were organized in TRAI on 19<sup>th</sup> September 2007 and 22<sup>nd</sup> February 2008.

The bilingual magazine 'TRAI DARPAN' is a representative in-house magazine of TRAI and it is published bi-yearly. On the auspicious occasion of the completion of ten years of the establishment of TRAI, the first issue of TRAI DARPAN was released by Chairman, TRAI in a function held on 29<sup>th</sup> October, 2007. This issue was widely appreciated both within the Authority and by the members of Hindi Salahakar Samiti of the Department of Telecommunications.

## 4.2

# Audited Accounts of TRAI for the year 2007-08

### AUDIT REPORT

**W**e have audited the attached Balance Sheet of the Telecom Regulatory Authority of India as at 31 March 2008 and the Income and Expenditure Account/Receipts and Payments Account for the year ended on that date under Section 19 (2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Section 23 (2) of the Telecom Regulatory Authority of India Act, 1997 (as amended in January 2000). These financial statements are the responsibility of the Telecom Regulatory Authority of India's management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This separate Audit Report contains the comments of the Comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum performance aspects, etc, if any are reported through Inspection Reports/ CAG's Audit Reports separately.
3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure in the

financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that:

- i. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of audit;
- ii. The Balance Sheet and the Income and Expenditure Account/Receipts and Payments Account dealt with by this report have been drawn up in the common format of Accounts prescribed by the Ministry of Finance.
- iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Telecom Regulatory Authority of India.
- iv. We further report that:

**A. Balance Sheet**

**(a) Liabilities**

**Current Liabilities and Provisions (Schedule 7) – Plan: Rs 4.32 lakh**

This does not include Rs 12.43 lakh, being the amount payable to M/s Frontier Economics Ltd., London, United Kingdom towards the fee for organizing training-cum-workshop for TRAI during 10<sup>th</sup> to 12<sup>th</sup> March 2008. Non-provision for this known liability has resulted in understatement of 'Current Liabilities and Provisions' (Plan), 'Expenditure' (Plan) and 'Deficit' (Plan) as well as overstatement of 'Capital Fund' (Plan) by Rs 12.43 lakh each.

**(b) Liabilities**

**Current Liabilities and Provisions (Schedule 7) Non Plan: Rs 504.08 lakh**

- (I) This does not include Rs 6.66 lakh, being the amount payable to the Center for Development of Advanced Computing (C-DAC) for the work relating to development of integrated application software (Rs 1.40 lakh), implementation of Public Key Infrastructure (Rs 4.06 lakh) and for hand holding support (Rs 1.20 lakh), which were completed before close of the year. Non provision for this known liability has resulted in understatement of 'Current Liabilities and Provisions' (Non-Plan) and 'Expenditure' (Non-Plan) as well as overstatement of 'Surplus' (Non-Plan) and 'Capital Fund' (Non-Plan) by Rs 6.66 lakh each.

The Management stated (August 2008) that the provision of this liability was not made because for making provisions for the year 2007-08, payments made up to 2 May 2008 were considered, as the dead line for preparation of accounts was 31 May 2008.

The Management's reply is not acceptable as the annual accounts of TRAI are prepared on accrual basis of accounting and not on cash basis of accounting. The liability had accrued and was known to the Management before close of the financial year 2007-08. As such necessary provision for the same should have been made in the books of accounts.

- (II) This does not include any provision based on actuarial valuation towards gratuity payable to regular employees of TRAI after their retirement. This was in violation of the mandatory provisions of Accounting Standard (AS)-15 issued by the Institute of Chartered Accountants of India (ICAI).

**(c) Assets**

**Current Assets, Loans and Advances (Schedule-11)**

<b>Non Plan:</b>	<b>Rs 1544.55 lakh</b>
<b>Claims Receivable:</b>	<b>Rs 47.77 lakh</b>

This includes an amount of Rs 4.88 lakh, being the written down value of two cars that was recoverable from the TDSAT of the Department of Telecommunications (DoT) since October 2000 but, despite repeated requests, the same has not been settled by DoT so far. As this amount was pending for recovery since long, the anticipated loss should have been accounted for in the books of accounts. Non provision for the anticipated loss has resulted in overstatement of 'Current Assets, Loans and Advances' (Non-Plan), 'Surplus' (Non-Plan) and 'Capital Fund' (Non-Plan) by Rs 4.88 lakh each.

## **B. General**

- (1) A reference is invited to Corpus/Capital Fund (Schedule-1) wherein an amount of Rs 4.50 lakh has been shown as "Less contribution towards Corpus/Capital Fund". This amount represents a 'Prior period expenditure' which has been debited directly to the Corpus/Capital fund instead of routing the same through 'Income and Expenditure Account'. However, this fact has not been disclosed in the 'Notes on Accounts'.
- (2) A reference is invited to Schedule-3 forming part of accounts where the details of closing balances of only those funds which are earmarked for specific purposes are required to be given. Contrary to this, it is noticed that Schedule-3 contains the details of the funds-flow of Non- Plan and Plan funds shown in the Receipts and Payments Account and the net balances represent the closing cash/bank balances of these funds. Hence the details given in the Schedule-3 are not relevant to this Schedule and are redundant to this extent.
- (3) Effect of audit comments on the Accounts  
The net impact of the comments given in

the preceding paragraphs is that as on 31 March 2008 the 'Current Liabilities and Provisions' were understated by Rs 19.09 lakh and the Assets were overstated by Rs 4.88 lakh, whereas the 'Excess of Income over Expenditure' for the year and the 'Capital Fund' were overstated by Rs 23.97 lakh each.

## **C. Grants in aid**

Out of the grants in aid (Non-Plan) of Rs 19.37 crore (including the unspent balance of Rs 0.72 crore (Non Plan) out of the earlier year's grants in aid) received during the year, TRAI could utilize a sum of Rs 18.64 crore (Non Plan) only leaving a balance of Rs 0.73 crore (Non Plan) as the unutilized grant as on 31<sup>st</sup> March 2008.

Further, out of the grants in aid (Plan) of Rs 3.80 crore (including Rs 0.80 crore out of the balance amount of previous years' grants (Plan) lying in TRAI General Fund maintained by Central Government) received during the year and the unspent balance Rs 0.25 crore (Plan) out of the earlier year's grant (Plan) lying with TRAI, TRAI could utilize a sum of Rs 3.24 crore (Plan) only leaving a balance of Rs 0.81 crore (Plan) as the unutilized grant as on 31<sup>st</sup> March 2008.

- v. Subject to our observations in the preceding paragraphs, we report that the Balance Sheet and the Income and Expenditure Account/Receipts and Payments Account dealt with by this Report are in agreement with the books of accounts.
- vi. In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts, and subject to the significant

matters stated above and other matters mentioned in Annexure to this Audit Report give a true and fair view in conformity with the accounting principles accepted in India:

- a. In so far as it relates to the Balance Sheet (both Plan and Non-Plan) of the state of

affairs of the Telecom Regulatory Authority of India as at 31 March 2008; and

- b. In so far as it relates to the Income and Expenditure Account of the Deficit (Plan) and Surplus (Non-Plan) for the year ended on that date.

**For and on behalf of the C&AG of India**

**Sd/-**

**(J.N. Gupta)**

**Director General of Audit (P&T)**

**Place: Delhi**

**Date: 22 September 2008**

## ANNEXURE TO SEPARATE AUDIT REPORT

**(Referred to in paragraph 4 (vi) of Separate Audit Report of even date on the accounts of Telecom Regulatory Authority of India for the year ended 31 March 2008)**

As per the information and explanations given to us, the books and records examined by us in normal course of audit and to the best of our knowledge and belief, we further report that:

### **(1) Adequacy of Internal Audit System**

TRAI has appointed a full-time Technical Officer (Internal Audit) with independent charge. The Internal Auditor audited the accounts and paid vouchers of TRAI for the year 2007-08 and action was being taken by the Administration Division on his Report.

**In our opinion, the internal Audit System of the organisation is adequate and commensurate with its size and the nature of its functions.**

### **(2) Adequacy of Internal Control System**

TRAI has framed the policies and procedures for creation of posts, appointment of staff/ officers, fixation of pay, extension of terms of consultant, settlement of personal claims, TA claims, training and study tours of officers and staff and regulations on various matters in accordance with the provisions of the TRAI Act and the same are followed in day to day functioning. Receipt and disbursement of cash and maintenance of cash book has been properly done in compliance with relevant rules & regulations. Physical verification of cash has been regularly done and the maximum limit of the cash balance, as prescribed by the Authority, was maintained. Two types of funds – one Plan Fund and the other Non-Plan Fund are maintained by TRAI and the expenditure pertaining to each fund is met from the respective funds and separate books of accounts are

maintained for each fund. TRAI General Fund is maintained by Department of Telecommunication (DoT). Grants from the Government of India to TRAI under Plan and Non Plan heads are credited to this fund. Expenditure of TRAI is met out of the release of grants by DoT under plan and non plan heads and utilization certificates in respect of grants received are furnished by TRAI to DoT. However, reconciliation of the account with DoT and confirmation of the balance in the fund by DoT for the year 2007-08 is not yet done.

In our opinion, the internal control system of the organisation is adequate and commensurate with its size and the nature of its functions.

### **(3) System of Physical verification of fixed assets**

The Registers of Fixed Assets have been properly maintained. The Physical verification of fixed assets for the year 2007-08 has been done.

### **(4) System of Physical verification of inventory**

Proper records of inventory have been maintained. The physical verification of inventory for the year 2007-08 has been done.

In our opinion, the system for physical verification of inventory is adequate and commensurate with its size and the nature of its functions.

### **(5) Regularity in payment of statutory dues**

As per clause 32 of TRAI Act, 1997, TRAI is exempt from the payment of tax on wealth and income. As on 31 March 2008, there was no disputed amount payable in respect of any other statutory dues including Contributory Provident Fund.

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**

**Name of the Entity : TELECOM REGULATORY AUTHORITY OF INDIA**

**BALANCE SHEET AS AT 31-03-2008**

CORPUS/CAPITAL FUND AND LIABILITIES	Schedule	NON-PLAN		PLAN	
		Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
CORPUS/CAPITAL FUND	1	129377832	93794307	18314299	20634315
RESERVES AND SURPLUS	2	-	-	-	-
EARMARKED/ENDOWMENT FUNDS	3	-	-	-	-
SECURED LOANS AND BORROWINGS	4	-	-	-	-
UNSECURED LOANS AND BORROWINGS	5	-	-	-	-
DEFERRED CREDIT LIABILITIES	6	-	-	-	-
CURRENT LIABILITIES AND PROVISIONS	7	50407930	32896083	432155	473681
<b>TOTAL</b>		<b>179785762</b>	<b>126690390</b>	<b>18746454</b>	<b>21107996</b>
<b>ASSETS</b>					
FIXED ASSETS	8	25330295	30615527	-	-
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	9	-	-	-	-
INVESTMENTS-OTHERS	10	-	8704689	-	-
CURRENT ASSETS,LOANS,ADVANCES ETC	11	154455467	87370174	18746454	21107996
MISCELLANEOUS EXPENDITURE		-	-	-	-
(to the extent not written off or adjusted)		-	-	-	-
<b>TOTAL</b>		<b>179785762</b>	<b>126690390</b>	<b>18746454</b>	<b>21107996</b>
SIGNIFICANT ACCOUNTING POLICIES	24				
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25				

**Sd/-  
Pr. Advisor (FA/IFA)**

**Sd/-  
Secretary**

**Sd/-  
Member**

**Sd/-  
Chairperson**

# FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)

Name of the Entity : TELECOM REGULATORY AUTHORITY OF INDIA

## INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD/YEAR ENDED 31-03-2008

INCOME	Schedule	NON-PLAN		PLAN	
		Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
Income from Sales/Services	12	-	-	-	-
Grants/Subsidies	13	253400000	171100000	30000000	20000000
Fee/Subscriptions	14	-	-	-	-
Income from Investments(Income on Invest from earmarked /endow. Funds transferred to Funds	15	-	-	-	-
Income for Royalty ,Publication etc	16	-	-	-	-
Interest Earned	17	-	-	-	-
Other Income	18	123846	158117	-	-
Increase(decrease) in stock of Finished goods and works-in-progress	19	-	-	-	-
<b>TOTAL(A)</b>		<b>253523846</b>	<b>171258117</b>	<b>30000000</b>	<b>20000000</b>
EXPENDITURE		-	-	-	-
Establishment Expenses	20	58209607	49754093	-	-
Other Administrative Expenses etc	21	153029871	94899160	32534016	14960869
Expenditure on Grants,Subsidies etc	22	-	-	-	-
Interest	23	-	-	-	-
Depreciation(Net Total at the year end- corresponding to Schedule 8)		6251298	6600157	-	-
<b>TOTAL (B)</b>		<b>217490776</b>	<b>151253410</b>	<b>32534016</b>	<b>14960869</b>

INCOME	Schedule	NON-PLAN		PLAN	
		Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
Balance being excess of Income over Expenditure (A-B)					
Transfer to Special Reserve (Specify each)		-	-	-	-
Transfer to / from General Reserve		-	-	-	-
<b>BALANCE BEING SURPLUS/(DEFICIT) CARRIED TO CORPUS/CAPITAL FUND</b>		36033070	20004707	-2534016	5039131
SIGNIFICANT ACCOUNTING POLICIES	24	-	-	-	-
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25	-	-	-	-

<b>Sd/-</b>	<b>Sd/-</b>	<b>Sd/-</b>
<b>Pr. Advisor (FA/IFA)</b>	<b>Secretary</b>	<b>Member</b>
		<b>Chairperson</b>

FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)

Name of the Entity : TELECOM REGULATORY AUTHORITY OF INDIA

SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2008

SCHEDULE-I-CORPUS/CAPITAL FUND:

	NON - PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
Balance as at the beginning of the year	-	-	-	-
Add:/Less Contributions towards Corpus/Capital Fund	93794307	74122178	20634315	15595184
Add:/(Deduct): Balance of net income/(expenditure) transferred	-449545	-332577	214000	-
from the Income and Expenditure Account	-	-	-	-
	36033070	20004706	-2534016	5039131
<b>BALANCE SHEET AS AT THE YEAR-END</b>	<b>129377832</b>	<b>93794307</b>	<b>18314299</b>	<b>20634315</b>

Sd/-  
SRO (Finance/Accounts)

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**

**Name of the Entity : TELECOM REGULATORY AUTHORITY OF INDIA**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2008**

**SCHEDULE-2 - RESERVES AND SURPLUS**

	NON - PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
1. Capital Reserve:	-	-	-	-
As per last Account	-	-	-	-
Addition during the year	-	-	-	-
Less: Deductions during the year	-	-	-	-
2. Revaluation Reserve:	-	-	-	-
As per last Account	-	-	-	-
Addition during the year	-	-	-	-
Less: Deductions during the year	-	-	-	-
3. Special Reserve:	-	-	-	-
As per last Account	-	-	-	-
Addition during the year	-	-	-	-
Less: Deductions during the year	-	-	-	-
4. General Reserve:	-	-	-	-
As per last Account	-	-	-	-
Addition during the year	-	-	-	-
Less: Deductions during the year	-	-	-	-
<b>TOTAL</b>	-	-	-	-

**Sd/-**  
**SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**

**Name of the Entity : TELECOM REGULATORY AUTHORITY OF INDIA**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2008**

**SCHEDULE-3-EARMARKED/ENDOWMENT FUNDS**

**(Amount-Rs.)**

	FUND-WISE BREAKUP				TOTALS			
	Fund WW	Fund XX	Fund YY	Fund ZZ	NON-PLAN		PLAN	
					Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
<b>a) Opening balance of the funds</b>					7297006	19514987	2494069	5535547
<b>b) Additions of the funds:</b>								
i. Donations/grants						-	-	-
ii. Income from investments made on account of funds					186500000	138500000	38000000	11500000
iii. Other additions(Misc income , receipt of advances)					713342	12570876	-	-
					-	-	-	-
<b>TOTAL (a+b)</b>					194510348	170585863	40494069	17035547
<b>c) Utilisation/expenditure towards objectives of funds</b>								
i. Capital Expenditure								
-Fixed Assets					10221332	10802899	-	-
-Others					743717	10477166	-	-
<b>Total</b>					<b>10965049</b>	<b>21280065</b>		
ii. Revenue Expenditure								
- Salaries,Wages and allowances etc					56271469	49813383	-	-

(Amount-Rs.)

	FUND-WISE BREAKUP				TOTALS			
	Fund WW	Fund XX	Fund YY	Fund ZZ	NON-PLAN		PLAN	
					Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
- Rent					68388540	37359582	-	-
- Other Administrative expenses					51566554	54835827	32361541	14541478
<b>Total</b>					176226563	142008792	32361541	14541478
<b>TOTAL (c)</b>					187191612	163288857	32361541	14541478
<b>NET BALANCE AS AT THE YEAR-END (a+b+c)</b>					7318736	7297006	8132528	2494069

**Notes**

- 1) Disclosures shall be made under relevant head based on conditions attaching to the grants
- 2) Plan funds received from the Central/State Governments are to be shown as separate funds and not to be mixed up with any other Funds

Sd/-

SRO (Finance/Accounts)

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)****Name of the Entity : TELECOM REGULATORY AUTHORITY OF INDIA****SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2008****SCHEDULE 4 -SECURED LOANS AND BORROWINGS**

	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
	-	-	-	-
1. Central Government	-	-	-	-
2. State Government (Specify)	-	-	-	-
3. Financial Institutions	-	-	-	-
	-	-	-	-
4. Banks	-	-	-	-
a) Term Loans	-	-	-	-
-Interest accrued and due	-	-	-	-
b) Other-Loans(Specify	-	-	-	-
-Interest accrued and due	-	-	-	-
	-	-	-	-
5. Other Institutions and Agencies	-	-	-	-
	-	-	-	-
6. Debentures and Bonds	-	-	-	-
	-	-	-	-
7. Others(Specify)	-	-	-	-
	-	-	-	-
<b>TOTAL</b>	-	-	-	-

**Note** Amount due within one year

**Sd/-**  
**SRO (Finance/Accounts)**

# **FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**

**Name of the Entity : TELECOM REGULATORY AUTHORITY OF INDIA**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2008**

## **SCHEDULE 5 -UNSECURED LOANS AND BORROWINGS**

**(Amount-Rs.)**

	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
1. Central Government	-	-	-	-
2. State Government (Specify)	-	-	-	-
3. Financial Institutions	-	-	-	-
4. Banks	-	-	-	-
a) Term Loans	-	-	-	-
-Interest accrued and due	-	-	-	-
b) Other-Loans(Specify	-	-	-	-
-Interest accrued and due	-	-	-	-
5. Other Institutions and Agencies	-	-	-	-
6. Debentures and Bonds	-	-	-	-
7. Others(Specify)	-	-	-	-
<b>TOTAL</b>	-	-	-	-

**Note** Amount due within one year

## **SCHEDULE 6-DEFERRED CREDIT LIABILITIES**

	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
a) Acceptances secured by hypothecation of capital equipment and other assets	-	-	-	-
b) Others	-	-	-	-
<b>TOTAL</b>	-	-	-	-

**Note** Amounts due within one year

**Sd/-  
SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)****Name of the Entity : TELECOM REGULATORY AUTHORITY OF INDIA****SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2008****SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS****(Amount-Rs.)**

	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
<b>A. CURRENT LIABILITIES</b>	-	-	-	-
1) Acceptances	-	-	-	-
2) Sundry Creditors	-	-	-	-
a) For Goods	-	-	-	-
b) Others	-	-	-	-
3) Advances Received	-	-	-	-
4) Interest accrued but not due on:	-	-	-	-
a) Secured loans/borrowings	-	-	-	-
b) Unsecured Loans/borrowings	-	-	-	-
5) Statutory Liabilities	-	-	-	-
a) Overdue	-	-	-	-
b) Others	-	-	-	-
6) Other current Liabilities	50407930	32896083	432155	473681
<b>TOTAL (A)</b>	<b>50407930</b>	<b>32896083</b>	<b>432155</b>	<b>473681</b>
<b>B. PROVISIONS</b>	-	-	-	-
1. For Taxation	-	-	-	-
2. Gratuity	-	-	-	-
3. Superannuation/Pension	-	-	-	-
4. Accumulated Leave Encashment	-	-	-	-
5. Trade Warranties/Claims	-	-	-	-
6. Other(Specify)	-	-	-	-
<b>TOTAL (B)</b>				
<b>TOTAL (A+B)</b>	<b>50407930</b>	<b>32896083</b>	<b>432155</b>	<b>473681</b>

**Sd/-**  
**SRO (Finance/Accounts)**

## Name of the Entity\_ TELECOM REGULATORY AUTHORITY OF INDIA

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2008**

## SCHEDULE 8 - FIXED ASSETS

(Amount-Rs.)

[illegible]

(Amount-Rs.)

DESCRIPTION	GROSS BLOCK			DEPRICIATION			NET BLOCK	
	Cost/ valuation as at beginning of the year	Additions during the year	Deductions during the year	Cost/ valuation at the year-ended	As at the beginning of the year	On Additions during the year	On Deductions during the year	Total up to the year-end
5. FURNITURE, FIXTURES	21414756	5800326	13253116	13961966	9310168	1163099	4321196	6152071
6. OFFICE EQUIPMENT	8778786	980538	187828	9571496	4317435	916366	112130	5121671
7. COMPUTER/PERIPHERALS	26379227	2525163		28904390	16340855	3286568		19627423
8. ELECTRIC INSTALLATIONS	3004756	43851	834324	2214283	841140	185955	440762	586333
9. LIBRARY BOOKS	2772469	206690		2979159	2301981	331228		2633209
10. TUBEWELLS & W.SUPPLY	-	-	-	-	-	-	-	-
11. OTHER FIXED ASSETS	-	-	-	-	-	-	-	-
<b>TOTAL OF CURRENT YEAR</b>	66951015	10439534	15038631	62351918	36335488	6251298	5565163	37021623
<b>PREVIOUS YEAR</b>	64819487	7864131	5732603	66951015	35166597	6600157	5431266	36335488
<b>B. CAPITAL WORK-IN-PROGRESS</b>								
<b>TOTAL</b>								

(Note to be given as to cost of assets on hire purchase basis included above)

Sd/-  
SRO (Finance/Accounts)

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)****Name of the Entity : TELECOM REGULATORY AUTHORITY OF INDIA****SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2008****SCHEDULE 9 - INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS****(Amount Rs.)**

	NON-PLAN		PLAN	
	Current Year	Previous Year	Current Year	Previous Year
	2007-08	2006-07	2007-08	2006-07
1. In Government Securities	-	-	-	-
2. Other approved Securities	-	-	-	-
3. Shares	-	-	-	-
4. Debentures and Bonds	-	-	-	-
5. Subsidiaries and Joint Ventures	-	-	-	-
6. Others ( to be specified)	-	-	-	-
<b>TOTAL</b>	-	-	-	-

**SCHEDULE 10 - INVESTMENTS OTHERS**

	NON-PLAN		PLAN	
	Current Year	Previous Year	Current Year	Previous Year
1. In Government Securities	-	-	-	-
2. Other approved Securities	-	-	-	-
3. Shares	-	-	-	-
4. Debentures and Bonds	-	-	-	-
5. Subsidiaries and Joint Ventures	-	-	-	-
6. Others (Bank FDRs)	-	8704689	-	-
<b>TOTAL</b>	-	8704689	-	-

**Sd/-**  
**SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**

**Name of the Entity: TELECOM REGULATORY AUTHORITY OF INDIA**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2008**

**SCHEDULE 11 - CURRENT ASSETS, LOANS,ADVANCES ETC**

**(Amount-Rs.)**

DESCRIPTION	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
<b>A. CURRENT ASSETS:</b>	-	-	-	-
	-	-	-	-
1. Inventories	-	-	-	-
a) Stores and Spares	-	-	-	-
b) Lose tools	-	-	-	-
c) Stock-in-trade	-	-	-	-
Finished Goods	-	-	-	-
Work in progress	-	-	-	-
Raw Material	-	-	-	-
	-	-	-	-
2. Sundry Debtors:	-	-	-	-
a) Debts Outstanding for a period exceeding six months	-	-	-	-
b) Others	-	-	-	-
	-	-	-	-
3. Cash balances in hand (including cheques/drafts and imprest)	59394	43446	-	-
4. Bank Balances:				
a) With Scheduled Banks				
-On Current Accounts	7259343	7253560	8132528	2494070
-On Deposit Accounts(includes margin money)	-	-	-	-
-On Savings Account	-	-	-	-
	-	-	-	-
a) With non-Scheduled Banks	-	-	-	-
-On Current Accounts	-	-	-	-
-On Deposit Accounts	-	-	-	-
-On Savings Account	-	-	-	-
	-	-	-	-
5. Post Office-Savings Accounts	-	-	-	-
<b>TOTAL (A)</b>	7318737	7297006	8132528	2494070

**Sd/-  
SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**

**Name of the Entity\_\_TELECOM REGULATORY AUTHORITY OF INDIA**

**SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-03-2008**

**SCHEDULE 11 - CURRENT ASSETS, LOANS,ADVANCES ETC**

**(Amount-Rs.)**

DESCRIPTION	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
<b>B. LOANS,ADVANCES AND OTHER ASSETS</b>				
1. Loans				
a) Staff	4636147	4277013	-	-
b) Other Entities engaged in activities/objectives similar to that of Entity			-	-
c) Other(specify)	493227	145209	-	-
	-	-		
2. Advance and other amounts recoverable in cash or in kind or for value to be received:			-	-
			-	-
a) On Capital Account	136600000	69700000	10500000	18500000
b) Prepayments	182585	100296		
c) Others	447430	914532	113926	113926
3. Income Accrued				
a) On Investments from Earmarked/Endowment Funds	-	-	-	-
b) On Investments-Others	-	-	-	-
c) On Loans and Advances	-	-	-	-
d) Others	-	-	-	-
(includes income due unrealised Rs.)	-	-	-	-
5. Claims Receivable	4777341	4936118	-	-
<b>TOTAL (B)</b>	<b>147136730</b>	<b>80073168</b>	<b>10613926</b>	<b>18613926</b>
<b>TOTAL (A+B)</b>	<b>154455467</b>	<b>87370174</b>	<b>18746454</b>	<b>21107996</b>

**Sd/-**

**SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)****Name of the Entity\_TELECOM REGULATORY AUTHORITY OF INDIA****SCHEDULES FORMING PART OF INCOME & EXPENDITURE  
FOR THE PERIOD/YEAR ENDED 31-03-2008****SCHEDULE 12 - INCOME FROM SALES/SERVICES****(Amount-Rs.)**

	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
1. Income from Sales	-	-	-	-
a) Sale of Finished Goods	-	-	-	-
b) Sale of Raw material	-	-	-	-
c) Sale of Scraps	-	-	-	-
2. Income from Services	-	-	-	-
a) Labour and Processing Charges	-	-	-	-
b) Professional/Consultancy Services	-	-	-	-
c) Agency Commission and Brokerage	-	-	-	-
d) Maintenance Services (Equipment/Property)	-	-	-	-
e) Others(Specify)	-	-	-	-
<b>TOTAL</b>				

**SCHEDULE 13 - GRANTS/SUBSIDIES**

(Irrevocable Grants & Subsidies Received)	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
1) Central Government	253400000	171100000	30000000	20000000
2) State Govenemnt(s)	-	-	-	-
3) Government Agencies	-	-	-	-
4) Institutions/Welfare Bodies	-	-	-	-
5) International Organisations	-	-	-	-
6) Other (Specify)	-	-	-	-
<b>TOTAL</b>	253400000	171100000	30000000	20000000

**Sd/-****SRO (Finance/Accounts)**

# **FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

**Name of the Entity\_ TELECOM REGULATORY AUTHORITY OF INDIA**

## **SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2008**

### **SCHEDULE 14 - FEES/SUBSCRIPTIONS**

**(Amount-Rs.)**

	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
1. Entrance Fees	-	-	-	-
2. Annual Fees/Subscriptions	-	-	-	-
3. Seminar/Program Fees	-	-	-	-
4. Consultancy Fees	-	-	-	-
5. Others(specify)	-	-	-	-
<b>TOTAL</b>				

Note Accounting Policies towards each item are to be disclosed

### **SCHEDULE 15 -INCOME FROM INVESTMENTS**

Investment from Earmarked Fund	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
(Income on Invest.from Earmarked/ Endowment Funds Transferred to Funds)				
1) Interest				
a) On Govt Securities	-	-	-	-
b) Other Bonds/Debentures	-	-	-	-
2) Dividends	-	-	-	-
a) On Shares	-	-	-	-
b) On Mutual Fund Securities	-	-	-	-
3) Rents	-	-	-	-
4) Others (Specify)	-	-	-	-
<b>TOTAL</b>				
<b>TRANSFERRED TO EARMARKED/ENDOWMENT FUNDS</b>				

**Sd/-  
SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)****Name of the Entity TELECOM REGULATORY AUTHORITY OF INDIA****SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2008****(Amount-Rs.)****SCHEDULE 16 - INCOME FROM ROYALTY,PUBLICATION ETC**

	NON-PLAN		PLAN	
	Current Year	Previous Year	Current Year	Previous Year
	2007-08	2006-07	2007-08	2006-07
1. Income from Royalty	-	-	-	-
2. Income from Publications	-	-	-	-
3. Others(specify)	-	-	-	-
<b>TOTAL</b>	-	-	-	-

**SCHEDULE 17 -INTEREST EARNED**

	NON-PLAN		PLAN	
	Current Year	Previous Year	Current Year	Previous Year
1) On Term Deposits				
a) With Scheduled Banks	-	-	-	-
b) With Non-Scheduled Banks	-	-	-	-
c) With Institutions	-	-	-	-
d) Others	-	-	-	-
2) On Savings Account				
a) With Scheduled Banks	-	-	-	-
b) With Non-Scheduled Banks	-	-	-	-
c) With Institutions	-	-	-	-
d) Others	-	-	-	-
3) On Loans	-	-	-	-
a) Employees/Staff	-	-	-	-
b) Others	-	-	-	-
4) Interest on Debtors and Other Receivables	-	-	-	-
<b>TOTAL</b>	-	-	-	-

Note Tax deducted at source to be indicated

**Sd/-**  
**SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**

**Name of the Entity\_\_TELECOM REGULATORY AUTHORITY OF INDIA**

**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2008**

**(Amount-Rs.)**

**SCHEDULE 18-OTHER INCOME**

	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
1. Profit on Sale/disposal of Assets	11000	-	-	-
a) Owned assets	-	-	-	-
b) Assets acquired out of grants,or received free of cost	-	-	-	-
2. Export Incentives realized	-	-	-	-
3. Fees for Miscellaneous Services		-	-	-
4. Miscellaneous Income	112846	158117	-	-
<b>TOTAL</b>	<b>123846</b>	<b>158117</b>	<b>-</b>	<b>-</b>

**SCHEDULE 19 - INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK IN PROGRESS**

	NON-PLAN		PLAN	
	Current Year	Previous Year	Current Year	Previous Year
a) Closing stock				
- Finished Goods	-	-	-	-
-Work-in-progress	-	-	-	-
b) Less Opening Stock				
- Finished Goods	-	-	-	-
-Work-in-progress	-	-	-	-
<b>NET INCREASE/(DECREASE) [a-b]</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

**SCHEDULE 20- ESTABLISHMENT EXPENSES**

	NON-PLAN		PLAN	
	Current Year	Previous Year	Current Year	Previous Year
a) Salaries and Wages	48246333	39795242	-	-
b) Allowances and Bonus	174710	163095	-	-
c) Contribution to Provident Fund	1404226	1335610	-	-
d) Contribution to Other Fund (specify)			-	-
e) Staff Welfare Expenses	113467	100358	-	-
f) Expenses on Employees Retirement and Terminal Benefits	4454687	4389474	-	-
g) Others (specify)	3816184	3970314	-	-
<b>TOTAL</b>	<b>58209607</b>	<b>49754093</b>	<b>-</b>	<b>-</b>

**Sd/-**

**SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**

**Name of the Entity\_\_\_TELECOM REGULATORY AUTHORITY OF INDIA**

**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31.03.2008**

**SCHEDULE-21-OTHER ADMINISTRATIVE EXPENSES ETC**

**(Amount-Rs.)**

	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
a) Purchases	-	-	-	-
b) Labour and processing expenses	-	-	-	-
c) Cartage and Carriage Inwards	-	-	-	-
d) Electricity and power	1642162	2308076	-	-
e) Water charges	-	-	-	-
f) Insurance	177188	109620	-	-
g) Repairs and maintenance	3555413	2923850	-	-
h) Excise Duty	-	-	-	-
i) Rent,Rates and Taxes	93625080	38408102	-	-
j) Vehicles Running and Maintenance	2459557	2945456	-	-
k) Postage,Telephone and Communication Charges	6370907	4461939	-	-
l) Printing and Stationery	5303324	6865494	-	-
m) Travelling and Conveyance Expenses	7932897	7528248	-	-
n) Expenses on Seminar/Workshops	3374109	2484408	-	-
o) Subscription Expenses	125477	139339	-	-
p) Expenses on Fees	396584	1492559	-	-
q) Auditors Remuneration	128980	121795	-	-
r) Hospitality Expenses	1214586	1043087	-	-
s) Professional Charges	6242425	13881077	-	-
t) Provision for Bad and Doubtful Debts/Advances	-	-	-	-
u) Irrecoverable Balances Written-off	9077384	207314	-	-
v) Packing Charges	-	-	-	-
w) Freight and Forwarding Expenses	-	-	-	-
x) Distribution Expenses	-	-	-	-
y) Advertisement and Publicity	4595702	5451975	-	-
z) Others (Payment to Security, Housekeeping etc.)	6808097	4526821	32534016	14960869
<b>TOTAL</b>	<b>153029871</b>	<b>94899160</b>	<b>32534016</b>	<b>14960869</b>

**Sd/-**  
**SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**

Name of the Entity\_\_TELECOM REGULATORY AUTHORITY OF INDIA

**SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-03-2008****SCHEDULE 22-EXPENDITURE ON GRANTS,SUBSIDIES ETC****(Amount-Rs.)**

	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
a) Grants given to Institutions/ Organisations	-	-	-	-
b) Subsidies given to Institutions/ Organisations	-	-	-	-
<b>TOTAL</b>				

**Note:** Name of Entities,their Activities along with the amount of Grants/Subsidies are to be disclosed**SCHEDULE 23 - interest**

	NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
a) On Fixed Loans	-	-	-	-
b) On Other Loans(including Bank Charges)	-	-	-	-
a) Others (specify)	-	-	-	-
<b>TOTAL</b>	-	-	-	-

**Sd/-**  
**SRO (Finance/Accounts)**

# FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)

Name of the Entity **TELECOM REGULATORY AUTHORITY OF INDIA**

## RECEIPTS AND PAYMENTS FOR THE PERIOD/YEAR ENDED 31-03-2008

RECEIPTS	NON-PLAN			PLAN			PAYMENTS			NON-PLAN			PLAN		
	Current Year	Previous Year	2007-08	Current Year	Previous Year	2006-07	Current Year	Previous Year	2007-08	Current Year	Previous Year	2007-08	Current Year	Previous Year	2006-07
<b>I. Opening Balance</b>															
a) Cash in hand	43446	33322	-	-	-	-	a) Establishment Expenses (corresponding to Schedule 20)			56271469	49813383	-	-	-	-
i) In current accounts	7253560	19481665	2494069	5535547			b) Administrative expenses (corresponding to Schedule 21)			119955094	92195409	32361541	14541478		
ii) In deposit accounts	-	-	-	-	-	-				-	-	-	-	-	-
ii) Savings accounts	-	-	-	-	-	-				-	-	-	-	-	-
<b>II. Grants Received</b>							<b>II. Payments made against funds for various projects</b>								
a) From Government of India	186500000	138500000	380000000	115000000			(Name the fund or project should be shown along with the particulars of payments made for each project)			-	-	-	-	-	-
b) From State Government	-	-	-	-	-	-				-	-	-	-	-	-
c) From other sources (details)	-	-	-	-	-	-				-	-	-	-	-	-
(Grants for capital & revenue exp to shown seperately)	-	-	-	-	-	-				-	-	-	-	-	-
<b>III. Income on Investments from</b>							<b>III. Investments and deposits made</b>								
a) Earmarked/Endow Funds	-	-	-	-	-	-	a) Out of Earmarked/Endowment funds			-	-	-	-	-	-
b) Own Funds(Other Investment)	-	-	-	-	-	-	b) Out of Own Funds(investments-Others)			-	8704689	-	-	-	-

RECEIPTS	NON-PLAN		PLAN		PAYMENTS		NON-PLAN		PLAN	
	Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07			Current Year 2007-08	Previous Year 2006-07	Current Year 2007-08	Previous Year 2006-07
<b>IV. Interest Received</b>	-	-	-	-	<b>IV. Expenditure on Fixed Assets &amp; Capital Work-in-progress</b>					
a) On Bank deposits	-	-	-	-	a) Purchase of Fixed Assets	10221332	10802899	-	-	-
b) Loans, Advances etc.	-	-	-	-	b) Expenditure on Capital Work-in-progress	-	-	-	-	-
c) Miscellaneous	-	-	-	-		-	-	-	-	-
<b>V Other Income(Specify)</b>					<b>V. Refund of surplus money/Loans</b>					
To Miscellaneous Income	112846	56517	-	-	a) To the Government of India	-	-	-	-	-
					b) To the State Government	-	-	-	-	-
<b>VI Amount Borrowed</b>	-	-	-	-	c) To other providers of funds (Consumer Protection Fund)	9468508	-	-	-	-
<b>VII. Any other receipts (give details)</b>	-	-	-	-	<b>VI. Finance Charges(Interest)</b>					
To Fees	-	-	-	-	<b>VII. Other Payments(Specify)</b>					
					Loans and advances and security deposits	743717	1772477	-	-	-
To Capital Fund	-	-	-	-	<b>VIII. Closing Balances</b>					
To Sales of Publication	-	-	-	-	a) Cash in hand	59394	43446	-	-	-
To Sale of Assets	75700	42223	-	-	b) Bank Balances			-	-	-
To loans and advances & security deposits	524796	12472136	-	-	i) In current accounts	7259342	7253560	8132528	2494069	
To encashment of FDr alongwith Interest	9468508	-	-	-	ii) In deposit accounts	-	-	-	-	-
					iii) Savings accounts	-	-	-	-	-
<b>TOTAL</b>	<b>203978856</b>	<b>170585863</b>	<b>40494069</b>	<b>17035547</b>	<b>TOTAL</b>	<b>203978856</b>	<b>170585863</b>	<b>40494069</b>	<b>17035547</b>	

Sd/-  
Pr. Advisor (FA/IFA)

Sd/-  
Secretary

Sd/-  
Member

Sd/-  
Chairperson

## SCHEDULE – 24

### Significant Accounting Policies

#### 1. Accounting Conventions:

- i) The financial statements have been prepared in the "Uniform Form of Accounts" as approved by the Controller General of Accounts vide their letter No. F.No.19(1)/Misc./2005/TA/450-490 dated 23.07.2007 for both Non-Plan and Plan activities appropriately and distinctly.
- ii) Accounts have been prepared on accrual basis for the current year i.e., 2007-08 - There is no change in Method of Accounting from the preceeding year.
- iii) Provision for all the undisputed and known liabilities have been made in the Books of Account.
- iv) Figures have been rounded off to the nearest of rupee.
- v) Contingent liabilities are disclosed after careful evaluation of facts and legal aspects of the matter involved.

#### 2. Fixed Assets:

Fixed Assets are stated at cost of acquisition inclusive of inward freight, duties and taxes and incidental and direct expenses related to acquisition.

#### 3. Depreciation:

- (a) Depreciation on Fixed Assets is provided on Straight Line Method at the rates specified in Schedule XIV of the Companies Act, 1956 except for the categories mentioned below on which higher rates of depreciation have been applied, as applied in the Accounts for preceding years:

Category	Minimum prescribed depreciation rate as per Companies Act, 1956	Depreciation rate applied
Office Equipments	4.75%	10.00%
Furnitures and Fixtures	6.33%	10.00%
Electrical Appliances	4.75%	10.00%
Airconditioners	4.75%	10.00%
Books and Publications	4.75%	20.00%

Office Equipments includes Mobile Handsets provided to the officers for official purposes. It has been decided by the Competent Authority vide Order No.2-1/97-LAN dated 04.05.2007 to provide/write off these handsets within three years on the same pattern on DoT. Accordingly depreciation on Mobile Handsets from the year 2007-08 onwards have been charged off @ 33.33%.

- (b) In respect of additions to Fixed Assets during the year, depreciation is considered on Pro-rata basis.
- (c) Assets costing Rs. 5,000/- or less, each are fully provided.

#### 4. Foreign Currency Transactions:

Transactions denominated in foreign currencies are recorded at the exchange rate prevailing at the time of transaction

#### 5. Retirement Benefits

- a) Provision for Leave Salary and Pension Contribution up to 31.03.2008 has been provided in Books of Accounts at the rates prescribed by Government of India under Fundamental Rules.

#### 6. Govt. Grant :

1. No grant in respect of specific fixed assets has been received during the current year.
2. Govt. grants are accounted for on the basis of sanctioned amount.

## SCHEDULE – 25

### Contingent Liabilities and Notes on Accounts:

#### Contingent Liabilities:

1. Claims against the Entity not acknowledged as debts Rs. 2,24,81,997/- towards increase in Rent to STC (Previous year Rs. 4,14,29,889/- towards increase in Rent)

#### 2. Current Assets, Loans and Advances:

In the opinion of the Management, the current assets, loans and advances have a value on realization in the ordinary course of business, equal at least to the aggregate amount shown in the Balance Sheet.

#### 3. Taxation:

As per clause 32 of the TRAI Act, 1997, TRAI is exempt from tax on Wealth and Income.

#### 4. Fixed Assets:

- a). The following items have been written off after taking approval of the Competent Authority vide office order No. 15-2/2006-GA dated 14.09.2007 and a sum of Rs. 11,92,159/- on account of Depreciation have been written back as per details given below:

#### b). Assets left at Jawahar Vyapar Bhavan :-

The Authority has approved write off of the anticipated loss of Rs. 83.66 lakh after adjusting Rs. 2.70 lakh receivable from STC in respect of the Assets left behind by TRAI on 16<sup>th</sup> and 20<sup>th</sup> floor of Jawahar Vyapar

Bhavan at the time of vacating the premises during June 2001 as per details given below:-

Total Book Value of the Assets left behind at STC	Rs. 122.22 lakh
Total W.D.V. of the Assets	Rs. 86.36 lakh
Less : Amt. Receivable from STC on a/c of Scrap	Rs. 2.70 lakh
Loss : written off during the year	Rs. 83.66 lakh

Apart from above, Provision on a/c of Property Tax payable to STC amounting to Rs. 15224000/- has been made in the accounts.

#### c). Fixed assets include:-

Out of four vehicles purchased from DoT for Rs. 14,71,692/- during 1997-98, two cars were transferred to TDSAT in October, 2000. The cost of these two cars was Rs. 7,35,846/- and accumulated depreciation on date of transfer was Rs. 2,48,211. The amount of WDV of such cars on the date of transfer was Rs. 4,87,635/- which has been debited to claims recoverable from TDSAT/DOT.

#### 5. Office accommodation occupied by TRAI on Second Floor at Trikoot.

Second Floor at Trikoot-I complex, Bhikaji Cama Place was in occupation of TRAI which was vacated on 15.07.07. At the time of allotment

Sl. No.	Particular of Asset	Book Value	Accumulated depreciation upto 2006-07	WDV as on 31.03.2007
1.	Office Equipment	24300	16739	7560
2.	Furniture & Fixtures	1393905	736105	657800
3.	Electrical Appliances	289285	280088	9198
4.	Air Conditioners	182079	159227	22852
<b>Total :</b>		<b>1889569</b>	<b>1192159</b>	<b>697410</b>

of the said accommodation, Directorate of Estates vide their office letter No. 1/2/2004-Ofc. Dated 14<sup>th</sup> March 2005 had conveyed that the TRAI would be required to pay Special licence fee for the space allotted in accordance with O.M.No.11013/D/7/94-Pol\_IV dated 14.09.1999. Since no final claim has been received from Directorate of Estates, a sum of Rs.1.00 crore has been provided in other liabilities for the said space.

**6. M/s Hexacom India Ltd.**

M/s Hexacom India Ltd., Jaipur had deposited in TRAI a sum of Rs.87,04,689/- in the year 2004-05, which represents the unrefunded amount to the subscribers of Hexacom, in pursuance to the refund order passed by the TRAI vide Telecommunication Tariff (12<sup>th</sup> Amendment) Order. This amount was kept separately in Corporation Bank as an un-appropriated amount and was shown as Current Liability in previous year's accounts. The amount, which was kept in Fixed Deposit, has now been transferred to Telecommunication Consumers' Education and Protection Fund.

**7. Grants**

During the accounting year i.e. 2007-08 the grants sanctioned under Non – Plan head was

Rs. 25.34 crore against which a sum of Rs. 18.65 crores was received. A sum of Rs. 13.66 crore receivable from DoT has been shown in Schedule-11 under the head "Advance and other amounts recoverable in cash or in kind or for value to be received.

Similarly, the grant under PLAN head of account was sanctioned as Rs. 3.00 crore against which a sum of Rs.3.80 crore was received. The excess amount was met out from the balances lying with TRAI General Fund being maintained by DoT. A sum of Rs.1.05 crore receivable from DoT has been shown in Schedule-11.

**8. Previous year figures:**

Corresponding figures for the previous year have been regrouped/arranged wherever necessary.

**9. Transactions in Foreign Currencies**

Transactions denominated in foreign currencies are recorded at the exchange rate prevailing at the time of transaction

**10. Schedules 1 to 25 are annexed to and form an integral part of the Balance Sheet as at 31<sup>st</sup> March, 2008 and the Income and Expenditure Account for the year ended on that date.**

**Sd/-**  
**PR. ADVISOR (FA&IFA)**

**Sd/-**  
**SECRETARY**

**Sd/-**  
**MEMBER**

**Sd/-**  
**CHAIRPERSON**



## 4.3

# Audited Contributory Provident Fund Accounts of TRAI for the year 2007-08

**W**e have audited the attached Balance Sheet of the Telecom Regulatory Authority of India-Contributory Provident Fund Account as at 31 March 2008 and the Income and Expenditure Account/Receipts and Payments Account for the year ended on that date under Section 19(2) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Rule 5 (5) of the Telecom Regulatory Authority of India (Contributory Provident Fund) Rules, 2003, issued under Government of India, Extraordinary Gazette Notification No. GSR 333(E) dated 10 April 2003. These financial statements are the responsibility of the Telecom Regulatory Authority of India-Contributory Provident Fund Account's Management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This separate Audit Report contains the comments of the Comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum performance aspects, etc, if any are reported through Inspection Reports/ CAG's Audit Reports separately.
3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable

assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that:

- i. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of audit;
- ii. The Balance Sheet and the Income and Expenditure Account/Receipts and Payments Account dealt with by this report have been drawn up in the format of accounts prescribed by the Ministry of Finance.
- iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Telecom Regulatory Authority of India – Contributory Provident Fund Account in so far as it appears from our examination of such books.
- iv. We further report that:

**A. Balance Sheet**

**ASSETS**

**Investments-Others (Schedule-10):  
Rs.192.50 lakh**

This includes a long term investment of Rs 6.00 lakh in UTI Energy Fund Growth Option Scheme of UTI Mutual Fund, the value of which had diminished by Rs 1.50 lakh as on 31 March 2008 due to decline in the Net Asset Value (NAV) of the Fund. However, this diminution of

Rs. 1.50 lakh in the value of the investment was not accounted for and charged to Income and Expenditure Account, though the same was mandatory in compliance with the requirements of Accounting Standard (AS)-13 issued by the Institute of Chartered Accountants of India. This resulted not only in violation of AS-13 but also in overstatement of 'Investments- Others' and understatement of 'Deficit' as well as 'Loans, Advances and Other Assets (Claims Receivable)-(Schedule 11B)' by Rs 1.50 lakh each.

The Management stated (August 2008) that the provision for decline in the NAV of above investment as on 31 March 2008 was not made as the decline in NAV was considered to be slight decline which was temporarily caused due to recession in the market. It was further stated that if decline in NAV continued during the next year, this would be accounted for accordingly.

The Management's reply is not acceptable as the decline in the value of investment was not slight and temporary, but it was substantial (25 % of total investment) and had shown a declining trend since February 2008 to the end of March 2008 and even beyond.

- v. Subject to our observations in the preceeding paragraphs, we report that the Balance Sheet and the Income and Expenditure Account/Receipts and Payments Account dealt with by this Report are in agreement with the books of accounts.
- vi. In our opinion and to the best of our information and according to the explanations given to us, the said financial

statements read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure to this Audit Report give a true and fair view in conformity with the accounting principles accepted in India:

- a. In so far as it relates to the Balance Sheet of the state of affairs of the Telecom Regulatory Authority of India-Contributory Provident Fund Account as at 31 March 2008; and
- b. In so far as it relates to the Income and Expenditure Account of the 'Deficit' for the year ended on that date.

**For and on behalf of the C&AG of India**

**Sd/-**

**(J.N. Gupta)**

**Director General of Audit (P&T)**

**Place: Delhi**

**Date: 22<sup>nd</sup> September 2008**

## ANNEXURE TO SEPARATE AUDIT REPORT

**(Referred to in paragraph 4 (vi) of Separate Audit Report of even date on the accounts of Telecom Regulatory Authority of India-Contributory Provident Fund Account for the year ended 31 March 2008)**

As per the information and explanations given to us, the books and records examined by us in normal course of audit and to the best of our knowledge and belief, we further report that:

### **(1) Adequacy of Internal Audit System**

TRAI has appointed a full-time Technical Officer (Internal Audit) with independent charge, who is also responsible for conducting internal audit of TRAI-CPF Account. The Internal Auditor has inspected the accounts and paid vouchers of TRAI-CPF Account for the year 2007-08.

In our opinion, the internal Audit System of the organisation is adequate and commensurate with its size and the nature of its functions.

### **(2) Adequacy of Internal Control System**

No cash transaction is done in TRAI-CPF Account as all receipts and payments are made through cheques only. Receipt of CPF deductions and payments made

to the members of TRAI-CPF on account of CPF withdrawals or temporary advances are done in accordance with the relevant rules and regulations and are regularly recorded in the bankbook. The funds of TRAI-CPF are invested in prescribed Government Securities/Fixed Deposits/Mutual Funds. The interests accrued/ received on these securities are properly credited to interest income. Decisions for investment of funds are taken in the periodical meetings of Board of Trustees. Interest on the CPF deposits of the members is credited to their individual accounts at the rate specified by the Central Government from time to time for the payment of interest on subscriptions to the General Provident Fund. Deficit, if any, in the interest payable to the members is met from TRAI General Fund. The members of TRAI-CPF Account are allowed withdrawal or for temporary advance out of their balance as per the guidelines of CPF Rules. In the case of advances given to the members, the Drawing and Disbursement Officer of TRAI is informed regarding the monthly deductions to be made from salary of the concerned members towards recovery of advances.

In our opinion, the internal Control System of the organisation is adequate and commensurate with its size and the nature of its functions.

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31-MAR-2008**

RECEIPTS		Current Year	Previous Year	PAYMENTS		Current Year	Previous Year
<b>I. Opening Balance</b>				<b>I. Expenses</b>			
a) Cash in hand	-	-	-	a) Establishment Expenses (corresponding to Schedule 20)	-	-	-
b) Bank Balances				b) Administrative Expenses (corresponding to Schedule 21)	416.20	482.00	
i) In current accounts	-	-	-				
ii) In deposit accounts	-	-	-				
ii) Savings accounts	908913.16		905160.94				
<b>II. Grants Received</b>				<b>II. Payments made against funds for various projects</b>			
a) From Government of India	-	-	-	(Name the fund or project should be shown along with	-	-	-
b) From State Government	-	-	-	the particulars of payments made for each project)			
c) From Other Sources (Details)	-	-	-				
(Grants for capital & revenue	-	-	-				
exp to shown sperately)	-	-	-				
<b>III. Income on Investments from</b>				<b>III. Investments and Deposits made</b>			
a) Earmarked/ Endow Funds	-	-	-	a) Out of Earmarked/ Endowment funds	-	-	-
b) Own Funds (Oth Investment)	-	-	400000.00	b) Out of Own Funds (Investments - Others)	4350000.00	11529644.00	
<b>IV. Interest Received</b>				<b>IV. Expenditure on Fixed Assets &amp; Capital Work-in-progress</b>			
a) On Bank Deposits - (Sch. A)	21324.00	417497.40		a) Purchase of Fixed Assets	-	-	-
b) Loans, Advances etc.	-	-	-	b) Expenditure on Capital Work-in-progress	-	-	-
c) Miscellaneous - (Sch. B)	187093.00	326115.13					
<b>V. Other Income (Specify)</b>				<b>V. Refund of surplus money/ Loans</b>			
To Miscellaneous Income	237.00	189010.00		a) The Government of India	-	-	-
				b) The State Government	-	-	-
<b>VI. Amount Borrowed</b>				c) Other providers of funds	-	-	-
<b>VII. Any other Receipts (Give Details)</b>				<b>VI. Finance Charges (Interest)</b>	-	-	-
Fees	-	-	-				

RECEIPTS		Current Year	Previous Year	PAYMENTS		Current Year	Previous Year
Capital Fund		-	-	<b>VII. Other Payments(Specify)</b>		377782.00	768357.00
Sales of Publication		-	-	Final Payments		1972910.00	2407164.00
Sale of Assets		-	-	Advances and Withdrawals			
Contribution from Members		4161440.00	3520760.00				
Contribution from TRAI		1276922.00	1231959.00	<b>VIII. Closing Balances</b>			
Transfer of Balances		-	2254935.00	a) Cash in hand		-	-
Repayment of Advances		75009.00	69515.00	b) Bank Balances			
Maturity of FDs		700000.00	6299607.69	i) In current accounts		-	-
				ii) In deposit accounts		-	-
				iii) Savings accounts		629829.96	908913.16
<b>TOTAL</b>		<b>7330938.16</b>	<b>15614560.16</b>	<b>TOTAL</b>		<b>7330938.16</b>	<b>15614560.16</b>

Sd/-  
Sh. J. S. Bhatia  
Dy. Advisor (Accounts)  
Ex - Officio Trustee

Sd/-  
Sh. P. K. Datta  
Jt. Advisor (A&P)  
Ex - Officio Trustee

Sd/-  
Dr. K. V. Damodharan  
Jt. Advisor (Economics)  
Trustee

Sd/-  
Smt. P. Janaki  
Assistant (Finance)  
Trustee

Sd/-  
Sh. Binod Kumar  
Advisor (A&P)  
Ex - Officio President

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**  
**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT**  
**INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD/ YEAR ENDED 31-MAR-2008**

INCOME	Schedule	Current Year	Previous Year
Income from Sales/ Services	12	-	-
Grants/ Subsidies	13	-	-
Fee/ Subscriptions	14	-	-
Income from Investments (Income on Invest from earmarked /endow. Funds transferred to Funds)	15	-	-
Income for Royalty ,Publication etc	16	-	-
Interest Earned	17	1151134.49	755616.53
Other Income	18	237.00	74677.00
Increase(decrease) in stock of Finished goods and works-in-progress	19	-	-
<b>TOTAL (A)</b>		<b>1151371.49</b>	<b>830293.53</b>
EXPENDITURE			
Establishment Expenses	20	-	-
Other Administrative Expenses etc	21	416.20	-
Expenditure on Grants, Subsidies etc	22	-	-
Interest	23	1460782.00	1089594.00
Depreciation(Net Total at the year end-corresponding to Schedule 8)			
<b>TOTAL (B)</b>		<b>1461198.2</b>	<b>1089594</b>
Balance being excess of Income over Expenditure (A-B)		-309826.71	-259300.47
Transfer to Special Reserve (Specify each)		-	-
Transfer to / from General Reserve		-	-
Balance being Surplus/ (Deficit) carried to <b>Recoverable from TRAI General Fund</b>	11	<b>-309826.71</b>	<b>-259300.47</b>
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

**Sd/-**  
**Sh. J. S. Bhatia**  
**Dy. Advisor (Accounts)**  
**Ex - Officio Trustee**

**Sd/-**  
**Sh. P. K. Datta**  
**Jt. Advisor (A&P)**  
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**Dr. K. V. Damodharan**  
**Jt. Advisor (Economics)**  
**Trustee**

**Sd/-**  
**Smt. P. Janaki**  
**Assistant (Finance)**  
**Trustee**

**Sd/-**  
**Sh. Binod Kumar**  
**Advisor (A&P)**  
**Ex - Officio President**

# Form Of Financial Statements (Non-profit Organisations)

## The Telecom Regulatory Authority Of India - Contributory Provident Fund Account Balance Sheet As At 31-mar-2008

CORPUS/CAPITAL FUND AND LIABILITIES	SCHEDULE	CURRENT YEAR	PREVIOUS YEAR
TRAI - CPF MEMBERS' ACCOUNT	1	21932585.00	17309124.00
RESERVES AND SURPLUS	2	-	-
EARMARKED/ ENDOWMENT FUNDS	3	-	-
SECURED LOANS AND BORROWINGS	4	-	-
UNSECURED LOANS AND BORROWINGS	5	-	-
DEFERRED CREDIT LIABILITIES	6	-	-
CURRENT LIABILITIES AND PROVISIONS	7	-	-
<b>TOTAL</b>		<b>21932585.00</b>	<b>17309124.00</b>
ASSETS			
FIXED ASSETS	8	-	-
INVESTMENTS-FROM EARMARKED/ENDOWMENT FUNDS	9	-	-
INVESTMENTS - OTHERS	10	19250290.00	15600290.00
CURRENT ASSETS, LOANS, ADVANCES ETC	11	2682295.00	1708834.00
MISCELLANEOUS EXPENDITURE		-	-
(TO THE EXTENT NOT WRITTEN OFF OR ADJUSTED)			
<b>TOTAL</b>		<b>21932585.00</b>	<b>17309124.00</b>
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

**Sd/-**  
**Sh. J. S. Bhatia**  
**Dy. Advisor (Accounts)**  
Ex - Office Trustee

**Sd/-**  
**Sh. P. K. Datta**  
**Jt. Advisor (A&P)**  
Ex - Office Trustee

**Sd/-**  
**Dr. K. V. Damodharan**  
**Jt. Advisor (Economics)**  
Trustee

**Sd/-**  
**Smt. P. Janaki**  
**Assistant (Finance)**  
Trustee

**Sd/-**  
**Sh. Binod Kumar**  
**Advisor (A&P)**  
Ex - Office President

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-MAR-2008**

**SCHEDULE 1 - TRAI - CPF MEMBERS' ACCOUNT**

**(Amount-Rs.)**

	<b>Current Year</b>	<b>Previous Year</b>
Balance as at the beginning of the year	17309124.00	12392559.00
Add: Contributions towards Members' Account	4623461.00	4916565.00
Add/(Deduct): Balance of net income/(expenditure) transferred from the Income and Expenditure Account		
<b>BALANCE AS AT THE YEAR-END</b>	<b>21932585.00</b>	<b>17309124.00</b>

**SCHEDULE 2 - RESERVES AND SURPLUS**

	<b>Current Year</b>	<b>Previous Year</b>
<b>1. Capital Reserve:</b>		
As per last Account		
Addition during the year		
Less: Deductions during the year		
<b>2. Revaluation Reserve:</b>		
As per last Account		
Addition during the year		
Less: Deductions during the year		
<b>3. Special Reserve:</b>		
As per last Account		
Addition during the year		
Less: Deductions during the year		
<b>4. General Reserve:</b>		
As per last Account		
Addition during the year		
Less: Deductions during the year		
<b>TOTAL</b>		N.A.

**Sd/-  
SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-MAR-2008**

**SCHEDULE 3 - EARMARKED/ ENDOWMENT FUNDS**

**(Amount-Rs.)**

	<b>FUND-WISE BREAKUP</b>				<b>Current</b>	<b>Previous</b>
	<b>Fund WW</b>	<b>Fund XX</b>	<b>Fund YY</b>	<b>Fund ZZ</b>	<b>Year</b>	<b>Year</b>
a) Opening balance of the funds						
b) Additions of the funds:						
i. Donations/grants						
ii. Income from investments made on account of funds						
iii. Other additions(sepcify nature)						
<b>TOTAL (a+b)</b>						
c) Utilisation/expenditure towards objectives of funds						
i. Capital Expenditure						
- Fixed Assets						
- Others						
<b>Total</b>						
ii. Revenue Expenditure						
- Salaries,Wages and allowances etc					N.A.	
- Rent						
- Other Administrative expenses						
<b>Total</b>						
<b>TOTAL (c)</b>						
<b>NET BALANCE AS AT THE YEAR-END (a+b+c)</b>						

**Notes**

- 1) Disclosures shall be made under relevant head based on conditions attaching to the grants
- 2) Plan funds received from the Central/State Governments are to be shown as separate funds and not to be mixed up with any other Funds

**Sd/-  
SRO (Finance/Accounts)**

## FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

### THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-MAR-2008

#### SCHEDULE 4 -SECURED LOANS AND BORROWINGS

(Amount-Rs.)

	Current Year	Previous Year
1. Central Government		
2. State Government (Specify)		
3. Financial Institutions		
4. Banks		
a) Term Loans		
-Interest accrued and due		
b) Other-Loans(Specify		
-Interest accrued and due		N.A.
5. Other Institutions and Agencies		
6. Debentures and Bonds		
7. Others(Specify)		
<b>TOTAL</b>		

**Note:** Amount due within one year

#### SCHEDULE 5 -UNSECURED LOANS AND BORROWINGS

(Amount-Rs.)

	Current Year	Previous Year
1. Central Government		
2. State Government (Specify)		
3. Financial Institutions		
4. Banks		
a) Term Loans		
-Interest accrued and due		
b) Other-Loans(Specify		
-Interest accrued and due		N.A.
5. Other Institutions and Agencies		
6. Debentures and Bonds		
7. Others(Specify)		
<b>TOTAL</b>		

**Note:** Amount due within one year

#### SCHEDULE 6-DEFERRED CREDIT LIABILITIES

	Current Year	Previous Year
a) Acceptances secured by hypothecation of capital equipment and other assets		
b) Others		N.A.
<b>TOTAL</b>		

Sd/-  
SRO (Finance/Accounts)

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-MAR-2008**

**SCHEDULE 7 - CURRENT LIABILITIES AND PROVISIONS**

**(Amount-Rs.)**

	Current Year	Previous Year
<b>A. CURRENT LIABILITIES</b>		
1) Acceptances		
2) Sundry Creditors		
a) For Goods		
b) Others		
3) Advances Received		
4) Interest accrued but not due on:		
a) Secured loans/borrowings		
b) Unsecured Loans/borrowings		
5) Statutory Liabilities	N.A.	
a) Overdue		
b) Others		
6) Other current Liabilities		
<b>TOTAL (A)</b>		
<b>B. PROVISIONS</b>		
1. For Taxation		
2. Gratuity		
3. Superannuation/Pension		
4. Accumulated Leave Encashment		
5. Trade Warranties/Claims		
6. Other(Specify)		
<b>TOTAL (B)</b>		
<b>TOTAL (A+B)</b>		

**Sd/-  
SRO (Finance/Accounts)**

# FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

## SCHEDULE 8 - FIXED ASSETS

**(Amount-Rs.)**

DESCRIPTION	GROSS BLOCK			DEPRICIATION		NET BLOCK	
	Cost/ valuation as at beginning of the year	Additions during the year	Deductions during the year	Cost/ valuation at the year-ended	As at the beginning of the year	Total up to the year-end	As at the current previous year-end
A. FIXED ASSETS:							
1. LAND							
a) Freehold							
b) Leasehold							
2. BUILDINGS							
a) On Freehold Land							
b) On Leasehold Land							
c) Ownership Flats/Premises							
d) Superstructures on land not belonging to the entity					N.A.		
3. PLANT MACHINERY & EQUIPMENT							
4. VEHICLES							
5. FURNITURE, FIXTURES							
6. OFFICER EQUIPMENT							
7. COMPUTER/PERIPHERALS							
8. ELECTRIC INSTALLATIONS							
9. LIBRARY BOOKS							
10. TUBEWELLS & W.SUPPLY							

(Amount-Rs.)

DESCRIPTION	GROSS BLOCK		DEPRICIATION		NET BLOCK		
	Cost/ valuation as at beginnning of the year	Additions during the year	Deductions during the year	Cost/ valuation at the year-ended	As at the beginning of the year	Total up to the year-end	As at the current previous year-end
11. OTHER FIXED ASSETS							
TOTAL OF CURRENT YEAR							
PREVIOUS YEAR							
B. CAPITAL WORK-IN-PROGRESS					N.A.		
TOTAL							

(Note to be given as to cost of assets on hire purchase basis included above)

Sd/-  
SRO (Finance/Accounts)

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-MAR-2008**

**SCHEDULE 9 - INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS**

**(Amount-Rs.)**

	Current Year	Previous Year
1. In Government Securities		
2. Other approved Securities		
3. Shares		
4. Debentures and Bonds		
5. Subsidiaries and Joint Ventures		N.A.
6. Others ( to be specified)		
<b>TOTAL</b>		

**SCHEDULE 10 - INVESTMENTS OTHERS**

	Current Year	Previous Year
1. In Government Securities	9308000	6800000
2. Other approved Securities	9042290	8500290
3. Shares	900000	300000
4. Debentures and Bonds	-	-
5. Subsidiaries and Joint Ventures	-	-
6. Others ( to be specified)	-	-
<b>TOTAL</b>	<b>19250290</b>	<b>15600290</b>

**Sd/-  
SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS(NON-PROFIT ORGANISATIONS)**

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-MAR-2008**

**SCHEDULE 11 - CURRENT ASSETS,LOANS,ADVANCES ETC**

**(Amount-Rs.)**

	Current Year	Previous Year
<b>A. CURRENT ASSETS:</b>		
1. Inventories		
a) Stores and Spares	-	-
b) Lose tools	-	-
c) Stock-in-trade		
Finished Goods	-	-
Work in progress	-	-
Raw Material	-	-
2. Sundry Debtors:		
a) Debts Outstanding for a period exceeding six months	-	-
b) Others	-	-
3. Cash balances in hand ( including cheques/drafts and imprest)		
4. Bank Balances:		
a) With Scheduled Banks		
- On Current Accounts	-	-
- On Deposit Accounts(includes margin money)	-	-
- On Savings Account	629829.96	908913.16
a) With non-Scheduled Banks		
- On Current Accounts	-	-
- On Deposit Accounts	-	-
- On Savings Account	-	-
5. Post Office-Savings Accounts	-	-
<b>TOTAL (A)</b>	<b>629829.96</b>	<b>908913.16</b>

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT  
SCHEDULES FORMING PART OF BALANCE SHEET AS AT 31-MAR-2008**

**SCHEDULE 11 (Contd...) - CURRENT ASSETS, LOANS, ADVANCES ETC.**

**(Amount-Rs.)**

	Current Year	Previous Year
<b>B. LOANS, ADVANCES AND OTHER ASSETS</b>		
1. Loans		
a) Staff	-	-
b) Other Entities engaged in activities/objectives similar to that of Entity	-	-
c) Other (Specify)	-	-
2. Advance and other amounts recoverable in cash or in kind or for value to be received:		
a) On Capital Account	-	-
b) Prepayments	-	-
c) Others	-	-
3. Income Accrued		
a) On Investments from Earmarked/Endowment Funds	-	-
b) On Investments - Others	1407855.45	465137.96
c) On Loans and Advances	-	-
d) Others	-	-
(includes income due unrealised Rs.)		
5. Claims Receivable - (334782.88 + 309826.71)	644609.59	334782.88
<b>TOTAL (B)</b>	<b>2052465.04</b>	<b>799920.84</b>
<b>TOTAL (A+B)</b>	<b>2682295.00</b>	<b>1708834.00</b>

**Sd/-  
SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT  
SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR  
THE PERIOD/YEAR ENDED 31-MAR-2008**

**SCHEDULE 12 - INCOME FROM SALES/SERVICES**

**(Amount-Rs.)**

	Current Year	Previous Year
1. Income from Sales		
a) Sale of Finished Goods		
b) Sale of Raw material		
c) Sale of Scraps		
2. Income from Services		
a) Labour and Processing Charges		
b) Professional/Consultancy Services		
c) Agency Commission and Brokerage		
d) Maintenance Services (Equipment/Property)		
e) Others(Specify)		
<b>TOTAL</b>		

**SCHEDULE 13 - GRANTS/SUBSIDIES**

	Current Year	Previous Year
(Irrevocable Grants & Subsidies Received)		
1) Central Government		
2) State Govenemnt(s)		
3) Government Agencies		
4) Institutions/Welfare Bodies		
5) International Organisations		
6) Other (Specify)		
<b>TOTAL</b>		

**Sd/-  
SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT  
SCHEDULES FORMING PART OF INCOME & EXPENDITURE  
FOR THE PERIOD/YEAR ENDED 31-MAR-2008**

**SCHEDULE 14 - FEES/ SUBSCRIPTIONS**

(Amount-Rs.)

	Current Year	Previous Year
1. Entrance Fees		
2. Annual Fees/Subscriptions		
3. Seminar/Program Fees		
4. Consultancy Fees		
5. Others(specify)		N.A.
<b>TOTAL</b>		

Note: Accounting Policies towards each item are to be disclosed

**SCHEDULE 15 - INCOME FROM INVESTMENTS**

Investment from Earmarked Fund	Current Year	Previous Year
(Income on Invest. from Earmarked/Endowment Funds Transferred to Funds)		
1) Interest		
a) On Govt Securities		
b) Other Bonds/Debentures		
2) Dividends		
a) On Shares		
b) On Mutual Fund Securities		N.A.
3) Rents		
4) Others (Specify)		
<b>TOTAL</b>		
<b>TRANSFERRED TO EARMARKED/ ENDOWMENT FUNDS</b>		

**SCHEDULE 16 -INCOME FROM ROYALTY,PUBLICATION ETC**

	Current Year	Previous Year
1. Income from Royalty		
2. Income from Publications		
3. Others (Specify)		N.A.
<b>TOTAL</b>		

**Sd/-  
SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT  
SCHEDULES FORMING PART OF INCOME & EXPENDITURE  
FOR THE PERIOD/YEAR ENDED 31-MAR-2008**

**SCHEDULE 17 -INTEREST EARNED**

	Current Year	Previous Year
1) On Term Deposits		
a) With Scheduled Banks	306852.86	365966.53
b) With Non-Scheduled Banks	-	-
c) With Institutions	822957.63	334004.00
d) Others	-	-
2) On Savings Account		
a) With Scheduled Banks	21324	55646
b) With Non-Scheduled Banks	-	-
c) With Institutions	-	-
d) Others	-	-
3) On Loans		
a) Employees/Staff	-	-
b) Others	-	-
4) Interest on Debtors and Other Receivables	-	-
<b>TOTAL</b>	<b>1151134.49</b>	<b>755616.53</b>

**SCHEDULE 18 - OTHER INCOME**

**(Amount-Rs.)**

	Current Year	Previous Year
1. Profit on Sale/ Disposal of Assets		
a) Owned assets	-	-
b) Assets acquired out of grants,or received free of cost	-	-
2. Export Incentives realized	-	-
3. Fees for Miscellaneous Services	-	-
4. Miscellaneous Income	237.00	74677.00
<b>TOTAL</b>	<b>237.00</b>	<b>74677.00</b>

**SCHEDULE 19 - INCREASE/(DECREASE) IN STOCK OF FINISHED GOODS & WORK IN PROGRESS**

	Current Year	Previous Year
a) Closing stock		
- Finished Goods		
- Work-in-progress		
b) Less Opening Stock		
- Finished Goods		
- Work-in-progress		
<b>NET INCREASE/(DECREASE) [a-b]</b>		N.A.

**Sd/-  
SRO (Finance/Accounts)**

**FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)**

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT  
SCHEDULES FORMING PART OF INCOME & EXPENDITURE  
FOR THE PERIOD/YEAR ENDED 31-MAR-2008**

**SCHEDULE 20- ESTABLISHMENT EXPENSES**

	Current Year	Previous Year
a) Salaries and Wages		
b) Allowances and Bonus		
c) Contribution to Provident Fund		
d) Contribution to Other Fund(specify)		
e) Staff Welfare Expenses		N.A.
f) Expenses on Employees Retirement and Terminal Benefits		
g) Others (specify)		
<b>TOTAL</b>		

**SCHEDULE 21-OTHER ADMINISTRATIVE EXPENSES ETC**

	Current Year	Previous Year
a) Purchases	-	-
b) Labour and processing expenses	-	-
c) Cartage and Carriage Inwards	-	-
d) Electricity and power	-	-
e) Water charges	-	-
f) Insurance	-	-
g) Repairs and maintenance	-	-
h) Excise Duty	-	-
i) Rent,Rates and Taxes	-	-
j) Vehicles Running and Maintenance	-	-
k) Postange,Telephone and Communication Charges	-	-
l) Printing and Stationery	-	-
m)Travelling and Conveyance Expenses	-	-
n) Expenses on Seminar/Workshops	-	-
o) Subscription Expenses	-	-
p) Expenses on Fees	-	-
q) Auditors Remuneration	-	-
r) Hospitality Expenses	-	-
s) Professional Charges	-	-
t) Provision for Bad and Doubtful Debts/Advances	-	-
u) Irrecoverable Balances Written-off	-	-
v) Packing Charges	-	-
w)Freight and Forwarding Expenses	-	-
x) Distribution Expenses	-	-
y) Advertisement and Publicity	-	-
z) Others (specify)                      - Bank Charges	416.20	-
<b>TOTAL</b>	<b>416.20</b>	<b>0.00</b>

**Sd/-  
SRO (Finance/Accounts)**

## FORM OF FINANCIAL STATEMENTS (NON-PROFIT ORGANISATIONS)

### THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT SCHEDULES FORMING PART OF INCOME & EXPENDITURE FOR THE PERIOD/YEAR ENDED 31-MAR-2008

#### SCHEDULE 22-EXPENDITURE ON GRANTS,SUBSIDIES ETC

(Amount-Rs.)

	Current Year	Previous Year
a) Grants given to Institutions/Organisations		
b) Subsidies given to Institutions/Organisations	N.A.	
<b>TOTAL</b>		

**Note:** Name of Entities,their Activities along with the amount of Grants/Subsidies are to be disclosed

#### SCHEDULE 23 - Interest

	Current Year	Previous Year
a) On Fixed Loans	-	-
b) On Other Loans(including Bank Charges)	-	-
a) Others (specify) <i>- Interest Payable to Members</i>	1460782.00	1089594.00
<b>TOTAL</b>	<b>1460782.00</b>	<b>1089594.00</b>

#### SCHEDULE 24 - SIGNIFICANT ACCOUNTING POLICIES

##### 1 Accounting Conventions:

- i) The financial statements have been prepared in the "Uniform Format of Accounts" as approved by the Controller General of Accounts vide their letter No. F.No.19(1)/Misc./2005/TA/450-490 dated 23.07.2007.
- ii) Accounts have been prepared on accrual basis for the current year i.e., 2007-08. There is no change in Method of Accounting from the preceeding year.

#### SCHEDULE 25 - CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS

##### Contingent Liabilities:

- 1 Claims against the Entity not acknowledged as debts NIL

##### Notes on Accounts

- 1 Investments have been made on the pattern prescribed in the Notification of Ministry of Finance (Department of Economic Affairs) dated 24<sup>th</sup> January 2005, effective from 1<sup>st</sup> April 2005.
- 2 As per approval of Competent Authority, the shortfall of Interest, if any, between Interest Earned on Investments made and Interest Payable to Subscribers, will be borne out of the TRAI General Fund. Accordingly, in this year, a sum of Rs. 3,09,826.71/- recoverable from TRAI General Fund has been accounted for.

Sd/-  
Sh. J. S. Bhatia  
Dy. Advisor  
(Accounts)  
Ex-Officio Trustee

Sd/-  
Sh. P. K. Datta  
Jt. Advisor (A&P)  
Ex-Officio Trustee

Sd/-  
Dr. K. V. Damodharan  
Jt. Advisor  
(Economics)  
Trustee

Sd/-  
Smt. P. Janaki  
Assistant  
(Finance)  
Trustee

Sd/-  
Sh. Binod Kumar  
Advisor (A&P)  
Ex-Officio President

## List of Abbreviations used in this compilation

3G	Third Generation
ADC	Access Deficit Charge
AGR	Adjusted Gross Revenue
ARPU	Average Revenue Per User
AUSPI	Association of Unified Service Providers of India
BSNL	Bharat Sanchar Nigam Limited
BSO	Basic Service Operator
BWA	Broadband Wireless Access
CAS	Conditional Access System
CDMA	Code Division Multiple Assay
C-DOT	Centre for Development of Telematics
COAI	Cellular Operators Association of India
CPP	Calling Party Pay
DEL	Direct Exchange Line
DIT	Department of Information Technology
DoT	Department of Telecommunication
DTH	Direct to Home
FLRIC	Forward looking Long Run Incremental Cost
FTA	Free to Air
GMPCS	Global Mobile Personal Communication System
GPRS	General Packet Radio Service
GSM	Global System of Mobiles
ILD	International Long Distance
ILDO	International Long Distance Operator
IN	Intelligent Network
IPLC	International Private Link Circuit
ISPAI	Internet Service Providers Association of India
ISP	Internet Service Provider
IUC	Interconnect User Charges
M/o I&B	Ministry of Information & Broadcasting
MDU	Multiple Dwelling Unit

MOU	Minutes of Usages
MSC	Mobile Switching Centre
MSO	Multi System Operators
MTNL	Mahanagar Telephone Nigam Limited
NGN	Next Generation Network
NGN-eCO	Next Generation Network Expert Committee
NGO	Non-Governmental Organisation
NIXI	National Internet Exchange of India
NLD	National Long Distance
NNP	National Numbering Plan
NTP	New Telecom Policy
OHD	Open House Discussion
PCO	Public Call Office
PMRTS	Public Mobile Radio Trunked Services
POI	Point of Interconnection
PSU	Public Sector Undertaking
QoS	Quality of Service
RDEL	Rural Direct Exchange Line
SACFA	Standing Advisory Committee on Frequency Allocation
SMS	Short Messaging Service
SP	Service Providers
TDSAT	Telecom Disputes Settlement and Appellate Tribunal
TEC	Telecom Engineering Centre
TRAI	Telecom Regulatory Authority of India
TTO	Telecom Tariff Order
USL	Universal Service Levy
USOF	Universal Service Obligation Fund
USSD	Unstructured Supplementary Service Data
VCC	Virtual Calling Card
VOD	Video on Demand
VPT	Village Public Telephone
VSAT	Very Small Aperture Terminal