

Regulation of Telecommunications Industry in India

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Abstract

Reforms have enabled the telecoms industry to handle a wide array of concerns such as service quality, consumer interest protection, and the rise of rural communications services. Furthermore, both the regulatory process and the court are significant determinants for attracting investment, and its success has triggered a phenomenal rise in wired and wireless telephony and added value services. India has to be on its current road to change to benefit the telecoms sector and its customers from new technology.

This paper examines the Indian telecom sector's transition from a monopolistic to a competitive environment. Even though similar transitions have occurred in other countries, India's shift is particularly notable due to the rapidity with which changes occurred. The National Telecommunications Policy, 1994, and the New Telecommunications Policy, 1999 established a strong and independent regulatory mechanism with well-defined powers and responsibilities. By setting service provider criteria, verifying compliance, and developing a structure for dispute resolution, this regulatory mechanism helps maintain a competitive environment in the services sector.

Key Words: *telecom, law, regulations, reforms*

Introduction

The paradigm shift in the Indian telecommunications market had followed the pattern observed elsewhere in the framework of deregulation of that sector from the monopoly system to one of open competitiveness (duopoly) and the subsequent development of an independent telecom regulatory system. The Government of India (G.O.I.) had adopted and implemented policy measures that take account of the ground conditions. With the advent of private players in the 1980s, the reform process began. Into the manufacturing of customer premise equipment in 1984, the corporatization of domestic telecom operations in two metropolises: Delhi and Mumbai, and the formation of an international services corporation in 1986 and a Telecom Commission with full government powers in 1989. (Prasad, 2008). Although the incremental reforms implemented in the 1980s were steps toward freeing bureaucratic control, they had a monopolistic tone.

The declaration of an economic liberalization agenda by the Government of India in 1991 gave the virtual drive for transformation. This strategy indicated a shift in policy makers' attitudes, which resulted in a structural transformation in the Indian economy (Venkatnarayana, 2015). Policymakers were acutely aware of the need to boost the infrastructure sector, which served as the economy's backbone. The choice of the telecom sector to "showcase" the policy shift underlined the Government's importance of telecommunications as an ordinary person's tool for capacity building, a significant driver of economic and social transformation, and a factor in developing the country's international competitiveness.

Past Constraints

Before liberalization, India's telecommunications market was in shambles. The government monopoly was characterized by abysmally low teledensity, weak tele-infrastructure, a limited-service portfolio, and a highly bureaucratized structure. The NTP94 estimated that the teledensity was around 0.8 per hundred people, compared to a global average of 10 per hundred people, and that it was considerably lower in several developing nations (Kathuria, 2004). The policy document admitted around eight million lines in the network with a waiting list of about 2.5 million and tele-coverage of nearly 140,000 villages out of 576,490 communities, highlighting the poor situation in tele-infrastructure (Subramaniam, 2008). The position in India then was poorer than in many developing countries, including many low-income countries. Furthermore, the fixed-line service tariff remained highly high—local, S.T.D., and I.S.D. Per-minute call prices (in INR) were 16.80, 30.00, and 75.00 respectively in 1997 but had dropped to 1.0, 2.4, and 6.40 in 2007.

The Government was aware of the imperatives of enhancing and modernizing telecommunication infrastructure in terms of volume, accessibility, and cost, having acknowledged telecommunications's impact on people's lives and the country. There, the G.O.I. also acknowledged telecoms' catalytic role in other countries' development processes, as well as global changes in the telecom landscape caused by increasing globalization, technological advancements, rapidly growing consumer needs, and new demands emerging from the unleashing of market forces.

National Telecom Policy, 1994

Giving effect to this conclusion and successfully liberalizing requires large amounts of investment and structural changes in the telecom behemoth. This could have been the start of a new policy endeavour that resulted in the National Telecom Policy 1994 (Kokil, 2007). This policy statement was the first attempt in India to formalize policy objectives and give a roadmap for telecom development. Specific targets were included in the strategy statement, such as making telephone service available on-demand, covering all villages, providing PCOs in urban areas for every 500 people by 1997, and introducing all value-added services available worldwide, preferably by 1996. The expected resource deficit for achieving these aims was considerably over Rs.230 billion. Hence the strategy stressed private sector involvement and the need for private investment to bridge the resource gap.

As a result, for the first time, the policy authorized private enterprises registered in India to supply essential telephone services under certain conditions. It instituted a duopoly regime with two operators in each of the four metros and eighteen telecom circles. Another significant aspect of this policy paper was its emphasis on safeguarding and promoting consumer interests, as well as ensuring fair competition. Although the NTP94 did not go far enough in terms of liberalization, it did remove the umbilical cord that had been binding the Indian telecom sector to its monopoly provider, which had been nurtured by the more-than-a-century-old Indian Telegraph Act (Kathuria, 2019). However, the policy's implementation fell short of the excitement it generated, yielding mixed effects. Physical targets, notably for rural telephones, were not met. By March 1999, only approximately half of the over 600,000 communities had been covered (Johnson, 2012).

The NTP94 placed a high priority on safeguarding consumer interests and promoting fair competition. The Telecom Regulatory Authority of India Act 1997 was enacted by the Government in 1997, resulting in the establishment of an independent statutory Regulatory Authority for the telecom sector, with clearly defined functions, powers, and responsibilities to encourage competition, ensure a level playing field, and promote and protect consumer interests. The Telecom Regulatory Authority of India (TRAI) has broad functions and powers in the sectors under its jurisdiction. These include ensuring technical compatibility and effective interconnection between operators and

service providers, regulating revenue-sharing agreements between service providers, monitoring quality-of-service standards, ensuring compliance with license conditions, approving telecom tariffs, and protecting consumer interests (Garg, 2020). The Telecom Regulator was not tasked with tasks such as licensing, standard formulation, and spectrum allocation, which fall under the purview of the Government.

New Telecom Policy, 1999

While the execution of NTP94 did have a considerable effect, it was deemed inadequate in resolving competition issues. Many projects encountered difficulties for two main reasons: first, actual revenues realized fell well short of predictions; and second, operators were unable to secure funding for their projects. The enunciation of a New Telecom Policy 1999 was a response to the profound changes occurring in the telecom sector worldwide, as well as the shortcomings of NTP94. The NTP99 broadened the scope of cellular mobile service, fixed service, cable service, and license terms and conditions and operational features. Interconnection had been a significant source of contention among service providers and had resulted in numerous disagreements. Recognizing the severity of the issue, the Government incorporated it into policy in NTP99. The NTP99 policy stated explicitly that interconnection between service providers in the mobile and primary service sectors was permitted.

1. Establishment of a Telecom Dispute Resolution and Appellate Tribunal

In 2000, a modification to the TRAI Act separated the regulatory and adjudicatory roles by creating a specialized statutory dispute settlement system, the Telecom Disputes Settlement and Appellate Tribunal (TDSAT). Subject to certain restrictions, this body's functions include adjudicating any conflict between a licensor and a licensee, two or more service providers, or a service provider. A group of consumers has the authority to control its proceedings and has both original and appellate jurisdictions. The civil court delegated jurisdiction to TDSAT on subjects within the latter's competence, and the latter's orders are executable as a civil court decree. On legal grounds, the Supreme Court of India may hear an appeal against the TDSAT's orders (Srivastava, 2016).

2. Convergence of Markets and Technologies

The Communication Convergence Bill of 2001 made considerable headway in shaping this trend. Despite being introduced in Parliament, this Bill made little progress and expired before becoming law (Patnaik, 2002). Broadcasting and cable services were eventually included in the term "telecommunication service" as defined in the TRAI Act, 1997, and revised in 2000 by a government notification dated January 9, 2004. As a result, the telecom regulator had jurisdiction over broadcasting

and cable services, and disputes resulting from these services were within the telecom sector's appellate body (Maheshwari, 2020).

3. Infrastructure Sharing

Previously, passive infrastructure sharing was permitted, allowing a new telecom operator to rent space on another's tower to place its equipment to support its rollout. With the new rule on active infrastructure sharing, a new entrant can now rent all active electronics, switches, and circuits from another telecom operator who possesses passive and active infrastructure. However, active infrastructure sharing does not include spectrum sharing. This rule will assist new operators in launching their services with less upfront capital investment, resulting in increased viability and cheaper rates. The cheaper cost of providing service will encourage service providers to expand telecom services in rural areas without incurring the substantial costs of telecom coverage in such places.

Influence of Regulatory Efforts

1. Telecom Regulator and Dispute Resolution Entity as a stimulus for telecommunication development

The independent regulator had established itself as a fixture in the telecom sector, and the depth of its dedication to serving as an umpire for the industry instilled confidence in both customers and service providers. The regulator and the dispute resolution agency had both matured into credible institutions, which was well for the telecom sector. The influence of the telecom regulator's activities spanning several facets of telecom services had been beneficial to expanding the telecom sector. Similarly, the TDSAT dispute resolution mechanism provided an excellent platform for focused issue resolution, and the consistency of its approach had significantly increased investor confidence (Prasad, 2007).

The telecom regulator faced enormous problems following deregulation, as it was expected to address a slew of concerns in areas like rate setting, quality of service, consumer protection, licensing, rural telecom service growth, and spectrum management. Dealing with these difficulties properly through legislation and integrating stakeholders in the process was critical to ensuring a level playing field, stimulating competitiveness, and increasing customer happiness. The regulator fully addressed these challenges, resulting in the telecom sector's revolution in India.

2. Tariffs

The Telecom Regulatory Authority of India recognized the importance of an inexpensive rate for the average person as a stimulant for much-needed telecom network expansion and as a tool for boosting competition in the sector early on. Increased competition in the telecom sector has given service providers the freedom to provide whatever rate they want as long as they meet specific regulatory guidelines, such as I.U.C. (Interconnect Usage Charges) compliance (Mathews, 2011). The first significant policy step was the 1999 Telecommunications Tariff Order (T.T.O.), in which the tariff structure of various telecom services had become transparent. This T.T.O. also conveyed signals to potential investors in the sector regarding the way telecom price reforms are being conducted, the main factors being:

- Further rebalancing prices to match with expenses while focusing on the social goal of encouraging non-users of telecom to connect to the system and utilize it more intensely;
- Enhanced flexibility for pricing and consumer choice for service providers.

3. Quality of Services (QoS)

In July 2000, the regulator established regulations on Q.O.S. for essential and cellular services, with different parameters supplied for wireline and wireless services, in compliance with its duty to define guidelines for the quality of service provided by various service providers. The TRAI has been reviewing the status of the quality of service supplied by operators regularly. The overall performance of wireline services in comparison to the benchmarks was determined to be poor in these studies. In the case of mobile service providers, however, they discovered that overall performance was far better, with almost 75% of the operators meeting most of their benchmarks. The TRAI classified basic and cellular Q.O.S. metrics into four areas under this regulation (Ardagna, 2014):

- Network performance;
- Customer helplines;
- Billing complaints; and
- Customer impression of services.

4. Protecting of Consumer Services

The TRAI has addressed consumers' concerns in a variety of ways, including:

- Holding half-yearly meetings with registered consumer organizations to gain a better understanding of their problems;
- Inviting consumer organizations to seminars, workshops, and conferences to inform them of various developments in the telecom sector; and

- Prescribing a written voluntary declaration by the consumer organizations

All of these steps increased consumers' impressions of the efficacy of telecom services and served as a warning to service providers that they must conform to the regulator's standards or face the consequences. These pro-consumer policies aided telecom expansion in India, as seen by the welcome increase in teledensity in both urban and rural areas

5. Provision of tele-connectivity in Rural Areas

The significant disparity between rural and urban teledensity has long necessitated immediate response. In the third quarter of 2007, the rural wireline customer count added up to 11.99 million. Both the NTP94 and the NTP99 stressed the importance of expanding rural tele-coverage. The number of village public telephones (V.P.T.) has consistently increased over the years, rising from 0.68 per 100 in 1999-2000 to 8.35 in December 2007 (Majumbar, 2020). According to the Annual Report of the Department of Telecommunications, 2007-08, about 527,000 VPTs in the country are currently eligible for financial assistance for operation and maintenance through the USOF (Universal Service Obligation Fund) (Malakar, 2015)

6. Spectrum Management

The NTP99 acknowledged that the continuous proliferation of new technologies, together with rising demand for telecom services, has resulted in a plethora of spectrum demands. As a result, the policy emphasized the importance of efficient, logical exploitation of this precious resource, as well as the importance of transparency in the process of allocating frequency spectrum. The availability and efficient use of spectrum were critical components in increasing service quality, growing the network, and successfully shifting to an era of service and technology convergence (Majumbar, 2020). Some of the crucial issues that were relevant in this context were as follows:

- Should the number of access providers be limited?
- Should the allocation of spectrum be accompanied by constraints for its use, such as adherence to a timetable and/or compliance with rollout responsibilities associated with previously given spectrum?
- What metrics should be used to calculate spectrum pricing?
- Should the spectrum-allocation strategy be flexible and independent of any single technology, letting service providers select its use?

The proposals of the TRAI centre on providing a level playing field, establishing technological neutrality, and assuring affordability. It had also suggested that in the future, after reserving the spectrum in particular bands, the spectrum be allocated through auctions. Since there was insufficient

spectrum to meet the needs of existing operators, let alone new applicants, an efficient, equitable method is clearly in the best interests of the telecom industry (Ardagna, 2014).

Future Challenges

The fundamental difficulty confronting India's telecom sector is the importance of telecommunication infrastructure in a country's economic and social life. How the telecom sector responds to that challenge is determined by two factors: first, how it addresses the concerns and needs of all segments of Indian society, and second, how it uses current technologies (and assimilates new technologies) to reduce internal barriers to Indian development and improve India's ability to compete globally. The Indian telecommunications industry has come a long way, but it still has a long way to go. To finish the journey efficiently, the industry must critically assess the extent to which policy objectives have been met, identify and fix areas where current policies are lacking, and forecast what new policies will be required to adapt to developing conditions (Maheshwari, 2020).

Another significant difficulty would be to reconsider the roles of the regulator and the dispute resolution institution as the telecom industry matures. The industry is distinguished by increasing network complexity, market segmentation into outlying areas and niches that serve diverse clients, and the heightened importance of technical breakthroughs in driving change. Regulatory bodies will increasingly be called upon to address difficulties arising from cross-platform competition. The needs of a fast-expanding and changing business will raise concerns regarding the suitable form of its regulating body. What powers, functions, and responsibilities should the regulator be given, and how should it be staffed to carry them out? Furthermore, how should its independence and protection from external meddling be ensured? Similar problems exist concerning the dispute-resolution institution, which will also need to prepare itself to deal with new forms of disputes promptly.

Finally, issues emerge from the need to increase teledensity and lay the groundwork for introducing new technology and services. Protocols for third- and fourth-generation networks must also be developed by authorities. In addition, developing and executing a sound, transparent spectrum policy will remain a principal focus.

Closing Arguments

The promotion of a competitive environment in the service industry, such as telecom, is mainly dependent on an independent, powerful regulatory apparatus based on status conveying specified powers, functions, and responsibilities. The regulator is enabled by this framework to operate transparently and to lay down ground rules, and then monitor service providers' conformity with them. An effective conflict resolution procedure, which objectively and promptly resolves disagreements, is also necessary for a competitive setting. To implement the dramatic changes arising from convergence, business changes to practice and growing consumer expectations in the telecommunications sector, the quality and transparency of regulation and the efficacy of the dispute settlement process remain essential aspects to attract investment. The political organization contributes equally to the clarity and transparency of the political system and the positive assistance of the regulatory institutions. If any vital agency fails to fulfil its particular tasks successfully, the reform process will be affected.

The telecommunications industry in India has travelled a long way and emerged from its early efforts to develop the core service into the current period of amazing landline and cellular telephony growth and value-added services. The sector has overcome numerous challenges to its current development phase but has to continue to reform if new technologies fulfil their promise and become an engine of equitable economic development.

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