The Political Economy of Telecom Regulation in India

I. Introduction

Infrastructure services, unlike many other commodities cannot be effectively traded in markets. There are several characteristics that make it unlikely that socially optimal and economically efficient prices and quantities will be delivered through the market. Investments are large and lumpy, implying significant scale economies in operations. Further, because of different classes of users, issues relating to cross subsidy of one category of users by another need to be addressed.

Until the middle nineties, telecommunication services in India were provided by an incumbent monopoly, the Department of Telecommunications (DoT), which was seen as the best method of overcoming the market failure resulting from the characteristics of telecommunications. Recently as technological and economic change made the reintroduction of competition seem consistent with the goals of collective welfare, new forms of institutional design and regulatory policy have evolved across the world and were sought to be established in India through the introduction of competition in the telecommunications sector.

Paul Joskow's list of regulatory goals for infrastructure, though it speaks of a "monopoly", addresses in more strictly economic terms the objectives underlying infrastructure regulation in any market structure.[1]

- Making sure that the monopoly charges consumers reasonable prices for services
- Inducing the monopoly to provide services efficiently
- Using the level and structure of prices to induce consumers to make efficient use of services offered
- Providing additional incentives to attract additional capital to the sector
- Achieving income distribution goals through the level and structure of prices.

In most jurisdictions, the frame of activity of the regulator is set out by the legislature through statute, the executive sets and communicates telecommunications policy, while the regulator uses its powers to implement the policy on a day-to day basis. The concept of an independent regulatory agency operating with transparent procedures, obligated to make decisions based on a logical evaluation of the facts in light of its statutory responsibilities and subject to judicial review, may not be easy to create. As Paul Joskow

[1] Paul L. Joskow Regulatory Priorities for Reforming Infrastructure Sectors in Developing Countries April 1998 Paper prepared for the Annual World Bank Conference on Development Economics Washington, D.C., April 20–21, 1998.

states, "Regulatory institutions necessarily take time to create and mature, and their independence and credibility are established on the basis of both their legal foundations and their actual behavior when faced with difficult decisions that involve substantial interest group controversy"[2]. William Melody describes independence not as independence from government policy, but rather as independence to implement policy without undue interference from politicians or industry lobbyists.

Regulatory governance has emerged as an area of concern across the world. As regulation becomes essential, establishment of independent regulatory institutions becomes important. The International Telecommunications Union (ITU) reports that there are now over 84 independent regulatory agencies in the world, whereas earlier there were only 10.

Litigation has been widespread since the formation of the Telecom Regulatory Authority of India (TRAI), although it started even before TRAI began functioning. Litigation continues to be an endemic part of sector development. In this presentation, a few major cases are explored that have been symptomatic of the disputes between stakeholders in the sector and which have delayed the transformation of India's telecom infrastructure to world class levels.

II. The National Telecom Policy (NTP) 1994

Telecommunications was not perceived as one of the key infrastructure sectors for rapid economic development during the formative years of the Indian economy. The relatively low levels of investment in the sector affected the quality, quantity and range of services provided. In 1998, telephone density was 2.2 while the world average was 14.26[3]. The situation today is vastly different. Telecom infrastructure is considered to be one of the crucial requirements for Information Technology enabled services (ITES) like Business Process Outsourcing (BPO).

The change in attitude toward telecommunications was first set out in the National Telecom Policy (NTP) document in 1994. NTP 1994 stated that in order to realize the goals of India's new economic policy (1991), it was necessary to have a world class telecommunications infrastructure. 'It is [therefore] necessary to give the highest priority to the development of telecommunications service in the country.[4] NTP 1994 thus focused on telecommunications for all and telecommunications within reach of all; universal service covering all villages as early as possible at affordable and reasonable prices; quality of telecom services to be of world standard; India to emerge as a major manufacturing base and major exporter of telecom equipment defence and security interests to be protected. NTP 1994 also envisaged setting up of an autonomous regulator, TRAI.

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[2] *Ibid*
[3] *World Telecommunication Development Report*, ITU, 1999
[4] NTP 1994, Ministry of Communications, Government of India, New Delhi *see www.dotindia.com*

Although the policy specified the creation of a regulator, the latter was not setup until 1997. Meanwhile, implementation of the 1994 policy was carried out by the Department of Telecommunications (DoT). In August and September 1995, the first eight mobile licenses began commercial operations in Delhi, Bombay, Calcutta and Madras. The basic service licenses were not as keen to sign license agreements as their mobile counterparts, because they would be in direct competition with DoT, who was also responsible for implementing policy. By early 1996, DoT had issued letters of intent to a few of basic service licenses.

The regime devised by DoT to implement policy was naturally skewed in its favour, especially as it related to it service provision functions. Thus, all interstate traffic was to be handed over to DoT in its capacity as the monopoly long distance carrier and interconnection charges were to be borne totally by the new entrants. Further, DoT did not have to pay any license fee.

The genesis of the Telecom Regulatory Authority of India (TRAI) lies in the bidding process for the grant of basic services licenses and the litigation that followed the grant of the first set of cellular licenses under NTP 1994.

New entrants challenged the government and DoT and questioned the process of awarding basic service licenses. This gave rise to a legal struggle in Delhi Science Forum and others vs. Union of India.[5] The central feature of this case was that Himachal Futuristic Communications Limited (HFCL) offered the highest bid for 9 basic circles. Subsequently, DoT, capped the number of circles a single company could operate in to three, leading to the litigation.

The litigation delayed entry of competition in the sector and the Supreme Court agreed that there had been delay on part of the government to establish an independent regulatory agency. Between the time of the filing of writ petitions, and the date of delivery of the judgment, the Telecom Regulatory Authority of India Ordinance, 1996 had been promulgated. The Supreme Court analyzed the said Ordinance and held that:

"The existence of the Telecom Regulatory Authority with the appropriate powers is essential for the introduction of plurality in the telecom sector. The National Telecom Policy is a historic departure from the practice followed in 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.[6]

The creation of the new regulatory agency was a significant event in the need to establish an institutional framework capable of achieving the objectives of NTP 1994. With the creation of TRAI, DoT surrendered its regulatory role, although it retained policy making, licensing and operations within the same organizational boundaries.

[5] Sec Delhi Science Forum and others vs. Union of India and another (1996) Supreme Court of India Company Law Journal 47:2 (April-June 1996)
[6] Delhi Science Forum vs. Union of India, op cit

III. The Initial Years of Telecom Regulatory Authority of India

The Telecom Regulatory Authority of India Act 1997 established the Telecom Regulatory Authority of India (TRAI) in January 1997, with a view to provide an effective regulatory framework and adequate safeguards to ensure fair competition and protection of consumer interests. To achieve the objectives of the TRAI Act, TRAI was given power to issue directions to service providers, make regulations, notify tariffs by Order, and adjudicate disputes arising between Government (in its role as service provider) and any other service provider. More details are provided in *Annex 1*.

The passing of the TRAI Act had been long delayed in the legislative process. It is quite possible that DoT did not want a regulator with teeth. Regulation of the industry would imply in practice focus on the incumbent and even 'reform' of the incumbent provider in terms of its operations especially towards the new entrants. TRAI was soon plunged into adjudicating between DoT and cellular mobile circle licensees. It began with DoT hiking PSTN to mobile tariffs in circles upto Rs. 10.00 per minute, making it 24 times more expensive than PSTN to PSTN calls.

TRAI determined that DoT did not have the right to charge a huge premium to its customers for PSTN to Mobile calls. The tender documents floated by DoT (and on the basis of which it had received the bids) specified that the tariff for the service provided by the licensee 'shall be subject to the regulation by Telecom Regulatory Authority of India, as when such an authority is set up by the Government of India'. Further, with respect to the contention of the petitioners regarding connectivity TRAI held that "subject to the technical integrity of the network and technical feasibility, operators should not be denied points of interconnect and multiple GMSCs as they require for their optimal and efficient operation of their networks".[7]

In another case regarding non payment of license fee by private licensees who accused DoT of delaying clearances prior to commercial launch, TRAI stated

"TRAI Act has been promulgated in the context of national objectives of acceleration of rural and urban telephone penetration; attraction of private capital-national and international-to upgrade telecom infrastructure and economic growth enabled by a developed communications infrastructure. Investors in order to have confidence to invest in the sector require an assurance that the DoT does not combine in itself the dual role of the regulator and the monopoly operator, that an independent authority plays a watchdog role of regulator under internationally accepted regulatory practices. The distinction sought to be made by the respondents [DoT]in regard to their role as licensors for receiving license fee divorced from their obligations as incumbent monopoly network operators for providing interconnection etc is totally unsustainable in the circumstances. This stance would also in part defeat the legislative intent of the

[7] Aircel Digilink and others vs. Union of India and others TRAI Petition 1, 1997

setting up of this authority namely speedy settlement of disputes between DoT and the service providers".[8]

In another case regarding issue of a cellular license to MTNL in September 1997, without any recommendation from it, TRAI remarked:

"In a multi operator environment, an independent evaluation of the economic needs for a new service provider is a condition precedent for on the one hand maintaining investors' confidence and on the other achieving public policy objectives. This is particularly so at this point in India when the Government in the DoT combines itself the roles of a licensor policy maker and service provider"[9]

These disputes between TRAI and the Central Government related to whether in exercise of its powers to regulate 'service providers', TRAI could regulate the functioning of the government as a licensor and whether it was mandatory for the government to seek its recommendations with regard to matters covered in the Act. The case was the Union of India v Telecom Regulatory Authority of India in the High Court of Delhi and was decided in July 1998. In this case, it was clearly held that the question of grant or amendment of a license by the Central Government acting in its capacity as the licensor falls outside the jurisdiction of the powers of the TRAI. The folly of this judgement lay in the fact that issues which were subject to frequent change and review, for example tariffs, were also a part of the license conditions and by implication beyond the jurisdiction of the newly established regulator. That the terms and conditions of the license are inviolate and not subject to 'review' by TRAI could not have been the intent of the legislature if it was serious about lifting the quality of telecommunications in the country to world class levels.

IV. The Telecommunications Tariff Order 1999

Although the High Court judgment held that TRAI had no power over licensor-licensee disputes, TRAI's powers of specifying the tariff regime remained intact. After going through a comprehensive consultation procedure covering service providers, consumers, policy makers and parliamentarians, TRAI issued its Telecommunication Tariff Order (TTO) on March 9, 1999. The Order was a landmark for infrastructure regulatory agencies in India in terms of attempting to rebalance tariffs to reflect costs more closely and to usher in an era of competitive service provision. The chief features of the tariff order were substantial reductions in long distance and international call charges, increase in rentals and local charges and steep reductions (an average of about 70 per cent) in the charge for leased circuits.

In the Explanatory Memorandum to TTO 1999, TRAI had stated implementation of calling party Pays (CPP) would follow later due to technical considerations involved in upgrading the incumbent's network to allow for new billing systems. After consultation, TRAI announced its final decision on CPP including the crucial aspect of the regime that

[8] Fascel Ltd. And others vs. Union of India and others
[9] Bharti Cellular and others vs. Union of India and another

raised the price of PSTN to Mobile calls and specified a revenue share of about 2:1 for mobile : PSTN. The target date for implementation of this regime was November 1, 1999. DoT and MTNL had both made submissions to TRAI that the regime would result in revenue losses and sought change in the ratio that according to them favoured mobile subscribers at the expense of PSTN subscribers.

A consumer organization Telecom Watchdog filed a public interest litigation against CPP in the High Court of Delhi claiming regulatory capture of TRAI by private cellular operators. MTNL argued that the license agreement made no mention of any termination charges payable by PSTN operators to mobile operators and in the light of the earlier High Court judgment of 1998 maintained that TRAI had no power to modify the license agreement even under the garb of tariff fixation. In January 2000, the High Court struck down the introduction of the CPP regime as specified by TRAI on the grounds that TRAI did not have the power to revise license conditions nor to set revenue sharing terms. One implication of this judgement was that TRAI's powers did not extend to fixing the terms and conditions of interconnection, but were merely limited to monitoring the terms already defined in the licenses. At best, TRAI could monitor a revenue share arrangement mutually agreed by both parties.

V. TRAI (Amendment) Act 2000

Successive court decisions had watered down TRAI of many powers critical to independent regulation for a viable and competitive telecommunications sector. Thus, the court decisions established:

1) that the government was not required to seek a recommendation from the TRAI before issuing additional telecom licenses
2) that the TRAI did not have the power to adjudicate disputes between the licensor and licensee
3) that TRAI did not have the power to alter provisions in the license agreements
4) that the TRAI could not make regulations on revenue sharing, without these being negotiated between service providers.

On 24th January 2000, an Ordinance amended the TRAI Act 1997 and altered a number of aspects. For example, the adjudicatory role of the TRAI has been separated and has been provided to a Telecom Dispute Settlement and Appellate Tribunal (TDSAT)[10]. This Tribunal has been provided the powers to adjudicate any dispute

(i) between a licensor and a licensee;
(ii) between two or more service providers; and
(iii) between a service provider and a group of consumers

TDSAT has been given additional powers compared to the powers that had been given to

[10] In its present form, the CCI Bill also envisages the dispute settlement function to be performed by the Communications Dispute Settlement Appellate Tribunal (CAT)

the erstwhile TRAI. For example, it can settle disputes between licensor and licensee. Further, the decisions of the Tribunal may be challenged only in the Supreme Court.

The remaining functions of TRAI have been better defined and increased, for instance with respect to powers relating specifically to interconnection conditions. TRAI now has the power to *'fix the terms and conditions of inter-connectivity between the service providers' (TRAI (Amendment) Act 2000), instead of 'regulating arrangements between service providers of sharing revenue from interconnection' (TRAI ACT 1997)*.

The new legislation signalled an attempt to re-establish a credible regulator. The government would be required to seek a recommendation from TRAI when issuing new licenses. The adjudication of licensor-licensee disputes would be undertaken by an independent tribunal specialised in telecom. In terms of interconnection arrangements, TRAI was given the powers to override the provisions of license agreements signed with DoT. However, while there has been an increase in the powers of the Authority (other than dispute settlement), the Act has led to a weakening of the guarantee that was provided in the previous Act with respect to the five year working period for the TRAI Chairman and Members. This statutory guarantee was done away with, and the revised Act provides for less stringent conditions for removal of any Authority Member or Chairman. The term of the Authority was reduced from five to three years.[11]

VI. WLL(M) and Limited Mobility

The new TRAI would grapple with a new competition issue almost as soon as it was created. In February 1999, TRAI had protested the government's intentions in to permit MTNL and DoT into mobile without a TRAI recommendation. In June 1999, MTNL announced a "limited mobility" service in Delhi based on Wireless in Local Loop (WLL) technology, with tariffs identical to basic services rates, a flat Rs.1.2 for the first three minutes of calling time. TRAI intervened asking MTNL for the basis for a 'limited mobility' service. MTNL claimed that they already had a licence for the WLL service, and that the limited mobility offering was merely an attempt to put the technology at the disposal of those who might want "a poor man's phone offering value for money" targeted at the "very low end of the cellular subscribers".

In September, when it became clear that if the MTNL licence permitted it to offer mobile services, the same would necessarily be true of the licences of the private basic services licensees, the DoT amended the MTNL licence to cover mobile explicitly. The new provision made MTNL's mobile licence "technology neutral". The fixed line players brought to the attention of Government of India as well as TRAI the fact that CDMA technologies being used by fixed line players can also be used to provide mobility. They demanded to be allowed to offer mobility services as a part of their fixed line licence.

In October 2000, DoT advised TRAI of the cost advantages of hand held instruments over fixed wireless instruments (Rs. 6,000 against Rs. 15,000) and sought TRAIs recommendation with respect to:

[11] In a letter to the Minister, the TRAI Chairman has sought extension of the tenure of the Authority from three to five years as is the case with other regulators, The Hindu August 15, 2006.

"*scope of Area of hand held subscriber terminals under Wireless Access System operations, the basis for assigning WLL frequency and the amount of entry fee and spectrum charges as a percentage of revenue to be charged from the Basic Service Operator for extending the above facility in respect of existing as well as future Basic Service Licensees, so as to ensure a level playing field with the Cellular Operators.*[12]"

In the run up to January 2001 when TRAI made recommendations to the government on Wireless in Local Loop with Limited Mobility (WLL(M)) as part of the Basic Service license, extensive consultations were held with all stakeholders, including with the Parliamentary Standing Committee on Communications. Cellular operators were opposed to WLL(M) mainly on two grounds. Firstly they argued that WLL(M) was a 'backdoor entry' for basic service in the mobile market and secondly, permission to offer mobility under the basic service license would violate the terms of the mobile license. Amidst the widespread controversy that this episode generated, TRAI provided its recommendations to DoT that mobility be permitted for basic service, but it be restricted to the Short Distance Charging Area (SDCA). The rationale was to allow operators to use new technology to increase penetration in a cost effective manner. Mobility was viewed as an additional or value addition to the Basic Service in order to increase the attractiveness of the service to customers. While allowing limited mobility under the Basic Service license the government granted concessions to CMSPs in order to provide for a level playing field between the licenses (*See Annex II for concessions*).

Cellular Mobile Service Providers (CMSPs) challenged the decision dated 25.1.2001 of DoT allowing Fixed Service Providers (FSPs) [also referred to Basic Service Providers (BSP) or Basic Service Operators (BSO)] to provide mobility to its subscribers with Wireless Access Systems limited within local area i.e. SDCA in which subscriber is registered. Challenge to the decision was on various grounds, particularly, that the decision was against the National Telecom Policy, 1999 (NTP-99), tender documents and licence agreements of both the service providers. CMSPs contention was that allowing FSPs with limited mobility would encroach the field exclusively occupied by them.

TDSAT dismissed the petition particularly on the ground that granting limited mobility in WLL [WLL (M)] was a matter of policy of the Central Government which they could not review. On appeal filed by the CMSPs in the Supreme Court the order of the Tribunal was set aside and the matter remanded to the Tribunal. In a 2:1 judgement, TDSAT once again dismissed the petition of CMSPs. Although the matter was once again taken to the Supreme Court, it died a natural death with the introduction of the unified access license, which is discussed below.

The dissenting voice in the 2:1 divided opinion given by TDSAT was that of the Chairperson. He was extremely critical of the role of the government and especially the TRAI in supporting the introduction of the hybrid limited mobility service. This was the beginning of many bruising collisions between TRAI and TDSAT between 2003 and

[12] www.trai.gov.in

2005 which were strategically used by stakeholders to delay reform. This is further discussed in Section VII.

Meanwhile, operationally implementation of the restriction of mobility became awkward and difficult for TRAI as operators used ingenious ways of offering full mobility to customers while seemingly remaining within the letter of the new license conditions. TRAI has admitted that

"….artificial restrictions [would] encourage service providers to find loopholes in licensing regime and they will use technology or loopholes in networks/regulation to by-pass such restrictions. One such recent case is the mobility under WLL(M) where the limited mobility within SDCA, granted to the operator has been converted into almost an All-India roaming by the operator registering the subscribers almost all over the country by using call-forwarding and multiple registration. Such aberrations lead to disputes and litigation which hamper the growth of telecommunication sector. Ultimately no one gains, since the ability of the technology should not have been restricted in the first place by means of a technology neutral license"[13]

In the litigation intensive scenario, and one which was threatening to undermine the framework of regulation, TRAI recognized the need to settle the mobility issue across different license types by proposing a unified license regime for basic and cellular operators. This regime covers both the access services and it is proposed that the scope of the license be enlarged to include all services at a later stage. TRAI maintains that the shift to a unified licensing regime is not at discord with NTP 1999 because CMSPs at the time of migration to revenue share regime had accepted a multipoly regime. According to TRAI the restriction on the number of CMSPs by licensor due to limitations of availability of spectrum at a particular time should not be claimed as a contractual right. NTP 1999 stated,

"The Licensee shall forego the right of operating in the regime of limited number of operators after 01.08.1999 and shall operate in a multipoly regime, that is to say that the Licensor may issue additional licenses for the Service without any limit in the Service Area where the Licensee Company is providing Cellular Mobile Telephone Service."[14]

The unification of access licences successfully ended crippling litigation in the sector.

VII. A Question of Legitimacy

While the level playing field issue relating to WLL (M) may have got settled after protracted litigation and government intervention, litigation continued to be used as an instrument of strategic involvement by service providers. Conflict between regulatory institutions can be used to strategic advantage by self serving service providers, while coordination between the agencies can effectively blunt such strategic attempts. For

[13] Recommendations on Unified L:icensing, TRAI, October 27, 2003, www.trai.gov.in
[14] *Ibid*

example if a service provider is convinced that chances of successfully challenging a TRAI or government order are high, it will do so.

One danger to augmenting competition in the telecommunication market in India has been the lack of coordination between newly established regulatory agencies. The role of TRAI in issues relating to passing tariff orders and interconnection regulations are defined under section 11 (2) of the TRAI (Amendment) Act 2000. These orders and regulations can be challenged by operators in the TDSAT. Soon after the Amendment to the TRAI Act in 2000, TRAI made the Telecommunication Interconnection (Reference Interconnect Offer) Regulation 2002. It was challenged in TDSAT, which held that TRAI could not amend the terms and conditions of interconnection since these are embedded in the license. Similarly in another case where TRAI issued a direction in 2003 to all service providers to establish direct connectivity, TDSAT set aside the direction again citing that TRAI could not vary terms and conditions of the license.

In 2003, TRAI issued a direction to all service providers that disconnection of interconnection was not desirable and payment disputes should be settled through mutual agreement and if mutual agreement was not possible, the aggrieved party could approach TRAI for determination. This was challenged successfully in TDSAT, which held that the power to settle disputes is not vested with TRAI. And finally, in a tariff Order when TRAI reduced the ceiling IPLC tariff by 70 per cent in 2003, TDSAT stayed the Order citing breach of transparency and natural justice.

These judgements (both the earlier High Court and recently those of the TDSAT) were based on a strict interpretation of the statute and had a similar ring. Despite the fact that the new Act assigned TRAI the power to fix terms and conditions of interconnection, TDSAT interpreted the statute to mean that for licenses issued before 2000, the only power TRAI had was to bring these conditions at par with licenses issued after 2000. Timely interconnection provision and availability at fair terms is perhaps the most important instrument in promoting competition in the telecom sector. Tariffs and interconnection are items that are part of the license conditions but are also subject to frequent review based on sector evolution. It could not have been the legislative intent to preclude these from the regulatory review if indeed the intention was to lift the quality of telecommunications in the country to world class levels.

Not for a moment should this mean that the regulator's decisions should not be subject to judicial review; on the contrary, the more power the regulator has, the more important are transparent administrative procedures and opportunities for judicial review. In fact TRAI has appealed many of the decisions of the TDSAT in the Supreme court with a view to clarify its powers under the Act.

However, even within the existing statute, outcomes of the regulatory process could have been different if the institutions involved in policy and regulation had demonstrated more coordination among them. Specifically in the current context, greater coordination between TRAI and TDSAT will send correct signals to the regulated entities. Outcomes in the telecom sector, already a talking point would show further improvement.

Some of this may be emerging if the recent judgement of TDSAT in the IPLC case is any indication. Reversing its earlier judgement, TDSAT declared in November 2005, that TRAI is an 'expert body' and its tariff fixation exercise for IPLC met all the principles of natural justice and transparency. In another decision, that seemingly restores the TRAI's role and legitimacy, TDSAT has declared that the government must make public its reasons for rejecting recommendations from an expert body like TRAI.

This is indeed welcome. As a general rule, we should not expect courts to become heavily involved in the details of complex technical issues that are supposed to be addressed by expert agencies. This would just create a second layer of regulation. The telecom industry is highly capital intensive and its returns vastly sensitive to regulation. If the costs of litigation are small compared to the gains that can be had from perpetrating the status quo, litigation can be used effectively as a short term entry barrier by service providers. Both private and public sector operators have successfully used this process. The recent decisions of the TDSAT would certainly make operators think seriously whether to use the judicial process to delay reform.

VIII. Conclusion

The creation of the new regulatory agency was a significant event in the need to establish an institutional framework capable of achieving the objectives of NTP 94, which recognized that India's interest was in allowing private capital to relieve the constraint of public investment in the telecom sector.

With the creation of TRAI, DoT surrendered its regulatory role, although it retained policy making, licensing and operations. In 2000, BSNL was created out of DoT, separating the policy maker from the service provider. However, there is a feeling that BSNL is not completely free of political pressure. In this scenario, BSNL is in a position to influence state policy and may not actually positively seek to transform itself from being a national monopoly into a global player. In any case, it is unlikely to do so i.e. become a global player while remaining under the states restrictive tutelle for all sorts of reasons.

One characteristic of India's telecom reforms - and cause of much of the problems attending it - is that major reform measures like private entry into services were attempted in haste, without the policy having been thought through. The Telecom Regulatory Authority of India Act 1997 which established TRAI in January 1997 came three years after the announcement of NTP 94. Even after the regulator was established, its role and legitimacy were questioned by the government itself.

In the early phase of reform, the disputes that occurred were between TRAI and the Central Government in relation of the issue whether in exercise of its powers to regulate 'service providers' it could regulate the functioning of the government as a licensor and whether it was mandatory for the government to seek its recommendations with regard to

matters covered in the Act. After amendment in the TRAI Act, once again the role of the regulator has been questioned by entrenched vested interests.

On the other hand, a serious attempt has been made to benefit from the lessons of the first few years of 'independent' telecom regulation. The difficulties of the TRAI, as severe as they were, were by no means unique to India. Other countries, including "developed" countries, attempting the transition to competitive telecommunications were experiencing or had experienced the same frustrations. As long ago as 1994, the World Bank's telecommunications policy team noted "The single most troubling issue in recent reforms has been the slow progress in developing regulatory capabilities. All major reforms have been predicated on the expectation that effective public regulation of the privatized monopolies…can be implemented fairly quickly. Yet building regulatory institutions in countries with little or no regulatory tradition in any sector is an arduous and slow task"[15].

[15] World Bank. *Telecommunications and Economic Development*. Baltimore: Johns Hopkins University Press,1997

Annex I: Main Functions Entrusted to Telecom Regulatory Authority of India

- To ensure technical compatibility and effective interconnection between different operators and service providers
- Regulate the revenue sharing arrangement between different service providers
- To lay down and ensure time frames for making available local and long – distance DoT circuits between service providers
- To protect consumer interests through monitoring of service quality standards
- To ensure compliance of license conditions, universal service obligations and the stated overall pricing policy by all operators and service providers
- To levy fees and other charges and to make regulations in that behalf
- To settle disputes between service providers
- To fix tariff for telecom service and ensure price regulation
- To render advice to the government in the national context on technology options, service provision and other allied matters concerned with telecom
- Any other matter referred to it by the government

TRAI is to exercise recommendatory functions on the need and timing for introduction of new service provider and the terms and conditions of license to a service provider.

In the exercise of its powers and the performance of its functions, TRAI shall be bound by directions on questions of policy given by the Government.

TRAI is vested with judicial authority and powers. Appeals against its decisions will lie with the High Court.

Source: Telecom Regulatory Authority of India Act (1997)

Annex II

Concessions to CMSPs when limited mobility was permitted [WLL(M)]

- The amendment dated 25th September, 2001 to the old CMTS license agreement, permitted the CMSPs to provide "Fixed Phones" based on existing GSM cellular network infrastructure in their Licensed Service area.
- Under the unified licensing regime, the above mentioned CMTS license conditions need to be modified to the extent that the choice of the technology is left to the service provider.
- The Cellular Mobile Service Providers were also permitted to use mobile PCOs.
- The annual revenue share license fee, which was higher for mobile services, was brought down to level of Basic Services i.e., at 8%, 10% and 12% for Category C, Category B and Category A Circles respectively.
- The CMSPs were allowed to retain 5% of the long distance call charge.

Concessions to CMSPs when Full mobility was permitted [WLL(M)]

- 2% concession in revenue share for 1st & 2nd CMSP in each service area for 4 years starting from financial year 2003-04