Chapter IV

Organization and Working of

Telecom Regulatory Authority of India
The aim of this Chapter is to understand the organization and working of Telecom Regulatory Authority of India.

The Chapter covers several areas including setting up of Telecom Regulatory Authority of India (TRAI); its mission; aims and objectives; organizational structure; powers and functions; divisions of TRAI and their work; human resource aspects of the Authority; accounting and auditing. The review of its working since inception has also been undertaken in this Chapter.

4.1 BACKGROUND

All through the century, the Government continued to have monopoly on Telecom Services until early 1990's. Major developments in Telecom Technology resulted in faster changes and expansion in Telecom Sector. Government of India was not far behind and planned imaginative developments in Telecom. These naturally required huge investments as also proper regulation. To bridge the huge resource gap the Government decided to invite private participation and originally opened up the sub-sector of value added services to private investment in July 1992. The National telecom Policy, 1994 also stated that suitable arrangements would have to be made to protect and promote the interest of consumers and to ensure fair competition.

Private entrepreneurs' entry into Telecom necessitated proper regulation of Telecom Sector as also an appropriate dispute resolution mechanism. Originally, the Government proposed to set up an independent Telecom regulatory Authority as a non-statutory Body. However, the Standing Committee on Communications in its 22nd Report (Tenth Lok Sabha) held a view that statutory status should be given to the Regulatory Authority to enable it to function independently and effectively. Even the Supreme Court in Delhi Science Forum Case of 1996 observed that:

"The existence of a Telecom Regulatory Authority with the appropriate powers is essential for introduction of plurality in the Telecom sector. The National Telecom Policy is a historic departure from the practice followed during the past century. Since the private sector will have to contribute more
to the development of the telecom network than DoT/MTNL in the next few years, the role of an independent Telecom Regulatory Authority with appropriate powers need not be impressed, which can harness the individual appetite for private gains, for social ends. The Central government and the Telecom Regulatory Authority have not to behave like sleeping trustees, but have to function as active trustees for the public good”.

4.2 ESTABLISHMENT OF THE TELECOM REGULATORY AUTHORITY OF INDIA

Notwithstanding identical technological and economic issues facing the telecommunication sector across Asia, countries have responded to the challenge of moving from a monopoly to a competitive structure in very different ways. Establishment of Regulatory Institutions has been country specific on account of different political, legal, and commercial situations obtaining. National Telecommunication Commission of the Philippines, set up in 1979, was the Asia’s first separate regulator. A decade later, after Jabatan Telekom Malaysia and Australian Telecommunication Authority (Austel, now ASA) became operative in 1987 and 1989, respectively, there were a total of three regulatory agencies. Three more separate regulators emerged in the early 1990s with the establishment of the Sri Lanka Telecom Regulatory Authority of India in 1990, Telecommunication Authority of Singapore (TAS) in 1992 and Office of the Telecommunication Authority (OFTA) in 1993 in Hong Kong. These were followed by the setting up of the Pakistan Telecommunication Authority (PTA) in 1996; and the Telecom Regulatory Authority of India, and the Nepal Telecommunication Authority (NTA) were set up in 1997. Sri Lanka Authority was also converted in to the Telecom Regulatory Commission (TRCSL) of Sri Lanka in 1997. Ministry-based form of regulation has continued in countries like Japan, Thailand, and Republic of Korea that have privatized or corporatized their State carriers in and licensed strong network competitors but do not yet have separate regulators. The growing trend towards separate regulatory agencies is expected to gather

further momentum over the next few years especially in respect of countries that have committed to the regulatory principles of the WTO Basic Telecommunication Services Agreement.  

Separation of regulatory function from policy and service provider functions of the Government has been an essential component of structural reforms in this sector. The relationship between the State, incumbent and the new entrant poses a new set of issues including those relating to the prevention of the incumbent from abusing its dominant position to prevent competition, ensuring universal service and adherence to quality of service as well as technical standards, monitoring license conditions, dealing with interconnection problem, regulating tariffs and other parameters for network development.

In the Indian context, the stage for the establishment of an independent regulator was set by the National Telecom Policy, 1994 (NTP), where the need for positioning a suitable arrangement for protecting and promoting the interests of consumers and ensuring fair competition were emphasized as a necessary prerequisite for implementation. Even different experts and Committees that provided important inputs leading to the finalization of the NTP had also highlighted the need for an independent regulator. For example, a high level Committee on Reorganization of Telecom Department headed by Dr. M. B. Athreya was set up to recommend the most appropriate organizational structure for the management of telecom sector in the country; the Committee’s recommendations made in March 1991, included the separation of “Policy and Regulation” tier from the “Operations” tier in any future structure.

In May 1993, the Ministry of Communications requested the changes required in the telecom sector and recommend modalities for constituting an independent Telecom Regulatory Authority. ICICI submitted its report in January 1994, making detailed recommendations for setting up of an independent Regulatory Authority. The report made comprehensive recommendations on composition, structure, responsibilities, functions, duties,
powers, mode of functioning, funding sources, enforcement and appeal mechanism of the Authority, including its role in research and Development and Universal Service.

Another Committee headed by Mr. D.K. Gupta was constituted in December 1994 to study and make recommendations on the restructuring of administrative, technical and financial set up at the headquarters of the DOT in the context of NTP. In its report submitted in March 1995, the Committee recommended splitting the DOT into three separate entities, including the creation of the Telecom Regulatory Authority of India.³

Initially, in the context of setting up the Telecom Regulatory Authority as an independent non-statutory body, the Indian Telegraph (Amendment) Bill 1995 was introduced and passed by the Lok Sabha on August 6, 1995. Further consideration of the matter in the Rajya Sabha, however, emphasized the need for setting up an independent statutory body. A comprehensive bill titled “Telecom Regulatory Authority of India Bill”, was proposed by the Government in 1995. While a notice for introduction of the bill in the Lok Sabha was given on November 23, 1995, the bill could not be introduced. Thereafter, since both the Houses of parliament were not in session, the Telecom Regulatory Authority of India Ordinance, 1996 (Ordinance No. 10 of 1996) was promulgated on January 27, 1996. A comprehensive bill to replace the aforesaid Ordinance was introduced in the Lok Sabha on February 27, 1996. Since the bill could not come up for consideration and passing in the 16th Session of 10th Lok Sabha, the Telecom Regulatory Authority of India (Second) Ordinance, 1996 (No. 20 of 1996) was promulgated on March 27, 1996.

TRAI Bill, 1996 was thereafter introduced in the Lok Sabha on July 23, 1996 which was referred to the Standing Committee on Communications on August 25, 1996 for consideration and report. The Committee, after due deliberations, suggested certain amendments which were taken into consideration by the Parliament while enacting the Telecom Regulatory Authority of India Act, 1997 (No. 24 of 1997) for setting up this statutory

³ Ibid., p. 19.
Authority. The Act received the assent of the President of India on March 28, 1997 and was deemed to have come into force on January 25, 1997.

4.3 SETTING UP

The Telecom Regulatory Authority of India (TRAI) was constituted in 1997 under “The Telecom Regulatory Authority of India Act, 1997”, dated 28th March, 1997. The Act was deemed to have come into force on 25th day of January, 1997. The Act was further amended in the year 2000 by the promulgation of “The Telecom Regulatory Authority of India (Amendment) Ordinance, 2000”, dated 24th January, 2000. The major aim of TRAI is to provide an effective regulatory framework, adequate safeguards to ensure fair competition and protection of consumer interests.

4.4 THE TELECOM REGULATORY AUTHORITY OF INDIA (TRAI): EARLY YEARS

The earliest steps taken by TRAI were to initiate tariff rebalancing for basic services and to issue a regulation on interconnection that specified certain important principles governing commercial aspects of interconnection. Groundwork was initiated also in a number of other areas such as evolving quality of service parameters, funding of universal service obligations, development of a number policy, maintenance of register on interconnection agreements and basic terms of license for different telecom services.4

TRAI emphasized a transparent, participatory, predictable, and equitable policy framework. These principles were important in the Indian environment for the following reasons:

a. In a nascent market where the incumbent has immense possibility to be anticompetitive, equity among service providers, transparency as to costs, and predictability as to process were needed to ensure new entry. To build up stakeholders’ support for the regulatory process, which after all, sought to replace the existing protective umbrella of the

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state with a market-driven process, it was important to maintain the principles of equity, transparency, and participation.

b. Given that telecommunications is a field where market economics as well as technologies are changing with breathtaking rapidity, the most important method of infusing an acceptable degree of certainty is to state clearly the underlying principles that will determine policy. This imparts predictability to the policy framework, so that even if the market situation is evolving rapidly, policy uncertainty is reduced. TRAI did this by specifying certain principles that emphasized the need for a level playing field with focus on preventing anticompetitive activities, basing interconnection charges and tariffs on costs, encouraging competition where possible, and emulating competitive conditions wherever competition is not yet fully established or cannot, for reasons such as incumbent monopoly, be immediately established.\textsuperscript{5}

What is important also is that these principles were established not by fiat but through a transparent and participatory process that involved widely distributed consultation papers followed by open house discussions with all stakeholders. In this regard, TRAI process established high standards of transparency in public policy, which will be emulated over time in other regulatory bodies as well.

4.5 CRITIQUE OF EARLY TRAI

In India, TRAI was established in 1997 by an Act of Parliament as a part of ongoing changes in telecommunications policy. By then, licenses for private provision of basic and cellular services had already been issued. A common view in 1997 was that TRAI should have been established earlier, that is, prior to opening up the sector. This was for several reasons. First, winners of the licenses already issued for cellular services through what had appeared to be a successful round of bids found that their winning bids were based on overestimated revenue assumptions. These same bidders realized that their bids would have been more realistic if a regulatory agency had

\textsuperscript{5} Ibid., pp. 36-37.
existed at that time, since the regulator would have been a source of scarce information on the potential of the Indian telecommunications market. Second, there is greater need in countries like India for a regulator to prepare the groundwork for liberalization through initiatives that address interconnection, a level playing field for various service providers, provision of universal service, tariff rebalancing, quality of service, and other conditions under which various services would be open to entry by the private sector. Third, a need had also been felt for a forum at which disputes among service providers could be settled. TRAI was seen as fulfilling all these needs.⁶

One issue that arose in TRAI’s early years was about the limits of its legal power. This included whether TRAI had the powers to settle disputes between the licensor and the licensees and whether TRAI could alter or specify interconnection conditions overriding those mentioned in the license. The former issue went to the heart of the matter as to which authority ultimately determined the choice and terms of a licensee. International experience varied greatly enough to not be an adequate guide.⁷

Not surprisingly for a democracy, the intervention of the judiciary was sought in order to determine the limits of TRAI’s powers. The courts ruled against TRAI on both counts on the grounds that the government needed to determine the powers of TRAI, and since the licensor (the Department of Telecommunication, DOT) was an arm of the government, it was the government’s (DOT’s) prerogative to set limits on its own powers. Since DOT had sought the court’s intervention, it followed that DOT should prevail in such a situation. However, the government remedied the situation substantially by passing an amendment to the TRAI Act in 2000, that clarified TRAI’s overriding powers in respect of interconnection and also provided for setting up a separate Telecom Disputes Settlement Appellate Tribunal with powers to settle disputes between the licensor and the licensees. The other significant change was a commitment by the government that it would be obliged to seek the recommendation of TRAI on the issues that TRAI had powers over and would act on these recommendations in a predictable way. The new TRAI

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⁶ ibid., p. 36.
⁷ ibid., p. 37.
became functional in March 2000 and has since addressed a number of issues, including opening up national long-distance service to private operators and issuing licenses to additional cellular mobile and fixed-service providers under the new Telecom Policy announced by the government in 1999.8

The regulator (TRAI) was born with reform-minded members but an infirm constitutional mandate. The telecom department as policy-maker-cum-service provider would systematically try to work policy to the advantage of its own service arm, to the detriment of private capital. The weak regulatory mandate given to the TRAI would make it impossible for the regulator to check the excesses of the telecom department.

Four salient factors prevented the regulator (TRAI) from curbing the DoT’s predatory behaviour. First, the TRAI did not have jurisdiction over the Monopolies and Restrictive Trade Practices Act (1969), which governed DoT’s anti-competitive behaviour. Second, while the TRAI could resolve disputes between service-providers, it could not intervene in licensor-service provider disputes. Disputes between the DoT as a policy-maker with licensing powers and service providers were beyond the scope of the TRAI. Third, the Indian Telegraph Act (ITA) of 1885 gave exclusive powers to the DoT for issuing and cancelling licenses and for allocating the radio spectrum. The ITA was appropriate for an era of national monopolies but inappropriate at a time when the government was only one of the service providers. The USA and the UK had given licensing responsibilities to the regulator, realizing the conflict of interest that arose when the licensor was also a service provider. Fourth, the TRAI could clarify technical aspects of a bid. But this was a power without much consequence after the bidding process had been concluded. This power would have helped if the TRAI had been born in 1992 when the first bidding was initiated.9

TRAI’s constitutional infirmity became evident by 1998. Unlike the British and American regulators, TRAI did not have licensing powers, but merely recommendatory powers to advise the DoT on licensing matters.

8 Ibid., pp. 37-38.
9 Mukherji, op. cit., p. 71.
Neither, could it settle licensee-licensor disputes. The DoT deployed its licensing powers to help MTNL, its service arm serving the metropolitan areas of Delhi and Mumbai, to get into the cellular services market.

The licensing regime had provided for two private cellphone operators in every service area. The DoT was not to compete in the cellular business. The entry of MTNL into the fray without consulting the TRAI affected the revenue expectations of the licensed service providers in a manner that they had not expected. Such unilateralism of the DoT was possible because it was policy maker and service provider at the same time. It increased the uncertainty and transactions costs of the private operators in the cellular business. Had the regulator been empowered with licensing powers, it could have determined the conditions of MTNL’s entry into the cellular area without jeopardizing the interest of the cellular companies.

Cellular operators urged that the service provider function of MTNL should require its treatment at par with other private service providers. MTNL should therefore have paid a license fee to even the conditions for private operators. Bharti Cellular and Sterling Cellular challenged the DoT’s decision to enter the cellphone market without seeking the recommendation of the TRAI. The two-member TRAI bench upheld the contention that it was necessary for the telecom department to seek TRAI’s recommendation. The TRAI was concerned that the auction-based bidding process had made demands on cellphone companies that were making them financially unsustainable. The MTNL’s entry under such conditions would kill the private operator.

At this point the PMO had two choices. Either it could support the regulator and cut DoT down to size by suggesting that DoT needed to consult TRAI. Or, it could keep tolerating DoT predation, which was inimical for private investment. When the PMO could not take decisive action, the Delhi High Court finally resolved the matter in 1998. The decision confirmed the regulator’s infirm mandate.

Following the letter of the law, the Usha Mehra judgment upheld the claim that, if one were to interpret the Indian Telegraph Act (ITA) of 1885 alongside the TRAI Act of 1997, there was no need for the DoT to seek the
advice of TRAI. The Indian Telegraph Amendment Bill (1995), which was introduced in 1995 with the possibility of reducing DoT’s licensing powers, could not been legislated into law. Therefore the ITA of 1885 had rested the licensing powers with the government rather than the regulator.

The judgment showed that DoT as policy-maker had the constitutional right to favour its service provider arm, the MTNL. There was a legal bias in favour of the status quo, which the 1997 TRAI legislation had not been able to correct.

In the Union of India vs. TRAI case, the TRAI counsel had stressed the fact that government needed to take the recommendation of TRAI before coming to any conclusion. Second, it had argued that the TRAI Act of 1997 should have been read in consonance with the ITA of 1885. Taken together they should be taken to mean that TRAI had recommending powers, which it was not allowed to exercise. Last but not least, India’s commitments within the WTO necessitated such an interpretation.

Justice Usha Mehra refuted all these claims and went with the Union of India’s position.

This was a major regulatory crisis due to the ambivalent legal nature of the TRAI Act of 1997. The regulator was supposed to even the playing field for service providers. One of the ways that the regulator could achieve this was by ensuring that the licensing powers of the DoT were not used to kill competition by favouring the government’s service provision arm. This was precisely the kind of anti-competitive behaviour that had marred the licensing process before the birth of TRAI, but even after its inception, and despite its best efforts, the TRAI, was powerless to intervene in the DoT’s anti-competitive behaviour.10

4.6 TRAI ORDINANCE 2000

In early 2000 the government issued an ordinance to amend the TRAI Act 1997. TRAI’s powers relating to tariffs and interconnection, deemed by courts to be limited, were restored in full. Even the government would have no

10 Mukherji, op. cit., pp. 72-73.
right to overrule. TRAI was reconstituted with new members. The mandate to adjudicate disputes between the service providers as well as service providers and the government was taken away from TRAI and handed over to the proposed new body, the Telecom Dispute and Settlement and Appellate Tribunal (TDSAT). It would no longer be necessary for government to refer to the Chief Justice of the Supreme Court of India, if the former wished to remove any TRAI member as long as the member concerned was given an opportunity to be heard. The last provision was a clear sign that the government was not comfortable with what it felt was an overly independent regulator.¹¹

The chairperson of the new TRAI was no longer required to be serving or retired judge but could be a civil servant or one with experience in relevant fields. The term of the TRAI team was reduced to 3 years. The old TRAI was dissolved. A fresh set of persons became the members of the new TRAI. TRAI was given some recommendatory functions and had full authority over some other. TRAI’s recommendatory functions were not binding on the government. However, regarding licensing, government had to seek TRAI’s opinion, and TRAI had to give its recommendations within 60 days of reference by the government. If the government did not find it possible to accept TRAI’s recommendations, it had to return the same to TRAI for reconsideration. TRAI would reconsider within 15 days and give its new recommendations. The government could make a final decision on its own, which might be different from TRAI’s recommendations, old or revised. TRAI could seek such documents from SPs, including DoT, as were needed to enable them to give their recommendations, and the SPs had to give these documents within 7 days. Thus, the new act went a long way in overcoming some of the earlier weaknesses of the TRAI, especially when dealing with the DoT.

From an institutional perspective, the post-1999 moves by the government have led to stronger institutions. The functions of adjudication have been separated from the functions of recommending various technical and non-technical measures, laying down and monitoring standards, and suggesting improvements. The quasi-legal functions have been entrusted to a more specialized body. The powers of TRAI have been considerably

¹¹ Uppal, Nair and Rao, op. cit., p. 6.
enhanced, and so have the government’s obligations. The government could do more to strengthen TRAI, such as by consulting outgoing members and the courts when it appoints new members and by giving TRAI greater resources to undertake research on markets and technology, but a good beginning has been made.\textsuperscript{12}

4.7 MISSION

The mission of Telecom Regulatory Authority of India (TRAI) is to ensure that the interests of consumers are protected and at the same time to create and nurture conditions for growth of telecommunications, broadcasting and cable services in a manner and at a pace which will enable India to play a leading role in the emerging global information society.

4.8 AIMS AND OBJECTIVES OF TRAI

One of the main objectives of TRAI is to provide a fair and transparent policy environment which promotes a level playing field and facilitates fair competition. The goals and objectives of TRAI are focused towards providing a regulatory regime that facilitates achievement of the objectives of New Telecom Policy (NTP) 1999.

The objectives of TRAI are as follows:

a. Increasing tele-density and access to telecommunications in the country at affordable prices;

b. Making available telecommunication services which in terms of range, price and quality are comparable to the best in the world;

c. Providing a fair and transparent policy environment which promotes a level playing field and facilitates fair competition;

d. Establishing an interconnection regime that allows fair, transparent, prompt and equitable interconnection;

e. Re-balancing tariffs so that the objectives of affordability and operator viability are met in a consistent manner;

\textsuperscript{12} Dossani and Manikutty, \textit{op. cit.}, pp. 56-58.
f. Protecting the interest of the consumers and addressing general consumer concerns relating to availability, pricing and quality of service and other matters;
g. Monitoring the quality of service provided by the various operators;
h. 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;
i. Preparing the grounds for smooth transition to an era of convergence of services and technologies;
j. Promoting the growth of coverage of radio in India through commercial and non-commercial channels; and
k. Increasing consumer choice in reception of TV channels and choosing the operator who would provide television and other related services.  

In pursuance of above objective TRAI has issued from time to time a large number of regulations, orders and directives to deal with issues coming before it and provided the required direction to the evolution of Indian telecom market from a Government owned monopoly to a multi operator multi service open competitive market. The directions, orders and regulations issued cover a wide range of subjects including tariff, interconnection and quality of service as well as governance of the Authority. 

4.9 MEMBERS

The TRAI comprises a full time Chairperson, not more than two whole time members and not more than two part-time members (See Figure 4.1), to be appointed by the Central Government. Special knowledge of, and professional experience in telecommunication, industry, finance, accountancy, law, management or consumer affairs constitutes the qualifications for appointment as Chairperson or members of the Authority. The Chairperson is a person who is or has been either a judge of the Supreme Court or Chief Justice of a High Court. The Chairperson has powers of general superintendence and directions in the conduct of the affairs of the Authority.

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13 Telecom Regulatory Authority of India (2008 a.), ibid., p. 9
14 www.trai.gov.in, the website of Telecom Regulatory Authority of India.
and he, in addition to presiding over the meetings of the Authority, exercises and discharges such powers and functions of the Authority and discharges such other powers and functions as may be prescribed.

**Figure 4.1**

Members of TRAI

- **Chairperson**
  - Dr. J. S. Sarma

- **Member**
  - Sh. A. K. Sawhney

- **Member**
  - Sh. R.N. Prabhakar

- **Part-time Member**
  - Prof. N. Balakrishnan

- **Part-time Member**
  - Dr. Rajiv Kumar

Source: TRAI Website\(^{15}\) as on 10\(^{th}\) September 2009.

The Central Government may appoint one of the members to be a Vice-Chairperson of the Authority who shall exercise and discharge such powers and functions of the Chairperson as may be prescribed or as may be delegated to him by the Authority.

### 4.10 TENURE

The term of the Chairperson and other members is for three years, as the Central Government may notify, from the date on which they enter upon their offices or till they attain the age of 65, which ever is earlier. The Central Government may remove from office any member, who (a) has been adjudged an insolvent; or (b) has been convicted of an offence which, in the opinion of the Central Government, involves moral turpitude; or (c) has become physically incapable of acting as a member; or (d) has acquired such financial or other interest as is likely to affect prejudicially his functions as a member; or (e) has so abused his position as to render his continuance in office prejudicial to the public interest. For day-to-day work, the TRAI has full time employees also.\(^{16,17}\)

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\(^{15}\) www.trai.gov.in, the website of Telecom Regulatory Authority of India.

\(^{16}\) The Gazette of India (1997), Extraordinary, Part II, Section 1, Chapter III, “Powers and Functions of the Authority”, No. 38, New Delhi, Saturday, March 29.

\(^{17}\) The Gazette of India (2000), The Telecom Regulatory Authority Of India (Amendment) Ordinance, 2000, Ministry of Law and Justice, New Delhi, the 24th January, 2000, India.
4.11 MEETINGS

The Authority shall meet at such times and places, and shall observe such rules and procedure in regard to the transaction of business at meetings (including quorum at such meetings) as may be provided by regulations. The Chairperson shall preside the meeting and in his/her absence Vice-Chairperson or any other member chosen by the members present shall preside. The decisions are taken by a majority vote of the members present and voting. In case of a tie, the Chairperson or the person presiding shall have the casting vote.

The functions and powers of this benchmark organization have been mentioned as under:

4.12 FUNCTIONS OF TELECOM REGULATORY AUTHORITY OF INDIA

TRAI has been assigned a large number of functions, out of these the most important functions include, to:

(i) make recommendations on measures to facilitate competition and promote efficiency in the operation of telecommunication services so as to facilitate growth in such services;

(ii) protect the interest of the consumers of telecommunication service;

(iii) lay-down the standards of quality of service to be provided by the service providers;

(iv) ensure the quality of service;

(v) monitor the quality of service and conduct the periodical survey of such provided by the service providers;

(vi) ensure effective compliance of universal service obligations;

(vii) recommend the need and timing for introduction of new service provider;

(viii) recommend the terms and conditions of license to a service provider;

(ix) ensure compliance of terms and conditions of license;
(x) ensure technical compatibility and effective interconnection between different service providers;

(xi) regulate arrangement amongst service providers of sharing their revenue derived from providing telecommunication services;

(xii) recommend revocation of license for non-compliance of terms and conditions of license;

(xiii) make recommendations on the type of equipment to be used by the service providers after inspection of equipment used in the network; and

(xiv) notify in the Official Gazette, from time to time, by order, the rates at which the telecommunication services within India and outside India shall be provided.  

Some of the major functions of the Telecom Regulatory Authority of India have been discussed below (Also see Figure 4.2):

1. **Facilitating Competition:** The Telecom Regulatory Authority of India has been vested with the all essential task of facilitating competition in the telecom sector. It achieves this task by creating a favourable environment for the entry of new players and regulating the conduct of existing ones in the telecom sector.

2. **Protecting Consumer Interests:** The interests of the consumers are the most important in any sector and in telecom sector this role is performed by the Telecom Regulatory Authority of India. It takes care of the consumer interest through various regulations, orders and advertisements issued from time to time. In addition it conducts open house discussions and workshops for the consumer awareness.

3. **Laying Down the Quality of Standards:** The Telecom Regulatory Authority of India lays down the Quality of Standards for the telecom service providers. The standards are introduced through regulations and they act as benchmarks helping the consumers to get better services.

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18 The Gazette of India (1997), op.cit.
19 The Gazette of India (2000), op.cit.
4. Monitoring the Quality of Standards: Laying down the quality of standards is not enough. Its alert and regular monitoring is equally important. The Telecom Regulatory Authority of India monitors the quality of standards of service delivery by telecom service providers. The surveys are published/posted on its website. The gross violators are informed by the authority and asked for an explanation.

5. Need and Timing for Introduction of Service Providers: The Telecom Regulatory Authority of India recommends the need and timing for introduction of service providers in the telecom sector. The regulator performs this function after ascertaining the requirement of the sector and need for ushering in more competition.
6. **Compliance of Terms and Conditions of License**: The terms and conditions of license in telecom sector in India are laid down by the government. However, the function of ensuring their compliance vests with The Telecom Regulatory Authority of India.

7. **Efficient Management of Available Spectrum**: The management of scarce Spectrum and its rational distribution is a vital task undertaken by the Telecom Regulatory Authority of India. In view of the 3G services being introduced by telecom operators – its allocation has assumed added significance. The regulator allots additional spectrum to the service providers after they reach a specified subscriber number.

8. **Compliance of Universal Service Obligations**: The endeavour of the State is not merely to develop and facilitate growth of an industry, but also to ensure that the services are distributed amongst all. In the telecom sector it becomes all the more important to ensure that provision of services do not merely remain limited to the urban and affluent sectors, but the residents of rural and remote areas are also able to access these services. The essential task of ensuring compliance of the service providers with the universal service obligations is undertaken by the Telecom Regulatory Authority of India.

**4.13 POWERS OF THE TELECOM REGULATORY AUTHORITY OF INDIA**

In order to carry out its task of regulation in an effective manner, The Telecom Authority of India has been vested with a number of powers. The Authority may by order in writing:

(i) call upon any service provider to furnish information or explanation relating to its affairs;

(ii) appoint one or more persons to make an inquiry in relation to the affairs of any service provider;

(iii) direct any of its officers or employees to inspect the books of account or other documents of any service provider.

In addition, the Authority has been vested with the power to issue such directions to service providers as it may consider necessary.
4.14 POWER TO MAKE REGULATIONS

The Authority has been vested with the power to make regulations consistent with the Act. This is done by issuing a notification. The matters covered by regulations include levy of fee and laying down such other requirements on fulfillment of which a copy of register may be obtained. Every rule and every regulation made under the Act shall be laid before each House of Parliament. The Parliament may modify the rule or regulation. It may even call for the annulment of the rule or regulation.\textsuperscript{20}

4.15 STAFFING

The Secretariat of TRAI is headed by the Secretary and works through ten functional divisions (See Figure 4.3) mentioned latter in the chapter. A staff of 178 (as on 31\textsuperscript{st} March 2008) is handling the work in the Secretariat, which performs the tasks assigned to it by the Authority in the discharge of its functions (See Table 4.1).

Table 4.1

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<tr>
<td>11.</td>
<td>Stenographer Grade ‘D’</td>
<td>02</td>
<td>00</td>
</tr>
<tr>
<td>12.</td>
<td>LDC</td>
<td>05</td>
<td>04</td>
</tr>
<tr>
<td>13.</td>
<td>Drivers</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>14.</td>
<td>PCM Operator</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>15.</td>
<td>Despatch Rider</td>
<td>01</td>
<td>01</td>
</tr>
<tr>
<td>16.</td>
<td>Group-D</td>
<td>25</td>
<td>08</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>208</strong></td>
<td><strong>166</strong></td>
</tr>
</tbody>
</table>

Source: Annual Report of TRAI\textsuperscript{21}

These 166 personnel are lead by one Secretary, five Principal Advisors and six Advisors.

\textsuperscript{20} The Gazette of India (2000), op.cit.
\textsuperscript{21} Telecom Regulatory Authority of India (2008 a.), op. cit., p.156
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.22

In addition, wherever necessary, Consultants are engaged. These include individual Consultants on retainership basis; Consultants for specific projects; Consulting Firms on retainership basis; and Consulting Firms for specific projects. This engagement is either on secondment or assignment basis.

4.16 DIVISIONS

The Telecom Regulatory Authority of India has a number of divisions to look after its functions.

The ten divisions of TRAI are as under:

a. Administration & Personnel (A&P) Division
b. Broadcasting & Cable Services (B&CS) Division
c. Converged Network & IT (CN & IT) Division
d. Economic Regulation Division (ER)
e. Financial Analysis (FA) & Internal Finance & Accounts (IFA) Division
f. Interconnection and Fixed Network (FN) Division
g. Legal Division
h. Mobile Network (MN) Division
i. Quality of Service (QoS) Division
j. Regulatory Enforcement and International Relation (RE & IR) Division

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22 Telecom Regulatory Authority of India (2007 a.), Annual Report 2006-07, October, Delhi, pp.155-158
Each division has been introduced briefly below:

a. Administration & Personnel (A&P) Division

A&P Division is headed by an Advisor who is responsible for all administrative and personnel functions which include planning and control of human resource development in TRAI. A&P Division has the responsibility of management and control of activities of GA section, PR section, LAN section, OL section, MR section and RTI section. Advisor (A&P) in his capacity as Management Representative is also responsible for conducting and coordinating management review of Quality Management System in TRAI. The Advisor (A&P) is assisted by 37 officers and staff, which include Joint Advisor & CPIO, Sr. Research Officer (GA), Sr. Research Officer (PR), Sr. Research Officer (Finance), 2 Sr. Research Officer (IT), Technical Officer (A&P), Technical Officer (Finance), Technical Officer (OL), Section Officer (GA), Section Officer (A&P), Section Officer (IT), Section Officer (MR) & RTI, a Librarian, Section Officer (R&I), 2 P.S., 4 Assistant (A&P), 2 Assistant (GA), Assistant (RTI), 2 Assistant (IT), 2 Assistant (PR), 1 Cashier, Assistant (Finance), Assistant (MR), 2 P.A., LDC (Caretaker), 2 LDC and LDC/Hindi Typist.\(^\text{23}\)

b. Broadcasting & Cable Services (B&CS) Division

Broadcasting and Cable Services (B&CS) Division is headed by a Principal Advisor, who is responsible for its overall supervision. The B&CS Division is responsible for monitoring the interconnection, tariff, quality of service, licensing issues relating to broadcasting and cable services; examination of issues relating to modernization / digitalization of broadcasting services and introduction of new broadcasting services; monitoring and follow up of complaints. The Principal Advisor (B&CS) is assisted by 10 officers and staff including a Joint Advisor, Dy. Advisor, 2 Sr. Research Officer, Section Officer, 3 Assistant, P.S., and P.A.\(^\text{24}\)

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\(^{23}\) Information about Administration and Personnel Division of TRAI has been taken from the website: http://www.trai.gov.in/right%20to%20information/apdivision.pdf

\(^{24}\) Information about Broadcasting and Cable Services Division of TRAI has been taken from the website: http://www.trai.gov.in/right%20to%20information/bcs.pdf
c. Converged Network & IT (CN& IT) Division

CN & IT Division is headed by an Advisor who is responsible for its overall supervision. The CN & IT Division is responsible for dealing with technical issues relating to convergence in telecommunication and IT Sector. The CN & IT Division also handles issues relating to Internet, Internet Telephony & VoIP, Broadband, IPv6, NGN, CUG, Competition in IPLC and IP-II segment and monitoring the performance of Internet Services Providers (ISP) including growth of Internet and Broadband Services on periodical basis. This Division also compiles “The Indian Telecom Services Performance Indicators Report” and publishes it on quarterly basis. The Advisor (CN & IT) is assisted by the Dy. Advisor, Sr. Research Officer, a Section Officer, P.S., P.A., and an Assistant.25

d. Economic Regulation Division (ER)

Economic Regulation Division is headed by an Advisor who is responsible for its overall. The Economic Regulation Division advises the Authority in the matter of framing appropriate tariff policy for telecom services from time to time; fixation of tariffs for various telecom services in India that are under tariff regulation which include tariff for Domestic Leased Circuits, International Private Leased Circuits and National Roaming in cellular mobile services. The Economic Regulation Division also advises the Authority on matters relating to fixation of cost based interconnection charges and on measures to promote competition in various segments of telecommunication services market in India. The Advisor (ER) is assisted by 13 officers and staff including Joint Advisor, Deputy Advisor, 3 Sr. Research Officer, P.P.S., 2 Section Officer, 3 Assistant, and 2 P.A.26

e. Financial Analysis (FA) & Internal Finance & Accounts (IFA) Division

FA&IFA Division is headed by the Principal Advisor who is responsible for its overall supervision. The FA&IFA Division is responsible for providing advice on all aspects relating to cost methodologies and costing of telecom services, accounting separation, and analysis of financial statements of

25 Information about Converged Network and IT Division of TRAI has been taken from the website: http://www.trai.gov.in/right%20to%20information/CN%20Division.pdf
26 Information about Economic Regulation Division of TRAI has been taken from the website: http://www.trai.gov.in/right%20to%20information/Eco%20Division.pdf
service providers etc. Principal Advisor (FA) is internal Financial Advisor of TRAI and renders advice to the Authority on all financial matters, income & expenditure accounts, financial auditing and scrutiny of financial transactions. The Principal Advisor (FA&IFA) is assisted by 12 officers and staff, including Dy. Advisor (A&B), 2 Sr. Research Officer (FA), Sr. Research Officer (A/cs), Technical Officer (Internal Auditor), Technical Officer, Section Officer (A/cs), P.S., 3 Assistant, and a PA.  

Figure 4.4

Divisions of Telecom Regulatory Authority of India

Source: Compiled from the TRAI Website

27 Information about Financial Analysis and Internal Finance and Accounts Division of TRAI has been taken from the website: http://www.trai.gov.in/right%20to%20information/fadivision.pdf
28 www.trai.gov.in, the website of Telecom Regulatory Authority of India.
f. Interconnection & Fixed Network (I & FN) Division

Interconnection & Fixed Network (I & FN) Division is headed by a Principal Advisor who is responsible for its overall supervision. The I & FN Division is responsible for determination of Interconnection Usage Charge, Access Deficit Charge and regular review thereof; monitoring of compliance of license conditions of Basic, NLD and ILD services and handling of all interconnection issues; quarterly PMR pertaining to fixed line services; fixing terms/conditions of Interconnection and ensuring effective interconnection between various service providers. The I & FN Division also provides support to ITU and APT and SATRC Study Group Activities and GREX hotline and is also responsible for monitoring of issues relating to interconnection in NGN and 3G. The Principal Advisor (I & FN) is assisted by the Joint Advisor, Deputy Advisor, Sr. Research Officer, Technical Officer, Section Officer, 2 Assistant, and 2 P.A.29

g. Legal Division

The Legal Division manages all litigation matters in which TRAI is a party. The Principal Advisor and an Advisor are responsible for overall supervision work of Legal Division. They are also responsible for rendering legal advice to the Authority on all regulatory issues. The Principal Advisor/Advisor (Legal) is assisted by the 2 Dy. Advisor, Senior Research Officer, Section Officer, 2 P. S., 3 Assistant, and a P.A.30

h. Mobile Network (MN) Division

MN Division is headed by an Advisor who is responsible for its overall supervision. The MN Division handles issues relating to compliance of terms and conditions of various licences issued to mobile operators; fixing terms/conditions of Interconnection and ensuring effective interconnection between various service providers; recommendations related to various issues/aspects of mobile services; ensuring compliance of matters relating to Universal Service Obligations and efficient management of available spectrum for telecom services; preparation of Quarterly PMR pertaining to mobile

29 Information about Interconnection and Fixed Network Division of TRAI has been taken from the website: http://www.trai.gov.in/right%20to%20information/FN%20Division.pdf
30 Information about Legal Division of TRAI has been taken from the website: http://www.trai.gov.in/right%20to%20information/Legal%20Division.pdf
services and support to ITU/APT Study Group activities. The Advisor (MN) is assisted by 2 Jt. Advisor, 2 Sr. Research Officer, a Technical Officer, Section Officer, PS, PA, and two Assistant.\footnote{Information about Mobile Network Division of TRAI has been taken from the website: http://www.trai.gov.in/right%20to%20information/MN%20Division.pdf}

i. Quality of Service (QoS) Division

QoS Division is headed by an Advisor who is responsible for its overall supervision. The QoS Division is responsible for laying down the standards of quality of service to be provided by the service providers; 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. QoS Division is also responsible for maintaining register of inter-connect agreements and of all such other matters as may be provided in the regulations. QoS Division also handles matters relating to Radio Paging, PMRTS and VSAT service. Generic consumer complaints are also attended to by the QoS Division. The Advisor (QoS) is assisted by 16 officers and staff, which include Deputy Advisor (l/c), Dy. Advisor (CA), 2 Sr. Research Officer (QoS), Sr. Research Officer (CA), 2 Section Officer (QoS), Section Officer (CA), 5 Assistant and 3 P.A.\footnote{Information about Quality of Service Division of TRAI has been taken from the website: http://www.trai.gov.in/right%20to%20information/QoS%20Division.pdf}

j. Regulatory Enforcement & International Relation (RE & IR) Division

Regulatory Enforcement & International Relation (RE & IR) Division is responsible for enforcement of all the Regulations / Directions / Orders issued by TRAI. RE & IR Division also handles the International Relations which includes coordination with all International Organisations / bodies viz ITU, APT, World Bank, WTO, ADB, SATRC, OECD and other International Regulatory Bodies. The RE Division comprises of the Principal Advisor who is the Head of Division assisted by a Joint Advisor, 2 Senior Research Officer, Section officer, P.S., Assistant and P.A.\footnote{Information about Regulatory Enforcement and International Relation Division of TRAI has been taken from the website: http://www.trai.gov.in/right%20to%20information/RE%20Division.pdf}
4.17 RECRUITMENT

The Telecom Regulatory Authority has constituted its own cadre of officers and staff by way of absorbing the officials who were on deputation of TRAI from various Ministries and Departments. However, most deputationists, particularly in the senior and middle levels did not exercise option for permanent absorption. Therefore, the recruitment of for its Secretariat by way of deputation from other Ministries/Departments/PSUs still continues. This is mainly due to the reasons that the prevailing remuneration package does neither attract talent from the open market with expertise and experience in the areas covered by the Authority nor does it attract talent present amongst the Ministries and Government owned telecom operators. Hence, the Authority is facing major difficulties in getting appropriate personnel for its Secretariat.34

4.18 TRAINING

TRAI has given utmost importance to the Human Resource Development 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 service standards, conduct and co-ordinate surveys on quality of service issues and other consumer related matters. This initiative has proved to be useful in organizing and participating effectively in the consultative process for the Authority, both through the preparation of consultation papers and analyzing 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. In order to meet the specific needs of TRAI, the Authority is working closely with a number of institutes and organizations such as Indian Institute of Management (IIM),

34 Telecom Regulatory Authority of India (2008 a.), op. cit., p.157
National Productivity Council (NPC), Institute of Secretariat and Training Management (ISTM) etc. In addition, TRAI has also sponsored its officers for international training under the ‘Institutional Capacity Building Project’ for further developing their expertise within the organization. During the year 2007-08, a total of 51 officers were deputed to attend training programmes conducted by various international organizations. These included, InterConnect Communications Ltd., Public Utility Research Centre, Telecommunication Executive Management Instt. Of Canada, The Institute of Public-Private Partnership, International Telecommunication Union, Royal Institute of Public Administration International, Goulet Telecom International and University of Florida. In addition 32 officers/officials of TRAI were also deputed for training programmes conducted by various training institutions within the country. In the year 2006-07 four TRAI officials were deputed for international training to organizations including Australian Communication and Media Authority and University of Florida and 46 officials were deputed for domestic training programmes to organizations such as IIM Lucknow, Indore and Kolkatta; and National Productivity Council at Goa, Leh, Udaipur, Munar and Ooty. The various areas of training included IT tools for executive secretary; managing performance; effective office administration; team building; knowledge management; strategic financial management; noting and drafting; record management. TRAI also has a system of in-house training and workshops, where distinguished national and international experts interact about latest developments in the telecom sector.

4.19 SEMINARS/WORKSHOPS

The telecom sector is changing rapidly world over and in order to keep pace with the developments taking place globally, the Authority has been deputing its officials to various seminars/conferences and meetings. In the year 2007-08, 23 officers were deputed for this task. This has ensured enhancement of knowledge about developments in the telecom sector and

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35 Telecom Regulatory Authority of India (2008 a.), op. cit., p.158
regulation amongst TRAI officials and provided valuable inputs for its own policy formulation.

4.20 WELFARE ACTIVITIES

Telecom Regulatory Authority of India undertakes a number of welfare activities for its employees. These include making transportation arrangements for picking-up and dropping off its employees; regular medical check-up; interaction with officers and staff to understand their grievances; capacity building exercises, etc.

4.21 FUNDING

TRAI is an autonomous body and it is wholly funded by grant received from the Consolidated Fund of India. The total expenditure on the functioning of TRAI in the year 2007-08 was Rs. 25.00 crores. This comprised of Rs. 21.75 crores under the Non-Plan and Rs. 3.25 crores under the Plan Budget – ‘Institutional Capacity Building Project’; covering consultancies and training programmes. The total expenditure for the preceding year 2006-07 was Rs. 15.12 crores out of which Rs. 1.49 crores was incurred on institutional capacity building.

The TRAI Act also states that there shall be constituted a fund to be called the Telecom Regulatory Authority of India General Fund and all grants, fees and charges received by the Authority shall be credited to it. In addition, the Fund includes all sums received by the Authority from other sources decided by the Central Government.

4.22 ACCOUNTS AND AUDIT

Under the Act, the Authority has to maintain proper accounts and other relevant records and prepare and annual statement of accounts in the form as prescribed by the Central Government in consultation with the Comptroller and Auditor General of India.

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37 Telecom Regulatory Authority of India (2008 a.), op. cit., p.157
38 Telecom Regulatory Authority of India (2007 a.), op. cit., p.158
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. The certified accounts of the Authority along with the audit report are forwarded annually to the Central Government and the Government causes the same to be laid before each House of Parliament.

4.23 INTERNAL AUDIT AND CONTROL SYSTEM

The Telecom Regulatory Authority of India has a full-time Technical Officer (Internal Audit) with independent charge. The Internal Auditor audits the accounts and paid vouchers of the Authority. TRAI has framed the policies and procedures for creation of posts, appointment of staff/officers, fixation of pay, settlement of claims, TA claims, training and study tours of its staff and regulations on various matters in accordance with the provisions of TRAI Act and the same are followed in day to day functioning. Receipt and disbursement of cash and maintenance of cash book is done in compliance with relevant rules and regulations. Two types of funds – one Plan Fund and the other Non-Plan Fund are maintained by TRAI and the expenditure pertaining to each fund is met from the respective funds and separate books of accounts are maintained for each fund. TRAI General Fund is maintained by the Department of Telecommunications (DoT). Grants from the Government of India to TRAI under Plan and Non-Plan heads are credited to this fund. The expenditure of TRAI is met out of the release of grants by DoT under plan and non-plan heads and utilization certificate in respect of grants is furnished by TRAI to DoT.39

4.24 RIGHT TO INFORMATION ACT

One of the most progressive legislations in modern India is The Right to Information Act, 2005, which came to force from 12th October 2005. In consonance with the Act, TRAI has designated a Central Public Information Officer assisted by a Central Assistant Public Information Officer. The

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39 Telecom Regulatory Authority of India (2008 a.), op. cit., p.165
Appellate Authority under the Act is a Principal Advisor. The name, designation of the officers and other details required to be published under Section 4 (1) of the Right to Information Act is posted on the website of the regulatory authority. During the year 2007-08, 159 applications were received under the RTI Act. It goes to the credit of the regulatory authority that all these applications were sent replies within the stipulated period of 30 days\(^40\). The number of applications received under the RTI Act and duly replied within the stipulated period were 91 in the year 2006-07\(^41\).

4.25 QUALITY MANAGEMENT

Based upon its continual efforts for quality management and enhancement, TRAI was awarded ISO 9001:2000 certificate, under License No. CRO/QSC/L – 8002321, in December 2004 by Bureau of Indian Standards (BIS) for a period of three years i.e. till 30\(^{th}\) November 2007\(^42\). Bureau of Indian Standards had conducted 4 surveillance audits and a renewal audit since December 2004 in order to evaluate the implementation and effectiveness of Quality Management System in TRAI. It was only on the basis of the recommendations by quality-auditors that TRAI has been awarded a 2\(^{nd}\) term of ISO 9001:2000 certification by the Bureau of Indian Standards for a period of three years till 30\(^{th}\) November 2010\(^43\). In TRAI, internal quality audit is conducted on a quarterly basis. For this task, TRAI has 43 internal quality auditors and 2 lead quality auditors. The Secretary reviews the Quality Management System on monthly basis. During the visit to Telecom Regulatory Authority of India’s Office, the most ubiquitous document visible is its Quality Policy, which is wooden framed with double golden line border. The same has been reproduced below in the Box No. 4.1.

\(^40\) Telecom Regulatory Authority of India (2008 a.), op. cit., p.159
\(^41\) Telecom Regulatory Authority of India (2007 a.), op. cit., p.165
\(^42\) Ibid., loc. cit., p. 165
\(^43\) Telecom Regulatory Authority of India (2008 a.), op. cit., p.159
Box No. 4.1

Telecom Regulatory Authority of India

QUALITY POLICY

Telecom Regulatory Authority of India’s (TRAI) mission is to ensure that the interests of consumers are protected and at the same time to nurture conditions for growth of telecommunications, broadcasting and cable services in a manner and at a place which will enable India to play a leading role in emerging global information society.

We shall focus on:

- Transparency in decision making by affording an opportunity to all stakeholders.
- Providing consumer with adequate choice, affordable tariffs and high quality of service.
- Promoting level playing field and fair competition among service providers.
- Access to world class quality telecommunications, broadcasting and cable services.
- Promoting efficiency in operations in all the tiers of the industry.
- Adoption of emerging technologies within the framework of a technology neutral policy.
- Ensuring technical compatibility and effective interconnection between service providers.

Necessary regulations, directions, orders or guidelines shall be issued to achieve above mission.

New Delhi, dated 20th March 2007

Chairman, TRAI

Source: Noted by the Author during Visit to TRAI Office at New Delhi.
4.26 IMPLEMENTATION OF OFFICIAL LANGUAGE POLICY

The implementation of the provisions of Official Language Act, 1963, Official Languages Rules, 1976 and other administrative instructions issued on the subject from time to time by the Department of Official Language (Ministry of Home Affairs) is ensured by the Telecom Regulatory Authority of India under the supervision of its Secretary. All the regulations, gazette notifications, and Annual Reports, etc. of the regulator are published/issued in bilingual form. The implementation of the Official Language Policy by all the Divisions and Sections is monitored by its Official Language Implementation Committee (OLIC) constituted under the Chairmanship of Advisor (A&P). The OLIC meets regularly on quarterly basis. In order to increase the progressive use of Hindi in day-to-day official work, an annual incentive scheme viz. Varshik Protsahan Yojana has been introduced in TRAI since last three years. The scheme, which carries 10 cash prizes every year, has encouraged the staff to do their maximum official work in Hindi. In order to facilitate staff to do official work including noting and drafting in Hindi regular Hindi Workshops are organized, in which dictionaries, administrative glossaries, reference books, etc. are distributed. The Telecom Regulatory Authority of India also publishes a bilingual magazine ‘TRAI Darpan’, which is done on biannual basis. The first issue of this magazine was released on 29th October, 2007.\textsuperscript{44} The visit to TRAI Library also reveals that it has an impressive collection of books and magazines in Hindi. The discussion with officials including Smt. Prakash Rani Chawla, Technical Officer (Library) highlighted the attempts made by the Authority to meet its obligations under the Official Language Policy.

4.27 CONSUMER GRIEVANCES REDRESSAL MECHANISM

Telecom Regulatory Authority of India (TRAI) has been receiving a large number of complaints from telecom consumers relating to the telecom services provided by the service providers. Though the Telecom Regulatory Authority of India Act, 1997 confers powers upon the TRAI to lay down standards of quality of service to be provided by service providers and to ensure the quality of service and conduct the periodical survey of such services.

\textsuperscript{44} Ibid., op. cit., pp.159-160.
service provided by the service providers so as to protect the interest of consumers, there is no specific provision in the TRAI Act imposing obligation or duty upon the TRAI for redressal of individual complaints and therefore such complaints by a consumer is to be addressed by Courts or other appropriate forum under the Consumer Protection Act, 1986. Under the provisions of TRAI Act, a group of consumers can petition the Telecom Dispute Settlement and Appellate Tribunal (TDSAT) for redressal of any dispute between a service provider and a group of consumers. However, TRAI does take cognizance of complaints of generic nature i.e. complaints affecting a large number of consumers or showing systemic inadequacy or cases indicating alleged violation of orders/regulations/directions issued by TRAI.

Absence of defined framework for functioning of the existing redressal mechanisms was leading to customer dissatisfaction. Also going by the number and nature of complaints being received at TRAI, it was seen that present institutional mechanism for handling consumer complaints was not effective. The redressal of grievances of individual consumer through courts or forum or commission under the Consumer Protection Act, 1986 is time consuming and at times costly, considering the stakes involved. As a result, the consumers were filing complaints to various authorities in the Government and TRAI. There was a need for effective mechanism for a speedy, effective, transparent and inexpensive complaint redressal, within company i.e. service provider. It was in this background that the Authority issued a consultation paper on 3rd January 2007 and then finally issued a Regulation for the same.

Telecom Regulatory Authority of India came out with Telecom Consumers Protection and Redressal of Grievances Regulation, 2007 (3 of 2007), dated 4th May 2007 which called for the establishment of three tier redressal grievance mechanism, namely:

a. Call Centre
b. Nodal Officer
c. Appellate Authority
a. Establishment of Call Centre

Every service provider, shall within sixty days from the date of commencement of these regulations, establish a “Call Centre” for redressal of grievances of its consumers, and, such Call Centre shall be accessible to its consumers round the clock during all days in a week. It is the duty of the Service Provider to ensure sufficient number of officers or employees at the Call Centre. Further sufficient lines or connections to be called as toll free number/consumer care number have to be put in place to ensure compliance with the Quality of Service Benchmarks for the parameter “Response Time to the Customer for Assistance both by Interactive Voice Response System (IVRS) mode as well as Voice to Voice mode. Every service provider has to give through a public notice in a newspaper the contact details of such Call Centre. Each Complaint of a consumer should be registered by allotting a unique identification number to be called Docket Number; it be communicated to the complainant; the action taken on the complaint; and contact details of the Nodal Officer in case Consumer is not satisfied with the redressal of his grievance.

b. Appointment of Nodal Officer

Every service provider, shall within one month from the date of commencement of these regulations, appoint or designate one or more Nodal Officers in each of its licensed service area. This appointment or designation of a Nodal Officer along with complete contact details has to be given through a public notice in a newspaper. In case a consumer is not satisfied with the redressal of his/her grievance by the Call Centre, such consumer may approach, by a letter in writing, or through telephone, or web based online filing of complaints or through short message service or through other electronic means and any other means, the Nodal Officer. Nodal Officer has to be accessible, register every complaint lodged by the consumers; communicate within three days from the receipt of the complaint, the unique complaint number to the consumer; and after taking the remedial measure,

45 Telecom Regulatory Authority of India (2007 b.), Telecom Consumers Protection and Redressal of Grievances Regulation, 2007 (3 of 2007), New Delhi, 4th May, pp. 4-6
46 Ibid., pp. 7-8
intimate to the consumer. Time Limit for redressal of complaints by Nodal Officer is within Ten Days of the registration of the complaint.

c. Appointment of Appellate Authority

Every service provider, shall within three months from the date of commencement of these regulations, appoint one or more appellate authorities, in each of its licensed area to hear and dispose of the appeals. This appointment of an Appellate Authority along with complete contact details has to be given through a public notice in a newspaper. In case a consumer is not satisfied with the redressal of his/her grievance by the Nodal Officer, such consumer may in writing, make an appeal to the Appellate Authority. Every appeal shall be made in duplicate and filed within three months after the expiry of the time limit. The Secretariat of the Appellate Authority shall register every appeal immediately on the receipt of the same and send, within three days of the receipt of the complaint, an acknowledgement indicating the serial number of the appeal registered; forward within six days from the date of receipt, a copy of the appeal to the concerned service provider for filing reply. The service provider shall within 15 days from the date of receipt of the appeal file in writing its reply. The Appellate Authority shall on receipt of reply and after conducting such inquiry as it may consider necessary, dispose off appeal by passing order in writing. The Appellate Authority shall decide every appeal within three months from the date of filing the appeal. The order shall be communicated within seven days of the order to the concerned service provider. The service provider shall within 15 days comply with the order and report the compliance immediately to the Appellate Authority. Every Appellate Authority shall submit to the Authority by the 15th October and 15th April of every financial year or at such shorter intervals, as the Authority.

Every service provider is also required to publish a “Manual of Practice for Handling Consumer Complaints” containing following information relating to Basic Telephone Service, Cellular Mobile Telephone Service and Broadband Service, namely: Name and address of the service provider; terms and conditions of service offered by the service provider; Complaint

47 Ibid., pp. 9-13
4.28 TELECOMMUNICATION CONSUMERS EDUCATION AND PROTECTION FUND

Telecommunication Consumers Education and Protection Fund Regulations, 2007 was issued on 15th June 2007 to establish a Fund for the telecom consumers’ awareness, education and for protection of their interests. The Fund shall collect to its credit amount from the Telecom Service Providers who may have charged their subscribers amount in excess of the rates of telecommunication service determined under any regulation or order or direction made under TRAI Act, or amount in excess of the rates announced by the service providers where the rates have been notified under market forbearance, which could not be refunded to the concerned subscribers and thus lying as unclaimed. With a view to ensure transparency in its working, all the expenditure from this Fund shall be incurred on the recommendations of the committee constituted under these regulations comprising of service providers and consumers’ organization. The regulator expects this measure would create awareness among telecommunications consumers about their rights; reduce the amount which remains unclaimed; educate consumers regarding latest developments in the sector and telecom laws; and also prevent the avoidable excess charging of rates by the service providers. The Fund had a resource of Rs. 14.21 Crores as on 31st March 2008, which was to be primarily utilized for:

(i) Study and Market Research Projects on matters relating to Protection of interests of Consumers; and

(ii) Organizing Seminars etc. on the subject of Telecommunication Consumer’s Welfare and Education.48

48 Telecom Regulatory Authority of India (2008 a.), op. cit., p.18
4.29 QUALITY OF SERVICE

The provision of services in the telecom sector has undergone a great deal of transformation since the days of monopoly. The competitive environment of the liberalized era has caused rising expectations about Quality of Service amongst the consumers. The Telecom Regulatory Authority of India has been making attempts from time to time to set benchmarks for the Quality of Services. As per the Section 11 (b) (v) of the Chapter III of the TRAI Act, it is the function of the Authority to lay-down the standards of quality of service to be provided by the service providers.49

In July 2000, a Regulation was issued by TRAI, which defined the quality of service parameters and their benchmarks for Basic and Cellular Mobile services. This “Regulation on Quality of Service of Basic and Cellular Mobile Telephone Services, 2000” was issued on 5th July 2000 under the provisions of Section 11 1(b)(v) of TRAI Act, 1997. The benchmarks were defined to be achieved in the short term, medium term and long term corresponding to periods 12, 24 and 48 months for Basic Services and 12, 24 and 36 months for Cellular Mobile Services from the date of issue of Regulation. Thus, even the long-term period expired in July 2003 for cellular services and July 2004 for basic services. TRAI has been carrying out regular reviews of the status of quality of service of the networks of all operators. The performance was found to be very poor for basic service networks, especially the ones that were predominantly wire line networks. In the case of cellular operators, while about 75 percent of operators were meeting most of the parameters, there was still the problem of several other parameters not being met. Several rounds of discussions were held with the various operators. It became quite evident that in the case of wire line basic operators, the network conditions were very poor and the possibility of meeting these targets within the stipulated time frame for the huge networks of the incumbent was not feasible since extensive rehabilitation work was required. Though the rehabilitation work was being carried out by the incumbents in particular, but the rate at which this was being carried out was far from satisfactory. In particular, difficulty was being experienced for the provisioning of new connections, fault incidences and call completion rate within the network. In

the case of cellular networks, it was found that while an extensive attempt had been made to cover all relevant parameters and lay down benchmarks for them in the present Regulation, however, certain important parameters were inadvertently left out and some other parameters, which had become unimportant as the result of technological developments had remained. Feedback had also been obtained from the agency hired by TRAI, which was carrying out the actual field measurements. Feedback was also being received regarding the need to monitor some new parameters in particular, those that reflect the call completion rates between networks, etc.50

The Authority decided to review the existing parameters and also to introduce some new parameters. The Authority had issued a Consultation Paper on the various issues relating to quality of service on 22nd February 200551 and held an Open House Session on 6th May, 2005. The Authority considered the comments received from stakeholders while finalizing the Regulation.

The TRAI, in exercise of the powers conferred upon it under Section 36 read with paras (i) and (v) of clause (b) of sub-section (1) of Section 11 of the TRAI Act, 1997 made the “Regulation on Quality of Service of Basic and Cellular Mobile Telephone Services, 200552”. The purpose of laying down Quality of Service Parameters was to create conditions for consumer satisfaction by making known the quality of service which the service provider was required to provide and the user had the right to expect. Also the purpose was to measure the Quality of Service provided by the Service Providers from time to time and to compare them with the norms so as to assess the level of performance. In general the idea was to protect the interests of consumers of telecommunication services.

New parameters such as Call Set up Success Rate (CSSR) which is the ratio of Established calls to Call attempts; Blocked Call Rate (a call that is not connected because there is no free channel to serve a call attempt; Service Coverage (to be measured through drive test on a sample basis for assessing the network coverage in cities where the service of the operator is

50 http://www.trai.gov.in/WriteReadData/trai/upload/Regulations/3/regul1jul05.pdf
52 Ibid., p.64
available); and POI Congestion (for out going traffic) were introduced in the regulation.53

The QoS parameters for Basic Service (Wire line) and for Basic Service (Wireless) and Cellular Mobile Telephone Service have been shown in Tables 4.2 and 4.3 below:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Parameters</th>
<th>Benchmarks</th>
<th>Averaged over a period of</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Provision of a telephone after registration of demand</td>
<td>100% cases in &lt;7 days, subject to technical feasibility</td>
<td>One quarter</td>
</tr>
<tr>
<td>2.</td>
<td>Fault incidences (No. of faults/100 subscribers /month)</td>
<td>By 31 March 2007: &lt;5 and By 31 March 2008: &lt;3</td>
<td>One quarter</td>
</tr>
<tr>
<td>3.</td>
<td>Fault repair by next working day</td>
<td>By next working day: &gt;90% and within 3 days: 100%. Rent Rebate Faults pending for &gt;3 days and &lt;7 days: Rent rebate for 7 days. Faults pending for &gt;7 days and &lt;15 days: Rent rebate for 15 days Faults pending for &gt;15 days: rent rebate for 1 month</td>
<td>One month</td>
</tr>
<tr>
<td>4.</td>
<td>Mean Time To Repair (MTTR)</td>
<td>&lt;8 Hrs</td>
<td>One month</td>
</tr>
<tr>
<td>5.</td>
<td>Grade of Service</td>
<td>a) Junction between local exchanges – 0.002 b) Outgoing junctions from TAX to local exchange – 0.005 c) Incoming junctions from local exchange to TAX – 0.005 d) Incoming or out going junctions between TAX’s 0.005 e) Switching network should be non-blocking or should have extremely low blocking probability</td>
<td>One quarter</td>
</tr>
</tbody>
</table>

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53 The Telecom Regulatory Authority of India Act, 1997, op. cit., pp. 92-93  
54 Ibid., pp. 86-87
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Requirement/Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Call Completion Rate within a local network Should be better than</td>
<td>&gt;55%</td>
</tr>
<tr>
<td>7</td>
<td>Metering and billing credibility</td>
<td>Not more than 0.1% of bills issued should be disputed over a billing cycle</td>
</tr>
<tr>
<td>8</td>
<td>Customer Care (Promptness in attending to customers requests) 95% of requests</td>
<td>One Billing Cycle</td>
</tr>
<tr>
<td></td>
<td>- Shifts</td>
<td>&lt;3 days</td>
</tr>
<tr>
<td></td>
<td>- Closures</td>
<td>&lt;24 Hrs.</td>
</tr>
<tr>
<td></td>
<td>- Additional Facility</td>
<td>&lt;24 Hrs.</td>
</tr>
<tr>
<td>9</td>
<td>Response Time to the customer for assistance (i) percentage of calls answered electronically: within 20 seconds = 80% within 40 seconds = 95% (ii) percentage of calls answered by operator (voice to voice): within 60 seconds = 80% within 90 seconds = 95%</td>
<td>One month</td>
</tr>
<tr>
<td>10</td>
<td>Time taken for refund of deposits after closures</td>
<td>100% within 60 days.</td>
</tr>
<tr>
<td>11</td>
<td>Customer perception of services (i) percentage satisfied with the provision of service &gt;95 (ii) percentage satisfied with the billing performance &gt;90 (iii) percentage satisfied with help services &gt;90 (iv) percentage satisfied with network performance, reliability and availability &gt;95 (v) percentage satisfied with maintainability &gt;95 (vi) Overall customer satisfaction &gt;95 (vii) Customer satisfaction with offered supplementary services &gt;95</td>
<td>Source: The Telecom Regulatory Authority of India Act, 1997</td>
</tr>
<tr>
<td>S. No.</td>
<td>Parameters</td>
<td>Benchmarks</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>(A)</td>
<td><strong>Network Performance</strong></td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td>(Accumulated down time of Community Isolation)</td>
<td>&lt;24 hours</td>
</tr>
<tr>
<td>(ii)</td>
<td>Call set-up Success Rate (within licensees own network)</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>(iii)</td>
<td>Service Access Delay</td>
<td>Between 9 to 20 seconds depending upon number of paging attempts (Average of 100 calls &lt;= 15 sec)</td>
</tr>
<tr>
<td>(iv)</td>
<td>Blocked Call Rate</td>
<td>(i) SDCCH Congestion &lt; 1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ii) TCH Congestion &lt; 2</td>
</tr>
<tr>
<td>(v)</td>
<td>Call Drop Rate</td>
<td>%&lt;3%</td>
</tr>
<tr>
<td>(vi)</td>
<td>Percentage of connections with good voice quality</td>
<td>&gt;95%</td>
</tr>
<tr>
<td>(vii)</td>
<td>Service Coverage</td>
<td>In door &gt;= -75 dBm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In-vehicle &gt;= -85 dBm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Out door - in city &gt;= -95 dBm</td>
</tr>
<tr>
<td>(viii)</td>
<td>POI Congestion</td>
<td>&lt;0.5%</td>
</tr>
<tr>
<td>(B)</td>
<td><strong>Customer Help Lines</strong></td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td>Response time to the customer for assistance</td>
<td>(i) % age of calls answered (electronically) : within 20 seconds = 80% within 40 seconds = 95%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(ii) % age of calls answered by operator</td>
</tr>
</tbody>
</table>

55 ibid., pp. 87-88
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(C) Billing Complaints</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) Billing complaints per 100 bills issued</td>
<td>&lt;0.1%</td>
<td>One quarter</td>
</tr>
<tr>
<td>(ii) % of billing complaints resolved within 4 weeks</td>
<td>100%</td>
<td>One quarter</td>
</tr>
<tr>
<td>(iii) Period of all refunds / payments due to customers from the date of resolution of complaints as in (ii) above</td>
<td>&lt; 4 weeks</td>
<td>One quarter</td>
</tr>
<tr>
<td>(D) Customer perception of service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(i) % satisfied with the provision of service</td>
<td>&gt;95</td>
<td></td>
</tr>
<tr>
<td>(ii) % satisfied with the billing performance</td>
<td>&gt;90</td>
<td></td>
</tr>
<tr>
<td>(iii) % satisfied with help services</td>
<td>&gt;90</td>
<td></td>
</tr>
<tr>
<td>(iv) % satisfied with network performance, reliability and availability</td>
<td>&gt;95</td>
<td></td>
</tr>
<tr>
<td>(v) % satisfied with maintainability</td>
<td>&gt;95</td>
<td></td>
</tr>
<tr>
<td>(vi) Overall customer satisfaction</td>
<td>&gt;95</td>
<td></td>
</tr>
<tr>
<td>(vii) Customer satisfaction with offered supplementary services % satisfied</td>
<td>&gt;95</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** The Telecom Regulatory Authority of India Act, 1997
4.30 CURBING UNSOLICITED COMMERCIAL COMMUNICATIONS

The Telecom Regulatory Authority of India has been receiving complaints from the consumers regarding telemarketing calls and unsolicited SMSs. Such calls and messages disturb the recipients, intrude into their privacy and at times impose a cost. Responding to the near hostile expressions of consumers with telemarketing, the Authority initiated a consultation process with all the stakeholders and came out with a comprehensive regulation called the “Telecom Unsolicited Commercial Communications Regulations” in June 2007 for putting in place a mechanism for curbing the unwanted telemarketing calls. The regulation contained establishment of a National Do Not Call Registry (NDNC Registry) which would have the list of telephone numbers of the subscribers who do not want to receive Unsolicited Commercial Communications (UCC)/SMSs by National Informatics Centre (NIC), a Government Agency.56

Thus, the primary objective of the National Do Not Call Registry (NDNC Registry) is to curb Unsolicited Commercial Communication (UCC). UCC has been defined as "any message, through telecommunications service, which is transmitted for the purpose of informing about, or soliciting or promoting any commercial transaction in relation to goods, investments or services which a subscriber opts not to receive."57

Under this regulation issued by TRAI, which came into operation w.e.f. 12th October 2007, all the registered telemarketers before making marketing calls are required to submit/upload the list of telephone numbers which they want to call for telemarketing purpose to the NDNC. The NDNC takes out (delete) the telephone numbers of the subscribers who are already registered with NDNC from this list and returns the clean list to the telemarketer for calling. Presently there are 19,163 telemarketers registered with the Department of Telecommunications58.

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56 Telecom Regulatory Authority of India (2007 c.), A Handbook for the Consumers from the Telecom Regulator, New Delhi, 21st September, p. 16.
57 http://ndncregistry.gov.in/ndncregistry/index.jsp
4.31 COMMON CHARTER OF TELECOM SERVICES

TRAI has issued several Orders, Directions and Regulations addressing the concerns of consumers including the Quality of Service standards. TRAI has institutionalized mechanism for registration for consumer organizations with TRAI. TRAI interacts periodically with these consumer organizations or Consumer Advocacy Groups (CAGs) registered with it (now 41 in number). Through mutual discussions between these consumer organizations and service providers, a Common Charter of Telecom Service was finalized, under the aegis of TRAI to be adopted by the service providers on a voluntary basis (See Box 4.2 below).

Box No. 4.2

COMMON CHARTER OF TELECOM SERVICES, 2005

1. All Service Providers acknowledge the rights of citizens to have a free choice in selecting their Service Providers and agree to promote their services in the best spirit of competition and traditions of service to consumers;
2. All Service Providers agree to promote the consumers’ right to education, choice, representation and redress;
3. All Service Providers assure that the privacy of their subscribers (not affecting the national security) shall be scrupulously guarded;
4. All Service Providers assure that their subscribers shall be entitled to interact with them, either personally or through their authorized representatives;
5. For information and education of subscribers, all Service Providers agree to inform their subscribers of the broad range of services offered, the individual plans available to them at any given point of time, the tariff rates applicable to each of these, their validity, terms and conditions, payment policies, the billing processes and procedures and the structure within the organization where information and clarification on consumer redress systems for complaints and billing disputes will be available with all their relevant contact numbers;
6. All Service Providers agree to arrange human interface with responsible company executives whose name and identity are made known during the process of disputes resolution in addition to arrangements like Customer Care Service through Call Centres;
7. All service providers agree to inform their subscribers on the reverse of each bill, their consumer grievance redress process with respect to fault complaints and billing disputes. They also agree to resolve the disputes as per the guidelines of TRAI issued from time to time;
8. All Service Providers agree to provide an applicant basic telephone connection within 7 days of registration, subject to technical feasibility and the mobile connection immediately subject to compliance of all required formalities by the subscriber;
9. All Service Providers agree to repair the faults within 24 hours of receipt of complaint from a subscriber, wherever technically feasible;

10. All Service Providers agree to ensure shifting of telephone connection within 3 working days within the same exchange, 5 working days for intra city and 30 working days for inter city exchanges and closure (disconnection) of telephone connection within 3 days, on receipt of a letter of request from the subscriber. An authenticated copy of the last telephone bill shall accompany the letter of request;

11. All Service Providers agree to provide in their bills related call and tariff details, payment procedures and list of points at which payments can be made by subscribers;

12. All Service Providers agree to register complaints in all areas of their service immediately, if delivered in person or by e-mail and within 24 hours on receipt of the complaint by post;

13. All service providers shall render service without discrimination to every citizen as per his eligibility defined below and who undertakes to pay all charges and deposits:

“For the purpose of this clause, a citizen shall be defined as an individual above the age of 18 or an institution, NGO or business/service organization engaged in any activity which is permissible under the laws of the land”.

14. All service providers agree to provide information on Directory Services and book complaints on toll free number for registering complaints;

15. All service providers agree to provide their subscribers satisfactory connectivity to their services and interconnectivity to the extent of their respective legal obligation under the relevant interconnection agreement and to ensure that subscribers do not suffer on account of poor service;

16. All service providers agree to levy reconnection charges as per the TTO or waive the same on their own discretion;

17. All service providers agree to allow emergency services like police, fire and ambulance for a period of 15 days during which incoming facility is allowed, if technically feasible, even after the telephone connection is suspended;

18. The subscribers agree to clear all dues within the specified time;

19. All Service Providers agree to achieve the minimum benchmarks prescribed by TRAI with respect to the quality of service and also commit themselves to improve upon the standards of service at different points of time;

20. Mutual courtesy and respect are the hallmarks of any durable relationship between the Service Providers and subscribers and both agree to abide by these principles.

Though this charter is non-justiceable, service providers agree to strive to adhere all the points contained in this charter and to make every effort to abide by the charter

* Clause 7 amended as agreed in the meeting of the CAGs and service providers held on 24th January 2006 so as to inform the subscribers through “each bill” instead of informing “periodically”.

Source: Website of TRAI59.

4.32 LICENSING

The Telecom Regulatory Authority of India Act states that the function of the Authority is to make recommendations, either *suo motu* or on a request from the licensor on the need and timing for introduction of new service provider [section 11 (a) (i)]; terms and conditions of license to a service provider [section 11 (a) (ii)]; revocation of license for non-compliance of terms and conditions of license [section 11 (a) (iii)]. It also has to ensure compliance of terms and conditions of license [section 11 (b) (i)].

With regard to licensing, over the past ten years, TRAI has undertaken the following initiatives:

(i) TRAI provided recommendations to the Government on Terms and Conditions of licensing new operators in almost all services of telecom sector, which facilitated liberalization of telecom market in India.

(ii) TRAI initiated the process of Unified Licensing in India. TRAI in its Unified Licensing recommendations in October 2003 had envisaged a two-stage process to introduce a Unified Licensing Regime in the Country. The first phase, implemented from November, 2003 onwards has put in place a Unified Access Licensing (covering both fixed and mobile services) in India. TRAI forwarded its recommendations for second phase i.e. Unified Licensing for all telecom services on in January 2005. Unified Licensing Regime would enable the provision of various services, both existing and new, by the service providers without the need for separate additional licenses, with the same media being used for different services which would build economies of sale and scope.

(iii) Recommendations on Public Mobile Radio Trunked Service (PMRTS) paved the way for PSTN connectivity, reduction in license fee, choice of technology, new service areas along highways, etc.

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(iv) TRAI recommended allowing higher data speed for VSAT users increasing it up to 2 Mbps, reduction in license fees for captive VSAT networks and reduction in the minimum Antennae size.

(v) Recommendation on review of Internet Service Provider (ISP) licensing regime: TRAI has recommended major functional and structural revamp of Internet Services including significant increase in the functional scope of ISP license and removal of restrictive provision in exiting license conditions.

(vi) Recommendation on ‘Infrastructure Sharing’ has proposed amendment in licenses of UASL/CMSP to allow sharing of active infrastructure excluding sharing of spectrum.

(vii) TRAI recommended in August 2007 wide ranging reform measures on licensing policy for access services provisions: No cap be placed on the number of access service providers in any service area. Operator can offer GSM, CDMA or any other technology under same license.61

4.33 INTERCONNECTION

The Telecom Regulatory Authority of India Act states that the function of the Authority is notwithstanding anything contained in the terms and conditions of the license granted before the commencement of the Telecom Regulatory Authority of India (Amendment) Act, 2000, fix the terms and conditions of inter-connectivity between the service providers [section 11 (b) (ii)]; to ensure technical compatibility and effective inter-connection between different service providers [section 11 (b) (iii)]; and to maintain register of interconnect agreements and of all such other matters as may be provided in the regulations [section 11 (b) (vii)].62

Interconnection regulations, directions and recommendations made by the TRAI are contributing to creation and enhancement of competition in the telecom market and in turn resulted in affordability of telecommunications.

services to the consumers. The major ones over the past ten years have been mentioned as under:

(i) Telecommunications Interconnection (Reference Interconnect Offer) Regulations, 2002.

(ii) Introduction of Access Deficit Charge (ADC) for sustainability of fixed line operations in a competitive environment.

(iii) Introduction of cost based Telecommunication Interconnection Usage Charges in 2003 which paved the path for lower tariff and growth of the sector. These charges envisage an origination, Transit and Termination charge regime.

(iv) Introduction of Mobile Termination Charges which is lowest in the world i.e. Indian Rupees (INR) 0.30 per minute.

(v) Ceiling limit of Indian Rupees (INR) 0.65 per minute on carriage charges paved the way for death of distance and introduction of One India tariffs by operators.

(vi) Telecommunication Interconnection (Port Charges) regulations—fixation of cost based port charges for Inter-network connectivity amongst the operators in 2001 and reviewed in 2007, thereby reducing the port charges by about 23 to 29% for various slabs.


(viii) International telecommunications access to essential facilities at cable landing stations regulations, 2007- addressed the issue of equal ease of access to bottleneck facilities at cable landing stations for accessing international bandwidth capacity on submarine cables. Mandated Cable Landing Station – Reference Interconnect Offer to owner of Cable Landing Stations.63

4.34 FACILITATING COMPETITION

The Telecom Regulatory Authority of India Act states that the function of the Authority is to make recommendations, either *suo motu* or on a request

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63 Telecom Regulatory Authority of India (2007 d.), *op. cit.*, p. 8
from the licensor on measures to facilitate competition and promote efficiency in the operation of telecommunication services so as to facilitate growth in such services [section 11 (a) (iv)].

With regard to facilitation of competition, over the past ten years, TRAI has undertaken the following initiatives:

(i) Recommendations on Mobile Number Portability, 8th Mar 2006: Mobile Number Portability (MNP) allows Mobile subscribers to change their service provider while retaining their subscriber number.

(ii) Recommendations on promotion of competition in International Private Leased Circuits (IPLC) Segment:- TRAI made recommendations on competition in IPLC segments and identifying bottleneck facilities for promoting competition in the international bandwidth segment in December 2005.

(iii) Recommendations on resale in International Private Leased Circuits (IPLC) segment, 23rd March, 2007 – terms and condition for resellers.


(v) TRAI vide its recommendations on Unified Licensing Regime in October, 2003 had inter-alia recommended that intra-circle Merger and Acquisition should be permitted subject to guidelines on Merger & Acquisition and other aspects of dominance will also be tested at the time of merger.

(vi) Recommendation on Infrastructure Sharing, April 2007 – the exponential growth in wireless telecom services calls for massive investment in infrastructure particularly passive, active and backhaul components. The recommendations made include identification of critical infrastructure sites and infrastructure sharing of passive, active and backhaul network components.

(vii) Recommendation on introduction of completion in ‘National Long Distance Communications’.

(viii) Recommendation on opening of the ‘International Long Distance Service’.

(ix) TRAI recommended in August 2007 wide ranging reform measures on licensing policy for access services provisions: No merger & acquisitions allowed if the combined market power of both operators exceeds 40%. M&As shall not be allowed if it reduces the number of players in circle to less than four.65

4.35 TARIFF

The tariff for telecom services is under forbearance, except rural telephony, roaming and leased circuits. Service Providers have flexibility to offer any tariff, subject to certain regulatory principles, including Interconnect Usage Charges (IUC) compliance.

The Telecom Regulatory Authority of India, over the past ten years has undertaken the following initiatives with regard to tariff:

(i) TRAI issued Telecommunications Tariff Order (TTO) 1999. There has been continuous decline in tariff for various service segments since the Authority started regulating tariff for telecom sector. For example, the local call tariff from mobile phone has declined from a level of Indian Rupees (INR) 16.80 per minute (prior to TTO) to be paid both for outgoing and incoming calls to a level of almost Indian Rupee (INR) 1.0 per minute for outgoing calls with incoming calls free.

(ii) Introduction of Calling Party Pays (CPP) regime and cost based interconnection usage charges have led cellular mobile telephone services market in India to be amongst one of the most competitive and fastest growing markets in the world. The intense competition has led India to be on 3rd position in terms of number of mobile subscribers after China and Russia and number one in terms of net

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65 Telecom Regulatory Authority of India (2007 d.), op. cit., p. 11
addition of mobile subscribers per month. In terms of minutes of usage in mobile segment, India stands at 2nd position after USA.

(iii) Significant reduction in Domestic Leased Lines (DLC) and International Private Leased Lines (IPLC) tariffs to make them cost based.

(iv) Significant reduction in International, Domestic long distance Calls charges.

(v) Roaming charges rationalized and ceiling limit specified.

(vi) Reduction in tariffs for mobile telephony has made the connectivity affordable to the common man and this has led to steep increase in the overall tele-density.66

4.36 TRANSPARENCY IN TARIFF

The Telecom Regulatory Authority of India has been taking several measures in the past to enhance/bring about transparency in the tariff offers brought about by the telecom service providers. Some of these measures undertaken by TRAI including directions issued in this regard have been mentioned as under:

(i) Tariff plans with misleading titles are not permitted.

(ii) The service provider should inform the customer within a week of activation of service the complete tariff plan and should also convey any changes to any item of tariff. The service provider cannot increase tariff on any item within 6 months of enrolment in a tariff plan.

(iii) The customer is free to move from one tariff plan to another without paying any fee for migration.

(iv) Tariff plans with life time validity to be available during the current licence period and also during the renewed licence period.

(v) In all types of lifetime tariff plans, the service provider must inform the subscriber the month and year of expiry of the current licence.

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66 Telecom Regulatory Authority of India (2007 d.), op. cit., p. 9
(vi) Hike in any tariff item is prohibited in tariff plans with prescribed period of validity of more than 6 months including lifetime validity or unlimited validity involving upfront payment.

(vii) Service Provider’s websites must contain comparison of tariff plans in terms of estimated monthly bill.

(viii) Even if the talk time value has exhausted, the pre-paid customers should get all services, which do not affect “talk time value”, like incoming calls/SMS etc during the entire validity period.

(ix) Prepaid customer’s unused balance are to be carried forward if recharged during the grace period specified for the purpose.

(x) The service provider shall intimate a postpaid customer (1) in advance about his credit limit and (2) whenever he reaches 80% of the credit limit. Services shall not be disconnected as long as the amount due is below the amount of his security deposit or specified credit limit whichever is higher.

(xi) Postpaid customers should be given, on request, detailed bill for STD/ISD calls free of charge.

(xii) Fixed line customers should be given rental rebate for faults pending beyond 3 days.

(xiii) Security deposits are to be refunded after adjustment of dues within 60 days, failing which interest has to be paid @10% per annum for the delay.

(xiv) Pre-paid customers can be charged for roaming, only if one chooses to make or receive a call while roaming and customers should be informed about this through SMS whenever one roams into another service area.

(xv) No chargeable value added service shall be provided to a customer without his explicit consent.
4.37 UNIVERSAL SERVICE OBLIGATION

India is predominantly a rural country with rural population of 743 million i.e. 72.2 percent of the total population. However in the field of telecom services, there is glaring divide between rural and urban population. For example, the tele-density was more than 25 percent in urban areas, where as it was only 1.7 percent in rural areas during December 31, 2004. Also, the rural teledensity as on 31st March 2008 was 9.20 against the total teledensity of 26.22 for the country as a whole.

With a view to increase tele-density in the rural areas the Government of India has set up Universal Service Obligation Fund (USOF). The government also reimburses to BSNL for telecom network in the rural areas. Government needs huge amount of resources to meet universal obligations. The Government is raising resources for U.S.O. through a 'universal access levy'. The universal access levy is a percentage of the revenue earned by the operators under various licenses. The Government consults TRAI while deciding the percentage of revenue share towards universal access levy. At present the universal service levy is 5 percent of the adjusted gross revenue of all the telecom service operators barring the pure value added service providers like internet, voice mail, e-mail service providers etc. The TRAI is

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68 http://www.trai.gov.in/trai/upload/misc4/Letter23may06.pdf
70 Government of India (2005 b.), op. cit.
71 Telecom Regulatory Authority of India (2008 a.), op. cit., p. 12.
73 www.dotindia.com, the Website of Department of Telecommunications, Government of India.
also empowered by the TRAI (Amendment) Act 2000, to exercise its control over the utilization of universal service fund.74

4.38 SPECTRUM

The Telecom Regulatory Authority of India Act states that the function of the Authority is to make recommendations, either *suo motu* or on a request from the licensor on efficient management of available spectrum [section 11 (a) (viii)].75

The Telecom Regulatory Authority of India, over the past ten years has undertaken the following initiatives with regard to the efficient management of available spectrum:

(i) Recommendations on allocation and pricing of spectrum for 3G and broadband wireless access services: The recommendations made in September 2006 on the issue focus on level playing field, technological neutrality and affordability while ensuring that spectrum is available to telecom operators wishing to provide 3G and Broadband Wireless Access (BWA) and thus deepening the penetration of telecom services in rural and urban India. TRAI gave a high priority to a forward looking and 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. TRAI recommended that spectrum identified for 3G should be treated as a stand-alone allocation and not as an extension of earlier spectrum allocation of 2G. The Government should realize a spectrum acquisition fee from telecom service providers. The spectrum for immediate allocation in case of 3G services should be in 450 MHz, 800 MHz and 2.1 GHz. Rural roll-out obligation imposed as part of overall roll out obligation in a time bound manner. Broadband Wireless Access (BWA) given a high priority. The Authority has identified 200 MHz of spectrum in 3.3-3.4 GHz.

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74 Telecom Regulatory Authority of India (2000), "Universal Service Obligation", Consultation Paper, New Delhi, July.
and 3.4-3.6 GHz bands to about 13 carriers in contiguous blocks of 15 MHz each.

(ii) TRAI recommended in August 2007 wide ranging reform measures on licensing policy for access service provisions:

(a) Any licensee wishing to get additional spectrum beyond 10 MHz in existing 2G bands after reaching the specified subscriber numbers shall have to pay a one time spectrum charge.

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

(c) Annual spectrum usage linked to the revenue of operators to be revised.\(^{76}\)

4.39 TENETS OF A GOOD REGULATING BODY AND TRAI

The regulator is expected to exercise his functions in an impartial, predictable, expert and strong fashion because of the extremely delicate nature of role-play to balance conflicting objectives.

Certain basic tenets of a good regulatory body are as follows:

(i) Credibility.

(ii) Independence from day-to-day government pressures and pressure from the companies and the users.

(iii) Capacity to provide transparent, open, honest and accessible process to consider rules and resolve disputes, thereby providing a stable and predictable environment.

(iv) Expertise and knowledge in National industrial and economic policy and financial and investment analysis.

(v) Appropriate databank on economic issues.

\(^{76}\) Telecom Regulatory Authority of India (2007 d.), op. cit., p. 15

178
(vi) Capacity to act as a buffer between political pressures and interests of carriers, and also to withstand shifts in policy consequent on change of governments or with elections.

(vii) Capacity to bring the telecom sector to meet the national goal through appropriate regulatory functions.

In addition, it should have all the necessary powers to be truly effective. It should be capable of withdrawing the monopoly given to a particular franchise or to restrict, it, if service becomes inadequate or rates are excessive. It should also be empowered to mandate increased or decreased level of competition or other necessary reform, if necessary.

The Telecom Regulatory Authority of India since its inception has been striving hard to attain the tenets of a good regulatory body. It has been exercising its functions in an impartial and expert manner. Despite initial challenging years and disputes with DoT, it has acquired a decent credibility amongst stakeholders. It has managed to provide a stable and predictable environment by means of transparent, open, honest and accessible working. In addition, it has been provided with adequate powers to be truly effective. It has played significant role in the growth and development of telecom sector in the form of facilitating competition, laying down and monitoring quality of service standards and ensuring rural connectivity. Through its regulations, directions, consultation papers, orders and study papers over the years, TRAI has developed expertise and a databank on regulatory administration in the telecom sector.

4.40 MAJOR ACHIEVEMENTS OF TRAI IN THE PAST DECADE

By discharging various recommendatory and regulatory functions, TRAI has been a harbinger of change and has contributed significantly in the growth of telecom services in terms of increase in the number of service providers, consumer base and vast network of the telecom services across the length and breadth of the country. These measures have resulted in
overall benefits to the consumer in terms of choice of services, affordable tariff of telecom services, and better quality of services etc, as is evident from the exponential growth in the total number of subscribers of telecom services\textsuperscript{77}.

Some of the exceptional achievements of the TRAI in the decade between 1997 and 2007 are mentioned below:

(i) Telecom sector has shown exponential growth, tele-density, which grew only by 1.92 per cent in 50 years (1948-1998), increased by 18 per cent in just 10 years of TRAI’s existence.

(ii) Subscriber base in the country is growing by 6 million every month.

(iii) Internet connection as on 31\textsuperscript{st} March 2007 are 40.57 million as compared to Broadband Policy, 2004 target of 18 million subscribers by end of 2007 and 40 million by the year ending 2010.

(iv) India now has the fourth largest telecom network after China, USA and Russia with lowest tariff.

(v) Telecom tariffs have fallen considerably and these are no longer regulated barring few exceptions. In some tariff plans, long distance calls cost as little as Indian Rupee (INR) 1.0 (about 2 cents) a minute. The telecom sector’s revenue has reached a financial size of Rs. 1100 billions Indian Rupee (INR) in 2006-07.

(vi) The Indian Telecom Service industry is contributing 2.71 per cent to the total GDP. Total telecom revenue in year 2005-06 was 867 billions Indian Rupees (INR).

(vii) Regulatory framework issued to cover nearly 300 million cable TV viewers.

The major achievements over the past decade have been listed in the Table as under:

\footnote{\textit{Ibid.}, p. 1}
Table 4.4
Major Achievements During 1997-2007 (as on 31st March)

<table>
<thead>
<tr>
<th>Item Name</th>
<th>1997</th>
<th>2002</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wireline Subscribers (in Millions)</td>
<td>14.54</td>
<td>38.29</td>
<td>40.75</td>
</tr>
<tr>
<td>Wireless Subscribers (in Millions)</td>
<td>0.34</td>
<td>6.68</td>
<td>165.11</td>
</tr>
<tr>
<td>Total No. of Telephone Subscribers (in Millions)</td>
<td>14.88</td>
<td>44.97</td>
<td>205.86</td>
</tr>
<tr>
<td>Tele-density (in percentage)</td>
<td>1.56</td>
<td>4.29</td>
<td>18.23</td>
</tr>
<tr>
<td>Internet Subscribers Wireline + wireless (in Millions)</td>
<td>0.09</td>
<td>3.42</td>
<td>40.57</td>
</tr>
<tr>
<td>Broadband Subscribers (in Millions)</td>
<td>-</td>
<td>-</td>
<td>2.33</td>
</tr>
</tbody>
</table>

**Per Minute Call Charges (in INR)#**

| (i) Local                                        | 16.80     | 3.09*     | 1.0       |
| (ii) STD                                         | 30.00     | 9.8       | 2.4       |
| (iii) ISD                                        | 75.00     | 40.80     | 6.40      |

| Minutes of Use (Wireless) (Per Subscriber per month) | -         | 215       | 471       |
| Average Revenue per User (ARPU) (in INR/sub/month)  | -         | 811       | 298       |
| Foreign Direct Investment (FDI) in Telecom (in Million INR) | 22328.4   | 95620.8   | 118087.9  |

(Dec 06)

*Source: A Journey Towards Excellence in Telecommunications*, Telecom Regulatory Authority of India, New Delhi, 21st September, 2007, p. 2

*Sept-2003 (after Calling Party Pay [CPP] was introduced).*

# There were incoming call charges in 1997 @ INR 16.80 per minute in peak hours

4.41 FUTURE AGENDA

The literature reveals that the Authority has been making efforts to perform its tasks creditably over the past ten years. As telecommunications sector is growing and changing at a break neck speed, future holds many challenges for the sector as well as the regulator. Information technology is, and with it, telecommunication technology are moving at an extremely fast pace, overtaking implementation of many plans and projects, and giving rise to serious dilemmas in which one has to choose between infructuous costs, if one were to abandon a project midway, and loss of opportunities, if adoption of the latest technology was to be delayed. The problem assumes much greater proportions in situations where financial resources are limited. The march of technology and its benefits to the masses must not be denied, but,

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78 On completion of its 10 years, the Telecom Regulatory Authority of India came out with the highlights of its key contributions and an overview of growth and developments in the telecom sector in the form of this booklet
at the same time, the value of investment already made cannot be overlooked all that easily. In TRAI, therefore, there is an attempt to handle the situation in a manner that affords flexibility for seamless migration from one technology to another and finally their convergence. TRAI has been working closely with the nongovernmental organizations (NGOs) and consumer organizations as they can play an important role in the evolution and maintenance of standards of services by acting as watchdogs of the quality of services and of the service providers’ responses to consumers’ needs and expectations.79

In a developing country like India it becomes a difficult balancing act for the regulator to simultaneously create conditions for inflow of high-value, long-term investments in the sector and the growth of a highly competitive market focussed primarily on consumers. While one tends to limit the number of market participants, the other requires just the opposite, that is, a large number of operators. TRAI is trying to handle this dilemma by providing franchisees at the point of customer interface so that even if the main licensees and the backbone operators remain limited in number, they can appoint large numbers of franchisees who will compete for customer attention and provide the customer with choice of service.80

The regulator’s objective, therefore, is to create an environment of ever-increasing competition in the market so that the market itself becomes the main regulator. Regulatory policies in the future will have to be less and less intrusive. TRAI firmly believes that regulation should do nothing more than provide a framework for operation to the market and leave it free to operate. The framework must provide enough flexibility to the service providers while respecting certain key regulatory principles, most important among which will be improving all-around transparency, ensuring a level playing field for all players, fair and non-discriminatory availability of interconnections, consumer care, and universal service obligations. TRAI has set for itself a heavy agenda, but – given fast and far-reaching changes – there is little choice. India has approached the situation with confidence and clarity. The policymakers, the service providers, the consumers and the

80 Ibid., pp. 39-40
regulators, together, feel the excitement of the dynamic possibilities that a lie ahead and are determined to realize them.81

4.42 CONCLUDING OBSERVATIONS

The Telecom Regulatory Authority of India (TRAI) set up in the year 1997 has been making efforts at carrying out its functions in an effective manner. Its role as an impartial regulator has been appreciated by most of the stakeholders in the telecommunications sector including government, consumers, service providers, consumer advocacy groups and independent analysts.

The journey, however, has been far from smooth. The TRAI Act, 1997, was an exercise in ambiguity and contradictions. According to the Act, TRAI could recommend certain actions and play an adjudicating role regarding certain others. TRAI could not revoke any license of an operator if the operator failed to conform to some standards of service, it could only make a recommendation to the government. If the defaulting service provider was the DoT itself, such a recommendation made little sense.82

Licensing was also not within the purview of TRAI, although, as one of its functions, it was to recommend the terms and conditions of licenses of a service provider. It, therefore, tried to issue directives to DoT regarding the terms and conditions of licenses for private service providers, but this was challenged by DoT in the Delhi High Court. Arguing that licensing was a sovereign prerogative of the government, DoT won the case. Thus, TRAI could not play any role in defining the terms under which DoT could issue licenses to its own competitors.83

From an institutional perspective, the post-1999 moves by the government have led to stronger institutions. The functions of adjudication have been separated from the functions of recommending various technical and non-technical measures, laying down and monitoring standards, and suggesting improvements. The quasi-legal functions have been entrusted to a

81 Ibid., 40-41
82 Dossani and Manikutty, op. cit., pp. 52-53.
83 Ibid., p. 53.
more specialized body. The powers of TRAI have been considerably enhanced, and so have the government’s obligations. The government could do more to strengthen TRAI, such as by consulting outgoing members and the courts when it appoints new members and by giving TRAI greater resources to undertake research on markets and technology, but a good beginning has been made. The TRAI Act of 2000 strengthened the hands of the regulator while keeping the licensing powers with the DoT. The TRAI’s recommendation was now required before the DoT could grant a license.\(^84\)

While the scope, scale and complexity of Authority’s functions continue to grow at a fast pace, the Authority is continually 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.\(^85\)

Thus, though there has been significant progress, significant institutional reform is still needed. There is a need to build up institutional capabilities within the regulator. The policymaker continues to undertake unnecessary regulatory functions that conflict with its role as a policymaker, preventing its ability to act fairly toward all market participants.\(^86\) Several issue areas such as ensuring universal service obligation; addressing the quality of service violations; involving stakeholders in a better manner and more frequently; curbing unsolicited commercial communications; need for more rational spectrum management; infrastructure sharing (both passive as well as active); introduction and spread of 3G services; and bridging the digital divide along with the human resource issues of recruiting, training and retaining the best personnel still poses challenges before the Authority.

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85 Telecom Regulatory Authority of India (2008 a.), *op. cit.*, pp. 156-157
86 Dossani and Manikutty, *op. cit.*, p. 65.