



Telecom Regulatory Authority of India



2006-07

Annual Report

Telecom Regulatory Authority of India

Annual Report

2006-07

Mahanagar Doorsanchar Bhawan, Jawahar Lal Nehru Marg,
(Old Minto Road), New Delhi - 110002
Telephone : +91-11-2323 3466,2322 0534, 2321 3223
Fax No: +91-11-23213294 E-mail : tra@del2.vsnl.net.in
Website : <http://www.tra.gov.in>

Letter of Transmittal

To the Central Government through Hon'ble Minister of Communication & Information Technology

It is my privilege to forward the 10th Annual Report of the Telecom Regulatory Authority of India to be laid before each House of Parliament. The report is for the year 2006-2007. 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: 15th October 07

TABLE OF CONTENTS

Sl. No.	Particulars	Page Nos.
A	Composition of Authority	1 - 10
B	Mission, Aims and Objectives	11- 12
C	Overview	13 - 28
D	Road map for the future	29 - 30
PART - I	Policies and Programmes	31 - 83
1.1	Review of General Environment in the Telecom Sector	33 - 66
1.2	Review of Policies and Programmes	66 - 83
PART - II	Review of Working and Operation of the Telecom Authority of India	85 - 116
PART - III	Functions of Telecom Regulaotry Authority of India in Respect of Matters Specified in Section 11 of TRAI Act	117 - 152
PART - IV	Organisational Matters of Telecom Regulatory Authority of India and Financial Performance	153-211
4.1	Organizational matters of Telecom Regulatory Authority of India	155-165
4.2	Audited Accounts of TRAI 2006-2007	167-205
4.3	Audited Accounts of TRAI Contributory Provident Fund 2005-2006	206-211
	List of Abbreviations used in this Compilation	212-214



LIST OF TABLE

Table No.	Subject	Page No.
Part - I		
Charts 1 & 2	Reduction in tariffs for Long Distance Services	34
Table 1.1	Total number of licenses for service areas and number of licensees offering services as on 31 st March 2007 (Other than BSNL and MTNL)	35
Table 1.2	Subscriber Base of Basic Services (wireline) as on 31 st March, 2007	37 - 39
Table 1.3	Details of Equipped Switching Capacity, Net Capacity Addition, etc. in respect of Basic Service Providers as on 31 st March, 2007	40 - 41
Table 1.4	Direct Exchange Lines and Waiting List during 1989-90 to 2006-07 for BSNL and MTNL (combined)	42
Table 1.5	The total DELs installed by Basic Service Operators and the total Waiting List as on 31 st March, 2007	43
Table 1.6	Operator-wise and Circle-wise details of Public Call Offices as on 31 st March, 2007 vis-à-vis March, 2006	44 - 46
Table 1.7	Operator-wise and Circle-wise status of VPTs as on 31 st March, 2007	46 - 48
Table 1.8	Subscriber Base (in Million) of Mobile (GSM and CDMA) Services from March, 2003 to March, 2007	49
Table 1.9	Market Share of different Mobile Operators in terms of subscriber base as on March, 2007	49
Table 1.10	List of Licensed Cellular (GSM & CDMA) Service Providers as on 31 st March, 2007	50
Table 1.11	Service-area wise List of Wireless Service Providers (GSM and CDMA) as on March, 2007	51 - 55
Table 1.12	Wireless subscribers (GSM and CDMA) as percentage of Basic subscribers in India, March 2001 to March 2007	55
Table 1.13	Market share of different GSM Operators in terms of subscriber base as on 31 st March 2007	56



LIST OF TABLE

Table No.	Subject	Page No.
Table 1.14	Market share of different CDMA Operators in terms of subscriber base as on 31 st March 2007	57
Table 1.15	Number of Licensees (Cellular and Unified) and their Subscriber Base for Cellular Wireless (GSM) Services as on 31 st March, 2007	57
Table 1.16	Subscriber Base for Wireless (GSM) Service in Metros and Circles from March, 2003 to March, 2007	57
Table 1.17	Additional GSM Wireless Subscribers added and annual growth rate in different circles during 2004-05, 2005-06 and 2006-07	58
Figure 1.1	PSU Operators Subscriber Base (1998-2007)	59
Figure 1.2	Private Operator's subscriber base (1998-2007)	60
Table 1.18	Number of VSAT Customers as on 31 st March 2007	60
Table 1.19	Number of PMRTS Customers as on 31 st March 2007	61
Table 1.20	Number of Internet Subscribers as on 31 st March 2007.	63
Table 1.21	Market Share of Top Five Internet Service Providers (ISPs) in terms of subscriber base as on 31 st March 2007	63
Table 1.22	Number of Broadband Subscribers as on 31 st March 2007	64
Table 1.23	List of Internet Telephony Service Providers as on 31 st March 2007 who have reported the start of services	64 - 65
Annexure	Subscriber base and other details as reported by ISPs	81 - 83
Part - II		
Figure 2.1	Widening of Rural and Urban Tele-density gap (March 1996 to March 2007)	96
Part - III		
Table 3.1	Telecommunications Tariff Orders (Amendments)	120 - 121



LIST OF TABLE

Table No.	Subject	Page No.
Table 3.2	Regulations issued by TRAI during 2006-2007	125 - 126
Table 3.3	List of Recommendations made by the Authority during the period 2006-07	136
Part - IV		
Table 4.1	Statement Showing Officers Sent on Training Programme During the year 2006-07	161 - 162
Table 4.2	Seminars/Workshops /Meetings attended by Authority & TRAI officials during 2006-07	163 - 164



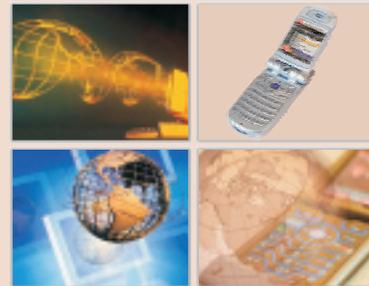
A. COMPOSITION OF AUTHORITY

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 31st March, 2007, the Authority consisted of the following:

Name	Designation	Date of Charge Assumption
Shri Nripendra Misra	Chairperson	22.03.2006
Shri A.K. Sawhney	Member	30.06.2006
Shri R.N. Prabhakar	Member	27.02.2007
Prof. N. Balakrishnan	Part-Time Member	26.09.2006
Dr. Rajiv Kumar	Part-Time Member	23.01.2007

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.



CHAIRPERSON



**NRIPENDRA MISRA
(From 22nd March,
2006 onwards)**

Shri Nripendra Misra joined as Chairman, Telecom Regulatory Authority of India on 22nd 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 several far-reaching initiatives have been taken by TRAI which have resulted in overall continued growth of telecom sector in the country. Some of the important landmarks during his tenure, has been the subscriber base crossing the 200 million mark and the successful implementation of CAS in notified area of Delhi, Kolkatta & Mumbai. The key focus areas of TRAI under his leadership has been strong consumer centric initiatives which will go a long way in furtherance of consumer interests.



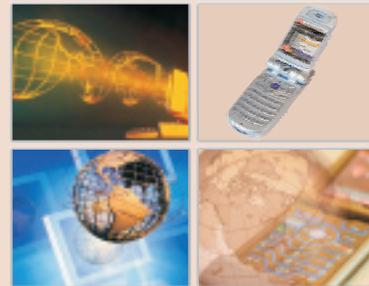
MEMBER



**A.K. Sawhney
(From 30th June,
2006 onwards)**

Shri A.K. Sawhney joined as Member, Telecom Regulatory Authority of India on 30th 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 for 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.

2. 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.

3. 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.



MEMBER

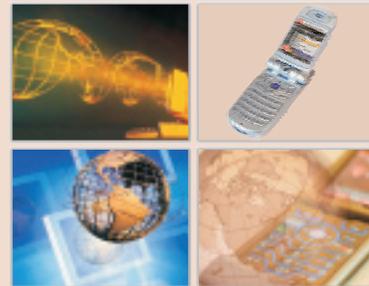


**R.N. Prabhakar
(From 27th
February, 2007
onwards)**

Shri R.N. Prabhakar, an officer of 1968 batch of Indian Engineering Service, joined as a full time Member, TRAI on 27th February, 2007. He is graduate in Electrical Engineering from Delhi College of Engineering and post graduate 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.



**Member
(Part-Time)**



**Prof. N.
Balakrishnan
(FTWAS, FNA,
FASc, FNAE,
FNASc, FIETE)
(From 26th
September, 2006
onwards)**

Prof. N. Balakrishnan, Member (Part-Time) w.e.f. 26th 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 PhD 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 Electromagnetics, 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 is a member of the Scientific Advisory Committee to the Cabinet (SAC-C), National Security Advisory Board.

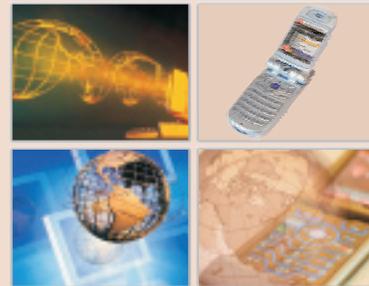
He is also a Member, Board of Governors of Indian Institute of Technology at Delhi and Madras.

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.

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



MEMBER



**(Part-Time)
Dr. Rajiv Kumar
(From 23rd
January, 2007
onwards)**

Dr. Rajiv Kumar joined TRAI as Member (Part-Time) on 23rd 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 had worked with ADB, Manila for over 10 years as the Principal Regional Economist for Central Asia and also with its Research Department as well as Country Economist for Mongolia and China. He has worked as Economic Adviser in the Ministry of Finance, Government of India from 1991-1995, as Senior Consultant In charge of the Economics Division with the Bureau of Industrial Costs and Prices, Ministry of Industry from 1989-1991.

He was Professor at Indian Institute of Foreign Trade from 1987-89, teaching Competitive Strategy and Micro Economics. Dr. Kumar was with ICRIER earlier as Senior Fellow from 1982 to 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

B.1 Preamble

1. 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 9th 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 2006-2007 to transform the telecom sector including the broadcasting and cable services to extend the scope, availability and reach of these services in India.

B.2 Mission of TRAI

2. 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.

B.3 Goals and Objectives of TRAI

3. 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:
 - Increasing tele-density and access to telecommunications in the country at affordable prices,
 - Making available telecommunication services which in terms of range, price and quality are comparable to the best in the world,

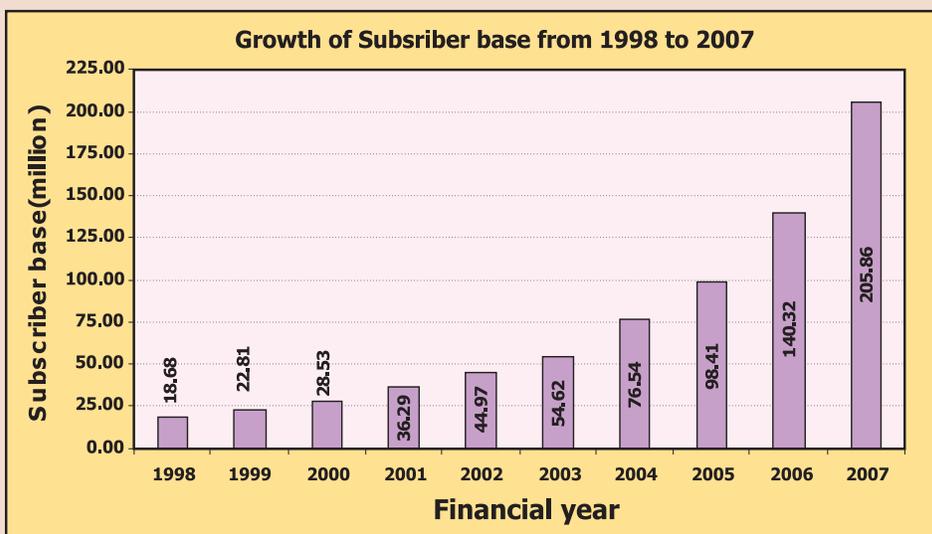


- Providing a fair and transparent policy environment which promotes a level playing field and facilitates fair competition,
- Establishing an interconnection regime that allows fair, transparent, prompt and equitable interconnection,
- Re-balancing tariffs so that the objectives of affordability and 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.



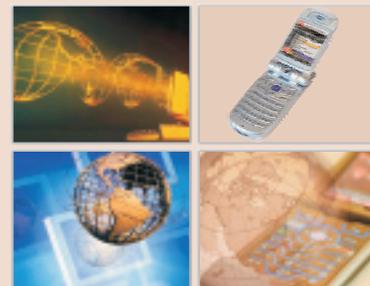
C. OVERVIEW

- Numerous policy initiatives were taken during 2006-07 to further facilitate reforms in the telecom sector including broadcasting and cable services and extend the scope, availability and reach of these services in India, which are briefly discussed in this part of the report. The success story of the initiatives taken by TRAI can be gauged from the exponential growth in the subscriber base as depicted below. The total subscriber base crossed the 200 million figure which is an important landmark of the current financial year.



- Recommendations for permitting usage of * and # in provisioning of value added intra-network services like Unstructured Supplementary Service Data (USSD) by Access Providers**

- The Access Providers uses special characters * and # in provision of value added Intra-network services like USSD (Unstructured Supplementary Service Data) wherein the subscriber of a network uses these special characters not at the time of dialing, but subsequently once he has entered their network for uses of supplementary services. The



National Numbering Plan 2003 is silent about the usage of above special characters in provisioning of intra-network value added services. Based on the Access Providers comments and keeping in view the interest of consumers TRAI recommended that relevant provisions of National Numbering Plan 2003 (NNP), viz. clause 1.6 of Introduction Part and Numbers for Special Services described in Annex IV, be elaborated and clarified so that the usage of special characters * & # is explicitly allowed in provisioning of intra-network value added services.

(b) Forbearance on Interconnection Usage Charges (IUC) for Short Message Service (SMS)

6. As per the prevailing IUC Regulation, termination and Carriage charges for Short Message Service (SMS) has not been specified by the Authority and are forborne. To address some of the representations from service providers, TRAI had issued a Consultation Paper on the issue of "Interconnect Usage Charges for Short Message Service (SMS)". The main issues raised in Consultation Paper were IUC for SMS & Premium rate SMS.

7. After receiving comments from stakeholders on the consultation paper, holding Open House Discussions at Delhi and deliberating upon the various aspects of the subject matter including consideration of the international practices, the Authority arrived at the following decisions.

- (i) The forbearance on IUC for SMS should continue for the present.
- (ii) It is felt that the charges of premium SMS are on higher side and bear no relationship with the cost and nature of services rendered.
- (iii) It is hoped that the telecom operators would voluntarily reduce the charges of premium SMS service and TRAI henceforth would closely monitor the trends.



- (iv) It is also observed that the subscribers are not fully aware of premium SMS charges. The telecom operators are required to ensure either themselves or in arrangement with the content provider for the following:
- a) Wide publicity to be provided for the tariff of the premium rate service.
 - b) Premium SMS should be on short coded SMS numbers only.
 - c) The Telecom Service provider should make necessary agreement/arrangement with the content providers that should include a clause making it mandatory on the part of Content provider to widely publicise the tariff applicable for the premium service for better consumer awareness.
 - d) The use of short coded SMS numbers should be in accordance with the directives of Department of Telecommunications (DoT) issued from time to time.

8. TRAI also observed that there is no significant asymmetry in the flow of SMS traffic. The marginal imbalance in SMS traffic perhaps may not call for intervention by the Authority in terms of fixing SMS termination charges in view of the overwhelming arguments in favor of forbearance. Moreover there is no supplementary cost for the terminating and transiting traffic as primary resource utilized for SMS i.e. the signaling channel (TS-16) is required for handling the signaling for the voice traffic and is used for SMS only in non busy time. The Authority decided to keep a close watch on the developments and flow of the traffic, and will take suitable action, if required, at any point of time.

(c) The Telecommunication (Broadcasting and Cable Services) Interconnection (Second Amendment) Regulation 2006

9. TRAI issued the amendment Regulation on 24th August 2006 to amend the Interconnection Regulations dated 10th



December 2004, mainly to provide standard forms of interconnection agreements for Conditional Access System (CAS) areas. The Interconnection Regulations of December 2004 covered arrangements among service providers for interconnection and revenue share, for all broadcasting and cable services in India. The objective of having standard interconnection agreements is to ensure that implementation of CAS does not get delayed in case the service providers fail to enter into mutually acceptable interconnection agreements through negotiation within the stipulated time. The Authority had placed on its website on 12th June 2006, draft standard interconnection agreements for CAS areas between broadcasters and multi system operators (MSOs) and between multi system operators (MSOs) and cable operators as well as the draft Regulation for providing these agreements.

10. The Authority received responses from the stakeholders and based on the comments received, the Authority held further discussions with them. The Authority, after carefully considering the feedback received from the stakeholders, finalized the standard interconnection agreements between broadcasters and multi system operators (MSOs) and between multi system operators (MSOs) and cable operators. Apart from providing standard interconnection agreements, the Interconnection Regulations dated 10th December 2004 have also been amended to prohibit such clauses in interconnection agreements, which would require the distributor of TV channels to pay a minimum guaranteed amount as subscription fee, where such distributor is using an addressable system for delivery of pay channels.

(d) Recommendations on Licensing Issues Relating to Direct to Home (DTH)

11. Ministry of Information & Broadcasting (M/o I&B) in the month of May 2006 had sought Authority's views regarding certain

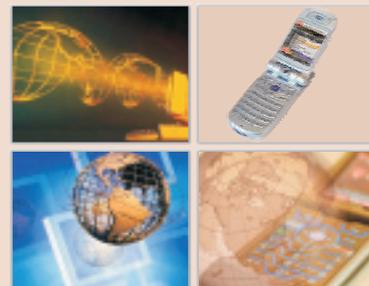


issues relating to the licensing provisions of the Direct to Home Service. The Authority had issued a Consultation Paper on those issues on June 5, 2006. This was followed up with a meeting with all the stakeholders who had responded to the Consultation Paper. Based on the outcome of the consultation process the Authority sent its recommendations to the Government on 25th August 2006.

12. The recommendations provide for clarifications to certain provisions of the Licensing conditions. It also provides for certain guidelines to be followed in the adoption of the Multiple Dwelling Unit (MDU) technology which is basically perceived to be in consumer interest. These guidelines will ensure that the interests of the consumers are protected by allowing the multiple service providers to enter the same premises. Through such fair competition the interests of the cable operators and other competitors to the DTH operators would also be protected.

(e) Tariff Order for Free to Air Channels in Basic Service Tier, Pay Channel and Set Top Box schemes in respect of CAS notified areas of Delhi, Mumbai, Kolkata and Chennai.

13. A Division Bench of the Hon'ble High Court of Delhi had on 20th July 2006, directed implementation of CAS in the three metros of Mumbai, Kolkata and Delhi by 31st December 2006. CAS has already been implemented in Chennai in September 2003. During the deliberations for introduction of CAS, the three areas identified for tariff regulation were - pay channels, basic service tier and schemes for supply of set top boxes. On the basis of detailed examination and analysis of the inputs received during the process of consultation, TRAI issued, The Telecommunication (Broadcasting & Cable) Services (Third) (CAS Areas) Tariff Order, 2006 on 31st August 2006. This order prescribes (i) the rates of tariff for basic service tier consisting of free to air channels, (ii) maximum retail price of individual pay channels which the multi system operator /cable operator will charge from the subscriber and (iii)



schemes for supply of set top boxes. This order is applicable in CAS notified areas of Mumbai, Delhi, Kolkata and Chennai.

(f) The Telecommunication (Broadcasting and Cable Services) Interconnection (Third Amendment) Regulation 2006

14. TRAI on 4th September 2006 issued a Regulation to amend the Interconnection Regulation dated 10th December 2004. The Interconnection Regulation of December 2004 covers arrangements among service providers for interconnection and revenue share, for all broadcasting and cable services in India. With the experience of more than one and a half years after issue of the Interconnection Regulation a need was felt to clarify as well as expand the scope of the same so as to minimize the doubts and disputes/ litigation. The Authority followed its consultative approach for amendment of the interconnection regulation by issuing a Consultation Note on 21st March, 2006, a Consultation Paper on 11th May 2006 and holding Open House Discussions in Mumbai on 16th June 2006 and in Delhi on 19th June 2006. After taking into consideration the comments received on the consultation paper as well as the comments made during the course of the Open House Discussions, the amendment Regulation was issued by TRAI.



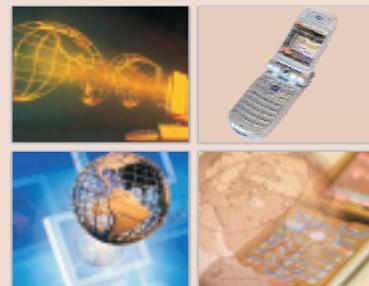
(g) Admissibility of Revenue Share between Visiting Network and Terminating Network for Roaming calls

15. International Roaming tariff are under forbearance and there is a ceiling on National Roaming tariff. Revenue sharing between home network and visiting network is normally decided by mutual agreement between service providers. In this regard, TRAI received representations from various service providers and their Associations against Bharat Sanchar Nigam Limited (BSNL) while demanding revenue share over and above the Transit Charge fixed by Authority. The key issue was whether the

terminating network service provider should get only the prescribed termination charges or in view of higher roaming charges, should there be any revenue share arrangement between the visiting network service provider and the terminating network service provider. To address the issues involved in the matter, a consultation paper was issued on 16th June 2006. Having considered the opinions of the stakeholders contained in their written submissions, the views expressed in the Open House Discussion and other relevant facts, the Authority remained of the view that there is no justification for a revenue sharing arrangement among operators in respect of roaming calls (National & International), and, therefore, it was concluded that no amendment in the regulation was called for. Thus, the Authority's earlier decision that terminating operator should get only the termination charge as prescribed in the IUC Regulation, was reconfirmed.

(h) Recommendations on 'Allocation and pricing of spectrum for Third Generation (3G) services and Broadband Wireless Access'

16. TRAI on 27th September 2006 sent its recommendations on the allocation and pricing of spectrum for 3G and Broadband Wireless Access (BWA) services to the Government. The recommendations focuses on level playing field, technological neutrality and affordability while ensuring that spectrum is available to telecom operators wishing to provide 3G and BWA and thus deepening the penetration of telecom services in rural and urban India. The Authority gave high priority to a forward looking but pragmatic long-term road map identifying bands of spectrum for immediate and future use thus ensuring that the benefits of technology is spread all over the country. Keeping with the broad working guidelines of the Authority, the recommendations fulfill the objectives of healthy competition, sectoral growth, level playing field and maintaining a technologically neutral stance. The key theme of the recommendation is that the consumer must reap the benefits of affordable and varied services. The



details of the recommendations have been discussed in part III of the report. It is evident to all that the spectrum is a scarce commodity and allocation should be considered in a holistic manner and any piecemeal or ad-hoc solutions should not find place in future planning. Accordingly, the Authority has also made suo-moto suggestions on the wider issue of spectrum management.

(i) Regulations on Quality of Service Standards for Broadband Service

17. The Authority had noted that alongwith the increase in the number of customers, the numbers of consumer complaints pertaining to Broadband Services were also increasing. A need was, therefore, felt for addressing the quality of service issues for broadband service. As a first step in this regard, TRAI proposed to lay down the benchmarks for quality of service standards for Broadband, through a consultation process with stakeholders. Accordingly a consultation paper was issued on 24th May 2006 and Open House Discussion was held at Delhi on 28th June 2006. Considering the views of stakeholders, TRAI issued Regulations on Quality of Service for Broadband Services on 6th October 2006.

(j) Regulation on Intelligent Network in Multi Operator, Multi Network Scenario

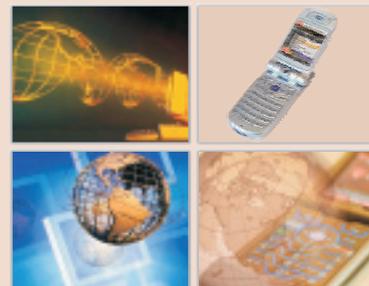
18. TRAI on 27th November 2006, issued Regulation titled "Intelligent Network Services in Multi Operator and Multi Network Scenario Regulations, 2006 (13 of 2006)" providing inter alia for Interconnection amongst all telecom service providers for Intelligent Network (IN) Services. This Regulation would ensure that specified innovative services made available through IN will not be restricted to the telecom service providers who have deployed the Intelligent Network platform but now it will also be available to subscribers of other operators. The regulation mandates all service providers to provide interconnection to all eligible service providers so that subscribers



of all Access Providers will have a choice of using the IN services of other service providers. This regulation will enable all telecom consumers in the country to have access to Multi-operator Multi-service IN platforms and no operator will be permitted to block his consumers from accessing IN platform belonging to other service providers. Service providers are required to enter into the necessary commercial and technical agreements for the same within three months. The technical architecture and mutual revenue share among service providers has to be mutually decided upon based on the principles of Reciprocity and Non-discrimination.

(k) Review of ceiling tariffs for roaming services

19. The Telecom Regulatory Authority of India (TRAI) had initiated a consultation process on the review of ceiling tariffs for roaming services with the issue of a Consultation Paper on the subject (Consultation Paper No.16/2006) on 24th November 2006. The Authority took this step based on the finding that while competition in mobile services has reached to a satisfactory level, the same is not true for roaming segment of the mobile services. The Authority considered the perception of consumers that roaming tariff was high and therefore burdensome to them. Stakeholders were given adequate opportunity to provide their views in matter. The Authority provided them with extended period for submitting written responses. They were also accorded an opportunity to present their views orally in the open house session held in New Delhi on 2nd January 2007. Following requests from the stakeholders, the Authority held further discussions with the representatives of the industry associations, namely, Cellular Operators Association of India (COAI) and Association of Unified Service Providers of India (AUSPI), BSNL, Mahanagar Telephone Nigam Limited (MTNL) and a consumer organization in the second week of January 2007. Based on in-depth analysis of various elements of cost, data on costs, the views of stakeholders, the prevailing tariff for calls originated in home networks and other relevant factors,



the Authority has prescribed a composite ceiling roaming charges as indicated below:

- Rs. 1.40 per minute for outgoing local calls;
- Rs. 2.40 per minute for outgoing National Long Distance (NLD) calls;
- Rs. 1.75 per minute for incoming calls.

The other salient features prescribed are: -

- No rental permitted for National roaming in any form;
- No surcharge is leviable for any of the national roaming services;
- No separate PSTN charges on roaming calls;
- Receiving SMS is free while roaming.

20. The revision resulted in a reduction ranging from 22% to 56% as compared to the market rates as it existed prior to the revision. This is in addition to the saving for the customers on account of abolition of rentals. The Telecommunication Tariff (Forty Fourth Amendment) Order dated 24th January 2007 containing the revised tariff became effective on 15th February 2007. The Authority expects that the reduction in tariffs would lead to substantial increase in demand and usage for the service, overall revenue growth for the service providers and provide an impetus to the growth of Indian economy and telecom services in particular. The Authority is of the view that reduction of roaming charges on the basis of cost orientation would make roaming facility affordable to the common man.

(I) Analysis of Tariff for Internet Access Services including Broadband

21. Study Paper (No.2/2006) on Analysis of Internet & Broadband tariff in India was released on 28th November 2006. The study paper mainly provides analysis of the prevailing market structure and tariff for Internet service through Dial-up and Broadband connection. It was concluded that Dial-up service



is cheaper than Broadband for very low usage subscribers. As the usage and the quality requirement of the subscriber goes up, broadband becomes cheaper.

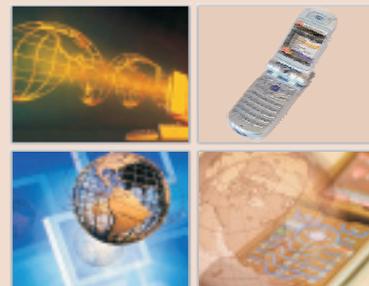
(m) Study Paper on Analysis of Tariff Schemes with Lifetime Validity

22. In the month of Dec'05/Jan'06 most of the mobile service providers launched tariff schemes with lifetime validity. It was decided that the viability of such schemes should be examined based on operators data. The analysis of tariff schemes with lifetime validity was carried out and a study paper (No.3/2006) on the subject was released on 19th December 2006. It was found that the scheme are giving reasonable Average Revenue Per User (ARPU).

(n) Study Paper on Financial analysis of Telecom Industry of China and India

23. TRAI on 27th June 2006 issued study on "Financial Analysis of Telecom Industry of China and India". Salient features of the Study Paper were as under:

- The Growth of mobile services in India over the past few years has been phenomenal. Mobile subscribers are growing at a Cumulative Annual Growth Rate of around 85% since 1999. Now over 4 million mobile subscribers are added every month. On the other hand China has registered a growth of 16% in the mobile subscriber base in the year 2005 with monthly addition of 5 million subscribers every month.
- Total telecom revenue of Chinese telecom companies increased from \$ 65 billion to \$ 72.70 billion during the calendar year 2005. Telecom revenue in India during 2005-06 was \$19.50 billion.
- ARPU in India and China is comparable in Global System of Mobiles (GSM) pre-paid segment but ARPU for post



paid segment in China is much higher. ARPU for Code Division Multiple Assay (CDMA) services are also higher in China in comparison to India.

- ARPU for Basic Telephone Services is higher in India when compared to ARPU for Basic Telephone services in China.
- Minutes of Usages (MOU) of cellular mobile Telephone services are much higher in India when compared to China's Cellular mobile telephone services.
- Minutes of Usage of GSM and CDMA based cellular mobile telephone services in India are 32% and 70% higher respectively when compared to Chinese cellular mobile telephone services.
- Lower ARPUs in India inspite of higher usage.
- The capital employed per subscriber for the Basic Service is much lower in China when compared to India. However capital employed for the cellular segment is lower in India.
- Indian mobile market is much more competitive when compared to the Chinese mobile market.

The study paper is released for information of various stakeholders, consumers, research agencies and analysts.

(o) Recommendations on Terms & Conditions for Resale in International Private Leased Circuits (IPLC) Segment

24. DoT had sought recommendations on Terms & Conditions for "Introduction of Resale in IPLC Segment" from TRAI. Accordingly, the Authority issued Consultation Paper on 22nd December 2006. After following the consultation process including the Open House Discussion at New Delhi on 29th January 2007, the Authority sent its recommendation to the Government on 23rd March 2007. The Authority recommended open competition in the Resale in IPLC segment without any ceiling on the number of Resellers. The major recommendations include scope of licence, eligibility criteria, limit of foreign equity, entry fee, licence fee, financial bank guarantee, security



conditions, remote access, preparation of accounts, duration of licence, customer services and quality of service (QoS) etc.

(p) The Telecommunication Interconnection Usage Charges (Eighth Amendment) Regulations, 2007

25. As part of the annual review, TRAI after following the transparent consultation process including the Open House Discussion notified "The Telecommunication Interconnection Usage Charges (Eighth Amendment) Regulations, 2007" on 21st March 2007. In terms of this regulation the total amount of Access Deficit Charge (ADC) for the financial year 2007-08 is estimated to be approximately Rs. 2000 Crores per minute. ADC on Outgoing International Long Distance Calls have been reduced to zero from existing level of Rs. 0.80 per minute. i.e. ADC burden on domestic consumers in outgoing international long distance calls have been removed. Per minute ADC on Incoming International Long Distance Calls have been reduced to Re.1.00 per minute from existing Rs. 1.60 per minute. ADC on percentage revenue share has been reduced to 0.75% from existing 1.50% of Adjusted Gross Revenue (AGR) of all service providers i.e. Access Providers, National Long Distance Operators and International Long Distance Operators. This regulation provides a major relief to domestic telecom sector by reduction of ADC on percentage revenue share and removal of per minute ADC on international outgoing calls. Further, TRAI has not imposed any ADC charges on revenue of Access Providers generated from rural wireless subscribers.

(q) Developments in Tariff Regulation

26. TRAI has been given the mandate to regulate tariffs for telecommunication services in the country. This function is discharged through Telecommunication Tariff Orders (TTO)



issued from time to time. The Indian consumer have immensely benefited from low tariffs, which has also been a major factor for explosive growth in the sector. Considering the intense competition in the sector and continuing reduction in the tariff, TRAI has moved from a Regime where tariffs were strictly regulated to one where tariffs are by and large allowed to be decided by market forces. 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. One of the major developments on the tariff front that took place in the year 2006-07 relates to review of ceiling tariffs for roaming services.

(r) Measures to Protect the Interest of Consumers

27. To enhance consumer awareness, the Authority vide letter dated 23rd May 2006 advised all service providers to provide printed material in English and Vernacular Language to customers at the time of enrollment inter-alia giving full detail of the tariff plan. Vide Direction dated 27th June 2005 to all access providers the Authority prescribed guidelines on the system of credit limit for postpaid subscribers. As a follow up to the above Direction and with a view to further streamline the procedure and enhance the consumer transparency, the Authority vide Direction dated 7th June 2006 mandated that the credit limit set for a postpaid customer shall be included in the monthly statement/bill of the customer on a regular basis. With a view to ensure that the directions issued by TRAI having continuing compliance are complied by the Service Providers, the Authority vide direction dated 14th July 2006 sought yearly report/certificate from service providers of compliance of Directions on tariff matters that have continuing application. In order to ensure and monitor that the service providers display details

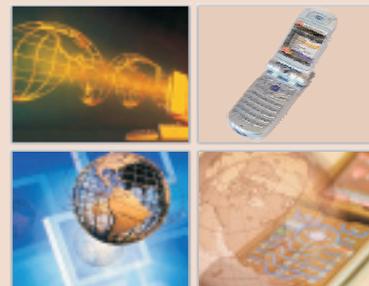


of the tariff plans on their website for the information of the consumers, the Authority vide letter dated 1st September 2006 made it mandatory for the service providers to submit a declaration along with tariff reports to the effect that the reported tariff plan has been displayed on the website.

28. For transparency and consumer protection, Authority had asked service providers to display International private Lease line tariff and domestic leased line tariff in their website. A Direction was issued on 29th August 2006 to Service Providers regarding issue of docket number for registering complaints made to call centre and also on the issue of termination of service. The Direction inter alia provides for time limit for action of termination requests made through various modes.
29. Further a Consultation Paper on the Redressal of Consumer Grievances and Consumer Protection in Telecommunication has been issued on 3rd January 2007. The consultation paper defines structural framework of institutional mechanism for handling consumer grievances and also outlines the processes and procedures and time limits for redressal of grievances at Call Centre, Nodal Officer and Appellate Authority level.

(s) Monitoring of Quality of Service (QoS)

30. 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 Service prescribing QoS benchmarks. Further in order to ensure quality of service standards for Broadband, TRAI has issued Regulations on Quality of Service for Broadband Services on 6th October 2006. In addition, in order to regulate the Quality of Service to be observed by the MSOs/Cable Operators in CAS notified areas of Chennai, Mumbai and Kolkata, TRAI issued the Standards of Quality of Service (Broadcasting and Cable Services) (Cable Television - CAS) Regulation, 2006 of 23rd August 2006.



31. 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 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.



32. 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 March 2006, June 2006, September 2006 and December 2006 were analyzed and the analysis reports were put on the TRAI website for the information of all stakeholders/Public on 7th September 2006, 13th November 2006, 24th January 2007 and 20th April 2007 respectively. These reports also include the analysis of the findings of the report of the Independent Agency (M/s TUV South Asia Ltd.) regarding assessment of customer perception of service for quarter ending March 2006, June 2006, September 2006 and December 2006.

D. Road Map for the Future

To fulfil its goals and objectives, the Authority proposes to take up the following issues during the next financial year:-

- (i) Regulatory and licensing requirement for Spectrum trading in India,
- (ii) Spectrum & Licensing related issues for new technologies- IMT 2000 and beyond-WIMAX/SDR,
- (iii) Satellite Communications related issues,
- (iv) Studies on Digitalization,
- (v) Studies on impact of CAS,
- (vi) Consultancy project on Forward looking Long Run Incremental Cost (FLRIC) Model,
- (vii) Capacity Building/Training with respect to Migration/ implementation process of Next Generation Network (NGN) in developed countries,
- (viii) Workshop/seminar on Regulatory & Technical issues relating to NGN,
- (ix) Objective Assessment of QoS and Customer Satisfaction Survey through and independent agency,
- (x) Hire Drive Test Equipment and personnel to carry out selected drive tests in the network of various service providers so as to assess the Quality of Service of their network,
- (xi) Issues relating to Direct to Home (DTH),
- (xii) Consultation Paper on Non CAS Tariff,
- (xiii) Mid year review of CAS,
- (xiv) Digitalization/Introduction of Voluntary CAS,
- (xv) Extension of areas for implementation of CAS,
- (xvi) Study/Information Paper on Broadband Penetration in the Country,



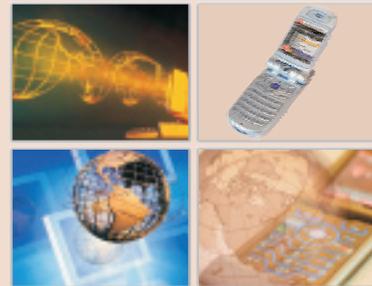
- (xvii) Inter Connection issues in Next Generation Network,
- (xviii) Measures to Promote web Hosting and Data Centres in India,
- (xix) Licensing issues related to Next Generation Network,
- (xx) Emerging Telecom Scenario - Technological Perspective,
- (xxi) IP Services related issues,
- (xxii) Seminar on NGN awareness,
- (xxiii) Seminar on emerging Telecom Scenario,
- (xxiv) Status paper on IPv6,
- (xxv) Status paper on Broadband,
- (xxvi) Market analysis in respect of IPLC Services,
- (xxvii) Market Study on socio-economic impact of growth of Telecom Services in India,
- (xxviii) Review of IUC/ADC,
- (xxix) Regulation on Access to Essential Facilities including Landing Facilities for submarine cable at Cable Landing Stations,
- (xxx) Review of license terms & conditions and capping of number of access providers,
- (xxxii) Recommendations on need of mobile virtual network operators,
- (xxxiii) Study on various aspects relating to content providers,
- (xxxiv) Consultation on Quality of Service issues related to Next Generation Network (NGN),
- (xxxv) Redressal of Consumer Grievances and Consumer Protection in Telecommunications,
- (xxxvi) Consumer awareness and capacity building of Consumer Advocacy Groups,
- (xxxvii) Consultation paper on review of Quality of Service Parameters.



PART-I

POLICIES AND PROGRAMMES

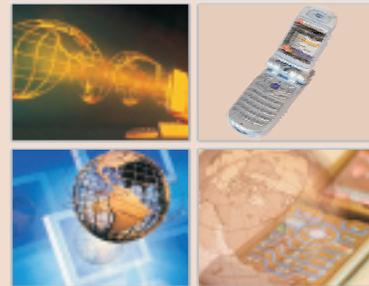
- 1.1. Review of General Environment in the Telecom Sector**
- 1.2 Review of Policies and Programmes**



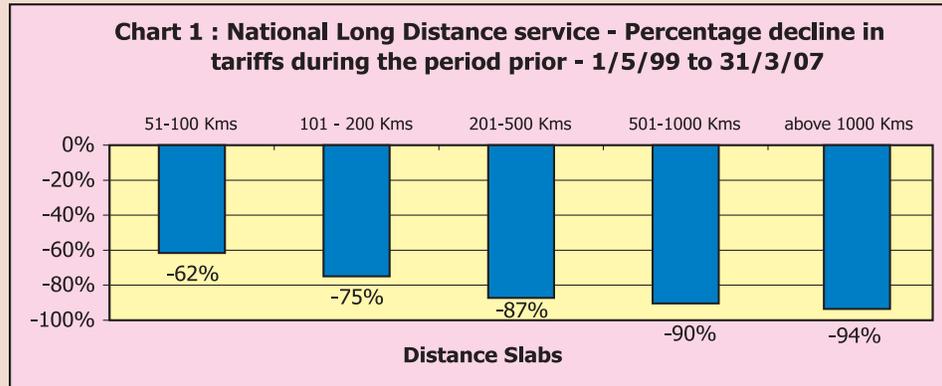


1.1 REVIEW OF GENERAL ENVIRONMENT IN THE TELECOM SECTOR

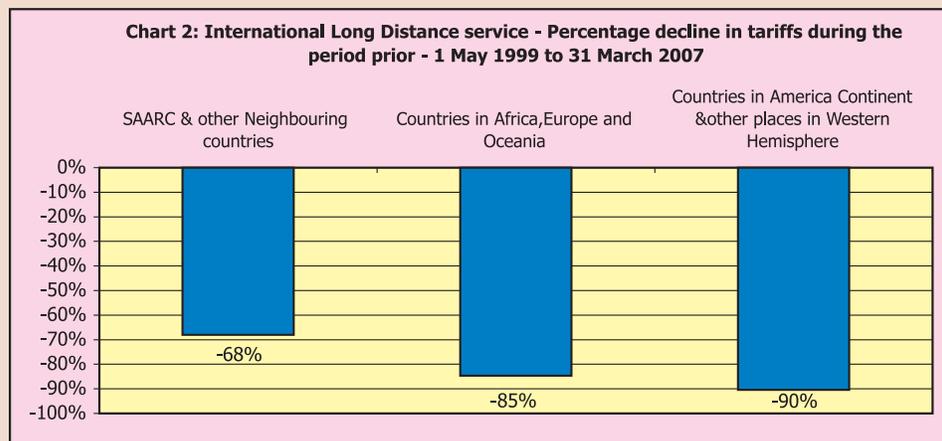
1. On the lines of previous three years, the year 2006-07 also witnessed a phenomenal growth in the subscriber base for mobile services which includes subscribers of WLL (F) and Internet services, thus building on the growth trend in subscriber base experienced since mid-1990s. However the subscriber base of Basic services (Wireline) recorded a marginal decrease by 1.90% in 2006-07 compared to previous year. The Mobile sector crossed the 165.11 million subscriber mark at the end of the financial year in comparison to the subscriber base of 90.14 million at the end of March, 2006 (the figures of 2005-06 does not include WLL(F) subscribers). It added 66.34 million subscribers in the financial year 2006-07 registering an annual growth rate of about 83.17%. The subscriber base of Fixed (wireline) lines stood at 40.75 million registering marginal decrease by 1.90% in the year 2006-07. The Internet subscriber base in the country as of 31st March 2007 stood at 9.27 million as compared to 6.93 million during the previous year, registering an annual growth rate of about 33.69%. The tele-density at the end of March, 2007 reached the mark of 18.23% as compared to 12.86% at the end of previous year recording an increase of 5.37%. This annual growth in tele-density is unprecedented and this was largely due to steep increase in mobile subscriber base and the various innovative tariff plans launched by the mobile service providers (SP). This growth in tele-density also becomes very significant in view of the fact that overall increase in tele-density during the 50 years period from 1948 to 1998 on a much smaller population base was only 1.92%.
2. Competition driven by regulatory initiatives, technological advancements and policy initiatives 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.



3. The reduction in tariffs for Long Distance Services can be seen in Chart - 1 & Chart - 2:



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.



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.

4. 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 telecommunication 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 found to be insufficient. As of March 2007, tariff for Cellular Services (except for roaming services), Basic Services (except for rural telephony) and NLD/ILD Services stand forborne and tariff for rural telephony, roaming services and leased lines continue to be in the regulated regime. With a view to protect the interest of subscribers on tariff related matters, the Authority has taken several initiatives by amending the Telecommunications Tariff Order (TTO) 1999 wherever necessary.

5. The total number of licenses issued for the different services in various circles and the actual services started by 31st March 2007 (other than BSNL and MTNL) has been indicated in Table 1.1 below

Table 1.1: Total Number of Licenses issued for Service Areas and Number of Licensees offering services as on 31st March 2007 (other than BSNL and MTNL)

Sl. No.	Name of service	Private Sector Licensees	Offering Services as on March 2007
1.	UASLs	98	76
2.	NLD Service	15	4
3.	ILD Service	10	4
4.	Cellular	37	37
5.	Very Small Aperture Terminal (VSAT) Service	8	8
6.	Public Mobile Radio Trunked Services (PMRTS)	12	12
7.	Radio Paging	-	-
8.	Global Mobile Personal Communication System (GMPCS)	-	-
9.	ISP Licence	379	113

Source: DOT / Service Providers



1.1.1 Basic Services

6. As on 31st March 2007, apart from BSNL providing service throughout the country, except Delhi and Mumbai where MTNL provides service, the Basic Services sector had 5 private licensed operators for the following telecom circles:

Reliance Infocomm Ltd. - 21 circles [Andhra Pradesh, Bihar, Chennai, Delhi, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh (East), Uttar Pradesh (West) and West Bengal].

Tata Teleservices Ltd. - 20 Circles [Andhra Pradesh, Bihar, Chennai, Delhi, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh (East), Uttar Pradesh (West) including Uttaranchal and West Bengal].

Bharti Airtel Ltd. - 16 Circles [Andhra Pradesh, Chennai, Delhi, Gujarat, Haryana, Karnataka, Kerala, Kolkata, Madhya Pradesh, Maharashtra, Mumbai, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh (East) and Uttar Pradesh (West) including Uttaranchal].



Shyam Telelink Ltd. - Rajasthan Circle

HFCL Infotel Ltd. - Punjab Circle

All the 5 Private Operators i.e. Basic Service Providers (Wireline) have migrated to Unified Access Service Regime in the year 2003-04.

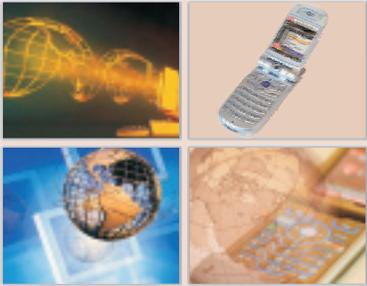
7. The subscriber base of basic services (Wireline) recorded a marginal decrease by 1.90% in 2006-2007 over the previous year. The Operator-wise and service area wise details of subscribers base as on 31st March 2007 is furnished in the table below:

Table 1.2: Subscriber Base of Basic Services (wireline) as on 31st March, 2007

Sl. No.	Name of the Circle/ Service Area	Service Provider	No. of DELs as on 31 st March 2006 Fixed (Wireline)		Total DELs as on 31 st March 2006	No. of DELs as on 31 st March 2007 Fixed (Wireline)		Total DELs as on 31 st March 2007	Annual Growth Rate %
			Urban	Rural		Urban	Rural		
1	Andaman & Nicobar	BSNL	17969	20353	38322	14282	17341	31623	-17.48
2	Andhra Pradesh	BSNL	1776240	1258000	3034240	1605989	1168358	2774347	-8.57
		TATA	108982	0	108982	114201	0	114201	4.79
		Reliance	14524	1	14525	41559	3	41562	186.14
		Bharti	16634	0	16634	40168	0	40168	141.48
3	Assam	BSNL	383780	136026	519806	363472	138916	502388	-3.35
4	Bihar (including Jharkand)	BSNL	996725	509869	1506594	931960	503238	1435198	-4.74
		Reliance	226	0	226	686	0	686	203.54
		TATA	60	0	60	150	0	150	150.00
5	Delhi	Bharti	423120	0	423120	606278	0	606278	43.29
		MTNL	1609834	0	1609834	1586418	0	1586418	-1.45
		TATA	14654	0	14654	18789	0	18789	28.22
		Reliance	27899	0	27899	64941	0	64941	132.77
6	Gujarat	BSNL	1709149	835077	2544226	1566712	776283	2342995	-7.91
		Reliance	40142	0	40142	63077	0	63077	57.13
		Bharti	4533	0	4533	15961	0	15961	252.11
		TATA	25584	0	25584	23767	0	23767	-7.10
7	Haryana	BSNL	658960	439114	1098074	586416	414910	1001326	-8.81
		Bharti	20600	0	20600	19253	0	19253	-6.54
		Reliance	377	0	377	4408	30	4438	1077.19
		TATA	0	0	0	180	0	180	100.00
8	Himachal Pradesh	BSNL	98377	380369	478746	89981	366589	456570	-4.63
		Reliance	1	0	1	499	0	499	49800.00
		TATA	0	0	0	0	0	0	0.00
9	Jammu & Kashmir	BSNL	251015	51505	302520	244314	51145	295459	-2.33
		Reliance	0	0	0	1	0	1	100.00
10	Karnataka	BSNL	1785631	848771	2634402	1683408	793685	2477093	-5.97
		Bharti	222759	0	222759	295823	0	295823	32.80
		TATA	31353	0	31353	56104	0	56104	78.94
		Reliance	29644	0	29644	58997	0	58997	99.02



Sl. No.	Name of the Circle/ Service Area	Service Provider	No. of DELs as on 31 st March 2006 Fixed (Wireline)		Total DELs as on 31 st March 2006	No. of DELs as on 31 st March 2007 Fixed (Wireline)		Total DELs as on 31 st March 2007	Annual Growth Rate %
			Urban	Rural		Urban	Rural		
11	Kerala	BSNL	1114879	2453818	3568697	1104255	2526312	3630567	1.73
		Reliance	7313	0	7313	20572	30	20602	181.72
		TATA	0	0	0	554	0	554	100.00
		Bharti	9369	0	9369	26790	0	26790	185.94
12	Madhya Pradesh (Including Chattisgarh)	BSNL	1248921	356865	1605786	1183352	374888	1558240	-2.96
		Bharti	272402	0	272402	290084	0	290084	6.49
		Reliance	5797	0	5797	16430	0	16430	183.42
		TATA	0	0	0	131	0	131	100.00
13	Maharashtra (including Mumbai)	BSNL & MTNL	4684359	1461006	6145365	4491416	1451949	5943365	-3.29
		Reliance	46999	30	47029	119944	224	120168	155.52
		Bharti	19075	0	19075	88094	0	88094	361.83
		TATA	228791	0	228791	295852	30	295882	29.32
	Mumbai	MTNL	2211418	0	2211418	2138728	0	2138728	-3.29
		Reliance	28088	0	28088	82684	0	82684	194.37
		Bharti	15889	0	15889	70037	0	70037	340.79
		TATA	189366	0	189366	234483	0	234483	23.83
	Maharashtra (excluding Mumbai)	BSNL	2472941	1461006	3933947	2352688	1451949	3804637	-3.29
		Reliance	18911	30	18941	37260	224	37484	97.90
		Bharti	3186	0	3186	18057	0	18057	466.76
		TATA	39425	0	39425	61369	30	61399	55.74
14	North East	BSNL	265059	96201	361260	266371	97076	363447	0.61
15	Orissa	BSNL	495940	288857	784797	477552	294644	772196	-1.61
		Reliance	549	0	549	1729	0	1729	214.94
		TATA	0	0	0	0	0	0	0.00
16	Punjab	BSNL	1007163	805519	1812682	856073	732396	1588469	-12.37
		HFCL	176294	0	176294	168646	0	168646	-4.34
		Reliance	9586	0	9586	24597	0	24597	156.59
		Bharti	3819	0	3819	51528	0	51528	1249.25
		TATA	0	0	0	899	0	899	100.00
17	Rajasthan	BSNL	1108364	637127	1745491	1036658	619525	1656183	-5.12
		Bharti	0	0	0	11866	0	11866	100.00
		STL	134067	9435	143502	141198	12996	154194	7.45
		Reliance	737	0	737	4828	0	4828	555.09
		TATA	0	0	0	0	0	0	0.00
18	Tamil Nadu (including Chennai)	BSNL	2828094	938481	3766575	2678089	914898	3592987	-4.61
		TATA	6937	0	6937	14329	0	14329	106.56
		Bharti	135077	0	135077	369723	0	369723	173.71
		Reliance	21330	0	21330	76209	0	76209	257.29
	Chennai	BSNL	953971	55287	1009258	955455	54037	1009492	0.02
		Reliance	12731	0	12731	54248	0	54248	326.11
		TATA	6403	0	6403	12983	0	12983	102.76
		Bharti	107818	0	107818	242659	0	242659	125.06
	Tamil Nadu (excluding Chennai)	BSNL	1874123	883194	2757317	1722634	860861	2583495	-6.30
		TATA	534	0	534	1346	0	1346	152.06
		Bharti	27259	0	27259	127064	0	127064	366.14
		Reliance	8599	0	8599	21961	0	21961	155.39
19	Uttar Pradesh (East)	BSNL	1161444	424300	1585744	1084988	423818	1508806	-4.85
		Reliance	7787	0	7787	18649	0	18649	139.49
		TATA	0	0	0	0	0	0	0.00
		Bharti	186825	0	186825	18705	0	18705	-89.99
20	Uttar Pradesh (West) (including Uttranchal)	BSNL	1218225	281308	1499533	1097915	264169	1362084	-9.17
		Reliance	332	0	332	3158	0	3158	851.20
		Bharti	8071	0	8071	16369	0	16369	102.81
		TATA	0	0	0	0	0	0	0.00

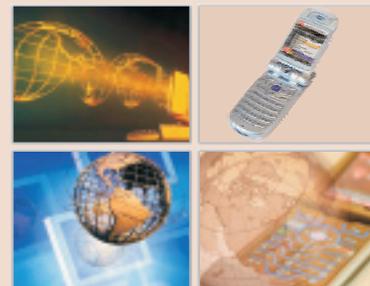


Sl. No.	Name of the Circle/ Service Area	Service Provider	No. of DELs as on 31 st March 2006 Fixed (Wireline)		Total DELs as on 31 st March 2006	No. of DELs as on 31 st March 2007 Fixed (Wireline)		Total DELs as on 31 st March 2007	Annual Growth Rate %
			Urban	Rural		Urban	Rural		
21	West Bengal (including Kolkata)	BSNL	1981897	619553	2601450	1965052	618937	2583989	-0.67
		Reliance	21246	0	21246	47608	0	47608	124.08
		Bharti	5131	0	5131	20745	0	20745	304.31
		TATA	120	0	120	2270	0	2270	1791.67
	Kolkata	BSNL	1357594	0	1357594	1374310	0	1374310	1.23
		Reliance	21187	0	21187	46022	0	46022	117.22
Bharti		5131	0	5131	20745	0	20745	304.31	
TATA		120	0	120	2270	0	2270	1791.67	
West Bengal (excluding Kolkata)	BSNL	624303	619553	1243856	590742	618937	1209679	-2.75	
	Reliance	59	0	59	1586	0	1586	2588.14	
	TATA	0	0	0	0	0	0	0.00	
TOTAL			28690771	12851585	41542356	28191022	12562390	40753412	-1.90

8. The above Table shows that the subscriber base of Basic Service recorded a marginal decrease of 1.90% in 2006-07 over the previous year. In comparison, the private Basic Service Operators (BSOs), recorded an annual increase of 43.14% in the subscriber base during the year 2006-07. As on 31st March 2007, however the incumbents BSNL and MTNL had 83% and 9% market share respectively in the subscriber base, while all the five private BSOs had only 8% of the total subscriber base. During the previous year, at the end of March 2006, the market share of the BSNL and MTNL was 74% and 8% respectively, while the share of all the private operators taken together was 18%. Thus the market share in terms of subscriber base of the incumbents BSNL and MTNL has slightly increased, whereas the market share of private BSOs has decreased by 10%.

9. The 5 private BSOs has added 9.91 lakhs new DELs. However, BSNL has recorded an reduction of 17.84 lakhs DELs. Whereas MTNL has also achieved an annual decline of 0.96 Lakhs DELs. Thus Private operators have contributed to provide most of the new additions in DELs. The total subscriber base however has recorded an annual decline of 7.8 lakhs DELs in comparison to previous year.

10. As on 31st March, 2006 the total equipped switching capacity was 15.87 crores [includes Fixed, WLL (F) & WLL (M) switch capacities]. During the year 2006-07, 2.41 crore capacity



was added taking the total capacity to 18.28 crores as on 31st March, 2007. Table 1.3 gives the details of equipped switching capacity, net capacity addition etc. in respect of Basic Service Providers:

Table 1.3: Details of Equipped Switching Capacity, Net Capacity Addition, etc. in respect of Basic Service Providers as on 31st March, 2007

Name of the Circle/Service Area	Service Provider	Equipped Capacity as on		Capacity added during the year
		31 st March 2006	31 st March 2007	
Andaman & Nicobar	BSNL	57274	59496	2222
Andhra Pradesh	BSNL	3986629	3942505	-44124
	TATA	1392000	2008000	616000
	Reliance	6840352	9435136	2594784
	Bharti	26000	38973	12973
Assam	BSNL	702372	713208	10836
Bihar (including Jharkand)	BSNL	1983204	2013833	30629
	Reliance	3869696	3875840	6144
	TATA	0	512690	512690
Delhi	Bharti	499834	696610	196776
	MTNL	4419689	2809729	-1609960
	TATA	1472513	2280000	807487
	Reliance	8577280	10037968	1460688
Gujarat	BSNL	3701831	3645452	-56379
	Reliance	5980080	5974320	-5760
	Bharti	6480	62496	56016
	TATA	1292720	42856	-1249864
Haryana	BSNL	1559976	1541222	-18754
	Bharti	25642	25855	213
	Reliance	1782560	1788832	6272
	TATA	650000	647976	-2024
Himachal Pradesh	BSNL	644066	644002	-64
	Reliance	238056	233320	-4736
	TATA	90000	257160	167160
Jammu & Kashmir	BSNL	413244	416132	2888
	Reliance	0	0	0
Karnataka	BSNL	3457013	3443485	-13528
	Bharti	228800	381000	152200
	TATA	96800	92072	-4728
	Reliance	5359888	5370192	10304
Kerala	BSNL	4167630	4267815	100185
	Reliance	4785776	4788400	2624
	TATA	25500	141000	115500
	Bharti	20000	93248	73248
Madhya Pradesh (Including Chattisgarh)	BSNL	2124119	2101091	-23028
	Bharti	397214	393688	-3526
	Reliance	3884544	3887040	2496
	TATA	250000	0	-250000



Name of the Circle/Service Area	Service Provider	Equipped Capacity as on		Capacity added during the year
		31 st March '2006	31 st March 2007	
Maharashtra (including Mumbai)	BSNL&MTNL	9416315	9864865	448550
	Reliance	13980144	15713856	1733712
	Bharti	43897	124992	81095
	TATA	2252000	4137583	1885583
Mumbai	MTNL	4217143	4717143	500000
	Reliance	0	7174704	7174704
	Bharti	35000	109368	74368
	TATA	0	2014833	2014833
Maharashtra (excluding Mumbai)	BSNL	5199172	5147722	-51450
	Reliance	13980144	8539152	-5440992
	Bharti	8897	15624	6727
	TATA	2252000	2122750	-129250
North East -I	BSNL	280736	281320	584
North East -II	BSNL	207604	211392	3788
Orissa	BSNL	967224	965720	-1504
	Reliance	892272	892848	576
	TATA	64000	577000	513000
Punjab	BSNL	2769341	2769541	200
	HFCL	507666	321095	-186571
	Reliance	3895552	3905408	9856
	Bharti	61728	65012	3284
	TATA	1540000	34979	-1505021
Rajasthan	BSNL	2279764	2274618	-5146
	Bharti	0	20480	20480
	STL	350000	350000	0
	Reliance	4451744	4459424	7680
	TATA	391880	1166996	775116
Chennai	BSNL	1437937	1430893	-7044
	Reliance	3342944	3341894	-1050
	TATA	443368	443368	0
	Bharti	275932	357882	81950
Tamil Nadu (excluding Chennai)	BSNL	3478812	3506324	27512
	TATA	370096	370096	0
	Bharti	164038	175538	11500
	Reliance	4474848	4774704	299856
Uttar Pradesh (East)	BSNL	2324647	2323473	-1174
	Reliance	6488912	6501520	12608
	TATA	233000	2100425	1867425
	Bharti	6448	8704	2256
Uttar Pradesh (West) (including Uttranchal)	BSNL	2247818	2235022	-12796
	Reliance	4754544	15378744	10624200
	Bharti	9360	11280	1920
	TATA	233000	2206650	1973650
Kolkata	BSNL	1745585	1684161	-61424
	Reliance	3904768	3912576	7808
	Bharti	60000	12927	-47073
	TATA	33391	93391	60000
West Bengal (excluding Kolkata)	BSNL	1681655	1703851	22196
	Reliance	1450000	3240000	1790000
	TATA	143000	143000	0
TOTAL		158664752	182756194	24091442

Source: BSNL/MTNL /Private Service Operators



11. As compared to the combined waiting list of 12.2 lakh telephones of BSNL and MTNL together on 31st March 2006, the total waiting list for these two Public Sector Undertakings (PSU) as on 31st March 2007 is 7.12 lakh telephones. Therefore there have been significant reduction in the waiting list of BSNL and MTNL. Data on the Direct Exchange Lines (DEL) and Waiting List during the period 1989-90 to 2006-07 for BSNL and MTNL combined is shown in table 1.4 below:

Table 1.4: Direct Exchange Lines and Waiting List during 1989-90 to 2006-07 for BSNL and MTNL (combined)

Year (April – March)	Direct Exchange Lines (DELs) (‘000)	DELs added annually (‘000)	Telephone Waiting List (‘000)
1989-1990	4,589.5	423.0	1,713.40
1990-1991	5,074.7	485.2	1,961.00
1991-1992	5,809.9	735.2	2,287.00
1992-1993	6,796.7	986.8	2,845.90
1993-1994	8,025.6	1,228.9	2,496.80
1994-1995	9,795.3	1,769.7	2,152.90
1995-1996	11,978.4	2,183.1	2,277.20
1996-1997	14,542.6	2,564.2	2,887.20
1997-1998	17,801.7	3,259.1	2,705.70
1998-1999	21,593.7	3,792.0	1,983.03
1999-2000	26,511.3	4,917.6	3,680.70
2000-2001	32,436.1	5,924.8	2,947.06
2001-2002	37,848.2	5,412.0	1,685.87
2002-2003	40,060.5	2,212.3	1,810.07
2003-2004	40,566.5	506.0	1,798.96
2004-2005	41,102.4	535.9	1,588.89
2005-2006	41,378.3	275.9	1,218.93
2006-2007	40,753.4	-788.9	1,036.75

Source: BSNL/MTNL.

12. The private operators had a combined wait list of 3,24,461 telephones during 2006-07. The highest wait list in a circle was at HFCL (Punjab) with a wait list of 3,19,110 telephones by the end of March 2007. Operator-wise details of total

DELs installed and waiting list as on 31st March, 2007 is given in the Table below:

Table 1.5: The total DELs installed by Basic Service Operators and the total Waiting List as on 31st March, 2007

Sl. No.	Basic Service Providers (wireline)	Area of Operation	DELs installed	Telephone Waiting List
1	BSNL	All India	33738604	710556
2	MTNL	Delhi & Mumbai	3725146	1729
3	Bharti Airtel Ltd	AP,MP, Delhi, Haryana, TN, Chennai, Karnataka, Kerala, Gujarat, Punjab, Maharashtra, Mumbai, UP (West) including Uttaranchal, West Bengal and Kolkata	1871387	5351
4	Tata Teleservices (Maharashtra) Ltd	Maharashtra & Mumbai	295882	0
5	Tata Teleservices Ltd	AP, TN, Chennai, Karnataka, Gujarat, Delhi, Bihar, Orissa, Rajasthan, Punjab, Haryana, Himachal Pradesh, Kerala, Madhya Pradesh, UP(East), UP(West) including Uttaranchal, West Bengal and Kolkata	231374	0
6	HFCL Infotel Ltd	Punjab	168646	319110
7	Shyam Telelink Ltd	Rajasthan	154194	0
8	Reliance Communications Ltd	AP, Bihar, Delhi, Gujarat, Haryana, HP, Karnataka, Kerala, MP, Maharashtra, Mumbai, Orissa, Punjab, Rajasthan, TN, Chennai ,UP (East), UP(West), WB, Kolkata	568179	0
		Grand Total	40753412	1036746

Source: BSNL/MTNL & Private Service Operators.

13. The number of public call offices (PCOs) in the country as on 31st March, 2007 stood at a little over 5.55 million. During the year 2006-07, 13.48 lakhs PCOs were added, recording



an annual growth rate of 32.11%. Operator wise and circle-wise details are given in the table 1.6 below:

Table 1.6: Operator-wise and Circle-wise details of Public Call Offices as on 31st March 2007 vis-à-vis 31st March 2006

Sl. No.	Name of the Circle/ Service Area	Service Provider	31 st March 2006	31 st March 2007	Net PCO added in the Year	Percentage Growth for the Year
1	Andaman & Nicobar	BSNL	1154	620	-534	-46.27
2	Andhra Pradesh	BSNL	266790	271327	4537	1.70
		TATA	0	175288	175288	100.00
		Reliance	123154	270178	147024	119.38
		Bharti	3536	3894	358	10.12
3	Assam	BSNL	24373	33083	8710	35.74
4	Bihar (including Jharkhand)	BSNL	85097	92420	7323	8.61
		Reliance	6938	37400	30462	439.06
		TATA	5078	37148	32070	631.55
5	Delhi	Bharti	36033	37112	1079	2.99
		MTNL	97128	91510	-5618	-5.78
		TATA	0	50865	50865	100.00
		Reliance	65435	59467	-5968	-9.12
6	Gujarat	BSNL	147526	124948	-22578	-15.30
		Reliance	61781	95435	33654	54.47
		TATA	0	105770	105770	100.00
		Bharti	262	992	730	278.63
7	Haryana	BSNL	35135	30411	-4724	-13.45
		Bharti	2728	3472	744	27.27
		Reliance	22438	25293	2855	12.72
		TATA	0	17302	17302	100.00
8	Himachal Pradesh	BSNL	11254	12048	794	7.06
		Reliance	1899	4610	2711	142.76
		TATA	45929	0	-45929	-100.00
9	Jammu & Kashmir	BSNL	16368	16057	-311	-1.90
10	Karnataka	BSNL	258696	267044	8348	3.23
		Bharti	36108	45351	9243	25.60
		TATA	71703	123710	52007	72.53
		Reliance	69939	156921	86982	124.37
11	Kerala	BSNL	114353	125316	10963	9.59
		Reliance	72038	101490	29452	40.88
		Bharti	2333	5261	2928	125.50
		TATA	6191	29126	22935	370.46
12	Madhya Pradesh (Including Chattisgarh)	BSNL	62849	61230	-1619	-2.58
		Bharti	54222	46490	-7732	-14.26
		Reliance	22631	40558	17927	79.21
		TATA	0	27144	27144	100.00



Sl. No.	Name of the Circle/ Service Area	Service Provider	31 st March 2006	31 st March 2007	Net PCO added in the Year	Percentage Growth for the Year
13	Maharashtra (including Mumbai)	BSNL & MTNL	479537	496667	17130	3.57
		TATA	119568	346971	227403	190.19
		Bharti	475	873	398	83.79
		Reliance	186391	268009	81618	43.79
	Mumbai	MTNL	181913	168567	-13346	-7.34
		TATA	11886	130317	118431	996.39
		Bharti	291	873	582	200.00
		Reliance	65346	74150	8804	13.47
	Maharashtra (excluding Mumbai)	BSNL	297624	328100	30476	10.24
Tata		107682	216654	108972	101.20	
Bharti		184	0	-184	-100.00	
Reliance		121045	193859	72814	60.15	
14	North East	BSNL	12702	15635	2933	23.09
15	Orissa	BSNL	30739	30280	-459	-1.49
		Reliance	17883	24306	6423	35.92
		TATA	9389	18388	8999	95.85
16	Punjab	BSNL	42066	33345	-8721	-20.73
		HFCL	42873	42978	105	0.24
		Reliance	35845	33597	-2248	-6.27
		Bharti	1946	3471	1525	78.37
		TATA	134909	22608	-112301	-83.24
17	Rajasthan	BSNL	68731	67878	-853	-1.24
		Bharti	0	889	889	100.00
		STL	26827	41698	14871	55.43
		Reliance	37564	68632	31068	82.71
		TATA	63252	27040	-36212	-57.25
18	Tamil Nadu (including Chennai)	BSNL	291831	301737	9906	3.39
		TATA	77651	131570	53919	69.44
		Bharti	65911	67148	1237	1.88
		Reliance	86409	204734	118325	136.94
	Chennai	BSNL	85922	88170	2248	2.62
		Reliance	19272	40910	21638	112.28
		Bharti	28887	28452	-435	-1.51
		TATA	57672	25930	-31742	-55.04
	Tamil nadu (excluding Chennai)	BSNL	205909	213567	7658	3.72
TATA		19979	105640	85661	428.76	
Bharti		37024	38696	1672	4.52	
Reliance		67137	163824	96687	144.01	
19	Uttar Pradesh (East)	BSNL	101957	110562	8605	8.44
		Reliance	47910	76324	28414	59.31
		Bharti	1201	3483	2282	190.01
		TATA	15692	47715	32023	204.07
20	Uttar Pradesh (West) (including Uttranchal)	BSNL	72573	62709	-9864	-13.59
		Reliance	45418	78950	33532	73.83
		Bharti	740	3198	2458	332.16
		TATA	81428	34962	-46466	-57.06
21	West Bengal (including Kolkata)	BSNL	122356	124633	2277	1.86
		Reliance	41186	61962	20776	50.44
		Bharti	426	1314	888	208.45
		TATA	4672	66779	62107	1329.35



Sl. No.	Name of the Circle/ Service Area	Service Provider	31 st March 2006	31 st March 2007	Net PCO added in the Year	Percentage Growth for the Year
	Kolkata	BSNL	65219	59810	-5409	-8.29
		Reliance	22138	22329	191	0.86
		Bharti	426	1314	888	208.45
		TATA	4672	39550	34878	746.53
	West Bengal (excluding Kolkata)	BSNL	57137	64823	7686	13.45
		Reliance	19048	39633	20585	108.07
		TATA	0	27229	27229	100
	TOTAL		4199157	5547336	1348179	32.11

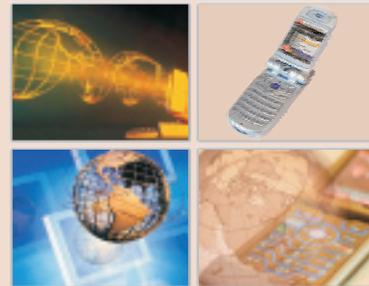
Source: BSNL/MTNL & Private Service Operators.

14. Out of the 6,07,491 villages in the country, 5,64,075 villages have been provided with Village Public Telephone (VPT) and 43,416 villages are yet to be connected with a VPT. In percentage terms approximately 93% villages have been covered by VPTs and the remaining 7% villages are yet to be covered. Table 1.7 below shows the operator-wise and circle-wise status of VPTs as on 31st March 2007.

Table 1.7: Operator-wise and Circle-wise status of VPTs as on 31st March, 2007

Sl. No.	Name of the Circle/ Service Area	Service Provider	31 st March 2006	31 st March 2007	Achievement during the year	Percentage growth during the year
1	Andaman & Nicobar	BSNL	198	198	0	0.00
2	Andhra Pradesh	BSNL	23826	23936	110	0.46
		TATA	1358	1358	0	0.00
		Reliance	0	0	0	0.00
3	Assam	BSNL	23094	24265	1171	5.07
4	Bihar (including Jharkhand)	BSNL	65455	66068	613	0.93
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
5	Delhi	Bharti	0	0	0	0.00
		MTNL	0	0	0	0.00
		TATA	0	0	0	0.00
		Reliance	0	0	0	0.00
6	Gujarat	BSNL	13343	14488	1145	8.58
		Reliance	4115	4115	0	0.00
		TATA	0	0	0	0.00
7	Haryana	BSNL	6811	6811	0	0.00
		Bharti	0	0	0	0.00
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00

S. No.	Name of the Circle/ Service Area	Service Provider	31 st March 2006	31 st March 2007	Achievement during the year	Percentage growth during the year
8	Himachal Pradesh	BSNL	16814	16814	0	0.00
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
9	Jammu & Kashmir	BSNL	5095	6064	969	19.01
10	Karnataka	BSNL	27066	27066	0	0.00
		Bharti	0	0	0	0.00
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
11	Kerala	BSNL	1468	1468	0	0.00
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
12	Madhya Pradesh (Including Chattisgarh)	BSNL	61454	66481	5027	8.18
		Bharti	243	0	-243	-100.00
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
13	Maharashtra (including Mumbai)	BSNL & MTNL	34371	36691	2320	6.74
		TATA	2648	2542	-106	-4.00
		Reliance	0	0	0	0.00
	Mumbai	MTNL	0	0	0	0.00
		TATA	226	126	-100	-44.24
	Maharashtra (excluding Mumbai)	BSNL	34371	36691	2320	6.75
TATA	2422	2416	-6	-0.24		
14	North East	BSNL	7924	8463	539	6.80
15	Orissa	BSNL	40753	41268	515	1.26
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
16	Punjab	BSNL	12687	12687	0	0.00
		HFCL	615	417	-198	-32.20
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
17	Rajasthan	BSNL	29771	33767	3996	13.42
		STL	3010	3010	0	0.00
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
18	Tamil Nadu (including Chennai)	BSNL	19629	17899	-1730	-8.81
		TATA	0	0	0	0.00
		Reliance	0	0	0	0.00
		Bharti	0	0	0	0.00
	Chennai	BSNL	1730	1730	0	0.00
		Reliance	0	0	0	0.00
		Bharti	0	0	0	0.00
		TATA	0	0	0	0.00
	Tamil Nadu (excluding Chennai)	BSNL	17899	16169	-1730	-9.66
TATA		0	0	0	0.00	
Reliance		0	0	0	0.00	
Bharti		0	0	0	0.00	
19	U P (East)	BSNL	76006	76006	0	0.00
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00



S. No.	Name of the Circle/ Service Area	Service Provider	31 st March 2006	31 st March 2007	Achievement during the year	Percentage growth during the year
20	UP (West) (including Uttaranchal)	BSNL	33356	34450	1094	3.28
		Reliance	0	0	0	0.00
		Bharti	0	0	0	0.00
		TATA	0	0	0	0.00
21	West Bengal (including Kolkata)	BSNL	37733	37743	10	0.03
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
	Kolkata	BSNL	427	437	10	2.34
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
	West Bengal (excluding Kolkata)	BSNL	37306	37306	0	0.00
		Reliance	0	0	0	0.00
		TATA	0	0	0	0.00
Total			548843	564075	15232	2.78

Source: BSNL/MTNL & Private Service Operators.

15. The above table shows that 15,232 VPTs were added during the year 2006-07, at an annual growth rate of 2.78%. The private operators share in these VPTs is very negligible and almost the entire VPTs have been installed by BSNL. In fact, during the year, BSNL has installed in all 15, 779 VPTs, where as the VPTs of other private operators have decreased by 547. The total number of VPTs of BSNL was recorded at 5,52,633 in March 2007 as compared to a meager 11,442 VPTs of private operators as on March 2007.

1.1.2 Wireless (GSM and CDMA) Services

16. The Wireless Industry crossed 165.11 million-subscribers mark at the end of the financial year 2006-07. This total subscribers base of 165.11 million comprise of 120.47 million GSM and 44.64 million CDMA subscribers. The subscriber base of Wireless (GSM and CDMA) Services from March 2003 to March 2007 is given below in Table 1.8. A total of 66.34 million subscribers were added in the financial year 2006-07, registering an annual growth rate of around 83.17%:

Table 1.8: Subscriber Base (in Million) of Mobile (GSM and CDMA) Services from March, 2003 to March, 2007

Service Providers	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	% age growth over FY 2006
Bharti	3.07	6.5	10.98	19.58	37.14	89.68 %
BSNL	2.29	5.53	9.9	17.65	30.99	75.58 %
Reliance	0.54	7.26	10.45	17.31	28.01	61.81 %
Hutch	2.16	5.15	7.8	15.36	26.44	72.14 %
Tata	0.16	0.63	1.09	4.85	16.02	230.31 %
Idea	1.28	2.73	5.07	7.37	14.01	90.09 %
Escotel	0.59	0.99				
Aircel	0.73	1.29	1.76	2.61	5.51	111.11 %
MTNL	0.35	0.46	1.08	2.05	2.94	43.41 %
Spice	0.64	1.21	1.44	1.93	2.73	41.45 %
BPL	1.13	1.88	2.58	1.34	1.07	-20.15 %
HFCL	0.03	0.03	0.05	0.06	0.15	150.00 %
Shyam	0.03	0.03	0.03	0.03	0.10	233.33 %
Total	13	33.69	52.23	90.14	165.11 *	83.17 %

Source: Service Provider

* Data includes WLL (F) subscribers.

17. The subscriber base & market share of different mobile operators as on March 2007 is given in the table 1.9 below:

Table 1.9 Market Share of different Mobile Operators in terms of subscriber base as on March, 2007

Service Providers	No. of subscribers (in Million)	Market Share as on March 07 (in %age)
Bharti	37.14	22.49
BSNL	30.99	18.77
Reliance	28.01	16.96
Hutch	26.44	16.01
Tata	16.02	9.70
Idea	14.01	8.49
Aircel	5.51	3.34
MTNL	2.94	1.78
Spice	2.73	1.65
BPL	1.07	0.65
HFCL	0.15	0.10
Shyam	0.10	0.06
Total	165.11	100.00

Source: Service Providers



18. As on March 2007, M/s Bharti, M/s Reliance & M/s Aircel have acquired licenses in all 23 service areas for offering mobile services. M/s Bharti and M/s Reliance are the only private operators who are providing services in All India i.e., 23 service areas. The list of licensed service providers in various service areas are shown in Table 1.10:

Table 1.10: List of Licensed Cellular (GSM & CDMA) Service Providers as on 31st March, 2007.

Sl. No.	Service Provider	Licensed Service areas	No. of Circles
1	BSNL	All India (except Delhi & Mumbai)	21
2	Bharti	All India	23
3	Reliance	All India	23
4	Aircel*	All India	23
5	Hutch**	All India (except MP)	22
6	Tata Teleservices	All India (except Assam, NE, J&K)	20
7	IDEA***	13 (Delhi, Mumbai, Maharashtra, Gujarat, Andhra Pradesh, Kerala, Haryana, UP-W, UP-E, Rajasthan, Madhya Pradesh, Himachal Pradesh, Bihar)	13
8	BPL	Mumbai	1
9	MTNL	Delhi, Mumbai	2
10	Spice Communications	Karnataka, Punjab	2
11	HFCL	Punjab	1
12	Shyam Telelink	Rajasthan	1

Source: DoT and Service providers

*M/s Aircel have yet to start their services in, Delhi, Mumbai, Kolkata, Maharashtra, Gujarat, Andhra Pradesh, Karnataka, Kerala, Punjab, Haryana, UP-W, UP-E, Rajasthan & Madhya Pradesh

**M/s Hutch has yet to start their services in Himachal Pradesh, Bihar, Orissa, Assam, North-East and Jammu & Kashmir.

***M/s Idea has yet to start their services in Mumbai & Bihar.

19. The list of Wireless Service Providers in various service areas are mentioned in the Table 1.11 below.

Table 1.11: Service-area wise List of Wireless Service Providers (GSM and CDMA) as on March, 2007

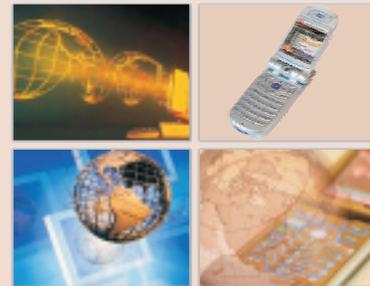
		Circle	Access service provider
Metros	1	Delhi	Bharti Hutch MTNL Idea Aircel Ltd* Reliance Infocomm Tata Teleservices
	2	Mumbai	BPL Hutch MTNL Bharti Aircel Ltd* Idea Cellular Ltd* Reliance Infocomm Tata Teleservices
	3	Chennai	Aircel Cellular Bharti BSNL Hutchison Reliance Infocomm Tata Teleservices
	4	Kolkata	Bharti Hutchison East BSNL Reliable Internet Services Ltd Dishnet Wireless Ltd* Tata Teleservices Reliance Infocomm
A Circle	5	Maharashtra	BPL Idea BSNL Bharti Aircel Ltd* Reliance Infocomm Tata Teleservices



		Circle	Access service provider
	6	Gujarat	Fascel Idea BSNL Bharti Aircel Ltd* Reliance Infocomm Tata Teleservices
	7	Andhra Pradesh	Idea Bharti BSNL Hutchison Aircel Ltd* Reliance Infocomm Tata Teleservices
	8	Karnataka	Bharti Spice BSNL Hutch Aircel Ltd* Reliance Infocomm Tata Teleservices
	9	Tamil Nadu	BPL Aircel BSNL Bharti Reliance Infocomm Tata Teleservices
B Circle	10	Kerala	Idea Communications Ltd BPL BSNL Bharti Dishnet Wireless Ltd* Tata Teleservices Reliance Infocomm
	11	Punjab	Spice Bharti BSNL Hutchison



		Circle	Access service provider
			Dishnet Wireless Ltd* Tata Teleservices Reliance Infocomm HFCL Infocomm Ltd
	12	Haryana	Idea Communications Ltd Hutch (ADIL) BSNL Bharti Dishnet Wireless Ltd* Tata Teleservices Reliance Infocomm
	13	Uttar Pradesh (West)	Idea Communications Ltd BSNL Bharti Dishnet Wireless Ltd* Tata Teleservices Reliance Infocomm Hutchison South
	14	Uttar Pradesh (East)	Hutch (ADIL) BSNL Idea Telecommunications Bharti Dishnet Wireless Ltd* Tata Teleservices Reliance Infocomm
	15	Rajasthan	Hutch (ADIL) Bharti Hexacom Ltd BSNL Idea Telecommunications Dishnet Wireless Ltd* Reliance Infocomm Tata Teleservices Shyam Telelink
	16	Madhya Pradesh	Idea Reliance Telecom BSNL



		Circle	Access service provider
			Tata Teleservices Reliance Infocomm Bharti Cellular Dishnet Wireless Ltd*
	17	West Bengal and Andaman & Nicobar	Reliance Telecom BSNL Bharti Cellular Tata Teleservices Hutchison South Dishnet Wireless Ltd Reliance Infocomm
C Circle	18	Himachal Pradesh	Bharti Reliance Telecom BSNL Idea Telecommunications Tata Teleservices Reliance Infocomm Dishnet Wireless Ltd Essar Spacetel Pvt. Ltd (Hutch)*
	19	Bihar	Reliance Telecom Reliance Infocomm BSNL Tata Teleservices Dishnet Wireless Ltd Bharti Cellular Ltd Essar Spacetel Pvt. Ltd (Hutch)* Aditya Birla Telecom Ltd (Idea)*
	20	Orissa	Reliance Telecom Reliance Infocomm BSNL Bharti Essar Spacetel Pvt. Ltd (Hutch)* Tata Teleservices Dishnet Wireless Ltd
	21	Assam	Reliance Telecom BSNL



		Circle	Access service provider
			Dishnet Wireless Ltd Bharti Essar Spacetel Pvt. Ltd (Hutch)*
	22	North East	Reliance Telecom BSNL Bharti Hexacom Ltd Dishnet Wireless Ltd Essar Spacetel Pvt. Ltd (Hutch)*
	23	Jammu & Kashmir	BSNL Bharti Reliance Infocomm Essar Spacetel Pvt. Ltd (Hutch)* Dishnet Wireless Ltd

Source DOT/Service Providers

* Services not started

20. The main growth happened in Wireless (GSM and CDMA) segment. The number of wireless subscribers as a proportion of basic service subscribers continued to increase. The ratio of wireless subscribers (GSM and CDMA) as a proportion of basic subscribers in India was 405% at the end of the financial year 2006-07. The incremental growth in the ratio of total wireless (GSM and CDMA) subscribers as a proportion of basic subscribers since March 2001 has been indicated in Table 1.12 below:

Table 1.12: Wireless subscribers (GSM and CDMA) as percentage of Basic subscribers in India, March 2001 to March 2007

March, 2001	March, 2002	March, 2003	March, 2004	March, 2005	March, 2006	March, 2007
10.94%	16.73%	30.36%	78.64%	113.05%	179.28%	405.18%

Source: Quarterly Reports of Service Providers

21. The Cellular GSM services has reached the 120.47 million subscriber mark at the end of financial year 2006-07, as compared to 69.19 million during the previous year. It added



around 51.28 million subscribers during the year, registering an annual growth of 74.11%.

22. In Cellular GSM services, in terms of subscriber base and market share, M/s Bharti with 37.14 million subscriber base remains the largest GSM operator followed by M/s BSNL, M/s Hutch and M/s Idea with subscriber base of 27.43 million, 26.44 million and 14.01 million respectively. The subscriber base of all GSM operators, except M/s BPL mobile Communications in Mumbai, has increased. The market share of different GSM operators as on March 2007 is given below in the Table 1.13:

Table 1.13: Market share of different GSM Operators in terms of subscriber base as on 31st March 2007.

GSM Group	No of Subscribers (in Millions)	Market Share (in %age)
Bharti	37.14	30.83
BSNL	27.43	22.77
Hutchison	26.44	21.95
Idea	14.01	11.63
Aircel	5.51	4.57
MTNL	2.75	2.28
Spice	2.73	2.27
Reliance	3.39	2.81
BPL	1.07	0.89
Total	120.47	100.00

Source: Service Providers

23. In Cellular CDMA services, in terms of subscriber base and market share, M/s Reliance with 24.62 million subscriber base remains the largest CDMA operator followed by M/s Tata and M/s BSNL with subscriber base of 16.02 million and 3.55 million respectively. The subscriber base of all CDMA operators except M/s Reliance in all India (except Tamil Nadu & Himachal Pradesh), M/s BSNL & M/s HFCL in Punjab has increased. The market share of different CDMA operators as on March 2007 is given below in the Table 1.14.

Table 1.14: Market share of different CDMA Operators in terms of subscriber base as on 31st March 2007

Company Name	No of Subscribers (in Millions)	Market Share (in %age)
Reliance Infocomm	24.62	55.15
Tata Teleservices	16.02	35.89
BSNL	3.55	7.95
MTNL	0.20	0.45
HFCL	0.15	0.34
Shyam Telelink	0.10	0.22
Total	44.64	100.00

Source: Service Providers

24. The Table 1.15 indicates the number of licensees (Cellular and Unified) and their subscriber base for GSM services at the end of March, 2007.

Table 1.15: Number of Licensees (Cellular and Unified) and their Subscriber Base for Cellular Wireless (GSM) Services as on 31st March, 2007.

Number of Service Areas	23
Number of private licensees	92
Total Number of subscribers	120.47 million
- Metros (including MTNL)	21.85 million
- Circles	98.62 million

Source: DoT & Service Providers

25. Table 1.16 below provides information on the subscriber base for Cellular Wireless (GSM) services in different categories of service areas for the period March, 2003 to March 2007.

Table 1.16: Subscriber Base for Wireless (GSM) Service in Metros and Circles from March, 2003 to March, 2007

Categories	(in millions)				
	March, 2003	March, 2004	March, 2005	March, 2006	March, 2007
Metros	4.44	7.94	11.02	15.86	21.85
"A" Circles	4.36	9.71	14.90	24.33	42.68
"B" Circles	3.37	7.40	12.66	22.73	43.11
"C" Circles	0.51	1.11	2.49	6.28	12.83
Total	12.68	26.16	41.07	69.20	120.47

Source: Reports of Service Providers



26. Table 1.17 below provides the additional GSM mobile subscribers and annual growth rates for different categories of service areas during the years 2004-05, 2005-06 and 2006-07

Table 1.17: Additional GSM Wireless Subscribers added and annual growth rate in different circles during 2004-05, 2005-06 and 2006-07

Circles	No. of Subscribers added during April, 2004 to March, 2005	% Growth during year 2004-05	No. of Subscribers added during April, 2005 to March, 2006	% Growth during year 2005-06	No. of Subscribers added during April, 2006 to March, 2007	% Growth during the year 2006-07
Metro	3.28 million	39%	4.39 million	43.94%	5.99 million	32.77%
Circle `A`	5.19 million	53 %	9.44 million	63.34%	18.35 million	75.42%
Circle `B`	5.26 million	71%	10.07 million	79.51%	20.39 million	89.74%
Circle `C`	1.38 million	124%	3.79 million	152.28%	6.55 million	104.30%
All India	14.91 million	57%	28.13 million	68.47%	51.28 million	74.11%

Source: Quarterly Reports of Service Providers

27. It may be seen from the above table that the subscriber base for GSM cellular wireless services has registered remarkable annual growth of 74.11% and maximum growth of 104.3% was observed in `C' Circle during 2006-07.

1.1.4 Public and Private Sector Contribution in the growth of fixed and Mobile Services

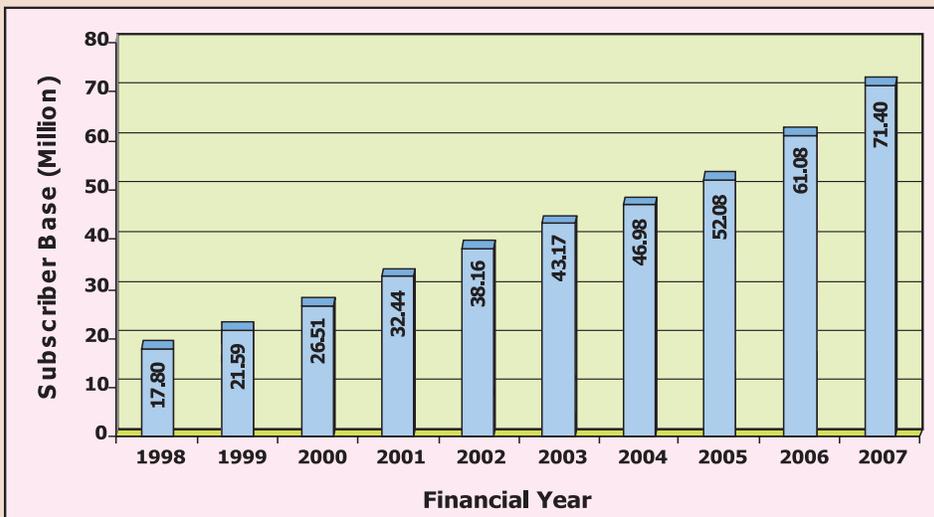
28. In the pre-reform period, growth in telecom services was primarily driven by public sector monopoly, showing very marginal growth, as the incremental tele-density between 1948 and 1998, a 50 year period, was only 1.92%. Telecommunication development in the initial stage of the reforms process beginning 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.

29. The policy and regulatory regime established by the Government and the Regulator has led to speedy growth of subscriber base of the incumbent Public Sector Undertakings as well as that of the private sector operators. During the period 1998-2007, the absolute growth in subscriber base of PSU operators was 53.6 million comprising of 21.81 million fixed subscribers and 31.79 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 1.1 below shows growth in subscriber base of PSU Operators.

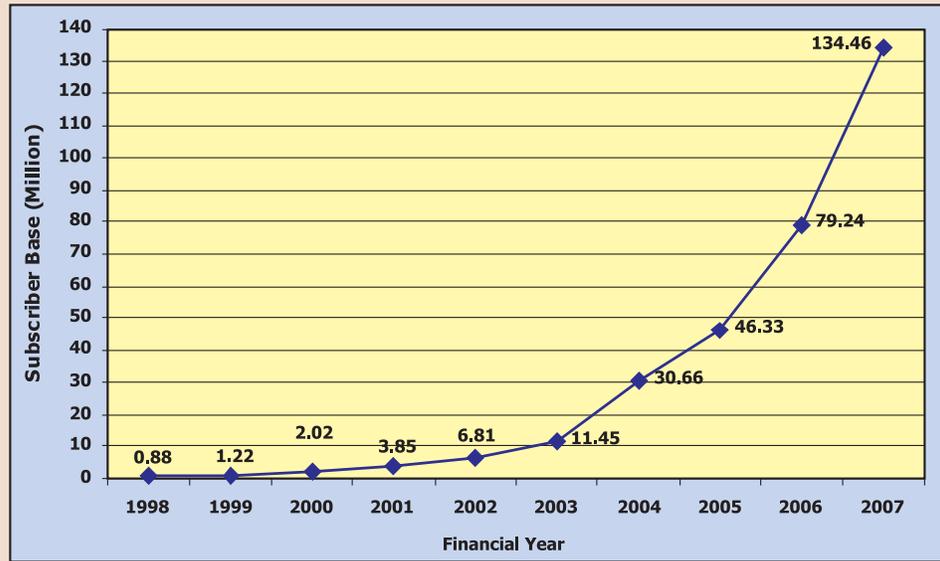
Figure 1.1 PSU Operators Subscriber Base (1998-2007)



30. Private operators have also shown remarkable growth in a highly competitive environment. The overall growth in the subscriber base of private operators during 1998-2007 was 133.58 million comprising of 8.90 million fixed subscribers and 124.68 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 1.2 below shows the growth in subscriber base of private operators.



Figure 1.2 : Private Operator's subscriber base (1998-2007)



1.1.5 Very Small Aperture Terminals (VSATs)

31. At present VSAT Service are being provided by 8 VSAT Service Providers. The space segment allocation for M/s Telstra Vishesh Ltd., has been withdrawn by Department of Space. Therefore M/s Telstra Vishesh Ltd., is now not providing the VSAT Service. VSAT industry added 10,737 VSAT connections during the year 2006-07. The total number of VSAT connections increased from 50,074 in March 2006 to 60,811 in March 2007, registering a growth of 21.44% as compared to growth rate of 30.73% in 2005-06. The number of VSAT connection as on 31st March 2007, is given in Table 1.18

Table 1.18: Number of VSAT Customers as on 31st March, 2007

Sl. No.	Name of Service Provider	Period Ending	
		March, 2006	March, 2007
1	HCL Comnet	17110	20250
2	Hughes Communications Ltd.	15669	20317
3	Bharti Tele-venture Limited	7265	8917
4	Bharti Broadband	4740	4862
5	Essel Shyam	2649	2441
6	Tatanet Services	2569	3969
7	ITI	49	49
8	GNFC	23	6
	Total	50074	60811

1.1.6 Public Mobile Radio Trunked Services

32. Public Mobile Radio Trunked Service (PMRTS) was opened for private sector in the year 1995. As on 31st March 2007, PMRTS is being provided by 12 operators. The subscriber base of PMRTS has recorded a growth rate of 5.18% during 2006-07 over the previous year. Its subscriber base increased from 29,950 at the end of March 2006 to 31,501 at the end of March 2007. Number of PMRTS customers as on 31st March, 2007 is given below in Table 1.19.

Table 1.19 Number of PMRTS Customers as on 31st March 2007

Sl. No.	Name of the Service Provider	Subscriber Base as on 31 st March 2006	Subscriber Base as on 31 st March 2007
1	Aryadoot Transport Pvt Limited	1271	1536
2	Jet-Aiu Skyline Transport Pvt Ltd.	391	436
3	Container Movement (Bombay) Transport Pvt Ltd.	5	5
4	Arya Offshore Services Pvt Ltd.	1455	1263
5	German Express Shipping Agency (India) Pvt Ltd. (Hapag Llyod)	1123	880
6	United Liner Agencies of India (Pvt) Ltd	1997	1932
7	Procall Limited	8525	8129
8	The Arvind Mills Ltd.	7797	9675
9	Smartalk Pvt Limited	1562	1631
10	QuickCall	4509	4572
11	Bhilwara Telenet Services Pvt Limited	1064	1158
12	India Satcom Ltd.	251	284
	Total	29950	31501
	Growth in % age		5.18%

Source: Quarterly Reports of Service Providers.

1.1.7 Radio Paging Services

33. In India, Radio paging Service was opened up in 1992 and the Service was commercially launched in the year 1995.



The licenses were awarded on Circle basis and City basis. The growth in the initial years was encouraging but of late the industry has been facing fierce competition from cellular sector resulting in rather dismal performance. After December 2004, the performance reports of radio paging service providers have not been received from the operators. As such, it appears that the Radio Paging Service Providers have either closed their services or their licenses have expired.

1.1.8 Internet Services

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

35. As per the data available on DOT's website (www.dot.gov.in), there were 382 licenses for Internet Services (Category A - 63; Category B - 119; and Category C - 200) as on 20th March 2007. As per the data reported to TRAI by various ISPs, the Internet subscriber base in the country as on 31st March 2007, stood at 92.71 lakhs as compared to 69.35 lakhs on 31st March 2006 registering a growth of 33.69%. A table of ISPs who have already started Internet service and their subscriber base as on 31st March 2007 is furnished at Table 1.24 at Annexure at the end of this Part I of the report. In addition to 92.71 lakhs internet subscribers, there are 313.06 lakhs wireless Internet subscribers at the end of March 2007, who are accessing internet through mobile handset (GSM/CDMA).

36. The distribution of Internet Subscribers among Govt. ISPs & Private ISPs as on 31st March 2007 is shown below:



Table 1.20: Number of Internet Subscribers as on 31st March 2007.

Public Sector ISPs	59.54 lakhs
Private Sector ISPs	33.17 lakhs
Total	92.71 lakhs

Note: This does not include 313.06 lakh wireless internet subscribers

37. The market share of top five Internet Service Providers (ISPs) in terms of subscriber base as on 31st March 2007 is indicated in Table 1.21 below:

Table 1.21: Market Share of Top Five Internet Service Providers (ISPs) in terms of subscriber base as on 31st March 2007

S.No.	ISP	Market Share
1.	Bharat Sanchar Nigam Limited	45.21%
2.	Mahanagar Telephone Nigam Limited	19.01%
3.	Sify Limited	8.89%
4.	Bharti Televentures Ltd.(Bharti Infotel)	6.84%
5.	Reliance Communications Infrastructure Limited	6.06%

38. Among PSUs owned ISPs, M/s BSNL and M/s MTNL have reported a subscriber base of 41.91 lakhs and 17.63 lakhs respectively, while M/s Sify Ltd, M/s Bharti Televentures and M/s Reliance Communications Infrastructure Limited have a subscriber base of 8.24 lakhs, 6.34 lakhs and 5.69 lakhs respectively.

1.1.9 Broadband

39. The number of Broadband subscribers (with a download speed of 256 kbps or more) was 23.39 lakhs on 31st March 2007 as compared to 13.48 lakhs subscribers on 31st March 2006 registering an annual growth of 73.52%. The distribution of Broadband subscribers among Government ISPs and Private ISPs as on 31st March 2007 is shown below:



Table 1.22: Number of Broadband Subscribers as on 31st March 2007.

Public Sector ISPs	14.46 lakhs
Private Sector ISPs	8.93 lakhs
Total	23.39 lakhs

1.1.10 Internet Telephony

40. On the recommendation of TRAI, Government issued the guidelines for opening of Internet Telephony and opened the market with effect from 1st April, 2002. DOT has given permission to 125 ISPs (Category 'A' - 38; Category 'B' - 56; and Category 'C' - 31) to offer Internet Telephony services. As per the report submitted to TRAI, 25 ISPs have been providing Internet Telephony Services. These ISPs are listed at Table 1.23 below:

Table 1.23: List of Internet Telephony Service Providers as on 31st March 2007 who have reported the start of services

Sl. 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	CJ Online Pvt. Ltd.
6	Data Infosys Ltd.
7	Digital2Virtual ISP Pvt. Ltd.
8	DIL Internet Ltd.(Primus Telecommunications)
9	Dishnet Wireless Ltd.
10	Estel Communications Pvt. Ltd.
11	HCL Infinet Ltd.
12	Icenet.net Limited
13	In2cable (I) Ltd.
14	Mahanagar Telephone Nigam Ltd.
15	NetMagic Solutions(P) Ltd.
16	Opto Network Pvt. Ltd.
17	PBC Ventures Ltd.(Chemical & Metallurgical Design Co. Ltd.)
18	Sify Ltd.
19	Southern Online Bio Technologies Ltd.



S. No.	Name of ISP
20	Swastik Netvision Telecom P.Ltd
21	Trak Online Net India Pvt.Ltd
22	Trikon Electronics Pvt. Ltd.
23	Value Healthcare Ltd.
24	Videsh Sanchar Nigam Ltd.
25	YOU Telecom India Pvt. Ltd.

1.1.11 Cable TV Services

41. At present, as per latest estimates there are 120 million households in India having television sets. Out of this, there are 71 million household subscribers of cable television services. At present, over 220 cable and satellite channels are being made available for viewing.
42. In order to regulate the 'carriage' of Broadcasting and Cable Services, the Government of India issued a Notification dated 9th 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 9th 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.
43. Perhaps the most significant development during the year in Cable TV sector was rolling out Conditional Access System (CAS) with effect from 31st December 2006. The Government issued a notification on 31st July 2006, for implementing CAS in parts of three metros of Delhi, Mumbai and Kolkata. Following up on this TRAI formulated the necessary regulatory framework consisting of quality of service standards, inter-connection issues and tariff issues. In order to ensure smooth roll out of CAS, it was decided that entry barriers for the



Cable TV subscribers must be kept at reasonable levels. Thus, the tariff order on CAS required that no pay channel will be priced higher than Rs.5 per month, and that the set top box should be available at affordable rental rates of Rs.30 to Rs.45 per month. As a result of these far reaching initiatives, CAS was rolled out successfully and nearly 5 lakhs subscribers had taken set top boxes by the end of March 2007 in the three metros.

1.2 Review of Policies and Programmes

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

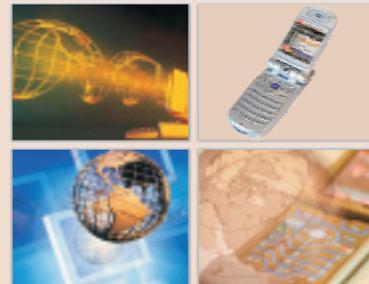
- Access to telecommunications is of utmost importance for achievement of the country's social and economic goals. Availability of affordable and effective communications for the citizens is at the core of the vision and goal of the telecom policy,
- Strive to provide a balance between the provision 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 world-class 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.

45. 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 lakh by the year 2002.



1.2.1 Rural Telephone Network

46. 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.

47. Out of the 6,07,491 villages in the country, 5,64,075 villages have been provided with Village Public Telephone (VPT) and 43,416 villages are yet to be connected with a VPT. In percentage terms 93% villages have been covered by VPTs and 7% villages are yet to be covered. A total of 15,232 VPTs were added during the year 2006-07, at an annual growth rate of 2.78%. The private operators share in these VPTs is very negligible and almost the entire VPTs have been installed by BSNL. In fact during the year, BSNL has installed in all 15, 779 VPTs, where as the VPTs of other private operators have decreased by 547. The total no. of VPTs of BSNL was recorded at 5,52,633 in March 2007 as compared to 11,442 VPTs of private operators as on March 2007.



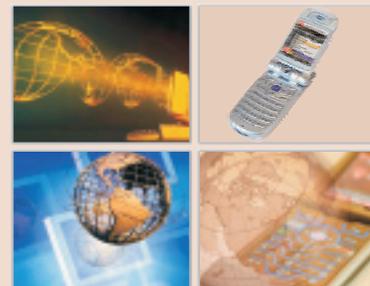
1.2.2 Expansion of Telephone Network

48. 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.

49. The subscriber base of basic services (Wireline) recorded marginal decrease by 1.90% in 2006-2007 over the previous year. The mobile industry has witnessed phenomenal growth during the year with an annual growth rate of 83.17%. The growth in absolute numbers in mobile subscribers during 2006-07 was 66.34 million as compared to 37.92 million in 2005-06. The total number of subscriber crossed 165.11 million mark by the end of financial year 2006-07. The total subscribers comprises of 120.47 million GSM and 44.64 million CDMA subscribers. As on March 2007, M/s Bharti, M/s Reliance & M/s Aircel have acquired licenses in all 23 service areas for offering mobile services. M/s Bharti and M/s Reliance are the only private operators who are providing services in All India i.e., 23 service areas. 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 6.93 million in March 2006 to 9.27 million at the end of March 2007 recording a growth rate of about 33.69%, the subscriber base of Broadband increased from 1.35 million in March 2006 to 2.34 million at the end of March, 2007.



1.2.3 Entry of Private Sector in both basic and value added service

(a) Basic Service

50. 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.

51. 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 31st August 2000.
52. 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.
53. By the end of March 2007, 5 private BSOs namely, M/s Reliance Infocom Ltd. (21 circles), M/s Tata Teleservices Ltd. (20 circles), M/s Bharti Airtel Ltd. (16 circles), M/s Shyam Telelink Ltd. (Rajasthan circle) and M/s HFCL Infotel Ltd. (Punjab circle) have been awarded licenses. All the five private operators had migrated to Unified Access Service Regime during 2003-04.



(b) Value Added Services - Voice Mail/Audiotex Service

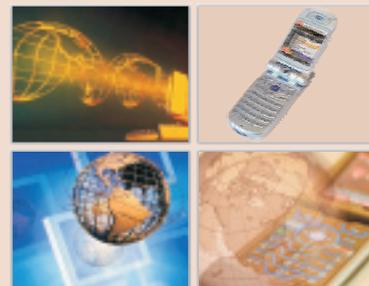
54. Licenses for the Voice Mail / Audiotex Service were initially awarded by the Department of Telecommunications from 1996 on a non-exclusive and first-come-first serve basis for a period of five years which can be extended by one year at a time. Meanwhile, the Government adopted the New Telecom Policy, 1999 (NTP'99) with effect from 1st April, 1999. This policy does not cover any special mention about Voice Mail / Audiotex

Services. Pursuant to the announcement of NTP'99, the Government took the decision to permit migration of existing licensees of Cellular, Basic and other value added telecom services to NTP-99 Regime. The recommendations of TRAI were sought in August, 2000, in regard to license fee, arrangement for migration of the existing Voice Mail Service Operators and finalization of terms and conditions for issue of fresh licenses for Voice Mail Service. TRAI gave its Recommendations to the Government on 29th December 2000 and the Government accepted these Recommendations. Accordingly, the Government issued the Guidelines for issue of licence for Voice Mail/ Audiotex Service on 17th February 2001. In May, 2001, the Government allowed Cellular Mobile Service Providers and Basic Service Operators to provide Voice Mail / Audiotex Service to the subscribers falling within their service area on a non-discriminatory basis, without any separate/ additional licence fee.

1.2.4 Technical compatibility and effective interconnection between service provider

Background

55. 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 24th 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.



56. Thereafter, based on several representations received from telecom service providers and stakeholders with respect to the IUC Regime as well as tariff under the new regime, TRAI carried out an extensive review of the IUC Regulation and issued the Telecommunication Interconnection Usage Charges Regulation on 29th October 2003. This IUC Regulation came into force from 1st February 2004. The main features of this IUC Regime were lower total amount of Access Deficit Charges (ADC), uniform termination charges of Rs. 0.30 per minute irrespective of terminating network, reduction of ADC on NLD and ILD calls, all of which resulted into lower tariff environment on voice telephony.

57. In the IUC Regulation dated 29th October, 2003, it was mentioned that in the subsequent years, the Authority would review both the size of the ADC payments as well as the beneficiaries of the ADC regime. Accordingly, TRAI issued a consultation paper on 'ADC Review' on 23rd June 2004. Based on the inputs received from the stakeholders during the Open House Sessions, detailed discussions with the service providers and its own analysis, TRAI issued on 6th January 2005 'The Telecommunication Interconnection Usage Charges (Fourth Amendment) Regulation' effective from 1st February, 2005. Under this regulation, the ADC rates were significantly reduced for Inter-circle Calls and International Long Distance Calls which led to substantial reduction in tariff for NLD and ILD calls.

58. The Authority further released a Consultation Paper on IUC/ ADC on 17th March, 2005 to address a wide range of issues, including (a) Justification of ADC on Fixed Wireless Lines and admissibility of ADC for non-BSNL Fixed Line Operators, (b) ADC as Percentage of Revenue, and its various variants including mixed models, higher ADC on NLD and ILD calls etc., (c) Interconnection Usage Charges (Carriage and Termination issues) including those for Incoming International calls, and whether to have differential rates for carriage and termination, and (d) Implications of increasing disbursement of USO Fund on the quantum of ADC payable. On the basis of the comments



received during the Open House Sessions as well as the comments received from the stakeholders and its own analysis, TRAI issued the new IUC Regulation on 23rd February 2006. Through this IUC Regulation, TRAI reduced the amount of ADC and the ADC regime also changed from minute based to revenue sharing of AGR (Adjusted Gross Revenue) of telecom service providers in respect of National Long Distance (NLD) calls. Further, to encourage the telecom operators to create infrastructure in Rural Areas, TRAI also decided that the revenue generated from rural subscribers is to be subtracted for calculation of AGR for the purpose of arriving at ADC. In addition, TRAI fixed the ceiling on carriage charges per minute for Long Distance Calls within India at Rs.0.65 per minute irrespective of the distance with a view to promote lower domestic prices and to give a greater impetus to subscriber growth. Prior to this regulation, the carriage charges were distance based (i.e., Rs.0.20 for distance up to 50 kms., Rs.0.45 for 200 kms., Rs.0.50 for 500 kms., and Rs.1.20 for above 500 kms.)

59. On 8th June, 2005, TRAI issued Transit Charges for BSNL's CellOne Terminating Traffic Regulation, 2005 which came into force from 3rd May, 2005 in compliance with the Hon'ble Telecom Disputes Settlement Appellate Tribunal's (TDSAT) orders dated 3rd May, 2005 in Petition No.20/2004 (COAI & Ors. Vs BSNL & Ors). Under this regulation, no transit charges shall be levied by BSNL from cellular operators for accessing BSNL's CellOne subscribers wherever the Mobile Switching Centres (MSCs) of both BSNL's CellOne and private CMSPs are connected to the same BSNL switch. The regulation was issued as there had been no direct connectivity between BSNL Cellular and other private CMSPs and the traffic terminating in BSNL's Cellone network was being routed through BSNL's PSTN switch and was being charged @19 paise per minute.

Initiatives during the year

60. TRAI has been reviewing the ADC regime on an annual basis. As part of the annual review, following the transparent



consultation process including the Open House Discussion, TRAI notified amended regulations "The Telecommunication Interconnection Usage Charges (Eighth Amendment) Regulations, 2007" on 21st March 2007. The details of this regulation are discussed in Part III of this report.

61. Regulation titled "Intelligent Network Services in Multi Operator and Multi Network Scenario Regulations, 2006 (13 of 2006)" was issued on 27th November 2006 providing inter alia for Interconnection amongst all telecom service providers for Intelligent Network (IN) Services. This Regulation would ensure that specified innovative services made available through IN will not be restricted to the telecom service providers who have deployed the Intelligent Network platform but now it will also be available to subscribers of other operators. The details of this regulation are discussed in Part III of this report
62. On 28th May 1999, the Authority had notified "The Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999", which specified arrangements among service providers for interconnection charges and revenue sharing for all telecommunication services including Port Charges. A revised regulation on Port Charges: "The Telecommunication Interconnection (Port Charges) Regulation 2001", was made effective on 28th December 2001. There has been a long pending demand by interconnection seekers that Port charges need to be reviewed to align with the current switch/exchange costs. Accordingly the Authority issued The Telecommunication Interconnection (Port Charges) Amendment Regulation, 2007 on 2nd February, 2007. The details of the regulations have been discussed in Part III of this report.



1.2.5 Telecommunication Technology

63. TRAI follows technology neutral approach in its policies.
 - (a) **Basic Service**
64. Competition generated in basic telephony has forced BSOs to adopt efficient and modern technology to upgrade their existing

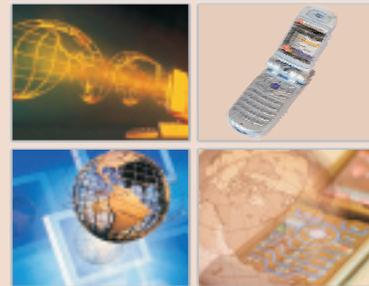
networks so as to offer new features and value added/ supplementary services to the consumers. Billing is a major area where technological innovations are taking place to accommodate on the one hand the various new features and value added/supplementary services and on the other hand the inter-operator 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

65. Cellular Mobile service providers in the country are at present primarily providing voice services along with various value added services and supplementary services such as Short Message Service (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

66. Broadband is a high-speed connectivity that cuts across the Internet, telephony and video worlds with the capacity for integrating them in a new way. As per Broadband Policy 2004, it is defined as an 'always-on' data connection that is able to support interactive services including Internet access and has the capability of the minimum download speed of 256 kbps to an individual subscriber from the Point of Presence (POP) of the service provider intending to provide Broadband service where such individual Broadband connections are aggregated and the subscriber is able to access these interactive services including the Internet through this POP. The interactive services will exclude any services for which a separate licence is specifically required, for example, real-time voice transmission, except to the extent that it is presently permitted under ISP licence with Internet Telephony. Optical Fibre Technologies, Digital Subscriber



Lines (DSL) on copper loop, Cable TV Network, Satellite Media, Terrestrial Wireless are the various technology options for Broadband Services. The Broadband subscriber base in the country has reached 23.39 lakhs at the end of March, 2007.

(d) Next Generation Network

67. The emergence of Next Generation Network (NGN), which is an IP based multi-service network, is driving the changes in the way basic telephony services are delivered. NGN enables use of a common core which will support a range of access technologies and converged services on such platform. With this background Telecom Regulatory Authority of India (TRAI) had submitted the recommendations on 'Issues pertaining to Next Generation Network' on 20th March, 2006. As a follow-up measure to our recommendations, it was decided to constitute an expert committee (NGN-eCO) by co-opting members from various quarters to deliberate upon the various issues related to NGN. Members were co-opted from Department of Telecom, Telecom Engineering Centre (TEC), Center for Development of Telematics (C-DOT), Service Providers, vendors and academia. With 30 members including representatives from TRAI, the NGN-eCO was constituted under the chairmanship of Secretary, TRAI on 20th June, 2006.



The following objectives were formulated for this committee.

- a. NGN awareness building programme.
- b. Timetable for NGN migration in the country.
- c. Background documents to be used for subsequent consultation on Interconnection and QoS issues by TRAI.
- d. Any other task assigned by Authority.

The first meeting of NGN-eCO was held on 11th October, 2006 at New Delhi. In order to give more focus to the task of NGN-eCO, it was resolved at the meeting that 3 Core Groups may be constituted to deliberate upon specific issues viz; a) Licensing

Issues, b) Interconnection Issues, and c) QoS related issues. On the basis of the recommendations of these Core Groups, NGN-eCO will prepare the final recommendations and will submit the same to Authority (TRAI). The NGN Core Group on Licensing issues has finalized the recommendations and Core Groups on Interconnection & QoS shall finalize their recommendations in the first quarter of next financial year.

(e) National Internet Exchange of India (NIXI)

68. In 2003, the Department of Information Technology (DIT) Government of India, had funded setting up of National Internet Exchange of India (NIXI) for the purpose of routing the domestic Internet traffic within the country on the recommendation of the Authority. Four nodes of National Internet Exchange of India have already become operational one each at Delhi (NOIDA), Mumbai, Chennai & Kolkota respectively. The setting up of NIXI was expected to ensure that domestic traffic originated in India remains in the country, latency for domestic traffic is reduced, cost savings to ISPs and improved quality of service. Presently, 54 links are connected to the four nodes of NIXI by 27 Internet Service Providers. It has been observed that limited number of ISPs have joined NIXI resulting in sub optimal utilization of NIXI's infrastructure. To make NIXI more efficient and effective, TRAI has initiated the process of consultation with the stakeholders. A consultation paper in this regard was issued on 1st November 2006 on 'Improvement in the effectiveness of National Internet Exchange of India (NIXI)'. Based on the inputs/comments received from the stakeholders and best international practices, TRAI will be finalizing the recommendations to be sent to the Government on the subject.



(f) Infrastructure Sharing

69. Telecom market is growing in our country at a faster pace. Every month about 6 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. Govt. has sought the views of TRAI for any amendments/changes in existing licensing conditions or legislation to encourage sharing of Infrastructure. For this, TRAI had issued a consultation paper on 'Infrastructure sharing' to address various related issues. Based on the inputs/comments received from the stakeholders, TRAI will be finalizing the recommendations to be sent to the Government on the subject.

(g) Internet Services

70. Internet services were launched in India on 15th August 1995. In November 1998 the Government opened up the sector for providing Internet services by private operators. A liberal licensing regime was put in place with a view to increase Internet penetration across the country. Though large numbers of ISPs have been licensed to provide Internet services, top 20 ISPs provide Internet services to 98% subscribers. Internet Telephony has been permitted to 125 ISPs, however only 25 of them are presently providing Internet Telephony. The growth of Internet and Broadband is slow and still far from the target of 18 million Internet subscribers and 9 million Broadband connections by 2007. New services like IPTV, IP-Telephony, Video on Demand (VOD) etc. are becoming popular. The scope of such services under existing licensing terms and conditions is silent. Also, with the increase in IP-Telephony, grey market operations are increasing. In order to address all these issues, TRAI has initiated a consultation process. A consultation paper on 'Review of Internet Services', has been released and discussions have taken place with the stakeholders. On request of DOT, recommendations on the issue are being prepared



and are likely to be sent in the first quarter of next financial year.

1.2.6 Implementation of New Telecom Policy

71. 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.

1.2.7 Universal Service Obligation (USO)

72. 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 3rd October 2001. TRAI in its recommendations on "Growth of Telecom Services in Rural India" dated 27th 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 Telegraphic (Amendment) Act, 2006 was passed on 29th 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.



1.2.8 Quality of Service

73. 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. In discharge of this function, TRAI released QoS Regulation for Basic and Cellular Services on 5th July, 2000. The Regulation had prescribed the QoS parameters for Basic and Cellular services to be achieved. Various technological developments necessitated change in QoS parameters. Accordingly, TRAI reviewed the QoS regulation after following the public consultation process and a revised QoS Regulation was issued on 1st July, 2005. 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. TRAI has also notified a Regulation on Quality of Service of Dial-up and Leased Line Internet Access Service in December, 2001 fixing benchmarks for Internet Dial-up Access. ISPs are required to comply with the benchmarks as per this regulation.



74. With the growth of Broadband services, there was increased number of consumer complaints with the increase of customers. The Authority felt the need for addressing the quality of service issues for broadband issues. Accordingly after following a consultative process with the stake holders, Authority issued Regulation on Quality of Service for Broadband Services on 6th October 2006.

75. M/s TUV South Asia Ltd was appointed to carry out objective assessment of the QoS provided by Basic and Cellular Service providers. The reports received for the quarter ending March, June and September 2006 were analysed and the reports were placed on the TRAI's website for information of stake holders.

Annexure

Table 1.24: Subscriber Base and other details as reported by ISPs:

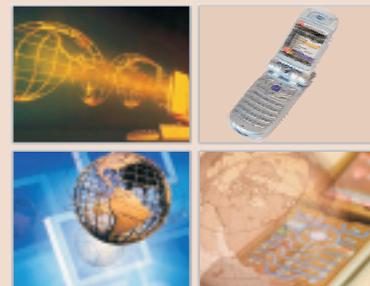
Sl. No.	Name of the Service Provider	Category	Geographical area of operation	Subscriber Base as on March, 2007
Category 'A'				
1	Bharat Sanchar Nigam Ltd.	A	All India	4191173
2	Sify Ltd.	A	All India	823777
3	Bharti Airtel Ltd. (Bharti Televentures Ltd.)	A	All India	633872
4	Reliance Communications Infrastructure Limited	A	All India	562161
5	Videsh Sanchar Nigam Ltd.	A	All India	483511
6	Data Infosys Ltd.	A	All India	198927
7	YOU Telecom India Pvt. Ltd.	A	All India	141282
8	Hathway Cable & Datacom Pvt. Ltd.	A	All India	122504
9	HCL Inffinet Ltd.	A	All India	42015
10	Punj Lloyd (Spectra Net Ltd.)	A	All India	19894
11	Hughes Communications India Ltd.	A	All India	18200
12	Tata Teleservices (Maharashtra) Ltd. (Hughes Telecom)	A	All India	11124
13	DIL Internet Ltd.(Primus Telecommunications)	A	All India	10186
14	In2cable (I) Ltd.	A	All India	5643
15	Trak Online Net India Pvt.Ltd	A	All India	4518
16	Swiftmail Communications Ltd.	A	All India	3850
17	HCL Comnet Systems & Services Ltd.	A	All India	2647
18	n-Louge Communications Pvt. Ltd.	A	All India	1061
19	ERNET India	A	All India	922
20	Tulip IT Services Ltd.	A	All India	688
21	Dishnet Wireless Ltd.	A	All India	596
22	i2i Enterprise Ltd.	A	All India	304
23	Primenet Global Ltd.	A	All India	263
24	Verizon Communications India Pvt. Ltd.	A	All India	182
25	Reach Network India Pvt. Ltd.	A	All India	130
26	Gateway Systems (I) Ltd.	A	All India	110
27	Guj Info Petro Ltd. (GIPL)	A	Gujarat	105
28	Estel Communications Pvt. Ltd.	A	All India	98
29	Tata Internet Services Ltd.	A	All India	84
30	Nextgen Communications Ltd [RPG Infotech Ltd. (Sprint RPG India)]	A	All India	48



Sl. No.	Name of the Service Provider	Category	Geographical area of operation	Subscriber Base as on March, 2007
31	L&T Finance Ltd. (L&T Netcom Ltd.)	A	All India	25
32	Nelco	A	All India	24
33	Astro Network India Pvt. Ltd.	A	Hyderabad	14
34	GTL Ltd.	A	All India	8
35	Gujrat Narmada Valley Fertilizer Co. Ltd. (GNFC)	A	All India	4
36	VSNL Broadband Ltd.	A	Mumbai & Pune	0
Category 'B'				
37	Mahanagar Telephone Nigam Ltd.	B	Delhi & Mumbai	1762842
38	Asianet Satellite Communications Ltd.	B	Kerala	40938
39	HFCL Infotel Ltd.	B	Punjab Telecom Circle	33606
40	Shyam Internet Services Ltd	B	Rajasthan	25505
41	Icenet.net Limited	B	Gujarat	20642
42	Fascel Ltd.	B	Gujarat	18001
43	Beam Cable System Pvt. Ltd.	B	Hyderabad	17744
44	WWW Communications Ltd.	B	Delhi	15291
45	Broadband Pacenet (I) Pvt. Ltd.	B	Mumbai	12263
46	Alliance Broadband Services Pvt. Ltd.	B	Kolkata	7175
47	West Bengal Electronics Industry Development Corp. Ltd.	B	Kolkata	6610
48	Trikon Electronics Pvt. Ltd.	B	Mumbai	5340
49	Rajesh Multi Channel Pvt. Ltd.	B	Mumbai	3497
50	Blazenet Ltd.	B	Gujarat	3249
51	Digital2Virtual ISP Pvt. Ltd.	B	Gujarat	2178
52	Geo City Network Solutions Pvt. Ltd.	B	Delhi	2129
53	Hathway Bhawani Cabletel & Datacom Pvt. Ltd.	B	Mumbai	1779
54	Value Healthcare Ltd.	B	Mumbai	1769
55	CJM Consultancy Services Pvt. Ltd.	B	Delhi	727
56	Myguru Online Ltd.	B	Andhra Pradesh	564
57	Southern Online Bio Technologies Ltd.	B	Andhra Pradesh	546
58	NetMagic Solutions(P) Ltd.	B	Mumbai	373
59	Vainavi Industries Ltd. (MAC Info Pvt. Ltd.)	B	Andhra Pradesh	205
60	Atria Convergence Technologies Pvt. Ltd.	B	Karnataka	188
61	Karuturi Networks Ltd.	B	Karnataka	188
62	Swastik Netvision Telecom P. Ltd.	B	Gujarat	51
63	PBC Ventures Ltd.(Chemical & Metallurgical Design Co. Ltd.)	B	Delhi	31
64	Cyquator Technologies Ltd.	B	Mumbai, Navi Mumbai	7



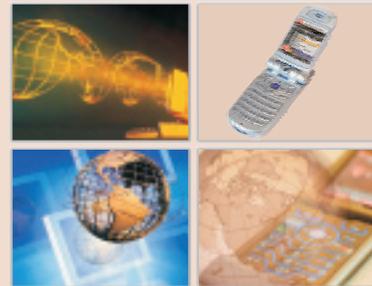
Sl. No.	Name of the Service Provider	Category	Geographical area of operation	Subscriber Base as on March, 2007
65	Godrej Infotech Ltd.	B	Mumbai	7
66	Surana Telecom Ltd.	B	AP	3
67	Gujarat State Petroleum Corporation Ltd. (GSPC)	B	Gujarat	1
68	Rolta India Ltd.	B	Mumbai	0
Category 'B&C'				
69	Sab Industires Ltd. (Sab Infotech)	B&C	Punjab, Karnal, Ambala	1144
70	Descon Ltd.	B&C	Kolkata & Burdwan District	162
71	Direct Internet Ltd.	B&C	Delhi, Gurgaon, Noida	24
72	Virtela India Pvt. Ltd.	B&C	Mumbai, Bangalore, Gurgaon	17
Category 'C'				
73	Bhupati Hotels Pvt. Ltd.	C	Visakhapatnam	1084
74	Broadlane Networks Pvt. Ltd.	C	Dombivli, Maharashtra	962
75	Sanchar Telenetwork Pvt. Ltd.	C	Bhavnagar SSA	846
76	iPath India Pvt. Ltd.	C	Ernakulam SSA	684
77	ISP Solutions India Pvt. Ltd.	C	Coimbatore SSA	538
78	Micky Online Pvt Ltd.	C	Moradabad	450
79	Rida Communication Pvt. Ltd.	C	Aligarh SSA	378
80	Bohra Pratisthan Pvt. Ltd.	C	Udaipur SSA	358
81	Spectrum Softech Solutions Pvt. Ltd.	C	Ernakulam SSA	224
82	Bhiwani Communications Pvt. Ltd.	C	Rohtak	216
83	Bhaskar Multinet Ltd.	C	Jaipur	152
84	Mynet Services India Pvt. Ltd.	C	Tamil Nadu SSA	140
85	CJ Online Pvt. Ltd.	C	Ghaziabad	118
86	Harisree Cable Net Pvt. Ltd.	C	Kanpur SSA	65
87	Conjoinix Technologies Pvt Ltd	C	J&K, Chandigarh	30
88	Centre for Development of Advanced Computing, C-DAC	C	Ghaziabad SSA	18
89	Opto Network Pvt. Ltd.	C	SSA Ghaziabad	14
90	Kerala State Electronics Development Corp. Ltd. (Keltron)	C	Thiruvananthapuram	6
91	Compucom (I) Pvt. Ltd.	C	Jaipur	2
92	Apna Telelink Ltd.	C	Jalandhar	0
	Total			9271031





PART-II

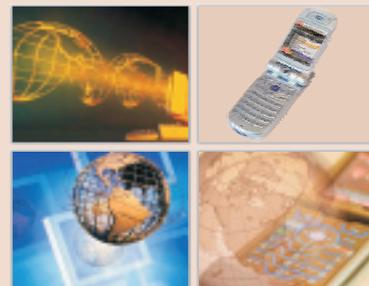
REVIEW OF WORKING AND OPERATION OF THE TELECOM REGULATORY AUTHORITY OF INDIA





2. REVIEW OF WORKING AND OPERATIONS OF THE TELECOM REGULATORY AUTHORITY OF INDIA

1. Part I of the Report has given an overview 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 2006-07. 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 and 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.
2. The Government of India issued a Notification dated 9th 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.
3. Under the TRAI Act, 1997, as amended, 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 & systems development of forum for interaction amongst service providers and interaction of the Authority with consumer organizations. The Government issued an order dated 9th 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.

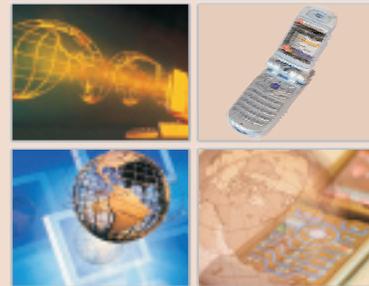
4. To formulate its policies and recommendations, TRAI interacts with various stakeholders such as the service providers, their organizations, Consumer Advocacy Groups/Consumer Organizations and other experts in this field. It has developed a process which allows all the stakeholders and the general 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.

5. 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 24 Consumer organizations as on 31st March 2007 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.

6. During the year 2006-07, TRAI notified the following Tariff Orders:
 1. The Telecommunication (Broadcasting and Cable) services (Second) Tariff (Sixth Amendment) Order 2006 dated 31st July 2006.
 2. The Telecommunication (Broadcasting and Cable) Services (Third) (CAS Areas) Tariff Order, 2006 dated 31st August 2006.
 3. The Telecommunication (Broadcasting and Cable) Services (Second) Tariff (Seventh Amendment) Order 2006, dated 21st November 2006.
 4. The Telecommunication (Broadcasting and Cable) Services (Third)(CAS areas) Tariff (First Amendment) Order, 2006, dated 21st November 2006.
 5. The Telecommunication (Broadcasting and Cable) Services (Third) (CAS areas) Tariff (Second Amendment) Order, 2006 dated 19th December 2006.
 6. The Telecommunication Tariff (Forty Fourth Amendment) order, 2007 dated 24th January 2007.
7. Following Recommendations have been given by TRAI to the Government during the year 2006-07:
 1. Recommendations for permitting usage of * and # in provisioning of value added intra-network services like

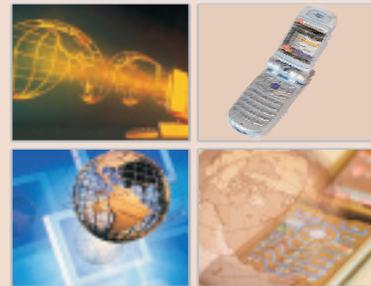


USSD (Unstructured Supplementary Service Data) by Access Providers (13th April 2006).

2. Recommendations on Licensing Issues relating to DTH (25th August 2006).
 3. Recommendations on components of Adjusted Gross Revenue (AGR) (21st September 2006).
 4. Recommendations on Allocation and pricing of spectrum for 3G and broadband wireless access services (27th September 2006).
 5. Recommendations on Terms & Conditions for Resale in International Private Leased Circuits (IPLC) Segment (23rd March 2007).
8. TRAI also issued following directions to the Service Providers during the year for compliance of its order:
1. Direction dated 28th April 2006 regarding compliance of amended procedure for filing of details of Interconnect Agreements.
 2. Direction dated 28th April 2006 to all Access Providers, NLDOs and ILDOs on reporting of International Long Distance Traffic Minutes.
 3. Direction dated 19th May 2006 regarding compliance of amended procedure for filing of details of Interconnect Agreements.
 4. Direction dated 22nd May 2006 to 11 service providers for compliance to Order No 14-2/2005-FA dated 5th May 2005 and furnish information of Adjusted Gross Revenue, Licence Fee etc.
 5. Direction dated 7th June 2006 regarding Credit Limit for Post-paid subscribers.
 6. Direction dated 14th July 2006 regarding Certificate of Compliance in respect of Directions issued by TRAI on tariff matters.



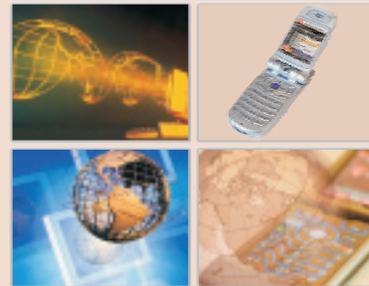
7. Direction dated 17th July 2006 to Cellular Mobile Service providers and Unified access service providers to comply with National Numbering Plan.
8. Direction dated 31st July 2006 regarding Certificate of Compliance in respect of Directions issued by TRAI.
9. Direction dated 21st August 2006 regarding Certificate of Compliance in respect of various Directions issued by TRAI.
10. Direction dated 23rd August 2006 regarding Certificate of Compliance in respect of Directions issued by TRAI on Quality of Service related matters.
11. Direction dated 24th August 2006 regarding Standard Interconnection Agreements in CAS notified areas.
12. Direction dated 29th August 2006 on issue of Docket Number for customer complaints and termination of service.
13. Direction dated 18th September 2006 to Multi System Operators (MSOs) permitted under sub-rule (3) of Rule 11 of the Cable Television Networks Rules, 1994 (as amended), to conduct public awareness campaign in notified CAS areas.
14. Direction dated 28th September 2006 regarding Non-Compliance on TRAI's decision dated 23rd August 2006 on IUC for SMS.
15. Direction dated 29th September 2006 to Multi System Operators (MSOs) permitted under sub-rule (3) of Rule 11 of the Cable Television Networks Rules, 1994 (as amended), to provide cable services in notified CAS areas.
16. Direction dated 10th October 2006 to Multi System Operators (MSO) (including independent Cable Operators) permitted to provide cable service in CAS notified areas under sub-rule (3) of Rule 11 of the Cable Television Network Rules 1994 as amended and Cable Operators getting feed from such approved Multi System Operators in CAS notified Areas.



17. Direction dated 3rd November 2006 regarding Registration of Interconnection Agreements.
18. Direction dated 16th November 2006 to Multi System Operators (MSOs) permitted under sub-rule (3) of Rule 11 of the Cable Television Networks Rules, 1994 (as amended), to provide cable services in notified CAS areas - Regarding Fortnightly Report.
19. Direction dated 16th November 2006 to Multi System Operators (MSOs) permitted under sub-rule (3) of Rule 11 of the Cable Television Networks Rules, 1994 (as amended), to conduct public awareness campaign in notified CAS areas.
20. Direction dated 16th November 2006 regarding Standard Interconnection Agreements in CAS notified areas
21. Direction dated 14th December 2006 to Multi System Operators (MSOs) permitted under the Cable Television Networks Rules, 1994 (as amended), to provide signals, on request, to the cable operators and direct subscribers affiliated to those approved MSOs of Delhi, who are not in a state of preparedness to roll out CAS by 31st December 2006.
22. Direction dated 22nd December 2006 to broadcasters for reporting of commercial tariff
23. Direction dated 11th January 2007 to M/s Nimbus Sports Broadcasting Private Limited to reduce the price of Bouquet of Sports channels and comply with the provisions of 3 & 3b of Telecommunication (Broadcasting & Cable) Service (Second) Tariff Order, 2004
24. Direction dated 2nd February 2007 to Service Providers to deposit in a separate bank account the excess amount charged from the consumers and refundable to them.



9. During the year 2006-07 TRAI issued the following Regulations:
1. The Telecom Regulatory Authority of India (Officers and Staff Appointment) (5th Amendment) Regulation 2006 dated 26th May 2006.
 2. The Second Amendment to TRAI Meetings for Transaction of Business Regulation, 1999 dated 11th July 2006.
 3. Regulation on the The Standards of Quality of Service (Broadcasting and Cable services) (Cable Television - CAS Areas) Regulation, 2006 dated 23rd August 2006.
 4. The Telecommunication (Broadcasting and Cable Services) Interconnection (Second Amendment) Regulation, 2006 dated 24th August 2006.
 5. The Telecommunication (Broadcasting and Cable Services) Interconnection (Third Amendment) Regulation, 2006 dated 4th September 2006.
 6. Quality of Service of Broadband Service Regulations 2006 dated 6th October 2006.
 7. Intelligent Network Services in Multi Operator and Multi Network Scenario Regulations, 2006 dated 27th November 2006.
 8. The Telecommunication Interconnection (Port Charges) Amendment Regulations, 2007 dated 2nd February 2007.
 9. The Telecommunication Interconnection Usage Charges (Eighth Amendment) Regulations, 2007 dated 21st March 2007.
10. The Consultation Papers issued by TRAI during the year 2006-07 are as under:
1. Consultation Paper on Issues relating to commercial tariff for Broadcasting and Cable Television Services.
 2. Consultation paper on Issues relating to regulation of Interconnection for Broadcasting and Cable Television Services.



3. Consultation Paper on Fixing the Benchmark pertaining to Quality of Service for Broadband.
4. Consultation Paper on Licensing Issues relating to DTH.
5. Consultation Paper on Allocation and Pricing of Spectrum for 3G, Broadband and Wireless access Services.
6. Consultation Paper on Interconnect Usage Charges (IUC) for Short Message Service.
7. Consultation Paper on Tariff order for CAS areas.
8. Consultation paper on Admissibility of Revenue Share between visiting Network and terminating Network for roaming calls.
9. Consultation Paper on Improvement in the effectiveness of National Internet Exchange of India (NIXI).
10. Consultation Paper on Measures to enhance Competition in Domestic Leased Circuits (DLC) Market in India.
11. Consultation Paper on Unsolicited Commercial Communications.
12. Consultation Paper on Review of Ceiling Tariffs for Roaming Services.
13. Consultation Paper on Infrastructure Sharing.
14. Consultation Paper on Resale in International Private Leased Circuits (IPLC) Segment.
15. Consultation Paper on Review of Internet Service.
16. Consultation Paper on the Redressal of Consumer Grievances and Consumer Protection in Telecommunication.
17. Consultation Paper on Revenue Sharing formula for service providers in CAS notified areas.
18. Consultation Paper on Access Deficit Charges.
19. Consultation paper on Issues relating to DTH.

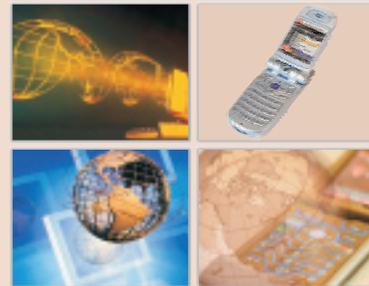
11. In the process of providing its recommendations during the year, the Authority conducted a total of 16 Open House



Discussions 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. Authority also held one meeting with the registered Consumer Advocacy Groups on various issues relating to provision of telecom services.

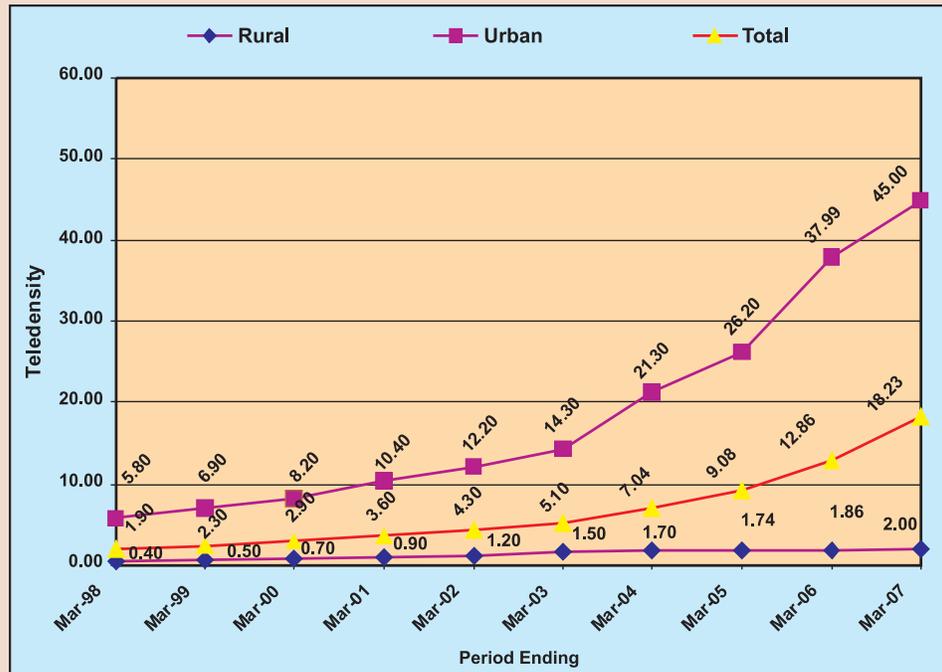
2.1 Rural Telephone Network

12. The various policy initiatives taken by the government so far for increasing the growth of telecom services in rural areas including setting up of Universal Service Obligation Fund, have not given the desired results and, therefore, the Authority felt that a fundamental shift in achieving the growth of telecom service in rural areas is necessary. Keeping this aspect in mind, TRAI had submitted its recommendations on Growth of Telecom Services in Rural India on 3rd October, 2005.
13. In the recommendation, TRAI had suggested that the focus of present USO Policy should shift from subsidy based on individual DELs, VPTs, Rural Community Phones etc. to network infrastructure expansion approach. This approach proposes to offer financial incentives to service providers in the form of providing the partial cost of shared infrastructure & license fee and spectrum charge reduction based on infrastructure roll out in rural areas to enable the service providers to expand telecommunication services in rural areas.
14. The main features of the Recommendations on Growth of Telecom Services in Rural Areas include: (a) Sharing of infrastructure including backbone infrastructure to receive support from USO, (b) Discount in annual license fee and spectrum charges linked with coverage in rural areas, (c) No spectrum fee for usage of CorDect and similar other technologies, (d) No prior Standing Advisory Committee for Frequency Allocation (SACFA) clearance for deployment up to height of 40 meters and (e) Support from USO Fund for penetration of mobile services in rural areas.



15. 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 Figure 2.1 shown below.

Figure 2.1: Widening of Rural and Urban tele-density Gap (March, 1998 to March, 2007)



16. In its recommendations on growth of Telecom Services in Rural Areas, TRAI had inter-alia recommended that mobile services should be brought under the ambit of Universal Service Obligation Fund (USOF) and sharing of infrastructure may receive support from USO. In November, 2006, the Indian Telegraph (Amendment) Act, 2006 was passed amending the Indian Telegraph Act, 1885 to bring the mobile services within the definition of universal services for the purpose of subsidy from USO Fund. The Rules for the administration of the fund, the Indian Telegraph (Amendment) Rules 2004 were also amended in November, 2006 to enable support from USOF to mobile

services and Broadband connectivity in the rural and remote areas of the country. 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.

17. The Government of India, Department of Telecommunication had issued guidelines on USO on 27th March 2002 based on the TRAI's detailed recommendations to the Government on implementation of the policy of the USO. With the amendment to the Indian Telegraph Act, 1885 and the Rules framed there under, statutory status was given to the USO Fund effective from 1st April 2002. TRAI also interacts with the USO Fund Administrator and monitors the implementation of USO. It also participates and contributes in the Inter-Ministerial Advisory Committee on USO.
18. As per Indian Telegraph (Amendment) Rules, 2006 dated 17th November, 2006, the following services shall be supported by the USO Fund, namely:-

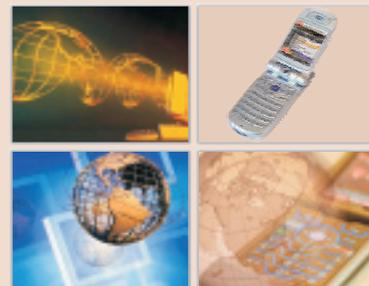
"i) Stream-I:

Provision of Public Telecom and Information Services-

- a) *Operation and Maintenance of Village Public Telephone in the revenue villages identified as per Census 1991 and Installation of Village Public Telephone in the additional revenue villages as per Census 2001.-*

For installation of Village Public Telephone in the revenue villages, identified as per 1991 Census, only the Operating Expenses and Revenue shall be taken into account for determining the Net Cost. For the additional revenue villages identified as per 2001 Census, Capital Recovery in addition shall also be taken into account for determining the Net Cost:

Provided that in the case of the Village Public Telephone which are still to be installed in the villages identified as per Census 1991, Capital Recovery shall also be taken into account while determining the Net Cost;



- b) *Provision of additional rural community phones in areas after achieving the target of one Village Public Telephone in every revenue village.-*

Where in a village the population is more than 2000 and no public call office is existing, a second public phone shall be installed and for the purposes of determining the Net Cost, Capital Recovery, Operating Expenses and Revenue shall be taken into account;

- c) *Replacement of Multi Access Radio Relay Technology Village Public Telephone installed before 1st day of April 2002.-*

Capital Recovery, Operating Expenses and Revenue shall be taken into account for determining the Net Cost.

Note - Unless otherwise specified by the Central Government, the Secondary Switching Area shall be taken as a unit for the purpose of arriving at the Net Cost for activities specified in items (a) to (e) of Stream I.

ii) *Stream-II:*

Provision of household telephones in rural and remote areas as may be determined by the Central Government from time to time:

- (a) For household Direct Exchange Lines installed prior to 1st day of April, 2002, the difference in rental actually charged from rural subscribers and rent prescribed by Telecom Regulatory Authority of India for such subscribers shall be reimbursed until such time the Access Deficit Charges prescribed by Telecom Regulatory Authority of India from time to time take into account such difference.
- (b) For household Direct Exchange Lines installed after 1st day of April, 2002, Capital Recovery, Operational Expenses and Revenue shall be taken into account to determine the Net Cost.



Note - Unless otherwise specified by the Central Government, the Short Distance Charging Area shall be taken as a unit for the purpose of arriving at the Net Cost for activities specified in item (b) of Stream II.

iii) Stream-III:

Creation of infrastructure for provision of Mobile Services in rural and remote areas:

- (a) The assets constituting the infrastructure for provision of mobile services shall be determined by the Central Government from time-to-time.
- (b) A percentage of the Capital Recovery for the infrastructure for provision of mobile services shall be taken into account to determine the Net Cost.

iv) Stream-IV:

Provision of Broadband Connectivity to villages in a phased manner:

A percentage of the Capital Recovery for the infrastructure for broadband connectivity shall be taken into account to determine the Net Cost.

v) Stream-V:

Creation of general infrastructure in rural and remote areas for development of telecommunication facilities

- (a) The items of general infrastructure to be taken up for development shall be determined by the Central Government from time to time.
- (b) A percentage of the Capital Recovery for the development of general infrastructure shall be taken into account to determine the Net Cost.

Note - Unless otherwise specified by the Central Government, the revenue district / group of revenue districts shall be taken



as a unit for the purpose of arriving at the Net Cost for the activities specified in Streams III, IV & V.

vi) Stream-VI:

Induction of new technological developments in the telecom sector in rural and remote areas

Pilot projects to establish new technological developments in the telecom sector, which can be deployed in the rural and remote area, may be supported with the approval of the Central Government.”

19. In the recommendations on "Allocation and pricing of Spectrum of 3G and Broadband Wireless Access services" submitted to the Government on 27th September 2006 the Authority has opined that wireless data technologies can help boost the deployment of broadband service in India especially in rural and remote areas where wireline base has not spread. The Authority views Broadband Wireless Access (BWA) as an efficient means for faster broadband deployment in both urban and rural areas. The Authority has recommended that DoT should coordinate some part of 700 MHz spectrum for making it available for rural wireless networks in the near future.



2.2 Expansion of Telephone Network

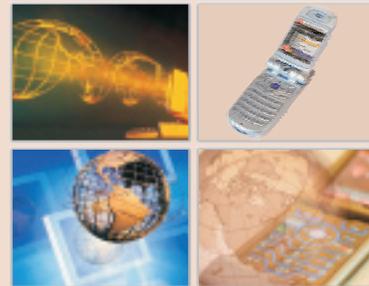
20. Keeping in mind the main principles of maximization of consumer interest, responsible and efficient use of spectrum, aiding growth of telecom sector, ensure technology and service neutrality/convergence, recovery of costs and pricing of spectrum, orient spectrum policy to the future, competition level-playing field and sharing of infrastructure, the Authority had made recommendations on "Allocation and pricing of Spectrum for 3G and broadband wireless access services" on 27th September, 2006. Since the future growth in telecom would largely depend on the availability of spectrum, efficient

utilization of the available spectrum, TRAI had also made suggestions on the wider issue of management of spectrum.

21. The year 2006-07 witnessed a phenomenal growth in mobile services with an addition of 66.34 million subscribers in the country recording an annual growth rate of 83.17% over the previous year. The total number of mobile subscribers as on 31st March 2007 stood at 165.11 million as against the subscriber base of 90.14 million at the end of March, 2006. This has largely been driven by competitive pressures among the mobile service providers, regulatory initiatives and technological advancements. The competitive pressures also made the service providers more innovative in their tariff offerings. Products like "Two year validity pre-paid coupons" and "Life-time Validity" schemes launched by service providers have made the telecom services more affordable and also led to large scale subscriber acquisitions. The rapid decline in tariffs demonstrates a strong linkage to the staggering growth in subscriber base of cellular mobile services.

2.3 Entry of Private Sector in Basic and Value Added Services

22. 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 the scope of services of the various service providers. By the end of 31st March, 2007 apart from BSNL and MTNL, the Basic Services sector had five licensed private operators in the different telecom circles. All these five private operators had since migrated to Unified Access Service Regime during 2003-04. As on March 2007, M/s Bharti, M/s Reliance & M/s Aircel have acquired licenses in all 23 service areas for offering mobile services.



M/s Bharti and M/s Reliance are the only private operators who are providing services in All India i.e., 23 service areas.

23. 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.

2.4 Technical Compatibility and Effective Interconnection between Service Providers

24. 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.

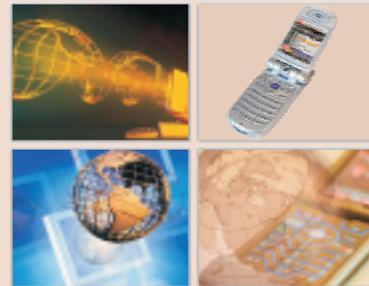
25. On 24th January 2003, TRAI issued the Telecommunication Interconnection Usage Charges (IUC) Regulation. This Regulation has established a framework of the Interconnection Usage Charge (IUC) Regime. As per the Regulation, IUC is to be determined based on minutes of usage of various Unbundled Network Elements and the cost of these elements. The IUCs for Origination, Transit/ Carriage and Termination are 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.

26. Subsequently, TRAI issued the Telecommunication Interconnection Usage Charges Regulation, 2003 dated 29th



October 2003 in supersession of earlier Regulation dated 24th January 2003. This IUC Regulation was effective from 1st February 2004 and it covered arrangements among service providers for payment of Interconnection Usage Charges for telecommunication services covering Basic Services that include WLL (M) service, Cellular Mobile Service, and Long Distance Service (STD/ISD) throughout the territory of India. The main features of this IUC regime were lower Access Deficit Charges (ADC), uniform termination charges of Rs. 0.30 per minute irrespective of terminating network, reduction of ADC on National Long Distance (NLD) and International Long Distance (ILD) calls, all of which resulted into lower tariff environment in voice telephony. In the October, 2003 Regulation, it was mentioned that in the subsequent years, the Authority would review both the size of the ADC payments as well as the beneficiaries of the ADC regime.

27. Continuing its exercise for review of IUC/ADC regime, TRAI issued the Telecommunication Interconnection Usage Charges (Fourth Amendment) Regulation on 6th January 2005. This regulation was effective from 1st February 2005. Under this regulation, the ADC rates were significantly reduced for Inter-circle Calls and International Long Distance Calls which led to substantial reduction in tariff for NLD and ILD calls.
28. In the year 2006, TRAI issued new IUC Regulation on 23rd February 2006. Through this IUC Regulation, TRAI reduced the amount of ADC and the ADC regime was changed from minute based to revenue sharing of AGR (Adjusted Gross Revenue) of telecom service providers in respect of National Long Distance (NLD) calls. Further, to encourage the telecom operators to create infrastructure in Rural Areas, TRAI also decided that the revenue generated from rural subscribers is to be subtracted for calculation of ADC. In addition, TRAI fixed the ceiling on carriage charges per minute for Long Distance Calls within India at Rs. 0.65 per minute irrespective of the distance with a view to promote lower domestic prices and to give a greater impetus to subscriber growth. Prior to this



regulation, the carriage charges were distance based (i.e., Rs.0.20 for distance up to 50 kms., Rs. 0.45 for 200 kms., Rs.0.50 for 500 kms., and Rs.1.20 for above 500 kms.)

Initiatives during the year

29. As part of the annual review, following the transparent consultation process including the Open House Discussion, TRAI notified amended regulations "The Telecommunication Interconnection Usage Charges (Eighth Amendment) Regulations, 2007" on 21st March 2007. In terms of this regulation the total amount of ADC for the financial year 2007-08 is estimated to be approximately Rs. 2000 Crores. Per minute ADC on Outgoing International Long Distance Calls have been reduced to zero from existing level of Rs. 0.80 per minute i.e. ADC burden on domestic consumers in outgoing international long distance calls have been removed. Per minute ADC on Incoming International Long Distance Calls have been reduced to Re.1.00 per minute from existing Rs. 1.60 per minute. ADC on percentage revenue share has been reduced to 0.75% from existing 1.50% of Adjusted Gross Revenue (AGR) of all service providers i.e. Access Providers, National Long Distance Operators and International Long Distance Operators. This regulation provides a major relief to domestic telecom sector by reduction of ADC on percentage revenue share and removal of per minute ADC on international outgoing calls.

30. Regulation titled " Intelligent Network Services in Multi Operator and Multi Network Scenario Regulations, 2006 (13 of 2006)" was issued on 27th November 2006 providing inter alia for Interconnection amongst all telecom service providers for Intelligent Network (IN) Services. This Regulation would ensure that specified innovative services made available through IN will not be restricted to the telecom service providers who have deployed the Intelligent Network platform but now it will also be available to subscribers of other operators. Also to meet the long pending demand by interconnection seekers that Port charges need to be reviewed to align with the current switch/exchange costs, the Authority issued The Telecommunication



Interconnection (Port Charges) Amendment Regulation, 2007 on 2nd February 2007. The salient features of amended regulations are:

- Reduction in the existing Port charges by about 23% to 29% for various slabs.
- TRAI expects that service providers will pass the benefit of reduction in Port charges to the consumers.
- Interconnection seekers are mandated to place their demand for the required number of Ports, on every Point of Interconnection (POI) on the basis of traffic projection, on six monthly basis.
- Facilitate the Interconnection Providers to take timely action to procure the expansion equipment for provisioning of Ports.
- Help effective and timely interconnection among different networks thereby improving the quality of service to consumers.

2.5 Telecommunication Technology

31. 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.

2.6 Implementation of New Telecom Policy (NTP'99)

32. New Telecom Policy, 1999 (NTP-99) has provided TRAI with the requisite policy framework envisaged by the Government. It provides for the Government to seek the recommendations of TRAI for opening up the various telecom sectors and for development and implementation of a policy on the USO. Accordingly, on the request of the Government, TRAI provided its recommendations on a number of issues, 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

2.7 Quality of Service

33. 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, in July, 2000, TRAI had issued a Regulation on Quality of Service for Basic and Cellular Services. In this regulation, TRAI had prescribed the QoS parameters to be achieved.
34. Since the long term periods set for achieving the Quality of Service Benchmarks in TRAI's Regulation dated 5th July 2000



(i.e., 36 months for Cellular Mobile Service and 48 months for Basic Services) were already over and various technological developments necessitated change in the QoS parameters, TRAI reviewed the quality of service parameters and a revised Regulation on Quality of Service for Basic and Cellular Mobile Services was issued on 1st July 2005. Through this regulation, TRAI has prescribed some new parameters for extensive monitoring of the cellular mobile network conditions and also to monitor responsiveness of the customer helplines of all operators. The Regulation includes network related parameters and also parameters on customer perception of service to be assessed through customer satisfaction survey. The Authority also decided that the parameters for basic service using wireless should be the same as that of cellular mobile service. TRAI has also notified a Regulation on Quality of Service of Dial-up and Leased Line Internet Access Service in December, 2001 fixing benchmarks for Internet Dial-up Access. ISPs are required to comply with the benchmarks as per this regulation.

35. Aimed at accelerating the growth of Broadband, the Government had issued the Broadband Policy in October, 2004. Since then the customer base of Broadband has increased manifold and exceeded 14 lakhs by April, 2006. The Authority at that time noted that along with the increase in the number of customers, the numbers of consumer complaints pertaining to Broadband Services were also increasing. A need was, therefore, felt for addressing the quality of service issues for broadband service. As a first step in this regard, TRAI proposed to lay down the benchmarks for quality of service standards for Broadband, through a consultation process with stakeholders. Accordingly a consultation paper was issued on 24th May 2006 and Open House Discussion was held at Delhi on 28th June 2006. Considering the views of stakeholders, TRAI has issued Regulations on Quality of Service for Broadband Services on 6th October 2006. In addition in order to regulate the Quality of Service to be observed by the MSOs/Cable Operators in CAS notified areas of Chennai, Mumbai and



Kolkata, TRAI has issued the Standards of Quality of Service (Broadcasting and Cable Services) (Cable Television - CAS) Regulation, 2006 on 23rd August 2006.

36. 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 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). Follow up meeting with the service providers were held for improving their performance with regard to quality of service. 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 Telecom Disputes Settlement and Appellate Tribunal (TDSAT) and the matter is under adjudication.
37. TRAI is 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 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 were brought to the notice of general public through press notes. Further the findings of the analysis were also placed on the TRAI's website for the information of all stakeholders/Public.
38. The POI Congestion Report analysis for the year 2006 - 07 shows that the number of POIs having congestion has increased from 456 in March 2006 to 499 in March, 2007. 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.

39. 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 March 2006, June 2006, September 2006 and December 2006 were analyzed and the reports have been put on the TRAI website for the information of all stakeholders/ Public on 7th September 2006, 13th November 2006, 24th January 2007 and 20th April 2007 respectively. These reports also include the analysis of the findings of the report of the Independent Agency (M/s TUV South Asia Ltd.) regarding assessment of customer perception of service for quarter ending March 2006, June 2006, September 2006 and December 2006.

2.8 Measures to Protect the Interests of the Consumers

40. 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.

41. In order to (i) bring uniformity and transparency in the procedures being followed by service providers with regard to metering and billing; (ii) prescribe standards relating to accuracy of measurement, reliability of billing; (iii) measure the accuracy of billing provided by the Service Providers from time to time and to compare them with the norms so as to assess the level of performance; (iv) minimize the incidences of billing complaints; and (v) to protect the interest of consumers of telecommunication services, TRAI had issued the Quality of Service (Code of Practice for Metering and Billing Accuracy) Regulation 2006 on 21st March 2006. The Regulation mandates the service providers to arrange audit of their Metering and Billing System on an annual basis through any one of the auditors notified by TRAI and to furnish to TRAI an audit certificate thereof not later than 30th June of every year. The Regulation also provides that the service providers have to take corrective action on the inadequacies, if any, pointed out by the Auditing Agency in the Certificate and to file with TRAI an Action Taken Report thereon not later than 30th September of every financial year. The authority notified the panel of auditors on 29th August 2006. The audit for the year 2006 -07 is currently under process. Enlargement of Panel of Auditors is under process and is expected to be completed by 30th April 2007.

42. During the year 2006-07 TRAI took several steps to protect the interest of consumers which are enumerated below:

- i) To enhance consumer awareness, the Authority vide letter dated 23rd May 2006 advised all service providers to provide printed material in English and Vernacular Language to customers at the time of enrollment giving full detail of the tariff plan being offered.



- ii) TRAI issued direction dated 7th June 2006 mandating that the credit limit set for a postpaid customer shall be included in the monthly statement/bill of the customer on a regular basis.
- iii) The Authority vide Direction dated 14th July 2006 sought yearly report/certificate from service providers of compliance of Directions on tariff matters that have continuing application.
- iv) In order to ensure and monitor that the service providers display details of the tariff plans on their website for the information of the consumers, the Authority vide letter dated 1st September 2006 has made it mandatory for the service providers to submit a declaration along with tariff reports to the effect that the reported tariff plan has been displayed on the website.
- v) For transparency and consumer protection, Authority had asked service providers to display International private Lease line tariff and domestic leased line tariff in their website.
- vi) Direction dated 29th August 2006 to Service Providers regarding issue of docket number for registering complaints made to call centre and also on the issue of termination of service. The Direction inter alia provides for time limit for action of termination requests made through various modes.
- vii) A Consultation Paper on the Redressal of Consumer Grievances and Consumer Protection in Telecommunication has been issued on 3rd January 2007. The consultation paper defines structural framework of institutional mechanism for handling consumer grievances and also outlines the processes and procedures and time limits



for redressal of grievances at Call Centre, Nodal Officer and Appellate Authority level.

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

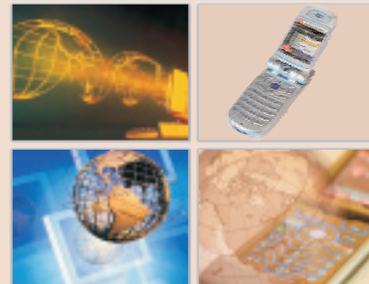
2.9 Universal Service Obligation

43. 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

44. 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.
45. TRAI submitted its recommendation of USO to the Government on 3rd October 2001. The Government of India had issued USO guidelines on 27th 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. As per the Rules under the Indian Telegraph (Amendment) Act, 2006 for administration of USO Fund, the USO Programme is divided into six different streams as mentioned in Para 18 earlier in this part of the report. TRAI continues to interact, participate and contribute in Inter-Ministerial Advisory Committee on USO.

2.10 Initiatives of TRAI in the Cable television Services and Broadcasting Services

a. Recommendations relating to Broadcasting & Cable Television Services

46. During 2006-07, TRAI submitted Recommendations on licensing issues relating to DTH to the Government. The details of the recommendations are discussed in Part III of this report.

b. Price Regulation of Cable Services

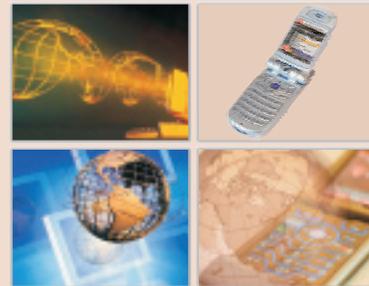
47. In order to regulate the prices of the Cable Services the following tariff orders were issued by TRAI during the year 2006-07:
- (a) The Telecommunication (Broadcasting & Cable) Services (Second) Tariff (Sixth Amendment) Order, 2006 was issued on 31st July 2006 which prescribed for determining the similarity rates of similar channels while benchmarking the price of new



pay channel, the factors such as the genre and language of the new pay channel / converted Free to Air (FTA) to pay channel, range of prices ascribed to the channel of similar genre and language in the price of bouquets that existed on 26th December 2003, range of prices of individual channels of similar genre and language as existing in CAS areas would be taken into account.

- (b) The Telecommunication (Broadcasting & Cable) Services (Third) (CAS Areas) Tariff Order, 2006 was issued on 31st August 2006 prescribing (i) the rates of tariff for basic service tier consisting of free to air channels, (ii) maximum retail price of individual pay channels which the multi system operator /cable operator will charge from the subscriber and (iii) schemes for supply of set top boxes. This order is applicable in CAS notified areas of Mumbai, Delhi, Kolkata and Chennai.
- (c) The Telecommunication (Broadcasting & Cable) Services (Second) Tariff (Seventh Amendment) Order, 2006 and The Telecommunication (Broadcasting & Cable) Services (Third) (CAS Areas) (First Amendment) Order 2006 were issued on 21st November 2006. These are two separate tariff orders applicable to commercial subscribers in Non CAS and CAS areas.
- (d) The Telecommunication (Broadcasting & Cable) Services (Third) (CAS Areas) (Second Amendment) Order, 2006 was issued on 19th December 2006 to amend the Tariff Order of 31st August 2006 [(b) above]. The amendment added an explanation in the Schedule containing the tariff details for supply of set top boxes in the Tariff Order of 31st August 2006, clarifying that the amount of rent and refundable security deposit is exclusive of applicable taxes if any.

The details of these tariff orders have been discussed in Part III of this report.



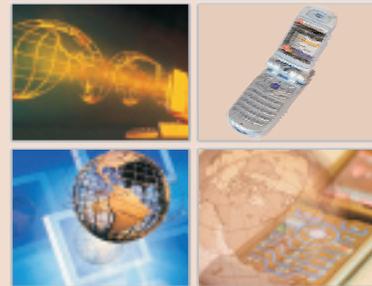
c. Regulation on Interconnection

48. In order to regulate the Interconnection agreements entered into among the service providers in CAS notified areas, a regulation titled, The Telecommunication (Broadcasting and Cable Services) Interconnection (Second Amendment) regulations was issued on 24th August 2006. Subsequently the Telecommunication (Broadcasting and Cable Services) Interconnection (Third Amendment) Regulation was issued on 4th September 2006. Also a regulation was issued on 23rd August 2006 specifying standards of Quality of Service to be observed by the MSOs/Cable Operators in CAS notified areas of Chennai, Mumbai, Delhi and Kolkatta. The details of these regulations have been discussed in Part III of this report.



PART-III

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



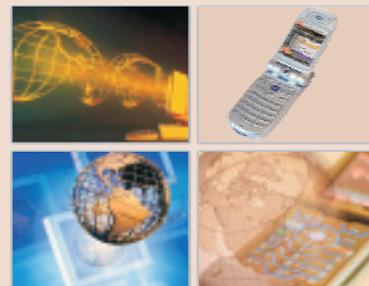


3. FUNCTIONS OF THE TELECOM REGULATORY AUTHORITY OF INDIA IN RESPECT OF MATTERS SPECIFIED IN SECTION 11 OF THE TRAI ACT

1. The 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.

3.1 Telecommunication rates both within India and outside India including the rates at which messages shall be transmitted to any country outside India

2. 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.



3. In addition, the Government of India vide order dated 9th 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.

3.1.1 Telecommunication Tariff Orders

4. The Authority's Telecommunication Tariff Order (TTO) 1999, implemented w.e.f. 1st 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 trigger to promote investment. During 2006-07 the Authority carried out an extensive review of the prevailing roaming tariff and prescribed revised ceiling tariff for national roaming service vide 44th amendment to TTO. In addition, amendments to tariff orders have also been issued for broadcasting and cable services during the year. The amendments to TTO '99 as well as the tariff orders on broadcasting and cable services are listed in the Table 3.1 below.



Table 3.1 Telecommunications Tariff Orders (Amendments)

Sl. No	Tariff Order	Date	Subject
1.	The Telecommunication (Broadcasting and Cable) services (Second) Tariff (Sixth Amendment) Order 2006	31 st July 2006	Determining the similarity of rate of similar channel
2.	The Telecommunication (Broadcasting and Cable) Services (Third) (CAS Areas) Tariff Order, 2006	31 st August 2006	Tariff ceiling in CAS areas
3.	The Telecommunication (Broadcasting and Cable) Services (Second) Tariff (Seventh Amendment) Order 2006	21 st November 2006	Retail Price of Individual Channel in Bouquet
4.	The Telecommunication (Broadcasting and Cable)	21 st November	Retail Price of Individual Channel in Bouquet for Hotels

Sl. No	Tariff Order	Date	Subject
	Services (Third)(CAS areas) Tariff (First Amendment) Order, 2006	2006	and other commercial establishments.
5.	The Telecommunication (Broadcasting and Cable) Services (Third)(CAS areas) Tariff (Second Amendment) Order, 2006	19 th December 2006	Clarification regarding applicability of taxes etc.
6.	The Telecommunication Tariff (Forty Fourth Amendment) Order, 2007	24 th January 2007	Prescribed composite ceiling roaming charges for regional/ national roaming

5. A proposal from an alliance of Multi System Operators was received in TRAI for amending the tariff order of 1st October 2004 for broadcasting and cable services requiring the broadcasters to offer new pay channels only as individual channels. After following the consultation process the Authority issued The Telecommunication (Broadcasting & Cable) Services (Second) Tariff (Sixth Amendment) Order, 2006 on 31st July 2006. By this amendment a new section 3 B has been added stating that in determining the similarity of rates of similar channels while benchmarking the price of new pay channel, the factors such as the genre and language of the new pay channel /converted FTA to pay channel, range of prices ascribed to the channel of similar genre and language in the price of bouquets that existed on 26th December 2003, range of prices of individual channels of similar genre and language as existing in CAS areas would be taken into account.
6. A Division Bench of the Hon'ble High Court of Delhi had on 20th July 2006, directed implementation of CAS in the three metros of Mumbai, Kolkata and Delhi by 31st December 2006. During the deliberations for introduction of CAS, the three areas identified for tariff regulation were - pay channels, basic service tier, and schemes for supply of set top boxes. On the basis of detailed examination and analysis of the inputs received during the process of consultation, TRAI issued a detailed tariff order titled "The Telecommunication (Broadcasting & Cable) Services



(Third) (CAS Areas) Tariff Order, 2006" on 31st August 2006. This order prescribes (i) the rates of tariff for basic service tier consisting of free to air channels, (ii) maximum retail price of individual pay channels which the multi system operator / cable operator will charge from the subscriber and (iii) schemes for supply of set top boxes. This order is applicable in CAS notified areas of Mumbai, Delhi, Kolkata and Chennai.

7. TRAI had issued, as an interim measure, a Tariff Amendment Order on 7th March 2006 (further amended on 24th March 2006) fixing a ceiling on cable TV charges payable by the commercial subscribers at the level prevailing as on 1st March 2006. Since this interim order was subject to review based on detailed examination, a consultation paper was issued on 21st April 2006 followed by an Open House Discussion on 25th May 2006. Meanwhile, in a civil appeal filed by Hotel Associations in the Supreme Court against the judgment dated 17th January 2006 of Telecom Disputes Settlement and Appellate Tribunal (TDSAT), the apex Court on 28th April 2006 ordered that status quo be maintained. Subsequently, the apex court in its order dated 19th October 2006, allowed TRAI to carry out the processes for framing tariff in exercise of its jurisdiction under Section 11 of the TRAI Act 1997, independently.

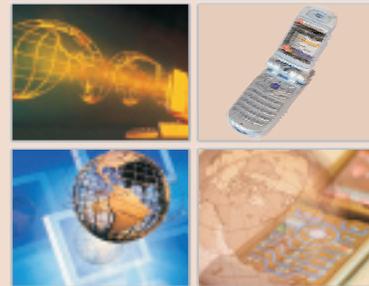
8. On the basis of the input received during the consultation process and in response to the draft tariff orders placed on the website as well as to the meetings held with stakeholders, TRAI issued "The Telecommunication (Broadcasting & Cable) Services (Second) Tariff (Seventh Amendment) Order, 2006" and "The Telecommunication (Broadcasting & Cable) Services (Third) (CAS Areas) (First Amendment) Order, 2006" on 21st November 2006. These are two separate tariff orders applicable to commercial subscribers in Non CAS and CAS areas. The major components of the tariff orders for Non CAS and CAS areas are:

i) The definition contained in the tariff amendment order of 7th March 2006 or in Tariff Order of 31st August 2006 (for CAS areas) relating to commercial cable subscribers



and ordinary cable subscribers was reexamined and no change has been made.

- ii) For the purpose of tariff regulation there will be two categories of commercial subscribers. One category consists of hotels with a grading of 3 star and above and heritage hotels. This category will also include any other hotels, motels, Inns and such other commercial establishments providing boarding and lodging and having 50 or more rooms. In the second category would fall all other commercial establishments.
- iii) In respect of the first category, the tariffs of pay channels as well as set top box rentals are proposed to be left to mutual agreements and market forces in both CAS and non-CAS areas on the ground that they are capable of protecting their interests. However, in order to ensure that this category also gets the choice of individual channels as well as bouquets in CAS areas which is available to other consumers, the bouquets offered to this category in CAS areas will be subject to restrictions on maximum bouquet price in relation to sum of individual channel prices, which would also be the case for those commercial subscribers in non-CAS areas having their own head ends and other facilities to receive signals directly from the broadcasters.
- iv) The tariff in respect of second category in CAS and non-CAS areas will be as that of ordinary cable subscribers. The relevant date for reckoning the ceiling is 26th December 2003 in non-CAS area.
- v) The tariff orders also provide that whenever any commercial cable subscriber uses the programmes of a broadcaster for public viewing by fifty or more persons on the occasion of special events at a place registered under entertainment tax act, then also the tariff will have to be mutually decided between the parties concerned.



9. In pursuance of the Hon 'ble Delhi High Court's direction to implement Conditional Access System (CAS) in parts of the three Metros of Delhi, Mumbai and Kolkata, TRAI issued Tariff Order on 31st August 2006, prescribing, among other things, ceiling maximum retail price for pay channel, maximum amount that can be demanded for Free to Air Channels under the Basic Service Tier and a standard tariff package for supply of Set top Boxes on rental basis. The Tariff Order indicated that the amount of ceiling for maximum retail price for pay channel and the amount for Basic Service Tier charges shall be exclusive of taxes.

10. It was noted that the position in respect of the mandated standard tariff package for supply of set top boxes under rental schemes was not clear in regard to inclusion or otherwise of the applicable taxes in the amount of rent, refundable security deposit etc. TRAI accordingly issued The Telecommunication (Broadcasting & Cable) Services (Third) (CAS Areas) (Second Amendment) Order, 2006 on 19th December 2006 to amend the Tariff Order of 31st August 2006. The amendment added an explanation in the Schedule containing the tariff details for supply of set top boxes in the Tariff Order of 31st August 2006 clarifying that the amount of rent and refundable security deposit is exclusive of applicable taxes, if any.

11. The Authority notified the 44th Amendment to the TTO, 1999 prescribing a composite ceiling roaming charges while regional/national roaming on 24th January 2007. The Authority has prescribed a composite ceiling roaming charges as indicated below:

- Rs. 1.40 per minute for outgoing local calls;
- Rs. 2.40 per minute for outgoing NLD calls;
- Rs. 1.75 per minute for incoming calls.

The other salient features prescribed are: -

- No rental permitted for National roaming in any form;



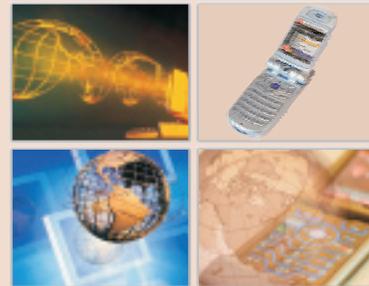
- No surcharge is leviable for any of the national roaming services;
- No separate PSTN charges on roaming calls;
- Receiving SMS is free while roaming.

3.1.2 Regulations

12. 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 2006-07, the Authority notified the following Regulations in pursuance of the above provisions of the TRAI Act to carry out the purposes of the Act.

Table 3.2: Regulations issued by TRAI during 2006-2007

Sl.No	Regulation	Date
1.	The Telecom Regulatory Authority of India (Officers and Staff Appointment) (5 th Amendment) Regulation 2006	26 th May 2006
2.	The Second Amendment to TRAI Meetings for Transaction of Business Regulation, 1999	11 th July 2006
3.	Regulation on the Standards of Quality of Service (Broadcasting and Cable services) (Cable Television - CAS Areas) Regulation, 2006	23 rd August 2006
4.	The Telecommunication (Broadcasting and Cable Services) Interconnection (Second Amendment) Regulation, 2006	24 th August 2006



Sl.No	Regulation	Date
5.	The Telecommunication (Broadcasting and Cable Services) Interconnection (Third Amendment) Regulation, 2006	4 th September 2006
6.	Quality of Service of Broadband Service Regulations 2006	6 th October 2006
7.	Intelligent Network Services in Multi Operator and Multi Network Scenario Regulations, 2006	27 th November 2006
8.	The Telecommunication Interconnection (Port Charges) Amendment Regulations, 2007	2 nd February 2007
9.	The Telecommunication Interconnection Usage Charges (Eighth Amendment) Regulations, 2007	21 st March 2007

Regulation on the Standards of Quality of Service (Broadcasting and Cable services) (Cable Television - CAS Areas) Regulation, 2006 dated 23rd August 2006

13. A regulation was issued on 23rd August 2006 specifying standards of Quality of Service to be observed by the MSOs/ Cable Operators in CAS notified areas of Chennai, Mumbai, Delhi and Kolkata. The issues addressed in the regulations broadly cover the following major areas:-

- (i) Connection, disconnection, transfer and shifting of cable services
- (ii) Complaint handling and redressal in respect of cable services
- (iii) Billing Procedure and billing related complaints
- (iv) STB related issues and complaints thereof
- (v) Positioning of channels/Taking the channel off air

The Telecommunication (Broadcasting and Cable Services) Interconnection (Second Amendment) Regulation, 2006 dated 24th August 2006.

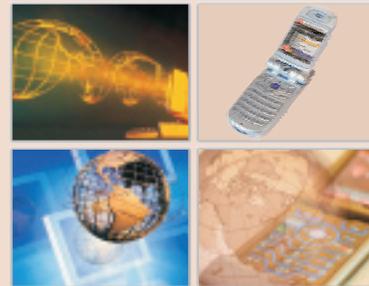
14. The above regulation was issued on 24th August 2006 for the purpose of interconnection agreements entered into among

the service providers in CAS notified areas. The main features of the standard interconnection agreements are:

- The service providers are at a liberty to enter into mutually acceptable interconnection agreements which are different from the standard interconnection agreements;
- If any of the service providers in the CAS areas are not able to arrive at a mutually acceptable interconnection agreement within a time-period specified by the Authority, then they shall be required to enter into interconnection agreements as per the standard interconnection agreements;
- The standard interconnection agreements between broadcasters and multi system operators have been provided only for pay channels.
- Revenue Sharing between the service providers will be as follows: share of broadcasters 45%, share of multi system operators 30%, and the share of cable operators 25% of the revenues generated from Pay channels;
- The carriage fee to be retained fully by the multi system operators;
- The charges for basic tier services to be retained fully by the cable operators;
- The multi system operators can operate throughout the CAS area without any restriction on area of operation;
- Term of standard interconnection agreements to be 12 months;

The Telecommunication (Broadcasting and Cable Services) Interconnection (Third Amendment) Regulation, 2006 dated 4th September 2006.

15. This Regulation was issued on 4th September 2006 to amend the Interconnection Regulation dated 10th December 2004.



The main amendments made in the Interconnection Regulation dated 10th December 2004 are as follows:

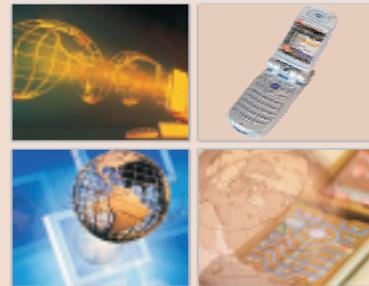
- A notice period of three weeks has been prescribed for disconnection of TV channel signals by a broadcaster to any distributor of TV channels. The requirement of issue of a three week notice has also been extended to the distributors of TV channels prior to disconnection of the re-transmission of any TV channel.
- Issue of public notice through newspapers has been made compulsory prior to disconnection of TV channel signals. Broadcaster/multi system operator/ distributor of TV channels are required to inform the consumers through scrolls on the concerned channel(s), but issue of notice in newspapers shall be compulsory.
- It has been mandated that the broadcaster/multi system operator or their agents/ intermediaries to whom a request for providing TV channel signals is made, should either provide the signals on mutually agreed terms, or specify the terms and conditions on which they are willing to provide TV channel signals, within sixty days from the date of the request.
- Methodology to arrive at the subscriber base of each distributor of TV channels at the time of first agreement, during the validity of agreement and at the time of renewal of agreement has also been laid down for agreements between the broadcasters and multi system operators and between multi system operators and cable operators.
- The Authority has prescribed that all broadcasters shall publish their Reference Interconnect Offers (RIO) describing, inter-alia, the technical and commercial conditions for interconnection for non addressable systems and submit copies of the same to the Authority. The reference interconnect offer so published by the broadcaster will form the basis for all interconnection agreements to be executed thereafter.



- Broadcasters will be required to give one months notice for conversion of Free To Air Channels to Pay channels and vice versa.
- Parties to an interconnection agreement for supply of TV channel signals will be required to renew their interconnection agreements within three months of the expiry of the original agreement.
- Issue of invoices by broadcasters /multi system operators or their agents/ intermediaries has been made compulsory for payment received from any distributor of TV channels for providing TV channel signals. The monthly invoice shall clearly specify the arrears and current dues along with the due date for payment of the same.

Quality of Service Standards for Broadband Service Regulations dated 6th October 2006

16. TRAI issued Regulations on Quality of Service of Broadband Service on 6th October 2006. The Broadband Policy issued by the Government in October, 2004 provides for fixation of the Quality of Service standards for Broadband Service by TRAI. At the time of issue of the Broadband Policy, Broadband connections in India were of the order of 50,000 only. The subscriber base of Broadband service crossed 17 lakhs by August, 2006. Alongwith the increase in the numbers of customers, the numbers of consumer complaints pertaining to Broadband Services are also increasing. The analysis of complaints received by the Authority indicated that the customers concern related to fault repair, service provisioning and network & billing. To address customers' concern and to create conditions for consumer satisfaction, a need was felt to fix the Quality of Service benchmarks for Broadband Services. The Authority had undertaken public consultation by releasing a Consultation Paper on 23rd May, 2006 and comments of stakeholders were sought by 16th June, 2006. Open House Discussions with the stakeholders were held at Delhi on 28th June, 2006. After the Open House Discussions, a core group,



consisting of representatives from COAI, AUSPI, ISPAI, BSNL, MTNL, VSNL, Spectranet and an independent Consultant, was formed to further deliberate on some of the issues relating to Quality of Service for Broadband. The Authority considered the comments received from stakeholders during the consultation process and the deliberations of the core group while finalizing the Quality of Service norms for Broadband. The Authority after extensive deliberations decided to lay down the Quality of Service Parameters and Benchmarks for Broadband Service.

The Intelligent Network Services in Multi Operator, Multi Network Scenario Regulation, 2006 dated 27th November 2006.

17. Regulation titled " Intelligent Network Services in Multi Operator and Multi Network Scenario Regulations, 2006 (13 of 2006)" was issued on 27th November 2006 providing inter alia for Interconnection amongst all telecom service providers for Intelligent Network (IN) Services. This Regulation would ensure that specified innovative services made available through IN will not be restricted to the telecom service providers who have deployed the Intelligent Network platform but now it will also be available to subscribers of other operators. Consumers are now offered a number of innovative services made available through Intelligent Network (IN) deployed by telecom service providers in their network. Free phone or Toll Free Number, Virtual Calling Card (VCC) for long distance calls, are some of the popular examples of services offered through IN platforms.

18. The regulation mandates all service providers to provide interconnection to all eligible service providers so that subscribers of all Access Providers will have a choice of using the IN services of other service providers. This regulation will enable all telecom consumers in the country to have access to Multi-operator Multi-service IN platforms and no operator will be permitted to block his consumers from accessing IN platform belonging to other service providers. Service providers are required to enter

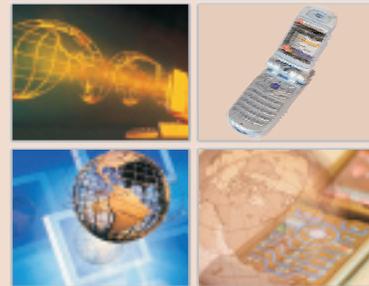


into the necessary commercial and technical agreements for the same within three months. The technical architecture and mutual revenue share among service providers has to be mutually decided upon based on the principles of Reciprocity and Non-discrimination.

The Telecommunication Interconnection (Port Charges) Amendment Regulations, 2007 (1 of 2007) Dated 2nd February 2007

19. On 28th May 1999, the Authority had notified "The Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999", which specified arrangements among service providers for interconnection charges and revenue sharing for all telecommunication services including Port charges. TRAI, had notified a revised Regulation on port charges: "The Telecommunication Interconnection (Port Charges) Regulation 2001", on 28th December 2001. In the said Regulation, it was also mentioned that the Authority may also at any time, on reference from any affected party and for good and sufficient reasons, review and modify the Port charges. Moreover, there is a long pending demand by interconnection seekers that port charges need to be reviewed to align with the current switch/exchange costs. In this background, the Authority issued the Draft Regulation on 12th January 2007 for seeking views of all stakeholders. Based on the comments received and internal analysis, the Authority issued "The Telecommunication Interconnection (Port Charges) Amendment Regulation, 2007, on 2nd February, 2007.

20. The Authority has taken costs of the network elements furnished by the service providers (interconnection seekers and interconnection providers) and also aligned the costing methodology with current practices adopted by the Authority in various regulations / tariff orders. For determination of the Port charges, the reasonable returns (Pre-tax Weighted Average Cost of Capital) @ 14% per annum on the capital



employed (net block only) has been considered after providing depreciation @10% per annum based on Straight Line Method of depreciation. Additionally, overhead @ 10% on capex recovery has been added.

The salient features of amended regulations are:

- Reduction in the existing Port charges by about 23% to 29% for various slabs.
- Interconnection seekers are mandated to place their demand for the required number of Ports, on every Point of Interconnection (POI) on the basis of traffic projection, on six monthly basis.
- Facilitate the Interconnection Providers to take timely action to procure the expansion equipment for provisioning of Ports.
- Help effective and timely interconnection among different networks thereby improving the quality of service to consumers.

TRAI expects that service providers will pass the benefit of reduction in Port charges to the consumers.

The Telecommunication Interconnection Usage Charges (Eighth Amendment) Regulations, 2007 dated 21st March 2007

21. TRAI has been reviewing the ADC regime on an annual basis. As part of the annual review, the Authority issued a Consultation Paper on "Access Deficit Charge (ADC)" on 31st January 2007. After following the transparent consultation process including the Open House Discussion at New Delhi on 6th March 2007, TRAI notified amended regulations and decided to lower Access Deficit Charges (ADC) in line with the determination made in 23rd February 2006 Regulation. The amended regulations shall be effective from 1st April, 2007 till 31st March 2008.



Salient features of the amended regulations are as follows:

- The total amount of ADC for the financial year 2007-08 reduced to approximately Rs. 2000 Crores from existing level of Rs. 3200 Crores.
- Per minute ADC on Outgoing International Long Distance Calls reduced to zero from existing level of Rs. 0.80 per minute i.e. complete removal of per minute ADC burden on domestic consumers in outgoing international long distance calls.
- Per minute ADC on Incoming International Long Distance Calls reduced to Re.1.00 per minute from existing Rs. 1.60 per minute i.e. reduction of around 38%.
- ADC on percentage revenue share reduced to 0.75% from existing 1.50% of Adjusted Gross Revenue (AGR) of all service providers i.e. Access Providers, National Long Distance Operators and International Long Distance Operators. This amounts to reduction of 50% of ADC on percentage revenue share basis.
- Major relief to domestic telecom sector by reduction of ADC on percentage revenue share and removal of per minute ADC on international outgoing calls.
- No ADC charge on revenue of access providers generated from rural wire line subscribers.

22. Present amendment to the Regulations is issued under the established framework of ADC Regime by TRAI through various Regulations since 2003, which envisaged that:

- ADC is a depleting regime
- ADC cannot be continued in perpetuity
- No need of fresh calculations for the admissibility of ADC



- ADC should be merged with USO (Universal Service Obligation) regime if considered necessary by the Department of Telecommunications (DOT)

3.1.3 Monitoring of Tariff

23. 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.
24. The service providers are also required to submit quarterly report on revenue and existing tariff plans. These reports are analysed 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.
25. The Authority also conducts detailed study of tariffs applicable for a service or types of tariff plans with a view to assess the level of tariff and sustainability of tariff schemes. During the year 2006-07 such studies were carried out on the following:

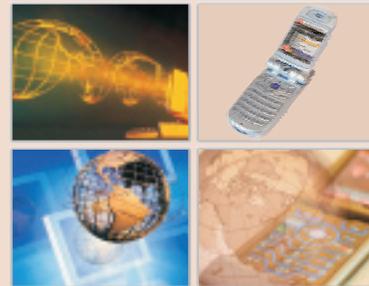


- (a) Study Paper (No.2/2006) on Analysis of Internet & Broadband tariffs in India was released on 28th November 2006. The Study Report mainly provided an analysis of the prevailing market structure and tariffs for Internet service through Dial-up and Broadband connection. It was concluded that Dial-up service is cheaper than Broadband for very low usage subscribers. As the usage and the quality requirement of the subscriber goes up, broadband becomes cheaper.
- (b) In the month of Dec'05/Jan'06 most of the mobile service providers launched tariff schemes with lifetime validity. It was decided that the viability of such schemes should be examined based on operators data. The Analysis of

tariff schemes with lifetime validity was carried out and a study paper (No.3/2006) on the subject was released on 19th December 2006. It was found that the schemes are giving reasonable ARPU.

3.1.4 Other Tariff Related Matters

26. To enhance consumer awareness, the Authority vide letter dated 23rd May 2006 advised all service providers to provide printed material in English and Vernacular Language to customers at the time of enrollment inter-alia containing: a) Full and complete tariff information sheet; b) The features of the service offered with special emphasis on roaming, premium rate services and other optional and value added services; c) The Terms and Conditions including the exceptions attached to the service in unambiguous terms; d) The rights of the consumers emanating from the various decisions of the TRAI (as published by TRAI) and e) The common charter of service agreed upon by the service providers.
27. The Authority had issued a Direction on 27th June 2005 to all access providers to lay down a system of credit limit for postpaid subscribers. The Authority vide Direction dated 7th June 2006 further streamlined the procedure/system by mandating that the credit limit set for a postpaid customer shall be included in the monthly statement/bill of the customer on a regular basis.
28. The Authority vide Direction dated 14th July 2006 has sought yearly report/certificate from service providers of compliance of Directions on tariff matters that have continuing application. The first certificate of compliance, covering the entire period from the date of issuance of the respective direction up to 30th June 2006 has been received from the service providers.
29. In order to ensure and monitor that the service providers display details of the tariff plans on their website for the information of the consumers, the Authority vide letter dated 1st September 2006 made it mandatory for the service providers to submit a declaration along with tariff reports to the effect that the reported tariff plan has been displayed on the website.



30. For transparency and consumer protection, Authority had asked service providers to display International private Lease line tariff and domestic leased line tariff in their website vide letter dated 6th March 2006 and 7th April 2006 respectively.

3.2 Recommendations on the need and timing for introduction of new service providers and the terms and conditions of licence to a new service provider

31. 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 2006-2007 following Recommendations were made by the Authority to the Government:

Table 3.3: List of Recommendations made by the Authority during the period 2006-07

Sl. No.	Title	Date of issue	Status as on 31 st march 2007
1.	Recommendations for permitting usage of * and # in provisioning of value added intra-network services like USSD (Unstructured Supplementary Service Data) by Access Providers	13 th April 2006	Accepted
2.	Recommendations on Licensing Issues relating to DTH	25 th August 2006	Pending
3.	Recommendations on components of Adjusted Gross Revenue (AGR)	21 st September 2006	Pending
4.	Recommendations on Allocation and pricing of spectrum for 3G and broadband wireless access services	27 th September 2006	Pending
5.	Recommendations on Terms & Conditions for Resale in International Private Leased Circuits (IPLC) Segment	23 rd March 2007	Pending



Recommendations for permitting usage of * and # in provisioning of value added intra-network services like USSD (Unstructured Supplementary Service Data) by Access Providers

32. Most of the Access Providers are using the Special Characters such as * and # in provision of value added intra-network service like USSD (Unstructured Supplementary Service Data) wherein the subscriber of a network uses these special characters not at the time of dialing, but subsequently once he has entered their network for use of supplementary services. National Numbering Plan 2003 (NNP-2003) was silent about the usage of such special characters and also does not encompass the mode/procedure by which a subscriber can access the service provider's physical network per se. TRAI obtained the comments of Access Providers and based on the examination of the submissions made by them and keeping in view the interests of consumers, the Authority has finalized its recommendations pertaining to need for elaboration and clarification in NNP-2003. Recommendation to Government was made on 12th April 2006. The recommendation was accepted by Department of Telecommunication (DoT) on 23rd May 2006, permitting the use of special characters such as *, #, \$ etc. from subscriber's terminal within the network of Service Providers.

Recommendations on Licensing Issues relating to DTH

33. The Recommendations on Licensing Issues relating to DTH were sent to Government on 25th August 2006. The Recommendations clarified certain provisions of the Licensing conditions. It also provides for certain guidelines to be followed in the adoption of the Multiple Dwelling Unit (MDU) technology which is basically perceived to be in consumer interest. These guidelines will ensure that the interests of the consumers are protected by allowing the multiple service providers to enter the same premises. Through such fair competition the interests of the cable operators and other competitors of the DTH operators would also be protected. The major recommendations are as follows:-



Personal Video Recorders and Interoperability

- There should not be any amendment in Articles 7.1 and 7.2 of the DTH License Agreement which mandate technical interoperability among DTH service providers.
- The license conditions should be amended to provide for casting an obligation on the service provider to inform and educate the Consumers about the limited technical interoperability of the Set top Boxes with Personal Video Recorders/Digital Video Recorders.

Uplinking and Platform Services

- The Guidelines for uplinking from India should be amended to exclude DTH platform services aimed at enabling the subscribers to utilize the platform efficiently and informing them of platform functionality and services.

Multiple Dwelling Unit Technology

The DTH license conditions should be amended to specifically permit use of MDU technology subject to the following conditions:

- (a) The DTH service provider should not insist on any exclusive arrangement for installation of MDU technology to the detriment of other distributors of TV channels;
- (b) Signals from the MDU technology shall not be provided to a consumer outside the multi-dwelling unit building, where the MDU technology is installed;
- (c) The MDU technology should not carry the content from any other service provider other than the DTH service provider; and



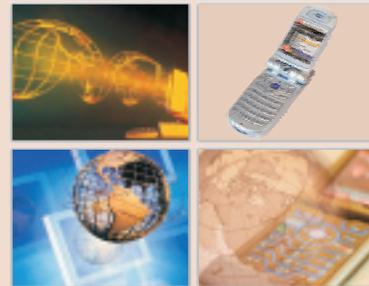
- (d) The DTH operator shall obtain written consent from those subscribers living in a multiple dwelling unit who are desirous of availing the facility of MDU technology, before installing the same. A general permission obtained from office bearers of the Residents Welfare Association/Group Housing Society will not be considered sufficient.

Recommendations on components of Adjusted Gross Revenue (AGR)

34. TRAI made recommendations on the components of Adjusted Gross Revenue (AGR) on 13th September 2006 to Telecom Disputes Settlement and Appellate Tribunal (TDSAT) in pursuance to TDSAT's Order dated 7th July 2006. The TDSAT in Petition No. 7/2003 (Association of Unified Telecom Service Providers of India Vs. Union of India & Ors and other connected parties) had remitted the issue of Adjusted Gross Revenue to TRAI for undertaking an exercise of finding out which component of AGR, as defined in the conditions of licence, should be retained and which component be excluded therefrom. In compliance of the direction of the Hon'ble Tribunal, the TRAI had submitted its recommendations on the question of components of AGR to the TDSAT on 13th September 2006.

Salient Feature of Recommendations are as follows:

1. Revenue accruing both direct and indirect from activities under the Licence should form part of the AGR.
2. Exclusion of revenues from verifiable non-licensed activity.
3. Proper audit trails should be available for items which are to be excluded from AGR.
4. Revenue from bundled sale of goods and services to be considered as part of AGR unless sale of goods is clearly discernible and services offered remain unaltered even on a stand alone basis.



The Authority in its recommendations also observed that the definition of AGR along with the "Statement of Revenue and Licence fee" appended to the respective licence agreements would need to be brought in line by Department of Telecommunication (DoT) with final order of TDSAT.

Recommendations on Allocation and pricing of spectrum for 3G and broadband wireless access services

35. TRAI submitted its Recommendations on "Allocation and Pricing of Spectrum for 3G Services and Broadband Wireless Access Services" on 27th September 2006. The salient features of the recommendations are:

- To provide long-term vision and planning for spectrum availability and its efficient usage, a National Frequency Management Board may be constituted.
- Spectrum identified for 3G should be treated as a stand-alone allocation and not as an extension of earlier spectrum allocation of 2G.
- Department of Telecom should realize a spectrum acquisition fee from telecom service providers.
- Base price for acquisition of spectrum for 3 G services recommended at Rs. 80 crore for Category 'A' circles, Delhi and Mumbai metro, Rs. 40 crore for category 'B' circle and metro Chennai and Kolkata and Rs. 15 crore for category 'C' circle.
- The spectrum for 3G services should be allocated in 450 MHz, 800 MHz and 2.1 GHz. As per present estimates 2x32.5 MHz of spectrum will be available in a time scenario of 6 to 9 months for 3G services.
- Five blocks of 2x5 MHz band, one block of 2x5 MHz in 450 MHz band and two blocks of 2x1.25 MHz in 800 MHz band to be made available through a prescribed auction procedure as detailed in the recommendations.



- Rural roll out obligation imposed as part of overall roll out obligation in a time bound manner.
- The Authority has identified 200 MHz of spectrum in 3.3-3.4 GHz and 3.4-3.6 GHz bands to about 13 carriers in contiguous blocks of 15 MHz each for BWA.

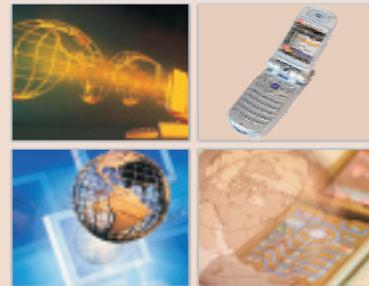
Recommendations on Terms & Conditions for Resale in International Private Leased Circuits (IPLC) Segment

36. To promote competition in the IPLC segment the Authority had initiated a consultation process in June 2005 and formulated its recommendation on the issues pertaining to measures to promote competition in International Private Leased Circuits (IPLC) in India. The recommendations were sent to DoT on 16th December 2005. The above recommendations of the Authority have been accepted by DoT. The DoT sought recommendations on Terms & Conditions for "Introduction of Resale in IPLC Segment" from TRAI. Accordingly, the Authority issued another Consultation Paper on 22nd December 2006. After following the consultation process including the Open House Discussion at New Delhi on 29th January 2007, the Authority finalized its recommendations on the subject.

37. "Resale" is the sale or lease of telecom services to an end consumer on retail basis after leasing from a telecom service provider on commercial basis at wholesale prices. In case of resale of IPLC, Resellers are required to take IPLC from licensed International Long Distance Operators (ILDOS) and sell to end consumers i.e. software exporters, BPO units, call centers, Banks and other small and medium enterprises (SMEs), ISP and other information technology enabled service providers. This would revolutionize the data carriage at a competitive cost.

38. Introduction of resale in IPLC segment would:

- promote non-facility / minimum facility based competition
- provide an effective entry vehicle for new entrants which may result in the reduction in price of international leased circuits



- improve customer services to end consumers and business entities
- Stimulate usage of existing network through innovative means and thus benefit the facility based provider as well as the growth of the economy
- Expand the availability of innovative services such as new billing terms and innovative tariff packages

39. The Authority recommends open competition in the Resale in the IPLC segment without any ceiling on the number of Resellers. The major recommendations include scope of licence, eligibility criteria, limit of foreign equity, entry fee, licence fee, financial bank guarantee, security conditions, remote access, preparation of accounts, duration of licence, customer services, quality of service (QoS) etc. The salient features in these recommendations are as under:-

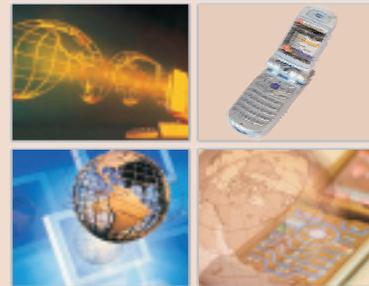
- **Scope of Licence:** Reseller would provide end-to-end IPLC of any capacity between India and country of destination. Resellers are required to take IPLC (wholesale bandwidth) from International Long Distance Service Providers (ILDs) to provide IPLC to end consumers on retail basis.
- **Eligibility Criteria:** The applicant company for Reseller licence should have a net worth as well as paid up capital of Rs. 2.5 Crores.
- **Limit of Foreign Equity:** The terms & conditions for foreign equity should be consistent with those of ILD sector as applicable from time to time which is at present 74%.
- **Entry Fee:** Entry Fee should be Rs. 1 Crore.
- **Licence Fee:** Licence fee may be kept as applicable to International Long Distance Licence which is at present 6% of Adjusted Gross Revenue.



- **Financial Bank Guarantee:** The Resellers should submit Financial Bank Guarantee (FBG) of Rs. 1 Crore.
 - **Security Conditions:** Resellers have to extend full support to security agencies and follow the guidelines issued from time to time by the security agencies / licensor/TRAI. ILDO and Reseller, both, shall be responsible for breach of any security condition or instructions issued by security agencies / Licensor in accordance with their functional responsibility.
 - **Remote Access:** Conditions for the Remote Access should be same as is applicable for ILD licence from time to time.
40. In addition to above, the recommendations include terms & conditions for preparation of accounts, tariffs, duration of licence, customer service and Quality of Service (QoS) etc. The Authority hopes that the recommendations would be accepted soon by DoT and new licence regime for Resellers would be put in place.

3.3 Ensuring compliance of the terms and conditions of license

41. 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.
42. 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. During the year an exercise of revisiting the various terms and conditions of UASL/CMSP License agreement were undertaken with a view to identify:

- (a) Such license conditions of which compliance can be ensured only by the licensor; and
- (b) Such License conditions, the compliance of which is required to be ensured by TRAI with further details as to -
 - (i) Conditions which contain specific reference to TRAI,
 - (ii) Conditions which do not specifically refer to TRAI.

Accordingly, compliance to various clauses viz. roll out obligations, verification of subscriber identity before enrolment, Public Utility Services were obtained from CMSPs/UASLs.

3.4 Steps taken to protect the interest of Consumers of Telecommunication Services

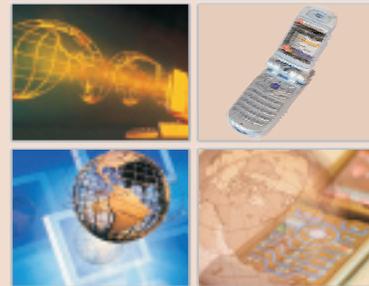
43. In January 2001, the TRAI issued a Regulation formalising the mode of its interaction with Consumer Organisations and NGOs related with telecom functions. This regulation provides the modalities for free registration of NGOs and Consumer Organizations with the TRAI to enable two-way interaction on 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.

44. As on 31st March 2007, 24 consumer organisations are registered with TRAI. They represent the metro cities of Delhi,



Mumbai, Kolkata, Chennai and Bangalore, the Union Territory of Chandigarh, and the states of Andhra Pradesh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Orissa and Rajasthan. Taking into account, the exponential growth of telecommunication services, there is a need to expand the Consumer Advocacy Group (CAG) network to other areas. The Authority has, therefore, started the process of registering suitable consumer organizations and NGOs from those states, which are at present not represented.

45. 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.
46. 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.
47. The Telecom Regulatory Authority of India has, therefore, decided to organize a series of workshops in different parts of the country to create awareness among the consumers about the initiatives taken by it to protect their interest so that they are able to get qualitative service in the telecom sector, 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. The first such workshop was held at Kochi in Kerala on 19th March 2007. As part of the consumer education programme, the TRAI has come out with a compilation of all consumer centric regulations, directions and tariff orders. The compilation has been well appreciated by the consumers and consumer organisations as a document of immense guidance and help to the consumers.

48. During the year 2006-07 a number of initiatives were taken to protect the interest of consumers. The Authority had been issuing directions to service providers to enhance consumer transparency in the matters of service provision. To enhance consumer awareness, the Authority vide letter dated 23rd May 2006 advised all service providers to provide printed material in English and Vernacular Language to customers at the time of enrollment inter-alia containing:

- a) Full and complete tariff information sheet
- b) The features of the service offered with special emphasis on roaming, premium rate services and other optional and value added services
- c) The Terms and Conditions including the exceptions attached to the service in unambiguous terms
- d) The rights of the consumers emanating from the various decisions of the TRAI (as published by TRAI) and
- e) The common charter of service agreed upon by the service providers.

49. The Authority had issued a Direction on 27th June 2005 to all access providers prescribing guidelines on the system of credit limit for postpaid subscribers. As a follow up to the above Direction and with a view to further streamline the procedure and enhance the consumer transparency, the Authority vide Direction dated 7th June 2006 mandated that the credit limit set for a postpaid customer shall be included in the monthly statement/bill of the customer on a regular basis.

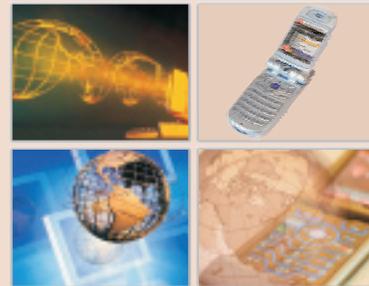


50. TRAI has issued several directions to Telecom Service Providers in the past on various tariff related aspects with a view to protect the interest of the consumers. While some of the directions were meant for one time compliance, others were to be complied on a continuing basis. The Authority feels it necessary to obtain periodical certificate of compliance from the service providers in order to ensure that those directions having continuous application are being complied by all the service providers. Briefly, the subject matters of such directions of the Authority having continuous application are as follows:-

- Prohibiting levy of migration charges by the cellular service providers.
- Mandating cellular service providers to carry forward unused balance during grace period at the time of recharge by prepaid subscribers.
- Prescription of format for publication/advertisement of tariff for consumer information.
- Prompt refund of security deposit to the customers within a prescribed period.
- Prohibiting telecom service providers from offering tariff plans with misleading titles.
- Mandating all access providers to inform credit limit for postpaid customers in writing.

Authority vide direction dated 14th July 2006 directed all Telecom Service Providers to furnish to the Authority a certificate of compliance on the tariff related directions regularly by 31st July every year. The certificates of compliance should categorically indicate that all these directions of the Authority are being complied with by them continuously and that there has been no breach of these directions during the year.

51. TRAI has been receiving representations from consumers regarding non-availability of facility with the service providers to correlate their previous interaction with the customer care helpline.



The Authority noticed that the service providers do not give any Docket/ Identification Number for the calls made to their customer care helpline and in many cases they even do not keep a record of such interaction and action agreed in their Customer Relationship Management system. The Authority also received a number of representations from consumers regarding bills being raised by the service providers even after a request has been made for termination of service. As per these complaints, the service providers do not implement the request for termination of service until all the dues are settled. Meanwhile the service providers continue to raise bills for rental etc. even if the phone is not used. The Authority also found that the customer is forced to pay pending bills or bills generated after his request for termination of service even if the service provider has the security deposit of the customer with him and the bill amount is lower than the security deposit. Also in some cases the service providers accept request for termination of service in writing only. In order to protect the interests of consumers and also to promote efficiency in handling consumer grievances, the Authority, after consultations with stakeholders, issued direction on 29th August 2006 to the service providers mandating them the following:



- (i) assign a unique docket number for all service request calls made to the customer care helpline numbers and also special numbers for registering complaints and convey the same to the customer at the time of such call. This shall be implemented within three months' from the date of the issue of this direction;
- (ii) acknowledge through SMS followed by entry in the next bill the requests made through Telephone call, FAX, SMS, e-mail etc for value added services, the charges for which are of a recurring nature;
- (iii) raise the bill only after adjustment of security deposit in the event of a request for termination of service received from a customer;
- (iv) terminate the service (a) within twenty four hours of the receipt of a request for termination of service made in

writing; (b) within three working days of the receipt of a request for termination of service made through Fax or through e-mail ID registered with the service provider; and (c) within seven working days of the receipt of a request for termination of service made through Telephone call, SMS and any other e-mail ID which is not registered with the service provider. The termination of service shall be subject to the return or recovery of the customer premises equipment, wherever applicable.

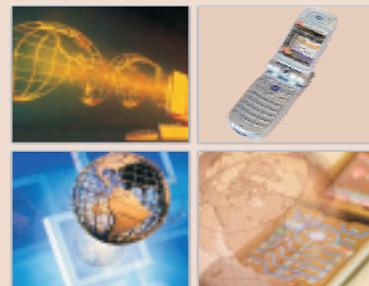
(v) stop charging the customer the fixed monthly charges like rental beyond the above prescribed period of termination of service or from the date of last usage, whichever is later.

52. In order to ensure and monitor that the service providers display details of the tariff plans on their website for the information of the consumers, the Authority vide letter dated 1st September 2006 made it mandatory for the service providers to submit a declaration alongwith tariff reports to the effect that the reported tariff plan has been displayed on the website. For transparency and consumer protection, Authority had asked service providers to display International private Lease line tariff and domestic leased line tariff in their website.

53. A Consultation Paper on the Redressal of Consumer Grievances and Consumer Protection in Telecommunication has been issued on 3rd January 2007. The consultation paper defines structural framework of institutional mechanism for handling consumer grievances and also outlines the processes and procedures and time limits for redressal of grievances at Call Centre, Nodal Officer and Appellate Authority level.

3.5 Levy of fees and other charges at such rates and in respect of such services as may be determined by Regulation

54. The TRAI notified a Regulation on Register of Interconnection Agreements on 21st August, 1999, under which the Register is open for inspection to any member of the public on payment of prescribed fee and on fulfilling any other condition that may



apply in this case. The fee for inspection of the Register is Rs. 50/- per hour. A fee of Rs. 20/- per page is charged for copies of extracts from the Register.

3.6 Steps taken to ensure compliance of Universal Service Obligation

55. 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.

3.7 Other Matters

(I) Institutional Capacity Building Project of TRAI

56. Under the Institutional Capacity Building Project of TRAI, funded by 'plan' budget, following studies/ consultancies were pursued during the year 2006-07 :

- (i) Studies on Emerging Technologies - Issues related to awareness building, migration, interconnection and QoS pertaining to Next Generation Network expert Committee (NGN-eCO)
- (ii) Studies on Media research & Consumer Surveys
- (iii) Study on Quality of Service & Customer Satisfaction
- (iv) Study on Interconnection in the Converged Multi-operator Multi-service scenario -NGN Scenario
- (v) Hardware procurement for Digital Signature
- (vi) Consultancy for estimation of β for telecom sector
- (vii) Up-gradation and Expansion of System software for TRAI
- (viii) Study relating to legal aspects of Growing Telecom Technology in regulatory regime

57. 4 officials of TRAI have attended various international trainings during the year 2006-07 under the Institutional Capacity Building Project of TRAI.

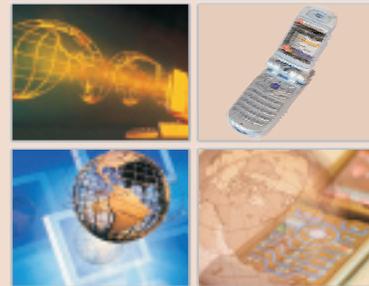


(II) Sale of Inbound International Calling Cards in India / Tata indicom's Global calling cards/Top up cards.

58. TRAI observed that some International Long Distance Operators were introducing or already introduced inbound international calling cards. In this connection a case relating to sale of this type of cards was examined in TRAI and taken up with DoT. DoT clarified that the sale of these cards by ILDO is not permitted under ILD licence and as per existing policy a 'No Objection Certificate' (NOC) is required from Licensor for sale of such inbound international calling cards in India. A letter was issued to all ILDO on 3rd July 2006 asking them to obtain NOC from DoT and also to suspend the introduction/ selling of inbound international calling cards in India.

(III) Admissibility of Revenue Share between Visiting Network and Terminating Network for Roaming calls

59. International Roaming tariff are under forbearance and there is a ceiling on National Roaming tariff. Revenue sharing between home network and visiting network is normally decided by mutual agreement between service providers. In this regard, TRAI received representations from various service providers and their Associations. The key issue was whether the terminating network service provider should get only the prescribed termination charges or in view of higher roaming charges, should there be any revenue share arrangement between the visiting network service provider and the terminating network service provider. To address the issues involved in the matter, a consultation paper was issued on 16th June 2006. Having considered the opinions of the stakeholders contained in their written submissions, the views expressed in the Open House Discussion and other relevant facts, the Authority remained of the view that there is no justification for a revenue sharing arrangement among operators in respect of roaming calls (National & International) and, therefore, it was concluded that no amendment in the regulation



was called for. Thus, the Authority's earlier decision that terminating operator should get only the termination charge as prescribed in the IUC Regulation, was reconfirmed. The said decision was also communicated to all the service providers and stakeholders through TRAI's website.

(IV) Interconnect Usage Charges (IUC) for Short Message Service (SMS)

60. As per the prevailing IUC Regulation, termination and carriage charges for Short Message Service (SMS) has not been specified by the TRAI and are forborne. To address some of the representations from service providers, TRAI had issued a Consultation Paper on the main issues of IUC for SMS & Premium Rate SMS. After obtaining comments from stakeholders on the consultation paper, holding Open House Discussions and its own analysis, TRAI decided as under:

- (i) The forbearance on IUC for SMS should continue for the present.
- (ii) The charges of premium SMS are on a higher side and bear no relationship with the cost and nature of services rendered.
- (iii) It is expected that the telecom operators would voluntarily reduce the charges of premium SMS service and TRAI henceforth would closely monitor the trends.
- (iv) It is also observed that the subscribers are not fully aware of premium SMS charges. The telecom operators are required to ensure either themselves or in arrangement with the content provider to give wide publicity for the tariff of the premium rate service.
- (v) Premium SMS should be on short coded SMS numbers only. The use of short coded SMS numbers should be in accordance with the Directives of Department of Telecommunications issued from time to time.



PART-IV

**ORGANISATIONAL MATTERS
OF TELECOM REGULATORY AUTHORITY
OF INDIA AND FINANCIAL
PERFORMANCE**





4.1 Organizational matters of Telecom Regulatory Authority of India

1. This 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.

A) Organization

2. The Telecom Regulatory Authority of India was established under the Telecom Regulatory Authority of India Act, 1997 enacted on 28th March, 1997. The TRAI (Amendment) Act, 2000 led to reconstitution of the Authority. It now consists of one Chairperson, two whole-time Members and two part time Members.

3. 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 160 (as on 31st March 2007) 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 31st March 2007)

As on 31st March 2007, the staff strength of the TRAI was as under:

Secretary, Pr.Advisors/ Advisors Level

<u>SL.NO.</u>	<u>NAME OF THE OFFICER</u>	<u>POST HELD</u>
1.	SH. R.K. ARNOLD	SECRETARY
2.	SH. RAJENDRA SINGH	SECRETARY (ON FOREIGN ASSIGNMENT TO WORLD BANK)
3.	DR. HARSHA VARDHANA SINGH	PRINCIPAL ADVISOR (PRESENTLY ON LEAVE)
4..	SMT. INDU LIBERHAN	PRINCIPAL ADVISOR (FINANCIAL ANALYSIS & IFA)
5.	SH. V.K BHASIN	PRINCIPAL ADVISOR (LEGAL)
6.	SH. R.N. CHOUBEY	PRINCIPAL ADVISOR (B&CS)
7.	SH. RAJAN SINGLA	ADVISOR (ADMINISTRATION & PERSONNEL)
8.	SH. M. KANNAN	ADVISOR (ECONOMIC)
9.	SH. SUDHIR GUPTA	ADVISOR (MOBILE NETWORK)
10.	SH. S.K. GUPTA	ADVISOR (CONVERGED NETWORK)
11.	SH. M.C. CHAUBE	ADVISOR (QoS & FIXED NETWORK)
12.	SH. K.J.S. BAINS	ADVISOR (LEGAL)



Below Advisor Level

<u>S.No.</u>	<u>POSTS</u>	<u>SANCTIONED</u>	<u>ACTUAL</u>
1.	JOINT ADVISOR / DEPUTY ADVISOR	19	17
2.	SENIOR PRINCIPAL PRIVATE SECRETARY	02	02
3.	SENIOR RESEARCH OFFICER	26	19
4.	PRINCIPAL PRIVATE SECRETARY	07	04
5.	TECHNICAL OFFICER	12	09
6.	SECTION OFFICER	16	12
7.	PRIVATE SECRETARY	14	11
8.	LIBRARIAN	01	01
9.	ASSISTANT	38	35
10.	PERSONAL ASSISTANT	18	10
11.	STENOGRAPHER GRADE 'D'	02	-
12.	LDC	05	05
13.	DRIVERS	14	14
14.	PCM OPERATOR	02	02
15.	DESPATCH RIDER	01	01
16.	GROUP-D	25	08
	TOTAL	<u>202</u>	<u>150</u>

4. 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. The total working strength of TRAI as on 31st March 2007 was as follows:

Direct Recruits	Deputationist	Absorbees	Total
47	75	38	160

B) Funding

- TRAI is a statutory body and is wholly funded by grant received from the Consolidated Fund of India. The total expenditure on the functioning of TRAI in the year 2006-07 was Rs. 15.12 crores (approx), out of this Rs. 1.49 crores was incurred on the 'Institutional Capacity Building Project' covering certain consultancy and training programmes.
- TRAI is of the view that in order to perform effectively as an independent regulator, it should be funded from a portion of the licence fees recovered as a cost of administration from those whom it regulates, and it should be given the flexibility in determining the terms and conditions of its employees to enable it to recruit talent / professionals from non-government sources at all levels. It is worth mentioning that some other National Regulatory Bodies like IRDA and SEBI are funded out of the fees recovered from the sector they regulate and hence these Authorities' have the flexibility to use these funds as per the specific requirements of their functioning.



C) Human Resource

i) Recruitment

7. The Authority has constituted its own cadre of officers and staff by way of absorbing the officials who were 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. This is mainly due to reasons that the prevailing remuneration package does not attract talent from the open market with expertise and experience in the areas covered by the Authority. Also, among Government employees, the relevant expertise is available mainly in the Ministries or with the Government owned Telecom Operators. Even for this group no added benefits in the remuneration package can be offered to attract appropriate talent. Therefore, the recruitment of personnel for its Secretariat by way of deputation from other Ministries / Departments / PSUs still continues. Hence, the Authority is facing major difficulties in getting appropriate personnel for its Secretariat.

8. 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.

ii) Training

9. 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's staff to address the diverse specialised needs of their task, the Authority is in close liaison with number of institutes and organizations such as the Indian Institutes of Management (IIMs), National Productivity Council (NPC), Institute of Secretariat 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.



10. Four TRAI officials were deputed during the year to attend training programmes conducted by the various international organizations viz. Australian Communication & Media Authority and Public Utility Research Centre, University of Florida. The officials have received valuable inputs through these trainings and the inputs have enriched their skills in their respective area of regulatory work. Forty Six officials of TRAI were also deputed for training programmes conducted by various training institutions within the country. The relevant details have been shown in Table 4.1 below:

Table 4.1 Statement Showing Officers Sent on Training Programme During the year 2006-07

A) International Trainings

Sl. No.	Name of the Training Institute	Place	Brief Particulars of the Training	No. of Officers sent
1.	Australian Communications & Media Authority, Australia	Canberra	Spectrum & Frequency Management	01
2.	Australian Communications & Media Authority, Australia	Melbourne	Spectrum & Frequency Management	02
3.	Public Utility Research Centre (PURC), University of Florida & World Bank	Gainesville, USA	PURC's Utility Regulation and Strategy	01
		Total		04

B) Domestic

Sl. No.	Name of the Training Institute	Place	Brief Particulars of the Training	No. of Officers sent
1.	National Productivity Council	Goa	IT Tools for Executive Secretary	08
		Leh	Managing Performance: Achieving Result	01
		Udaipur	Effective Office Administration	05
		Munar	Team Building & Team Work in Organization	02
		Ooty	Modern Office Management	01
2.	Indian Institute of Management - Indore	Indore	Knowledge Management	06
3.	Indian Institute of Management - Lucknow	Lucknow	Strategic Financial Management	01



Sl. No.	Name of the Training Institute	Place	Brief Particulars of the Training	No. of Officers sent
4.	Indian Institute of Management, Kolkata	Kolkata	Strategic Financial Management	01
5.	Institute of Secretariat Training & Management	Delhi	Workshop on Noting & Drafting	06
			Workshop on Record Management	05
			PA Refresher Programme	01
			MS Power Point	04
			Managing Change in Organization	01
			Pay Fixation Rule	01
			Modern Office Management	01
			Introduction to MS Excel	02
		Total		46

11. TRAI also has in place a system of in-house training and workshops, where distinguished national and international experts are invited for interaction with its officers on latest developments in the telecom sector. This is another step for capacity building by TRAI for its officers and staff.

iii) Seminar / Workshops

12. In order to keep pace with the developments taking place globally, the Authority has deputed members of its staff to the following 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.

Table 4.2 Seminars/Workshops /Meetings attended by Authority & TRAI officials during 2006-07

S. No.	Subject & Organizers	Place	Authority & other officials participated
1	Asia Pacific Forum on Telecom Policy and Regulation, 2006	Macao, China	2 - Advisor
2	ICICI Conference	New York	Chairman
3	Exploiting Electronic Numbering to optimize IP routing and Interconnection in NGN - IIR	London	1- Jt. Advisor
4	Regulation in the Era of Convergence	Egypt	Chairman
5	World Dialogue on Regulation Expert Forum on ICT Sector & Regulatory Performance Indicators	Singapore	1 - Pr. Advisor 1- Advisor
6	Participation in the Forum & Youth Forum at ITU Telecom World 2006 & Seminar on New Technologies, New Thinking : ICT Regulation	Hongkong	Chairman 1 - Advisor 1 - Dy. Advisor
7	APT & MoI&C, Bhutan's 8 th SATRC Meeting & Sub-Regional Meeting on improving Network connectivity	Thimphu, Bhutan	Chairman 1 - Advisor
8	ITU's (TDB) Seminar on QoS Consumer Protection	Geneva	1 - Advisor
9	APT : 30 th Session of Management Committee Meeting	Maldives	Member 1 - Pr. Advisor
10	OECD Information - Computer & Communications Policy Committee	Budapest, Hungary	Member
11	OECD Committee for Information, Computer & Communications Policy	The Hague, Netherlands	Member
12	ITU - Asia Pacific Centre of Excellence Stakeholders Meeting (ASP-COE)	Bangkok	1 - Advisor
13	Association of Annual Govt. Mobile Forum's 3 rd GSM World Congress	Barcelona, Spain	Chairman
14	Regional Seminar for Training on Spectrum Mgmt. system for Developing Countries	Vientiane, Lao PDR	1 - Dy. Advisor



S. No.	Subject & Organizers	Place	Authority & other officials participated
15	GSM Associations' Seminar for Regulators	Dhaka, B'desh	1 - Pr. Advisor
16	ITU: Biennial Seminar of Radio Communication Bureau	Geneva	1 - Advisor
17	3 GSM World Congress -2 nd Annual Regulators Symposium	Singapore	Chairman
18	ITU's 7 th Annual Global Symposium for Regulators (GSR)	Dubai, UAE	Secretary
19	ASEAN Workshop on NGN	Jakarta, Indonesia	1 - Jt. Advisor
20	ITU's Workshop on NGN	Hanoi, Vietnam	1 - Advisor
21	APT's Regional Workshop on Capacity Building in Public Policy issues of Internet Users for Business Development on Asia and the Pacific	Bangkok	1 - Dy. Advisor
22	SATRC Workshop on 'Licensing for Convergence'	Bangladesh	1 - Dy. Advisor
23	ITU/ESCAP Joint Regional Workshop on Disaster Communication	Bangkok	1 - Dy. Advisor
24	OVUM's Executive Workshop on 'Regulating for the Future - NGN & NGN Cost Modelling	Singapore	1 - Senior Research Officer
25	Role of Telecom / ICT in Disaster Mitigation	Bandung Indonesia	1 - Dy. Advisor
26	ITU/APT Workshop on NGN Planning	Bangkok	1 - Jt. Advisor
	Total		32



Right to Information Act

13. The Right to Information Act, 2005, which came into force from 12th 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.

14. During the year 2006-07, 91 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

15. TRAI had been awarded ISO 9001:2000 certificate, under Licence No.CRO/QSC /L-8002321, in December, 2004 by Bureau of Indian Standards (BIS) for a period of three years i.e. till 30th November 2007. To evaluate the implementation and effectiveness of Quality Management System (QMS) in TRAI, BIS has also conducted three surveillance audits. The quality-auditors have found the QMS functioning satisfactory and have recommended the continuance of the license issued by the BIS.
16. Conducting internal quality audit on a quarterly basis has also ensured the continual improvement in the system. TRAI has 23 internal quality auditors and 03 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 on a half yearly basis. The last Management review meeting was held on 29th November 2006.
17. During the year 2006-07, the 'Quality Policy' adopted by TRAI has been reviewed and modified keeping in view the fast changing technological and industrial environment.
18. The office of TRAI has shifted to new rented office premises in Mahanager Doorsanchar Bhawan (Near Zakir Hussain College), Jawahar Lal Nehru Marg (Old Minto Road), New Delhi - 110002 with effect from 10th December 2006. In spite of concerted efforts, TRAI could not find its own office accommodation which is very much desirable in view of being a Regulator of Telecom Sector.





TELECOM REGULATORY AUTHORITY OF INDIA
FINAL ACCOUNTS
2006-2007





4.2 Audited Accounts of TRAI for the year 2006-07

AUDIT CERTIFICATE

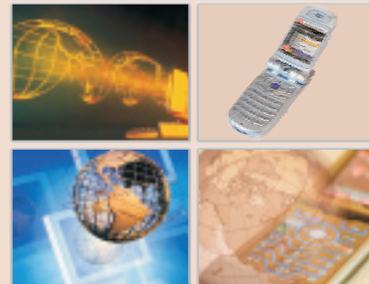
I have audited the attached Balance Sheet of the Telecom Regulatory Authority of India as at 31 March 2007 and the Income and Expenditure Account/Receipts and Payments Account for the year ended on that date. Preparation of these financial statements is the responsibility of the Telecom Regulatory Authority of India's Management. My responsibility is to express an opinion on these financial statements based on my audit.

I have conducted my audit in accordance with applicable rules and the auditing standards generally accepted in India. These standards require that I 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, evidence supporting the amounts and disclosures in the financial statements. I believe that my audit provides a reasonable basis for my opinion.

Based on our audit, I report that:

1. I have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purposes of our audit;
2. Subject to the major observations given below and detailed observations in the Audit Report annexed herewith, I report that the Balance Sheet and the Income and Expenditure Account/Receipts and Payments Account dealt with by this report are properly drawn up and are in agreement with the books of accounts:

Overstatement of 'Excess of Income over Expenditure' by Rs 235.90 lakh due to non provision for liability of Rs 152.24 lakh towards payment of property tax and non provision for



anticipated loss of Rs 83.66 lakh in the net realisable value of the abandoned assets (Paragraphs 2.1 and 2.2);

Non preparation of Accounts in the 'Uniform Format of Accounts' prescribed by the Controller General of Accounts (Paragraph 2.3);

3. In my opinion and to the best of my information and according to the explanations given to me:
- (i) the accounts give the information required under the earlier prescribed format of accounts;
 - (ii) the said Balance Sheet, Income and Expenditure Account/ Receipts and Payments Account read together with the Accounting Policies and Notes thereon, and subject to the significant matters stated above and other matters mentioned in the Audit Report annexed herewith, give a true and fair view:
 - a. In so far as it relates to the Balance Sheet of the state of affairs of the Telecom Regulatory Authority of India as at 31 March 2007; and
 - b. In so far as it relates to the Income and Expenditure Account of Surplus for the year ended on that date.



Place: Delhi
Date: 12 October 2007

Sd/-
(Vikram Chandra)
Director General of
Audit (P&T)

Audit Report on the Account of Telecom Regulatory Authority of India for the year 2006-07

1. INTRODUCTION

1.1 The Telecom Regulatory Authority of India (TRAI) was established with effect from 20 February 1997, under an Act of Parliament known as the Telecom Regulatory Authority of India Act, 1997 to regulate telecom services and matters connected with or incidental thereto. The TRAI Act was amended by an ordinance effective from 24 January 2000, separating the adjudicatory and disputes functions from TRAI by establishing a Telecom Disputes Settlement and Appellate Tribunal (TDSAT).

1.2 Section 23(2) of the Telecom Regulatory Authority of India Act, 1997 provides that the accounts of TRAI shall be audited by the Comptroller and Auditor General (C&AG) of India. Accordingly, the audit of annual accounts of TRAI for the year 2006-07 was conducted under Section 19(2) of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971.

TRAI received Rs 13.85 crore from the Central Government during the year 2006-07 against the sanctioned grant of Rs 17.11 crore (Non Plan) for the year and Rs 1.07 crore (Non Plan) from the unspent balance of the earlier year's grant (Non Plan) lying with TRAI. TRAI utilized Rs 14.20 crore (Non Plan) leaving an unutilized balance of Rs 0.72 crore (Non Plan).

TRAI also received Rs.1.15 crore from the Central Government during the year 2006-07 against the sanctioned grant of Rs 2.00 crore (Plan Fund) and Rs 0.55 crore (Plan Fund) from the unspent balance of the earlier year's grant (Plan Fund) lying with TRAI. TRAI utilized Rs 1.45 crore (Plan Fund) leaving an unutilized balance of Rs 0.25 crore (Plan Fund).



2. COMMENTS ON ACCOUNTS

BALANCE SHEET

2.1 LIABILITIES

Current Liabilities and provisions (Schedule L) - Non Plan Rs 328.96 lakh

The above does not include Rs 152.24 lakh towards provision for liability on account of property tax payable to the State Trading Corporation (STC) for hiring of office accommodation in the Jawahar Vyapar Bhavan (JVB) of STC for the period from June 1999 to June 2001. This has resulted in: -

- (i) Understatement of 'Current Liabilities and Provisions' and 'Expenditure' by Rs 152.24 lakh each, and
- (ii) Overstatement of 'Excess of Income over Expenditure' and 'Capital Fund' by Rs 152.24 lakh each.

Further, to the above extent, the disclosure given in Note 13 of Notes to Accounts (Schedule T) is also incorrect.

Despite similar comments issued on the accounts for the years 2002-03 to 2005-06, the Management has not taken any corrective action so far.

Management stated (August 2007) that the issue of property tax could not be settled as yet as the rate of property tax was a case of litigation between STC and NDMC and was pending before Hon'ble Supreme Court. The amount of property tax to be paid by TRAI to STC for occupation of JVB between 1 June 1999 and 30 June 2001 had, therefore, become sub-judice and could only be settled after the pronouncement of the judgment.

The contention of the Management is not correct as the above liability has arisen in terms of the provisions of valid lease agreements and necessary provision for the same should have been made, which could be adjusted on final settlement of the liability. STC has already demanded immediate reimbursement of at least 'Rs one crore as on account payment' of property tax to STC which was already decided and agreed upon between TRAI and STC in the meeting held in the matter on 6 January 2004.



2.2 ASSETS

Fixed Assets (Schedule-H) - Non Plan

Gross Block of assets left at JV Bhavan: Rs 122.22 lakh

Net Block of assets left at JV Bhavan: . Rs 86.36 lakh

Non-provision for the anticipated loss of Rs 83.66 lakh in the net realisable book value of the assets (furniture & fixtures including electrical appliances) abandoned in June 2001 on the 16th and 20th floors of JVB of STC indicated not only non-compliance with the mandatory requirements of Accounting Standard -10 issued by the Institute of Chartered Accountants of India but has also resulted in: -

- (i) Understatement of 'Current Liabilities and Provisions' and 'Expenditure' by Rs 83.66 lakh each.
- (ii) Overstatement of 'Excess of Income over Expenditure' and 'Capital Fund' by Rs 83.66 lakh each.

Despite similar comments issued on the accounts for the years 2002-03 to 2005-06, the Management has taken no corrective action so far.

The Management stated (August 2007) that against the net book value of Rs 86.36 lakh of the assets left behind at JVB of STC, STC had already agreed to pay TRAI Rs 0.34 lakh towards the assets left on 16th floor of JVB, which were sold by STC as scrap, and Rs 2.36 lakh towards the "value in use" of the assets (as valued by a Consultant) left behind by TRAI on the 20th floor of JVB. It was further stated that final adjustment on above account would be done after final ascertainment of the amounts payable by TRAI to STC on account of liabilities towards property tax, etc.

The reply of the Management is not tenable in view of the fact that the above abandoned assets were no more in existence. Besides, in compliance with the mandatory requirements of AS-10, necessary provision for expected loss in their realisable



value from STC should have been made, which could have been adjusted on final settlement in the matter with STC.

2.3 General

Format of Accounts

Controller General of Accounts (CGA) issued instructions in July 2006 for preparation of accounts by all Central Autonomous Bodies in the 'Uniform Format of Accounts' prescribed by CGA in January 2002. Accordingly, TRAI was requested by Audit in September 2006 to prepare one set of consolidated accounts in the above format prescribed by CGA showing the activities relating to both Non Plan and Plan funds appropriately and distinctly. Audit scrutiny, however, revealed that the accounts were not prepared in the uniform format prescribed by CGA.

The Management stated (August 2007) that inadvertently the Accounts for the year 2006-07 could not be prepared in the 'Uniform Format of Accounts' prescribed by the Controller General of Accounts (CGA), but assured to prepare the Accounts from the financial year 2007-08 in the above format.

2.4 EFFECTS OF AUDIT COMMENTS ON THE ACCOUNTS

The net impact of the comments given in the preceding paragraphs is that 'Current Liabilities and Provisions' as on 31 March 2007 were understated by Rs 235.90 lakh whereas 'Excess of Income over Expenditure' for the year and 'Capital Fund' were overstated by Rs 235.90 lakh each.

**Sd/-
(Vikram Chandra)
Director General of
Audit (P&T)**

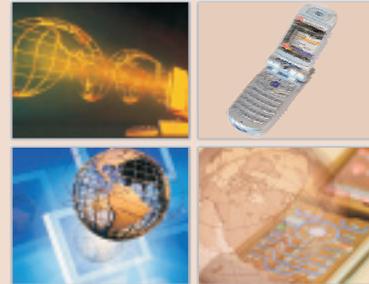
Place: Delhi
Date: 12 October 2007

TELECOM REGULATORY AUTHORITY OF INDIA

Receipt and Payment Account for the year ending 31st March, 2007

(in Rupees)

A/c Code	Receipts	Current Year as on 31/03/07 (NON-PLAN)	Previous Year as on 31/03/06 (NON-PLAN)	Current Year as on 31/03/07 (PLAN)	Previous Year as on 31/03/06 (PLAN)	A/c Code	Payments	Current Year as on 31/03/07 (NON-PLAN)	Previous Year as on 31/03/06 (NON-PLAN)	Current Year as on 31/03/07 (PLAN)	Previous Year as on 31/03/06 (PLAN)
1	To Balance Brought down:					13	By Chairperson & Members :				
1.1	To Bank	19481665	19455509	5535547	0	13.1	By Pay & Allowances	1317770	1967181		
1.2	To Cash in hand	33322	29604			13.2	By Other benefits	63579	250273		
2	To Fee, Charges & Fine					13.3	By Travelling expenses :				
2.1	To Fees		2000			13.3.1	By Overseas	1433420	239473		
2.2	TO Charges					13.3.2	By Domestic	659953	1403756		
						13.4.1	By Retirement Benefits	93000	143511		
2.3	To Fines					14	By Officers :				
2.4	To Other (specify)					14.1	By Pay & Allowances	27525345	24862841		
3	To Grants:	138500000	132000000	11500000	20000000	14.2	By Retirement benefits	805354	764430		
3.1	To Accounts with Govt.					14.3	By Other benefits	3028131	3683242		
3.2	To Other (specify)					14.4	By Travelling expenses :				
4	To Gifts					14.4.1	By Overseas	1698149	5597686		
5	To Seminars & Conferences					14.4.2	By Domestic	1740775	2361235		
6	To Sales of Publications		4500			15	By Staff				
7	To Income on Invs. & Deposits					15.1	By Pay & Allowances	11060040	9505888		
7.1	To Income on investments					15.2	By Retirement benefits	437256	404357		
7.2	To Income on Deposits					15.3	By Other benefits	1391458	848152		
8	To Loans:					15.4	By Travelling expenses :				
8.1	To Government					15.4.1	By Overseas				
8.2	To Other (specify)					15.4.2	By Domestic	86553	121187		
9	To Sales of Assets	42223				16	By Hire of Conveyance	963825	954639		
10	To Sale of Investments					17	By Wages	0	2800		
11	To Recoveries from pay bills					18	By Overtime	432871	359869		
11.1	To Loans & Advances					19	By Honorarium				
	Principal Amount					20	By Other office exps.	43133748	41985339		178
11.2	To Intrs. On Loan & Advncs.	101600	6334			21	By Expenditure on Research				
11.3	To Miscellaneous	460605	488954			22	By Consultation exps.	2093802	576554	11135629	9957127
12	Miscellaneous Income	56517	16915			23	By Seminars & Confrcns	2896045	2421693		
20	To Recovery of Tel. & Petrol					24	By Publications of TRAI				
33.1.1	To Loans & Advances					25	By Rent & Taxes	37359582	2320263		
33.1.3	LOANS ADVANCES	316682					Training			3405849	4507148
33.1.3.4	To Recov. Of LTC Advance					26	By Interest on Loans				
33.3	Advances others										
40.1	To Capital Fund	719280	648462			27	By Promotional Exps.				
42.2.1	To Deposits from Contractors		340000			28	By Membership fee	156000	210907		



A/c Code	Receipts	Current Year as on 31/03/07 (NON-PLAN)	Previous Year as on 31/03/06 (NON-PLAN)	Current Year as on 31/03/07 (PLAN)	Previous Year as on 31/03/06 (PLAN)	A/c Code	Payments	Current Year as on 31/03/07 (NON-PLAN)	Previous Year as on 31/03/06 (NON-PLAN)	Current Year as on 31/03/07 (PLAN)	Previous Year as on 31/03/06 (PLAN)
42.5	To Provisions					29	By Subscription	2445	164810		
42.6	To Other Liabilities		1040			30	By Purchase of Fxd.Assest	10802899	3814847		
46.1	To claim receivable		265135			31.1	By Investments	8704689			
46.2	To security deposits	9804621									
46.5	To Others	132057	155701			31.2	By Deposits				
33.1.2	To loans and advances	937291	25869			32	By Security Deposits				
						33	By Loans and advances to				
						33.1	By Employees				
						33.1.1	By Authority	10138			
						33.1.2	By Officers :		3524880		
						33.1.3	By Staff				
						33.2	By Suppliers and Contractors		1527039		
						33.3	By Others		63623		
						34	By Repayment of loan				
						35	By others (WBP 4555IN)				
							By Leave Salary and Pension				
						35.1	By Contribution	3395126	2988681		
						35.2	By Audit Fee	234565	152280		
						35.3	By Misc.				
						42.2.1	By Deposits of contractors	115000			
						46.1	By Claim recoverables	1647339			
						44.1	By Capital Work in progress				
						46.5	By other current Assets				
						46.2	By securities deposits		3600		
						36	By Balance carried down				
						36.1	By Bank	7253560	19481665	2494069	5535547
						36.2	By Cash	43446	33322		
	TOTAL	170585863	153440023	17035547	20000000			170585863	153440023	17035547	20000000

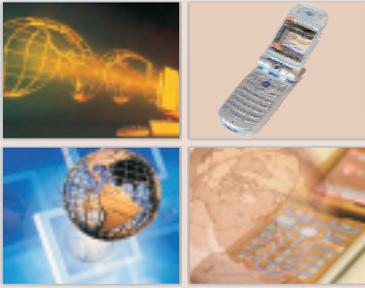


**Sd/-
Pr. Advisor (FA&IFA)**

**Sd/-
Secretary**

**Sd/-
Member**

**Sd/-
Chairperson**



A/c Code	Expenditure	Schedule	Current Year as on 31st March, 07 (NON-PLAN)	Previous Year as on 31st March, 06 (NON-PLAN)	Current Year as on 31st March, 07 (PLAN)	Previous Year as on 31st March, 06 (PLAN)	A/c Code	Income	Schedule	Current Year as on 31st March, 07 (NON-PLAN)	Previous Year as on 31st March, 06 (NON-PLAN)	Current Year as on 31st March, 07 (PLAN)	Previous Year as on 31st March, 06 (PLAN)
21	To Expenditure on Research												
22	To Consultation exps.		926857	1032935	11609310	9957127							
	To Training				3351559	4447512							
23	To Seminars & Confrms		2464408	2638672									
24	To Publications of TRAI												
25	To Rent & Taxes		38408102	22680000									
26	To Interest on Loans												
27	To Promotional Exps.												
28	To Membership fee	F	296940	183696									
29	To Subscription	G	138339	189298									
35	To Others												
35.1	To Leave Salary & Pension												
	Contribution		4389474	3007836									
35.2	To Audit Fee		121795	112770									
35.3	To Misc.												
37	To Depreciation	H	6600157	5274909									
40	To Loss on (assets written off)		207314	137954									
40	To Bad Debts written off												
50	To prov. for bad & doubtful debts												
	To Excess of income over expend.		20004706										
	(Transferred to Capital Fund A/c)				5039131	15595183							
	Total		171258117	132510596	200000000	300000000		TOTAL		171258117	132510596	200000000	300000000

Sd/-
Pr. Advisor (FA&IFA)

Sd/-
Secretary

Sd/-
Member

Sd/-
Chairperson

TELECOM REGULATORY AUTHORITY OF INDIA
Balance Sheet as on 31st March, 2007

(in Rupees)

A/c Code	Liabilities	Schedule	Current Year as on 31st March,07 (NON_PLAN)	Previous Year as on 31st March,06 (NON_PLAN)	Current Year as on 31st March,07 (PLAN)	Previous Year as on 31st March,06 (NON_PLAN)	Assets	Schedule	Current Year as on 31st March,07 (NON_PLAN)	Previous Year as on 31st March,06 (NON_PLAN)	Current Year as on 31st March,07 (PLAN)	Previous Year as on 31st March,06 (PLAN)
40	Funds						43 Fixed Assets	H				
40.1	Capital Fund	I					43.1 Gross Block at Cost		54728845	52597317		
			73789601	76603024	15595184		Less: Accumulated depreciation		32748950	31580059		
	Less: Excess of Expenditure over Income (Previous year, Excess of income over exp.)											
	Balance		20004706	-2480846	5039131	15595183	43.3 Net Block		21979895	21017258		
							Assets left at JV Bhavan					
							Gross Block at Cost		12222170	12222170		
							Less: Accumulated Deprec.		-3586538	-3586538		
							Net Block of assets left at JVB		8635632	8635632		
							Total Net Block :		30615527	29652890		
40.2	Other Funds (Specify)						Capital Work-in-Progress	M				
41	Reserves	J					Investment & Deposits	N	8704689			
8	Loans :	K					31.1 Investment					
8.1	Government						31.2 Deposits					
8.2	Others						Loans and Advances	O	4422222	5666057		
42	Current Liabilities and provisions	L	32896083	32154749	473681		Account with Govt.	S	69700000	37100000	18500000	10000000
							Sundry Debtors	P				
							Cash and Bank Balance	Q	7297006	19514987	2494070	5355547
							Other Current Assets	R	5950946	14342993	113926	59636
							TOTAL		126690390	106276927	21107996	15595183

Sd/-
Pr. Advisor (FA&IFA)Sd/-
SecretarySd/-
MemberSd/-
Chairperson

SCHEDULE - A FEES, CHARGES & FINE

(In Rupees)

A/ c Code	Description	Current year as on 31 st March 07	Previous year as on 31 st March,06
2.1	Fee		
2.1.1	Registration Fee		
2.1.2	Adjudication fee		
2.1.3	Document access fee		
2.1.4	Others		2000
	Total		2000
2.2	Charges		
2.2.1	Government		
2.2.2	MTNL		
2.2.3	VSNL		
2.2.4	Others PSUs		
2.2.5	Private operators		
	Total		
2.3	Fines		
2.3.1	Government		
2.3.2	MTNL		
2.3.3	VSNL		
2.3.4	Others PSUs		
2.3.5	Private operators		
	Total		
2.4	Others (specify)		
	Grand Total	0	2000

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)

SCHEDULE - B GRANTS

(In Rupees)						
A/c Code	Description	Source	Opening Balance as on 1 st April,06	Sanctioned grant for the year	Grants received during the year	Closing balance as on 31 st March,07
3.1	Government (Account with Government)	Budget	37100000	171100000	138500000	697000000
	Total	MoF	37100000	171100000	138500000	697000000
3.2	Other Grants					
	Grand Total		37100000	171100000	138500000	697000000
	Previous Year		39100000	130000000	132000000	371000000
	Note: Also see Schedule 'S' and Note No.8 of Schedule 'T'					

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)



SCHEDULE - C OTHER BENEFITS

(In Rupees)

A/c Code	Description	Current year as on 31 st March,07	Previous year as on 31 st March,06
13.2	Chairperson and Members		
13.2.1	Leave Travel Concession		70220
13.2.2	Medical Benefits	4653	36878
13.2.3	Others (specify)	16018	163946
	Total	20671	271044
14.3	Officers		
14.3.1	Bonus Ex-gratia		
14.3.2	Leave Travel Concession	734223	1931933
14.3.3	Medical Benefits	1747482	1992385
14.3.4	Welfare Expenses	100358	101970
	Total	2582063	4026288
15.3	Staff		
15.3.1	Bonus Ex-gratia	163095	127415
15.3.2	Leave Travel Concession	300576	312651
15.3.3	Medical Benefits	829404	666937
15.3.4	Welfare Expenses		
	Total	1293075	1107003
	Grand Total	3895809	5404335

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)

Schedule - D RETIREMENT BENEFITS

(In Rupees)

A/c Code	Description	Current year as on 31 st March,07	Previous year as on 31 st March,06
13.4	Chairperson and Members		
13.4.1	Contribution to PF etc.	93000	143511
13.4.2	Pension		
13.4.3	Gratuity		
13.4.4	Other		
	Total	93000	143511
14.2	Officers		
14.2.1	Contribution to PF etc.	805354	764430
14.2.2	Pension		
14.2.3	Gratuity		
14.2.4	Other		
	Total	805354	764430
15.2	Staff		
15.2.1	Contribution to PF etc.	437256	399775
15.2.2	Pension		
15.2.3	Gratuity		
15.2.4	Other		4582
	Total	437256	404357
	Grand Total	1335610	1312298

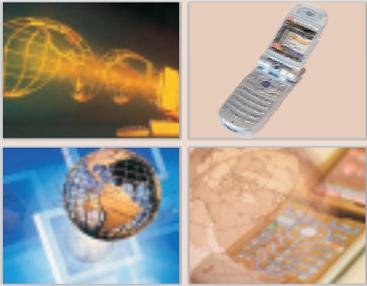
Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)



SCHEDULE - E OTHER OFFICE EXPENSES

(In Rupees)

A/c Code	Description	Current year as on 31 st March,07	Previous year as on 31 st March,06
20.1	Repair and Maintenance		
20.1.1	Buildings	7224	304850
20.1.2	Office Equipments	2916626	1502701
20.1.3	Vehicles	736275	680962
20.1.4	Others		69902
20.2	Electricity and Water	2308076	2273166
20.3	Insurance and Bank Charges	109620	115094
20.4	Printing	4906552	3078871
20.5	Stationery	1958942	1688114
20.6	Postage etc.	192135	258963
20.7	Telephones	4269804	8022471
20.8	Legal Fee and Expenses	12954220	13614050
20.9	Vehicles (Petrol/Diesel)	2209181	1458265
20.10	Miscellaneous	12217503	10281464
	Total	44786158	43348873



Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)

SCHEDULE - F MEMBERSHIP FEE (28.1)

A / C Code	Description	Purpose	2006 - 2007 (In Rupees)	
			Amount	
			Current Year as on 31 st March, 07	Previous Year as on 31 st March, 06
28.1				
	TERI	For SAFIR	25665	18335
	NCAER	For Library		5000
	INDIA HABITAT CENTRE	For Membership	11224	
	ITU - D Geneva	Participation in the activities of ITU-D as sector member	250968	145083
	Institute of Electrical Engineering(IEE)-UK	Membership Fee	3523	5937
	IEEE, USA	Membership Fee	2860	3341
	International Union of Radio Scie.	Registration Fee		6000
	World Space IP Ltd.	For Membership	1200	
	World Space IP Ltd.	For Rent	1500	
	Total		296940	183696

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)



SCHEDULE - G SUBSCRIPTION (29.1)

A / C Code	Description	Purpose	2006 - 2007 (In Rupees)	
			Amount	
			Current Year as on 31 st March, 07	Previous Year as on 31 st March,06
29.1				
	Swamy Publishers (P) Ltd.	Subscription for Swamy News	1477	700
	Company Law Journal	Subscription for Company Law Journal 2005	8200	9760
	ITU-T & ITU-R	Online subscription	125750	171179
	VOICE & DATA	Subscription of Technical Magazine	420	84
	Central News Agency	Swamy News	3492	602
	Centre for Science & Environment	Subscription of Magazine		288
	New Scientist	Subscription of Magazine		6685
	Total		139339	189298



Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)

SCHEDULE-H
FIXED ASSETS AS ON 31.03.2007

A/c Code	Description	Gross Block			Depreciation			Net Block			Cost as on 31-Mar-07	
		Cost as on 01-Apr-06	Additions during the year	Deductions during the year	Cost as on 31-Mar-07	As on 01-Apr-06	For the year	Adjustments	As on 31-Mar-07	As on 01-Apr-06		Additions during the year
43.3.1	Land											
43.3.2	Building											
43.3.3	Office Equipments	8058552	796388	76154	8778786	3500218	867188	49971	4317435	4558334	70800	4461351
43.3.4	Vehicles	4410781	838385	648145	4601021	3336489	402027	514607	3223909	1074292	436358	1377112
43.3.5	Furniture and Fixtures	7809813	1504821	236717	9077917	4280859	1377328	195248	5462939	3528954	127493	3614978
43.3.6	Electrical Appliances	1476157	1041308	57747	2459718	563944	121127	4605	680466	912213	920181	1779252
43.3.7	Airconditioners	622207	37500		659707	338370	82995		421365	283837	45495	238342
43.3.8	Computers	27576571	3516496	4713840	26379227	17507849	3499841	4666835	16340855	10068722	16655	10038372
43.3.9	Books and Publications	2643236	129233		2772469	2052330	249651		2301981	590906		24077246
43.3.10	Others, if any											
	Total	52597317	7864131	5732603	54728845	31580059	6600157	5431266	32748950	21017258	1500687	21979895
	Assets left at JVB											
	Furniture & Fixtures	11677132			11677132	3425864			3425864	8251268		8251268
	Electrical Appliances	545038			545038	160674			160674	384364		384364
	Sub-Total :	12222170			12222170	3586538			3586538	8635632		8635632
	G. Total	64819487	7864131	5732603	66951015	35166597	6600157	5431266	36335488	29652890	1500687	30615527
	Previous Year	58295417	6745172	221102	64819487	29975436	5274909	83748	3516597	28319981	1001551	29652890

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)



SCHEDULE - I FUNDS

(In Rupees)

A/c Code	Description	Opening Balance as on 1 st April,06	Additions during the year	Deductions during the year	Closing Balance as on 31 st March,07
40.1	Capital Fund	74122178	20723986	1051857	93794307
40.2	Other Funds				
	Total	74122178	20723986	1051857	93794307
	Previous year	77368584	648462	3894868	74122178

SCHEDULE - J RESERVES

(In Rupees)

A/c Code	Description	Opening Balance as on 1 st April,06	Additions during the year	Deductions during the year	Closing Balance as on 31 st March,07
41.1		0	0	0	0
41.2		0	0	0	0
	Total	0	0	0	0

SCHEDULE - K LOANS

(In Rupees)

A/c Code	Description	Opening Balance as on 1 st April,06	Additions during the year	Deductions during the year	Closing Balance as on 31 st March,07
8.1	Government	0	0	0	0
8.2	Other (specify)	0	0	0	0
	Grand Total	0	0	0	0

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)

SCHEDULE - L CURRENT LIABILITIES AND PROVISIONS

(In Rupees)

A/c Code	Description	Current year as on 31 st March,07	Previous year as on 31 st March,06
42.1	Sundry Creditors	113926	
42.2	Deposits from		
42.2.1	Contractors	535000	650000
42.2.2	Operators and Others	8704689	8704689
42.2.3	Interest to Operators	119602	
42.3	Income received in Advance		
42.4	Outstanding Expenses	8071540	5039950
42.5	Provisions	11813132	15006274
42.6	Other Liabilities	3538194	2753836
	Total	32896083	32154749

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)



SCHEDULE - M CAPITAL WORK IN PROGRESS

(In Rupees)

A/c Code	Description	Opening Balance as on 1 st April,06	Additions during the year	Deductions during the year	Closing Balance as on 31 st March,07
44.1	CWIP	0	0	0	0
44.2					
	Total	0	0	0	0
	Pre.Year	0	0	0	0

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)



SCHEDULE - N INVESTMENTS AND DEPOSITS

(In Rupees)

A/c Code	Description	Opening Balance as on 1 st April,06	Additions during the year	Deductions during the year	Closing Balance as on 31 st March,07	
					Cost	Market value
31.1	Investments	0			0	0
31.2	Deposits		8704689		8704689	0
	Total	0	8704689	0	8704689	0
	Previous Year		0		0	

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)



SCHEDULE - O LOAD AND ADVANCES

(In Rupees)

A/c Code	Description	Current year as on 31 st March,07	Previous year as on 31 st March,06
33.1	Advances to Employees		
33.1.1	Chairperson & Members	10138	
33.1.1.1	For House Building		
33.1.1.2	For Purchase Of conveyance		
33.1.1.3	TA advance		
33.1.1.4	LTC and other advance		
33.1.2	Officers		
33.1.2.1	For House Building	2879922	2881175
33.1.2.2	For Purchase Of conveyance	1041773	821379
33.1.2.3	TA advance	2095	181763
33.1.2.4	LTC and other advance	90464	1067228
33.1.3	Staff		
33.1.3.1	For House Building	232278	403649
33.1.3.2	For Purchase Of conveyance	123040	169943
33.1.3.3	TA advance		0
33.1.3.4	LTC and other advance	42512	140920
	Total	4422222	5666057

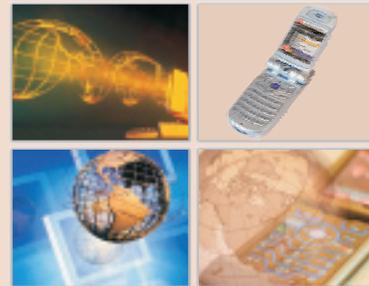
Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)

SCHEDULE - P SUNDRY DEBTORS

(In Rupees)

A/c Code	Description	Current year as on 31 st March,07	Previous year as on 31 st March,06
45.2	Unsecured Debtors	0	0
45.2.1	Upto six months old	0	0
45.2.2	More than six months old	0	0
45.2.2.1	Considered good	0	0
45.2.2.2	Considered doubtful	0	0
	Total (x)	0	0
	Less :		
	Prov. for Bad & Doubtful	0	0
	Debts already made	0	0
	Add/Subtract prov. Required	0	0
	During the year	0	0
	Total (y)	0	0
	Total (x-y)	0	0

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)

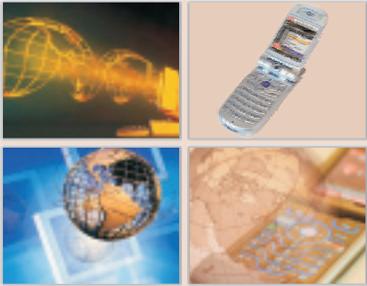


SCHEDULE - Q CASH AND BANK BALANCES

(In Rupees)

A/c Code	Description	Current year as on 31 st March,07	Previous year as on 31 st March,06
36.1	Balance with Scheduled Banks		
36.1.1	Current Account	7253560	19481665
36.2	Cash in Hand	43446	33322
	Total	7297006	19514987

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)

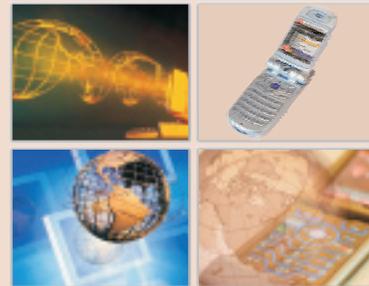


SCHEDULE - R OTHER CURRENT ASSETS

(In Rupees)

A/c Code	Description	Current year as on 31st March,07	Previous year as on 31st March,06
46.1	Claims Receivable	4936118	3288779
46.2	Security Deposits	582019	10386640
46.3	Prepaid Expenses	100296	436532
46.4	TRAI Publication		
46.5	Other (Specify) (See Note 12)	332513	231042
	Total	5950946	14342993

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)



SCHEDULE - S ACCOUNTS WITH GOVERNMENT

(Please refer to schedule 'B')

(In Rupees)

	Opening Balance	Amount due	Amount received	Closing balance
	37100000	171100000	138500000	69700000
TOTAL	37100000	171100000	138500000	69700000
See Note No.8 of Schedule T				

Sd/-
(S.S. Panwar)
S.R.O. (A/cs.)



Schedule - T

Accounting Policies and Notes to Accounts

A. Significant Accounting Policies

1. Financial Statements

- i) The financial statements have been prepared in the formats approved by the Government of India, Ministry of Communication in consultation with CAG of India issued vide Gazette Notification No. GSR 236(E) dated March 31, 1999.
- ii) Accounts have been prepared on accrual basis for the current year i.e., 2006-07 - There is no change in Method of Accounting from the preceding year.
- iii) Provisions for all the undisputed and known liabilities have been made in the Books of Accounts.
- 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.
- vi) As per clause 32 of the TRAI Act, 1997, TRAI is exempt from tax on wealth and income.

2. Transactions in Foreign Currencies

Transactions denominated in foreign currencies are recorded at the exchange rate prevailing at the time of transaction.

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, like 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%
Furniture and Fixtures	6.33%	10.00%
Electrical Appliances	4.75%	10.00%
Airconditioners	4.75%	10.00%
Books and Publications	4.75%	20.00%

(b) The following items have been written off after taking approval of the Competent Authority vide office order No. 21-7/2000-GA dated 10.11.2005 and a sum of Rs. 83,748/- on account of Depreciation have been written back as per details given below:

Sl. No.	Particular of Asset	Book Value	Accumulated depreciation upto 2005-06	WDV as on 31.03.2006
1.	Office Equipment	76154	49971	26183
2.	Vehicles	648145	514607	133538
3.	Furniture & Fixtures	236717	195248	41469
4.	Electrical Appliances	57747	4605	53142
5.	Computers	4713840	4666835	47005
	Total :	5732603	543126	5189447

4. Retirement Benefits

a) Provision for Leave Salary and Pension Contribution up to 31.03.2007 has been provided in Books of Accounts at the rates prescribed by Government of India under Fundamental Rules.



5. Insurance claims are accounted for when TRAI's right to receive claim is accepted by Insurance Company.

B. Notes on Accounts

6. Last Year's Figures

- i. The closing balance under various heads of accounts as appearing in the Ledger as on 31.03.2006 have been correctly brought down as opening balances on 01.04.2006 in the Ledgers.
- ii. The final accounts viz., Receipt and Payment Account, Income and Expenditure Account, Balance Sheet as well as various Schedules thereof contain the previous year's audited figures for comparison as prescribed. However, previous year's figures have been re-grouped or re-arranged.
- iii. All expenses pertaining to the earlier years for which provision was available in the Accounts of 2006-07 have been identified and debited to respective provision heads.
- iv.
 - a) The provision made in the Accounts for the preceding years, to the extent of short/excess provision have been debited /credited directly to Capital Fund (40.1).
 - b) Expenses relating to earlier years or adjustments relating to earlier years which were pointed out by the auditors in their report on the previous year accounts the necessary adjustment entries have been passed in the Capital Fund (A/c 40.1) directly.
 - c) The effect of all transactions of additions/ deductions in account code 40.1 (Capital Fund) has been reflected in Schedule - I to the Balance Sheet.

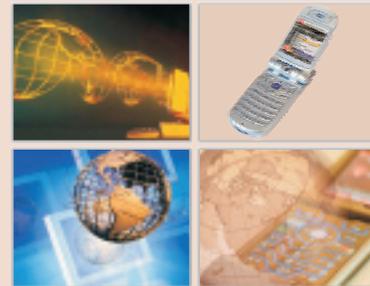


7. Provision made in respect of Liabilities for 2006-2007

- a) Outstanding liabilities for the year 2006-07 to the tune of Rs.23422866/- have been assessed, based on the bills/demands available and the payments made upto 15.05.2007 for the said year, as per details hereunder:

Account Code	Nomenclature	Provisions created in respect of liabilities for 2006-07
42.4	Outstanding Expenses	Rs. 8071540
42.5	Provisions	Rs. 11813132
42.6	Other Liabilities	Rs. 3538194
Total		Rs. 23422866

- b) 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 (12th Amendment) Order. This amount has been kept separately in Corporation Bank as an un-appropriated amount and has been shown as Current Liability. As suggested by Audit Party, the amount has been kept in Fixed Deposit with the Corporation Bank during the year 2006-07. This amount along with similar other unrefunded amount lying with other operators would be utilized for the Telecommunication Consumers' Education and Protection Fund by notification of suitable regulation for the purpose.



8. Grants

During the accounting year i.e. 2006-07 the grants sanctioned were Rs. 17.11 crore, However, grants received were 13.85 crores.

9. Pay, Allowances & Advances

A) Pay & Allowances

- i. Reimbursements of newspaper bills, tuition fees etc. have been accounted for under 'Other Benefits' (Code 13.2.3) for Authority Members and 'Welfare Expenses' for Officers (Code 14.3.4) and Staff (Code 15.3.4).
- ii. Reimbursement/Payment of employees' residential telephone bills have been accounted under the head 'Telephone Expenses' (Code 20.7).

B) Electricity and Water (20.2)

Electricity bills for the period 01.04.06 to 08.12.06 i.e. till the occupation of TRAI House at S.J. Enclave have been accounted for. As regards the liability for Electricity and Water charges, in r/o present premises i.e. Mahanagar Door Sanchar Bhavan, JLN Marg, New Delhi has not been provided due to non receipt of bills from MTNL.

C) Advances

TA advances (Code 33.1.2.3) and LTC Advances (33.1.2.4) & (33.1.3.4) shown under Schedule 'O' are reviewed and followed up for submission of bills and adjustments on a regular basis.



D) Schedule - O (Loans & Advances)

A sum of Rs. 4171044/- paid advances to Suppliers/ Contractors and a sum of Rs. 89574/- being receivable from the parent offices of the deputationists which was shown in Schedule-O have been transferred to Schedule -R under the head 46.1 (Claim receivable) as suggested by the Audit Party.

10. Fixed Assets

Fixed assets include:-

- a) 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 Rs. 2,48,211. The amount of WDV of such cars on the date of transfer Rs. 4,87,635/- has been debited to claims recoverable from TDSAT/DOT.
- b) Cost of fixtures amounting to Rs.1,22,22,170/- and WDV of Rs.86,35,632/- as on 31.3.2002 fitted at 16th and 20th floors of Jawahar Vyapar Bhawan (JVB), the previous office of TRAI was left there at the time of vacation. Since these fixtures specifically related to the specifications/requirements of that building and could not be dismantled and re-used in the new premises, they were left behind at JVB. The Authority was of the opinion that TRAI should get these assets valued independently by an approved Valuer, so that a claim may be made with STC accordingly. No depreciation was charged during the current year on these assets.

The Govt. approved valuer has assessed the "value in use" of these assets as Rs. 2,35,622/- for fittings and fixtures left by TRAI on 20th floor and a sum of Rs. 34,139/- as "scrap value" in respect of 16th floor, thus totaling a sum of Rs. 2,69,761/-. The matter is still pending with STC. However, the fixtures amounting to Rs. 1,22,22,170/- and WDV Rs.



86,35,632/- have been separated from the total gross block as suggested by Audit.

11. Claims Recoverable (Code 46.1)

1. Rs. 4,87,635 is the amount recoverable from TDSAT/ DOT on account of two vehicles transferred to DOT.

12. Other Current Assets (Code 46.5)

This include as under:-

- | | | |
|----------------|---|---------------------------------|
| Rs. 9,239/- | - | Recoverable from CBDT |
| Rs. 2,03,672/- | | Recoverable from other Deptts., |
| Rs. 2,12,911/- | | Total: |

13. Claims against Authority.

TRAI has shifted its office from Jawahar Vyapar Bhavan (owned by STC) in the month of June, 2001. During tenancy period, TRAI had some dispute with STC on the following grounds:-

- (i) 10% increase in Rent every year from period 01.06.1999 for 16th Floor and from 01.01.2000 for 20th Floor.
- (ii) 10% increase in Maintenance Charges beyond the period ending 31.05.1999 and 31.12.1999 for 16th and 20th floor respectively.
- (iii) Payment of Property Tax.

- a) The amount of 10% increase in Rent and 10% increase in Maintenance Charges for the period mentioned in (i) and (ii) above as per the demand of STC is Rs. 2,24,81,997/- (without interest). This includes increase in charges for furniture. Since furniture was returned to STC in July 1999, no charges for furniture is to be paid as per our stand communicated to STC vide letter dated 23.5.2001.



- b) Likewise STC has also demanded Property Tax of Rs.1,92,17,892/-for the period from 01.06.97 to 30.06.2001.

TRAI has not accepted the above claims and its legal aspects are being examined. For each matter (i), (ii) and (iii) above, TRAI has expressed its opinion to STC through its letter No. 6-1/1997-TRAI (GA) dated 23.05.01 to refer the dispute for Arbitration.

It may also be noted here that TRAI appointed a valuer namely M/s R.K. Consultant for the purpose of valuation of the left out furniture and fixture in STC Bldg. In his report he valued the scrap value of Rs. 34,139/- for fittings and fixtures left in the 16th floor and the "value in use" of Rs. 2,35,622/- for the items left in the 20th floor. TRAI has also insisted that STC first accept this valuation report and adjust the same with the payable amount vide D.O. No. 6-1/97-TRAI (GA) dated 11.04.2005.

The above-referred matter is a contingent liability.

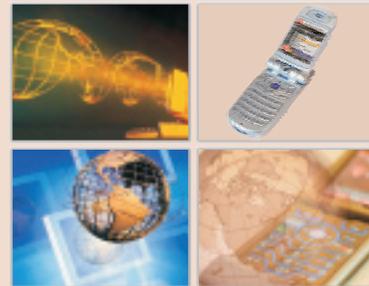
14. Schedule A to T form part of Balance Sheet.

Sd/-
PR. ADVISOR (FA&IFA)

Sd/-
SECRETARY

Sd/-
MEMBER

Sd/-
CHAIRPERSON



4.3 Audited Contributory Provident Fund Accounts of TRAI for the year 2006-07

AUDIT CERTIFICATE -

I have audited the attached Balance Sheet of Telecom Regulatory Authority of India -Contributory Provident Fund Account as at 31 March 2007 and the Revenue Account/ Receipts and Payments Account for the year ended on that date. Preparation of these financial statements is the responsibility of Telecom Regulatory Authority of India - Contributory Provident Fund Account's Management. My responsibility is to express an opinion on these financial statements based on my audit.

I have conducted my audit in accordance with applicable rules and the auditing standards generally accepted in India. These standards require that I 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, evidence supporting the amounts and disclosures in the financial statements. I believe that my audit provides a reasonable basis for my opinion.

Based on our audit, I report that:

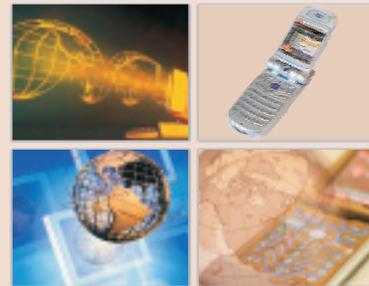
1. I have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purposes of our audit;
2. I report that the Balance Sheet, the Revenue Account/Receipts and Payments Account dealt with by this report are properly drawn up and are in agreement with the books of accounts;
3. In my opinion and to the best of my information and according to the explanations given to me:
 - (i) the accounts give the information required under the earlier prescribed format of accounts;



- (ii) the said Balance Sheet, Revenue Account/Receipts and Payments Account read together, and subject to the matters mentioned in the Audit Report annexed herewith, give a true and fair view:
- 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 2007; and
 - b. In so far as it relates to the Revenue Account of Deficit for the year ended on that date.

Place: Delhi
Date: 12 October 2007

Sd/-
(Vikram Chandra)
Director General of
Audit (P&T)



Audit Report on the Annual Accounts of Telecom Regulatory Authority of India - Contributory Provident Fund Account for the year 2006-07

1. INTRODUCTION

1.1 The Telecom Regulatory Authority of India - Contributory Provident Fund (TRAI-CPF) Account was established with effect from 5 May 2003 in pursuance of Rule 3 (1) 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. TRAI CPF constituted an irrevocable Trust for the benefit of the subscribers and mainly consisted of contributions/subscriptions made by TRAI and the subscribers, interests accrued thereon, securities purchased, etc. All sums paid to TRAI CPF under the above Rules were credited to an account, viz., "The Telecom Regulatory Authority of India Contributory Provident Fund Account" constituted in terms of Rule 3 (3) of the TRAI (CPF) Rules, 2003. The custody, control and management of TRAI CPF were vested in the Board duly constituted in terms of Rule 6 (1), *ibid*, and the maintenance of the accounts, convening meetings of the Board, keeping records of the meetings, etc, were being done by the Secretary of the Fund, as nominated by the Chairperson, TRAI.

1.2 In terms of Rule 5 (5), *ibid*, the TRAI CPF Account shall be audited by the authority auditing the accounts of the TRAI, i.e., the Comptroller and Auditor General of India. Accordingly, the audit of TRAI CPF Account for the year 2006-07 was conducted under Section 19 (2) the Comptroller and Auditor General's (Duties, Powers and Conditions of Service Act), 1971.

2. COMMENTS ON ACCOUNTS

.....NIL

Place: Delhi
Date: 12 October 2007

Sd/-
(Vikram Chandra)
Director General of
Audit (P&T)

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT
RECEIPTS AND PAYMENTS ACCOUNTS FOR THE PERIOD ENDED 31ST MARCH 2007**

Sl. No.	RECEIPTS	AMOUNT (CURRENT YEAR)	AMOUNT (PREVIOUS YEAR)	Sch.	Sl. No.	PAYMENTS	AMOUNT (CURRENT YEAR)	AMOUNT (PREVIOUS YEAR)	Sch.
1	To Balance brought forward				11	By Investments	11529644.00	5509119.69	I (a)
1.1	Cash at Bank	905160.94	222994.22						
1.2	FDS								
2	To Contribution from Members	3520760.00	2801962.00	A	12	By Final Payment	768357.00	440977	J
3	To Transfer of Balances	2254935.00	2133090.00	B	13	By Advances and Withdrawals	2407164.00	1578000.00	K
4	To Contribution from TRAI	1231959.00	1054446.00	C	14	By Misc. Payments	482.00	1607.50	L
5	To Encashment of Mutual Funds	400000.00	687494.14	D					
6	To Interest Income	406343.53	153174.77	E					
	To Accrued Interest (2005 - 06)	337269.00	56034.00						
7	To Repayment of Advances	69515.00	228290.00	F					
8	To Maturity of FDS	6299607.69	1055308.00	G					
10	To Miscellaneous (Recovered from TRAI Gen. Fund)	189010.00	42072.00	H	20	By Closing Balance at Bank	908913.16	905160.94	
		15614560.16	8434865.13				15614560.16	8434865.13	

Sd/-

Sh. Mathew Palamattam
Dy. Advisor (Accounts)
Ex-Officio Trustee

Sd/-

Sh. A. K. Tewari
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. Rajan Singla
Advisor (A &P)
Ex-Officio President



**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT
REVENUE ACCOUNT FOR THE PERIOD ENDED 31ST MARCH 2007**



FIGURES FOR THE PREVIOUS YEAR (Rs.)	EXPENDITURE	FIGURES FOR THE CURRENT YEAR (Rs.)	Schedule	FIGURES FOR THE PREVIOUS YEAR (Rs.)	INCOME	FIGURES FOR THE CURRENT YEAR (Rs.)	Schedule
707982	To Interest	1089594	M	391851	By Accrued Interest	350728.00	N
				143787.87	By Interest Income (Earned)	404888.53	E
				0.00	By TRAI Contribution of Ex - Employees (Not Payable)	74677.00	C
				172343.13	By Excess of Expenditure over Income (Recoverable from TRAI General Fund)	259300.47	
707982		1089594		707982		1089594	

Sd/-

Sh. Mathew Palamattam
Dy. Advisor (Accounts)
Ex-Officio Trustee

Sd/-

Sh. A. K. Tewari
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. Rajan Singla
Advisor (A & P)
Ex-Officio President

**THE TELECOM REGULATORY AUTHORITY OF INDIA - CONTRIBUTORY PROVIDENT FUND ACCOUNT
BALANCE SHEET AS AT MARCH 31, 2007**

FIGURES FOR PREVIOUS YEAR (Rs.)	LIABILITIES	FIGURES FOR THE CURRENT YEAR (Rs.)	FIGURES FOR PREVIOUS YEAR (Rs.)	ASSETS	FIGURES FOR THE CURRENT YEAR (Rs.)
12392559.00	TRAI - CPF Members Account	17309124.00	10770253.69	INVESTMENTS	15600290.00
			905160.94	CURRENT ASSETS, LOANS & ADV.	908913.16
			518755.00	Bank Balances	455759.00
			9378.96	Interest Accrued	9378.96
			189010.41	TDS	334782.88
				Recoverable from TRAI General Fund	
12392559.00		17309124.00	12392559.00		17309124.00

Sd/-

Sh. Mathew Palamattam
Dy. Advisor (Accounts)
Ex-Officio Trustee

Sd/-

Sh. A. K. Tewari
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. Rajan Singla
Advisor (A & P)
Ex-Officio President

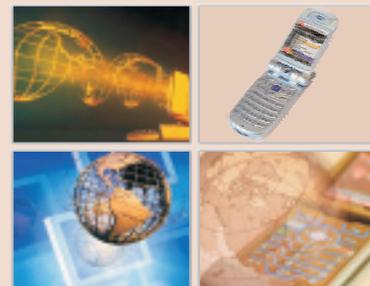


List of Abbreviations used in this compilation

3G	Third Generation
ADC	Access Deficit Charge
AGR	Adjusted Gross Revenue
ARPU	Average Revenue Per Unit
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
EDGE	Enhanced Data-Rates for GSM Evolution
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
PSTN	Public Switched Telecommunications Network
PSU	Public Sector Undertaking



QoS	Quality of Service
SACFA	Standing Advisory Committee on Frequency Allocation
SMS	Short Messaging Service
SP	Service Providers
SSA	Secondary Service Area
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





TELECOM REGULATORY AUTHORITY OF INDIA

Mahanagar Doorsanchar Bhawan, Jawahar Lal Nehru Marg,
(old Minto Road), New Delhi - 110 002