"FUNCTIONING ANARCHY": *INDIA'S NATIONAL TELECOMMUNICATIONS POLICY AND THE DEVELOPMENT OF "BASIC" TELEPHONE SERVICES*

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I. INTRODUCTION

The Government of India's (GOI) efforts to implement its 1994 National Telecommunication Policy are perhaps most appropriately summed up by paraphrasing John Kenneth Galbraith's memorable assessment of India: as he said of the country, one may say of the Policy that it is "functioning anarchy." Since its articulation by the Congress (I) government of Prime Minister P. V. Narasimha Rao, it has been shown to be haphazardly conceived, modified on an *ad hoc* basis, badly implemented and abused for private gain. Nevertheless, in its own perverse way, it has made possible the incremental and still incomplete, but probably irreversible, liberalization of the telecommunications sector.

Nowhere is this paradox more evident than in the government's efforts to promote the development of "basic" telecommunication services, as envisioned in the Policy. From the outset, this endeavor has been crippled by enduring conflicts of interest, a sometimes stunning incomprehension about the technical aspects of the telecommunications industry, an intermittent disregard for economic analysis and a vestigial loyalty to the Fabian socialism of the Nehruvian state. In this paper, I attempt to survey this process of reform, and to offer some tentative assessments of its irregular progress.

For the purposes of this paper, I adhere to the Indian government's tacit definition of basic services as (typically wireline-based) voice telephony, but without subscribing to it. Indeed, an important portion of my argument criticizes this implicit identification, and examines in some

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detail its deleterious impact on the formulation and execution of government policy. Additionally, it should be noted that while the reform of the Indian telecommunications sector has involved a great deal more than the liberalization of basic services, I do not address its other dimensions except insofar as they have impinged upon the latter.

II. THE MACROECONOMIC AND REGULATORY CONTEXT OF INDIAN TELECOMMUNICATIONS POLICY

A. Present Capacity

India has, in absolute terms, a large domestic telecommunications network with impressive voice telephony capabilities. It has 12 million direct exchange lines (DELs), 21,158 telephone exchanges and 10 million telephone lines. One thousand one hundred industrial and commercial centers have direct dialing facilities linking them to each other and to overseas destinations.[1] The country also has a long distance transmission network with 116,000 route kilometers of terrestrial microwave radio relay, coaxial & undersea cables and 25,000 miles of optical fiber systems. The rate of growth of voice telephone connections on a nationwide basis is 8.4%, a full 3.4% higher than the global rate of 5%.[2]

On the whole, however, the voice telephony network as it presently stands leaves much to be desired. First, it is heavily concentrated in urban regions, with the four largest cities (Bombay, Delhi, Calcutta and Madras) enjoying telephone densities in excess of 4 DELs per 100. By contrast, rural areas typically have less than 0.1 DEL per 100 persons. Indeed, only 140,000 of a total of India's 604,000 villages have access to telephones within a reasonable distance.[3]

Second, the system is distinguished by significant regional imbalances. For example, the relatively industrialized states of Punjab, Gujarat, Maharashtra and Kerala have 4 times the penetration rate of Uttar Pradesh (UP). Unremarkably, *panchayat* villages[4] in the former states have significantly greater access to voice telephony than their counterparts

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1. All other locations only have trunk booking facilities.

2. ASIAN DEVELOPMENT BANK, 1996 PROPOSED LOAN FOR THE RURAL TELECOMMUNICATIONS PROJECT (INDIA) (R258-96) [hereinafter ADB].

3. MINISTRY OF FINANCE, UNION BUDGET, 1996-1997 (1996). Just over one-half of the country's 232,000 *panchayat* villages [larger rural administrative centers that serve as the seats of local government] have access to voice telephony.

4. For a definition of *panchayat* village, see *supra* note 3.

in the latter: all such villages in Kerala and 80% of those in Tamil Nadu have direct access to a telephone facility, compared with 20% in UP.

Third, relative to other developing countries in Asia, India's telecommunications system compares very unfavorably in terms of network coverage and expansion. Its telephone density of 1.3 DEL per 100 persons is among the lowest in Asia.[5] Moreover, in the period between 1991 and 1993, India's wireline voice telephony network grew by one-third (from 4.6 million to 6.8 million DELs). But the waiting list increased from a total of 1.7 to 2.8 million prospective subscribers. Since 1993, the situation has deteriorated further, so much so that as late as 1996, aggregate unexpressed demand for voice telephone connections exceeded supply by 42%.[6] Today, many potential subscribers do not even bother to apply for a connection, as they know service will not be available for a minimum of two years.

The significance of such pronounced underdevelopment in basic services is obvious, not least to large numbers of Indian policy-makers. It is clearly a major constraint on economic and social development. At the grassroots level, capacity constraints in this area impede the successful implementation of (Government-run) social welfare programs in public health care and education, particularly in rural areas. According to a non-governmental organization active in 6 Indian states, a basic voice telephone link between a north Indian village and the district office of the government Primary Health Care Worker would so noticeably improve the latter's pre-natal monitoring and preventive care capabilities that it would effectively reduce the infant mortality rate in that community by about eight percent.[7]

Moreover, structural deficiencies in the basic services network undermine the ability of India's newly liberalized, export-oriented economy to attract the international capital inflows necessary to finance its expansion in a sustained manner. Equally, they severely inhibit the ability of Indian private sector firms to effectively compete effectively with their foreign counterparts. As one might expect, the small and medium-sized firms that comprise India's emerging *mittelstand*—and are crucial to its export strategy—bear a disproportionate share of this burden.

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5. For instance, even low-income Asian countries such as China and Pakistan have telephone densities of 1.7 DELs and 2 DELs per 100 people. A Newly Industrializing Economy (NIE) such as Malaysia has 13 DELs per 100 people.

6. ADB, *supra* note 2.

7. Interviews with participants, Symposium on Governance, Development Alternatives (June 10, 1995).

Finally, because voice telephone services are so critical to the successful pursuit of national public health, education and social welfare efforts, they are essential to the improvement of the country's human capital endowments. In this regard, their retardation has profound consequences for the emergence of a literate and healthy workforce capable of servicing export-oriented industries, and possessed of the requisite skills to negotiate an increasingly flexible labor market. Thus, basic services are an important interface between the "hard" dimensions of development, such as macroeconomic, regulatory and structural reform, and its "soft" aspects, such as health, education, and social welfare.

It is tempting to believe that these testaments to the importance of voice telephony persuaded the GOI in 1991 to officially recognize that the general inadequacies of its telecommunications network were unacceptable; that its programmatic public sector-based efforts to remedy them had, at best, met with limited success over the course of forty years;[8] and most importantly, that it would have to reverse longstanding policies and significantly liberalize its telecommunications sector. Such an assessment would be misplaced, however, fundamentally because the GOI's reform efforts were precipitated and sustained by the massive balance of payments crisis suffered by the Indian economy in 1991. Indeed, the peculiar and involuntary nature of this impetus for reform determined the scope and pace of the GOI's liberalization program, so much so that it explains its haphazard conception and implementation. Therefore, any discussion of the GOI's efforts to promote basic telephone services must necessarily begin with a consideration of the wider macroeconomic and regulatory environment of the early 1990's in which the GOI formulated its telecommunications policies.

B. Institutional and Policy Reform Initiatives Pertaining to "Basic" Services: A Chronology

Until the 1980's, the GOI pursued quasi-socialist import-substitution industrialization (ISI) policies predicated on "a vast regulatory apparatus designed to support a large public sector (producing key inputs such as steel, power, transport, ... [commercial finance and telecommunications]. Suffused with more than a residual antipathy to capitalism, which the Indian political classes associated with colonial exploitation, the GOI

8. *See, e.g.*, THE MINISTRY OF FINANCE, REPUBLIC OF INDIA, ECONOMIC SURVEY OF INDIA (1991).

restricted the private sector to the production of consumer goods (imports of which were banned)."[9] Forty years of government policy based on this strategy created a well-diversified but highly *dirigiste* mixed economy distinguished by "protection[ism,] tight controls over industry and investment, and a legal framework [that] prevent[ed] the free movement of capital and labor."[10] But though these features made for lackluster GDP growth and frequent state intervention in the economy, India maintained a consistent record of macroeconomic stability based on cautious financial policies.[11] Widening fiscal deficits and a mounting debt burden during the 1980s, however, raised serious questions about the sustainability of the country's current account.[12] Then, the outbreak of the Gulf War in 1991, combined with domestic political turmoil delivered two successive shocks to the Indian economy. Capital flight, a precipitous decrease in exports, and a sharp rise in oil import bills so weakened India's balance of payments profile[13] that in June, both Standard & Poor and Moody's downgraded India's credit-worthiness to the lowest level. In response, the international capital markets cut off short-term credit,[14] leaving the country with less than one billion dollars in foreign exchange reserves, or the equivalent of two weeks worth of import cover.

Aware that it was on the verge of defaulting on its US$71 billion external debt,[15] the GOI turned to the International Monetary Fund (IMF) and the World Bank for emergency assistance.[16] The multilaterals' response was unexpectedly generous. The IMF extended US$635 million in compensatory financing to boost reserves, as well as a 20-month loan of US$2.2 billion through the standby credit facility.[17] In return, the Fund ordered the government to abolish statutory controls on foreign exchange flows, devalue the rupee by 18% against the dollar, and sharply reduce government spending.[18] The World Bank loaned India a further US$ 3 billion through the Structural Adjustment Lending (SAL) window, on

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9. Ranjit Teja, *Crisis, Recovery and Transformation in India*, in 29 FIN. & DEV. 32 (1994).
10. *See generally*, THE INDIAN ECONOMY: PROBLEMS AND PROSPECTS (Bimal Jalan ed., 1992).
11. Teja, *supra* note 9, at 32.
12. *Id.* at 32.
13. *Id.* at 32.
14. Dilip Das, *India Gives Up On Free-Market Reform*, ASIAN WALL ST. J., Jan. 20, 1992, *available in* Westlaw Library, WSJ-ASIA file.
15. Cynthia Owens, *India Reaches Economic Watershed: Effort to End Years of Self-Imposed Isolation Cheers Foreign Executives*, ASIAN WALL ST. J., Aug. 8, 1991, *available in* Westlaw, WSJ-ASIA file.
16. Das, *supra* note 14.
17. *Id.*
18. *Id.*

condition that India undergo structural adjustment and IMF-mandated fiscal stabilization.[19] In particular, the Bank required India to abolish industrial licensing, and raise the statutory ceiling on foreign equity ownership to 51%.[20]

The government accepted the multilaterals' conditionalities and began its tenure by presenting a remarkably austere 1991 federal budget. Adopting an extremely restrictive fiscal stance, the federal government curtailed expenditure on subsidies, defense needs, capital expenditure, and loans to the states and the public sector.[21] In this way, it managed to reduce the fiscal deficit from 9% to 6.5% of GDP.[22]

After receiving another US$300 million loan from the Asian Development Bank in 1992 to assist in reforming the financial services sector,[23] India began negotiating with the IMF in 1993 for a further US$9 billion loan partly under the Extended Fund Facility, and partly through the concessional Enhanced Structural Adjustment Facility (ESAF) window.[24] In return for this additional financing, the IMF, in consultation with the World Bank, specified further conditionalities to reduce the fiscal burden of the federal government.[25] Specifically, it required India to accelerate financial sector reforms, remove unproductive farm subsidies, liberalize consumer imports and deregulate the labor market, especially by adopting legislation that would allow employers to "hire-and-fire" employees at will.[26] India agreed in principle to these policies, but stressed that some politically sensitive reforms, such as those pertaining to the liberalization of labor laws, would have to be very gradually undertaken.

That the GOI undertook to liberalize its telecommunications policy in this context is highly significant, particularly with regard to basic services. Until 1991, its regulation of the sector simply consisted of federal political oversight by the Parliamentary executive: under the Indian Telegraph Act of 1885,[27] all telecommunications services were directly

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19. Fiammetta Rocco, *Gandhi Murder May Delay Key IMF Loan: New Funds Urgently Needed to Solve India's Growing Balance of Payments Problems*, INDEP. ON SUNDAY, May 23, 1991, *available in* Westlaw Library, INDEPENDENT file.

20. Das, *supra* note 14.

21. *Id.*

22. *Id.*

23. *Id.*

24. *India Launches Talks with IMF for Big Loan,* AGENCE FRANCE PRESSE, July 26, 1993, *available in* LEXIS, Nexis Library, AFP file.

25. *Id.*

26. *Id.*

27. The Indian Telegraph Act, 1885, INDIA L. DIG., *available in* Westlaw Library, Martindale-Hubbell International Law Digest file.

operated as government-owned and -operated monopolies by the federal Ministry of Communications (MOC), which also administered and owned the postal services. Firmly underpinning this macroeconomic and regulatory regime was the ruling paradigm of Nehruvian socialism: since the state was deemed the guardian, benefactor and representative of citizens' interests, the wealth-creating potential of the "commanding heights of the economy, [namely heavy industry, were] to be reserved for its public sector"[28] organs. Conversely, these resources had to be protected from appropriation by private economic actors, (particularly if they happened to be foreign,) not only because such transfer of control would lead to the enrichment of a few at the expense of many, but also because public control of such sectors, which were important to the vitality of the Indian military-industrial complex, was essential to ensure the vitality of the country's defensive capabilities.

Thus, like all other public sector enterprises, the MOC was mandated to pursue three sets of public corporate objectives in addition to the sectorally specific aims of providing universal service and promoting the development and installation of the most sophisticated telecommunications technology.[29] First, it was expected to create and sustain profitable and competitive operations by achieving the maximum possible efficiency, imposing minimal costs on consumers, and increasing the range and availability of services. Additionally, it was to help fulfill the social welfare obligations of the Nehruvian state by providing stable employment to a sizeable proportion of India's formal sector labor force. Third, it was to ensure the perpetuation of direct governmental responsibility for the sector in the interest of national security.

Prior to 1991, none of these goals of GOI telecommunication policy was ever questioned, even during periods of intermittent administrative reform of the sector by the MOC. Indeed, the most far-reaching of these structural reorganizations, which were ordered by the Rajiv Gandhi government in the latter half of the 1980's, very much exemplified the ministry's tendency to acquiesce in the prevailing consensus on the state's role as regulator and economic actor.

The Gandhi government's reforms were implemented in three stages. In 1985, the MOC divided its joint responsibility for telecommunications and postal services into two departments, and entrusted the newly-created

28. JAWAHARLAL NEHRU, OCCASIONAL SPEECHES 45 (Menon ed., 1967).

29. *See, e.g.* Michael Boon, *No Bargains in India's Market*, COMM. INT'L, Oct., 1996, *available in* LEXIS.

Department of Telecommunications (DOT) with primary responsibility for the provision and oversight of all services concerned with the telecommunications sector. The following year, the government created two public sector corporations within the DOT: *Mahanagar Telephone Nigam Limited* (MTNL) ["Metropolitan Telephone Company Limited"], which was charged with the ownership, management, and operation of the metropolitan local loop networks of Delhi and Bombay, and the *Videsh Sanchar Nigam Limited* (VSNL) ["International Telecommunications Company Limited"], which was entrusted with ownership, management, and operation of international telephone services. Much like the multitude of other public sector corporations, MTNL and VSNL enjoyed financial and administrative autonomy, were able to directly raise investment funds by tapping international and domestic capital markets, and were intended to be commercially viable. For its part, the DOT retained ownership, management and operation of all telecommunications services and facilities for the rest of the country.[30]

Finally, in 1989, the GOI created another agency within the MOC, the Telecommunications Commission (TC), and invested it with broad responsibility for policy development. Additionally, it was also entrusted with primary responsibility for perspective planning to promote all telecommunications services in India, including technology, production and services.

Far from altering the *dirigisme* of the underlying regulatory regime, these structural changes demonstrated remarkable fidelity to both its spirit and standard operational procedures. For instance, in their contributions to the Seventh (1985-1990)[31] and Eighth (1990-1995) Five-Year Plans,[32] as well as the Perspective Plan for Telecommunications Services (1990-2000),[33] the newly re-constituted MOC, TC and DOT extrapolated from contemporary levels of unrealized demand for voice telephone connections to arrive at numerical targets to be realized during the subsequent phase of network expansion. The DOT was then given formal responsibility for financing the process out of federal budgetary allocations, and physically installing the required capacity.

Pursuant to these instructions, the federal government, acting through the MOC, the DOT and the TC, aimed to install 1.7 million new telephone

30. ADB, *supra* note 2.

31. PLANNING COMMISSION, SEVENTH FIVE-YEAR PLAN (1984).

32. PLANNING COMMISSION, EIGHTH FIVE-YEAR PLAN (1989).

33. MINISTRY OF COMMUNICATIONS, PERSPECTIVE PLAN FOR TELECOMMUNICATIONS SERVICES (1990).

connections within the Seventh Plan period. Moreover, during the Eighth Plan period, it hoped to install an additional 8.6 million new telephone connection, more than *eight* times what it set out to achieve during the earlier Plan period. Indeed, by the end of 1997, the GOI planned to have raised national telephone density levels to 1.1 DELs per 100 persons, and to have installed a telephone in each of India's 597,000 villages. It also aimed to maintain this trajectory of network expansion so that, by 2000, DOT would have installed a telephone in each of India's 232,000 *panchayat* villages under a federally-funded and -administered "Phone in Every Village Scheme"; and the waiting time for voice telephone connections in both urban and rural areas would have been reduced to a maximum of a few months. Beyond 2000, the GOI aimed to raise telephone density levels to between 6 and 7 DELs per 100 persons in urban areas, and from between 0.9 and 2.3 DELs per 100 persons in rural areas.

As the targets and action-plans of the various Plans demonstrate, the structural reorganizations of the MOC had little or no success in altering the fundamental orientation and substance of Indian telecommunications policy, particularly with regard to basic services. Indeed, they were quite plainly not designed to bring about such a change. That the MOC, DOT and TC continued to adhere to the long-established practice of target-setting by central government ministries, and to rely on the DOT to implement policies designed to realize them, suffices to establish that, to a very large extent, the organizational reforms were cosmetic. Telecommunications policy in India was still predicated, almost as a matter of faith, on sustained state action and federal budgetary support. By extension, it would and could not challenge or alter the underlying regulatory regime.

Nevertheless, there is little doubt that Eighth Plan and the Perspective Plan together generated considerable economic impetus for the fundamental transformation of the system, particularly in the context of the balance of payments crisis that was already looming in 1990. The total cost for the achievement of Eighth Plan targets alone amounted to well over US $9.6 billion, a level of budgetary support that the GOI in 1989 conceded would be difficult to provide in light of its widening fiscal deficit. Furthermore, the outlays required for the Perspective Plan's targets beyond 2000 would have required public expenditure of even greater magnitudes.[34]

Additionally, given the dramatic increases in absolute levels of

34. ADB, *supra* note 2.

unrealized demand for telecommunications services in general, and voice telephony in particular, there was mounting concern in official circles as to whether the DOT had the requisite physical capacity to implement network expansion. By June 1991, at the height of the balance of payments crisis, the GOI realized that the DOT had clearly fallen severely behind in this endeavor, and at the current rate of increase, would fail to meet its Perspective Plan targets.[35] Hence, in September 1991, the GOI announced the first substantive change to its telecommunications policy: it formally opened the sector to private sector participation in the sphere of so-called "value-added" services, namely cellular telephony, paging, electronic mail, voice mail, data services, audio and video text services, and video conferencing. Initially, it opened competitive bidding for private licenses to provide mobile phone service in the four largest cities (Bombay, Delhi, Calcutta and Madras,) and radio paging services in 27 other major cities. The GOI also intimated through unofficial announcements, however, that it was framing policies to allow for more comprehensive private participation in the telecommunications sector in the very near future.

The bidding process for value-added services, and for cellular phone licenses in particular, was unnecessarily complicated. It was distinguished by a conspicuous lack of clear operational guidelines, particularly with regard to the evaluation of private bids, and marred by substantial procedural irregularity and allegations of official corruption. In this regard, it presaged many of the problems that were to bedevil the liberalization of basic services. For the purposes of this discussion, however, this preliminary phase is chiefly important for the extent to which it established the category, "value-added service" in the GOI's policy lexicon, and defined it with a high degree of specificity. Thenceforth, for the purposes of sectoral liberalization, it would be constituted by the following eight services: cellular telephony, paging, electronic mail, voice mail, data services, audio and video text services, and video conferencing.

Two and a half years later, the GOI issued its first official pronouncement on private sector participation in the provision of "basic services," when, in May 1994, the P. V. Narasimha Rao government formally announced a new National Telecommunications Policy (NTP) in Parliament. In contrast to its earlier initiatives with regard to value-added services, the GOI's communication was chary of making specific

35. Interview with Giri C. Iyer, Member, Telecommunications Commission of India (Jan. 6, 1997).

recommendations, and pointedly refrained from even defining basic services. Rather, the government contented itself with announcing a seminal change in policy orientation.

On closer examination, however, the thrust of the new policy was remarkably consonant with its Nehruvian predecessor in a number of respects. Its five stated objectives, for instance, were redolent with the concerns of the latter, and placed a striking emphasis on state responsibility for the sector. First, the GOI was to "ensure availability of telephones on demand as early as possible." Second, it was to "achieve universal access by servicing all villages as soon as possible." Third, the government was to "ensure that the quality of telecommunications services [was] of world standard and that the services [were] reasonably priced." Fourth, the GOI was to "ensure that India emerge[d] as a major manufacturing base and major exporter of telecommunications equipment." Fifth, it was to "ensure protection of the defense and security interests of the country."[36]

Moreover, the NTP was equally noteworthy for the extent to which it relied on targets set by the federal Planning Commission, even as it purported to "revise" them. Indeed, the changes contemplated by the NTP were chiefly significant for the extent to which they *advanced* the deadlines for the realization of these numerical goals, without altering the form or substance of the latter.

Three of these modified targets merit specific mention. First, the NTP mandated that by 1997, "telephones [were to be] available on demand," with all villages enjoying at least access to them. Second, in urban areas, one Public Call Office (PCO) offering access to voice telephone services was to be provided for every five hundred persons. Third, all "value-added" services available internationally were to be introduced into India "to raise telecom services to international standards," ideally by 1996.[37]

According to the GOI, the main reason for such haste lay in the accelerating and back-logged demand for all telecommunications services, but particularly voice telephony. It observed that between April 1992 and April 1994, total demand for basic service connections alone had risen by 50%, from 7.03 million people, to 10.5 million, a level that was well beyond the current ability of the DOT to satisfy. Moreover, if demand were to grow at that rate for the subsequent three years, it would reach 15.8 million by April 1997. The geometric growth of this demand, if unmet,

36. MINISTRY OF COMMUNICATIONS, THE NATIONAL TELECOMMUNICATIONS POLICY (1994).
37. *Id.*

would exacerbate already serious structural constraints on the recovering Indian economy, and severely retard its growth.

The GOI noted, however, that meeting such high levels of unfulfilled demand would require the release of at least 10 million basic service connections alone by 1997, a figure that was about 2.5 million connections in excess of the original Eighth Plan targets. Such an expansion would require additional capital investments by the DOT of over $6.5 billion, which the fiscal capability of the GOI would patently be unable to finance. Therefore, with this constraint in mind, the GOI determined to invite foreign and domestic private sector participation in the telecommunications sector, but only to the extent it was necessary to *supplement* the DOT's functions, particularly in the area of "basic telephony." In a related vein, it categorically rule out outright privatization of the department.[38]

Therefore, it is fairly clear that the entry of private sector providers envisioned in the NTP was compelled by the straitened fiscal circumstances in which the GOI found itself. While the Policy was no doubt significant for the extent to which it departed from Nehruvian orthodoxy in articulating the need for private investment in the sector, it certainly reflected no enthusiasm on the part of the GOI about the prospect.

This reservation conspicuously manifested itself in the substance of the policy. First and foremost, the GOI explicitly drew attention to the fact that private operators would function in a supplementary capacity. The primary responsibility for the development of the telecommunications sector still lay with the DOT. Second, the NTP did not clearly define the normative role of the DOT. Perhaps more importantly, it did not specifically assign policy-making and oversight responsibilities for the liberalization process to an independent regulatory authority. By default, then, the DOT was allowed to continue in its traditional functions of service provision and hardware manufacture, but was also made responsible for the formulation of telecommunications policy, the supervision of sectoral liberalization and the licensing of its private sector competitors. In this way, the NTP set the stage for the entrenchment of a profound conflict of interest that subsequently distinguished the DOT's interventions throughout the entire process of liberalization.

It is tempting to speculate whether the GOI's vestigial antipathy to the private sector was responsible for the other failures of the NTP. For

38. INDIA-TELECOM REGULATORY BUREAU, MARKET REP., Mar. 21, 1995, *available in* LEXIS.

instance, the Policy conspicuously omitted to discuss (or even disclose) such elementary details pertaining to the mechanics of sectoral liberalization as tariff and revenue sharing arrangements between the DOT and private firms. While it is unlikely that the GOI's residual hostility to private sector entry in the sector actively motivated it to neglect these issues, it seems probable that such attitudes did not encourage acute sensitivity to these considerations.

Arguably the most notable example in this regard is the GOI's problematic definitional treatment of basic services, particularly in light of the specificity of its earlier approach to value-added services. It will be recalled that while the government had painstakingly delimited the eight constituent elements of the latter category of telecommunications service, it left the category of basic services totally undefined. As will be seen shortly, this omission was to have grave consequences for the government's understanding of the role of innovation in sectoral deregulation, as well as the normatively critical role of cross-subsidization of basic by value-added services in the financing of this process.

In light of the carelessness inspired by its vestigial resistance to liberalization, however, it is not difficult to see *why* the GOI proceeded in this way.[39] Historically, the DOT, MTNL and VSNL had never been able to provide value-added services, of which a limited number were quite well-known in India, for consumer use. Indeed, they had never had the requisite financing nor technological expertise to pursue such a project. Hence, it seemed intuitively justifiable and desirable in official circles to identify seven or eight of these services, and allow private sector joint ventures whose foreign partners were both acquainted with the technology and capable of making it commercially available in India, to provide them. By contrast, voice telephony seemed, at a similarly intuitive level, to constitute the most "basic" form of telecommunications which Indian consumers had long been able to avail of. Hence, in formulating the NTP, they reflexively identified "basic" services with voice telephony, without ever making that association clear. Ultimately, such official carelessness probably delayed the entire reform effort by about two years.

But if the GOI was insufficiently aware of the magnitude of its errors, it was quite conscious that specific content would have to be infused into its generalized statements of policy. Therefore, soon after announcing the NTP, it sought expert advice on how best to carry out the reform process. With regard to basic service provision, it instructed the Industrial Credit

39. Interview with Giri C. Iyer, *supra* note 35.

and Investment Corporation of India (ICICI), the country's leading private sector investment and development finance institution, to recommend an appropriate regulatory framework to encourage private sector participation.

The ICICI Report on Entry Conditions for Basic Telecom Services was presented to the GOI on June 13, 1994, within a month of the announcement of the NTP. While its contents are far too voluminous to summarize here, it made a number of important suggestions to the TC and the GOI about how best to proceed with sectoral liberalization.[40] First, it recommended that the GOI completely separate and establish institutional "firewalls" between the three main functions of the DOT under the NTP: licensing, regulation and operations. Second, it advised the creation of a sector specific Telecommunications Regulatory Authority which would be, and be perceived to be, independent of both the licensing and operating arms of the DOT. Third, it counseled the enunciation of a long-term tariff policy by the DOT that explicitly defined its period of validity and the reasons for, or points in time at which it would be reassessed or changed. Fourth, it recommended that private operators be allowed entry into the sector either by leasing an existing portion of DOT assets or through the purchase of such assets for the relevant geographic area of operations at a mutually negotiated price. Fifth, ICICI suggested that the transition from a regulatory regime distinguished by public monopoly, to a perfectly competitive one governed by market forces, be gradually effectuated. It suggested that initially, private licenses providing for exclusive operational rights within the relevant delimited area be issued to individual private operators for a period of fifteen years. In that time, these operators were to be licensed to compete with the DOT, without the distraction of additional competition from other private sector firms. After the termination of that five-year period, however, ICICI strongly argued for the introduction of additional basic service operators into that area, to gradually introduce markedly stronger competitive forces. As the subsequent phases in the sectoral liberalization demonstrated, however, neither the GOI nor the DOT took these eminently sensible recommendations to heart; and the entire process of reform was much the poorer for it.

On September 19, 1994, the GOI formally invited Indian private sector telecommunications companies incorporated under the Indian Companies Act of 1956 to build and operate basic telephone service

40. INDUSTRIAL CREDIT AND INVESTMENT CORPORATION OF INDIA, REPORT ON ENTRY CONDITIONS FOR BASIC TELECOM SERVICES 32 (1994) [hereinafter ICICI].

networks, in collaboration with foreign joint venture partners.[41] Pursuant to the MOC's assessment of the ICICI report, it announced the establishment of an independent Telecommunications Regulatory Authority of India (TRAI) in the near future, but took no further action pertaining to its institution. Rather, it authorized the DOT to lay down a framework of guidelines to help structure the process of deregulation.[42]

Chief among these regulations was a competitive bidding procedure, which stipulated that private service providers, in conjunction with their foreign partners, could enter the sector by submitting competitive bids to install and run basic service networks in one or more of the twenty telecommunications "Circles" into which the DOT divided the country. The Circles were roughly coincident with India's state boundaries, and respectively encompassed a population of almost 50 million people. Additionally, they were classified into three categories (A, B, C), based on the relative economic development of the states they encompassed, and hence, on the effective rates of return they promised private sector operators of basic phone services. Bidders for Category A Circles, which were distinguished by high levels of industrialization and the highest volume of traffic,[43] were required to have a net worth of not less than $30 million. Bidders for Category B Circles, which were less heavily used, and hence less remunerative, were required to have a net worth of not less than $20 million. By contrast, bidders for Category C Circles, which were the least remunerative of the three, were required to have a net worth of not less than $5 million. In all cases, the foreign partner in any bidding consortium would be limited to 49% equity.

The MOC explicitly permitted all bidders, whether Indian or foreign, to bid for as many circles as they chose. It stipulated, however, that each private firm could join only one consortium for these purposes,[44] and reserved the right to restrict the number of circles for which one bidder secured franchises, to prevent a private monopoly.[45] Bidders were merely required have a net minimum worth equivalent to the requisite amount

41. Additionally, the GOI invited similar consortia of Indian and foreign telecommunications companies to submit bids to build and operate cellular mobile networks in cities other than Bombay, Delhi, Calcutta and Madras (for which such licenses had already been awarded).

42. Philip Eade, *The Numbers Look Right*, EUROMONEY, Mar., 1995, *available in* LEXIS.

43. Category A Circles included Delhi, Gujarat, Maharashtra [including Bombay], Andhra Pradesh, Tamil Nadu & Karnataka.

44. P. Balakrishna, *India Lays Down Private Franchise Laws*, COMM. INT'L, Feb., 1995, *available in* LEXIS.

45. Shiraz Sidhva, *Delhi Opens Tenders for Telecoms*, FIN. TIMES, Jan. 17, 1995, *available in* LEXIS.

stipulated for each Circle category. Additionally, they were required to leave a deposit with the MOC that would be forfeit if they were awarded the franchise, but proved unable to operate it.[46]

The tenders submitted by successful prospective private service providers in rounds of competitive bidding would effectively constitute fee payments for the issuance of licenses by the DOT. In return for the franchise, private operators were required to assume two of the three established sets of public corporate responsibilities historically incumbent upon the DOT. First, in addition to providing universal access (rather than service), they were expected to create and sustain profitable and competitive operations by achieving the maximum possible efficiency, imposing minimal costs on consumers, and increasing the range and availability of services. Second, they were to assist in meeting the traditional the social welfare obligations of the DOT by providing stable employment to DOT employees when they leased or otherwise took over the department's operations.

In addition to ensuring the transfer of these two obligations to the DOT's private sector successors, licensing procedures were also intended to fulfill another public purpose: they were to provide the federal government with a revenue base predicated on fees collected during competitive tenders and franchise renewals. In this way, they were to protect the country's balance of payments profile.

The DOT's competition policy also merits some attention. Following the recommendations of the ICICI report, the DOT designed its bidding procedures to establish duopolies in each Circle: the winning private sector provider would compete to provide basic services with DOT, which would retain its presence throughout the country. No other provider would be permitted to operate within the confines of the relevant Circle.[47] However, the department deviated from the Report's basic thrust in one very important respect: while ICICI had clearly intended such an arrangement to be transitional, the DOT gave no indication that the regime it envisioned was similarly temporary. If anything, the term of validity of the exclusive basic service licences it was to issue indicated the converse, for they were fifteen-year franchises for exclusive operation that could subsequently be renewed every ten years.

In a related development, the DOT further restricted competition by

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46. *India Sets Guidelines for Telephone Bids*, REUTERS, Jan. 15, 1995, *available in* LEXIS.

47. Milan Ruzicka, *India Telecom License Bids Go Sky-High; Speculation Grows That New Delhi May Scrap Results*, J. COM., Sept. 15, 1995, *available in* LEXIS.

categorically ruling out the levy of market-based tariffs. In fact, private operators would not be allowed to charge tariffs in excess of those charged by DOT.[48] The DOT did not, however, specify this price ceiling. Moreover, it chose to ignore the ICICI Report and failed to define the duration of the preliminary tariff regime, as well as the timetable for its review and modification.

Finally, the DOT also segmented the basic services market in a manner that had similarly adverse consequences for competition: while it fully intended to allow private participation in each of the twenty Circles, it limited bidding consortia to service provision in the local loop. The lucrative long-distance service portion of the market, which entailed inter-Circuit traffic, was to remain the monopoly of the DOT. Thus, even in the context of the liberalized regime, fully *three-quarters* of all new lines would continue to be installed by the DOT.[49] Similarly, international service was monopolized by VSNL.[50]

The harmful effects of this segmentation were immediately apparent to all prospective private bidders. Typically, when these firms had undertaken the expansion of basic service networks in other countries, they had cross-subsidized the extension and upgrading of the local loop (as well as universal service obligations) with revenues generated by their operation of more lucrative long-distance and international services. Under the regime established by the DOT, such a course of action was effectively mooted.[51]

When the Chairman of the TC, D. K. Gupta, was made aware of these objections, he justified the proposed arrangement by saying, ""India's needs in long-distance communication are less acute than for basic services."[52] Therefore, he said it was both acceptable and desirable that the GOI selectively liberalize only those areas in which there was a level of unmet demand that DOT could not satisfy. Conversely, where excess demand was largely non-existent, the MOC's constituent departments and public sector corporations could retain their monopolies.[53]

The GOI's sole concession with regard to the long-distance and

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48. Sidhva, *supra* note 45.

49. John Zarocostas, *India Sets Goal to Double Phone Lines by 1997*, J. COM., Oct. 16, 1995, *available in* LEXIS.

50. Stefan Wagstyl, *India Lays Down Tight Telecoms Rules*, FIN. TIMES, Sept. 19, 1994, *available in* LEXIS.

51. N. Vasuki Rao, *India's Telecom Market Will Be Partially Opened*, J. COM., Sept. 21, 1994, *available in* LEXIS.

52. Gordon Cramb, *Survey of India*, FIN. TIMES, Nov. 8, 1994, *available in* LEXIS.

53. *Id.*

international service monopolies amounted to an equivocal statement that, after a period of five years from the date of licensing, the DOT's monopoly on long-distance service would be reviewed. It did not specify the agency that would undertake the review, and heavily qualified the possibility of liberalizing this area of operation: according to the Telecom Commission, if it were determined that "the opening at the local and regional level [had] done well for the economy, for subscribers *and government*, India *might* open national traffic calls [(i.e., inter-Circle traffic)] [to competition.]" (emphasis added.)[54] No such possibility was even broached with regard to international traffic.

In evaluating bids for licenses, the DOT announced that it would consider six criteria. First, it would consider the track record of the company, relative to its competitors. Specifically, it would reject all bidders who, by January 1, 1995, had not operated a telecommunications network with at least 500,000 lines. This provision effectively forced all Indian companies to seek foreign partners, since the former uniformly lacked such expertise.[55] Second, the DOT mentioned it would consider the compatibility of the technology with the Indian context. Third, it said it would evaluate usefulness of the technology offered by the private provider. Fourth, it would look to see if and how national security aims had been furthered. Fifth, the DOT said it would consider the bidding company's relative ability to provide best service quality at the lowest cost. Sixth, the DOT would also assess the commercial attractiveness of the terms of the bid received, relative to all others.[56] Finally, the department announced that certain of the six criteria were more important than others, and that they would be given greater weight during the evaluation process. It did not, however, specify what these criteria were, or how much emphasis would be placed on them.

In spite of this important omission, the DOT set the deadline for all basic service bids on March 31, 1995, and opened competitive bidding for basic service licenses on January 17.[57] Then, one day before competitive bidding was due to begin for both basic and value-added services, the DOT, under orders from the Minister of Communications, Sukh Ram, awarded a 10-year license to a consortium consisting of US West and BPL India to operate integrated basic and value-added services in four Secondary Switching Areas in the southern state of Tamil Nadu. In a vain

54. Zarocostas, *supra* note 49.
55. *India Sets Guidelines for Telephone Bids*, *supra* note 46.
56. MINISTRY OF COMMUNICATIONS, NATIONAL TELECOMMUNICATIONS POLICY (1994)
57. Sidhva, *supra* note 45.

attempt to pre-empt the resulting outcry, the DOT justified the decision on the grounds that it was a pilot project, not a full franchise.[58] Unremarkably, the award of the license was challenged in the Madras High Court on the very next day.[59] Additionally, the three main national labor unions in the telecommunications sector used the occasion to challenge the legality of the NTP in a number of High Courts in various states.[60]

The DOT continued to accept bids even while the litigation was pending, and furthermore, attempted periodically to issue new regulations pertaining to the tender process. The most notable of such issuances took place on March 21, 1995, when the DOT announced a set of guidelines for the tender process that it claimed were definitive and capable of governing all subsequent phases of the liberalization process.

The most important of these "final regulations" consisted of a restatement of the DOT's intention to establish an independent TRAI, and a delineation of its composition, functions, powers, jurisdiction and administrative procedures. According to the DOT, the body was to be composed of between two and four Members who would serve either for a term of five years, or up to the age of sixty-two, and would have the status of Secretaries to the GOI.[61] It would be chaired either by a serving or retired Supreme Court Judge or Chief Judge of a state High Court, who would also be appointed for a term of five years. All Members of the TRAI, including the Chair, would be removable solely on the recommendation of Supreme Court, on the basis of a specific inquiry it conducted into the Member's alleged misconduct. Members would enjoy salary and perquisite protection, since these would not be allowed to be varied to their disadvantage after their appointment.

The TRAI was to be responsible for tariff regulation and setting of access charges, technical compatibility and effective inter-connection between different service providers, revenue sharing arrangements between different service providers, and establishing and ensuring time frame for making available local and DOT long distance circuits between service providers. Additionally, it was to ensure operators' compliance with license conditions, fix tariffs for telecom service and ensuring price

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58. *US West To Set Up India's First Private Telephone Service*, AFX NEWS, Jan. 16, 1995, *available in* LEXIS.

59. N. Vasuki Rao, *Pilot US West Telecom Project Faces Challenge in India Court*, J. COM., Feb. 28, 1995, *available in* LEXIS.

60. Dinesh Sharma, *Nationwide Strike Bound to Delay Telecom Privatization Plan*, BANGKOK POST, *available in* LEXIS.

61. Secretaries to the GOI are the highest ranking civil servants in the Indian Administrative Service (IAS).

regulation, resolve disputes between service providers, and levy such additional fees on service providers that it deemed necessary and that DOT regulations authorized. Finally, the TRAI was to protect consumer and national security interests, to the extent necessary.

The body was empowered to carry out these functions by recourse to its four main powers. First, it was empowered to seek information on all aspects of service provider's activities, and any other advice and inputs from any source it deemed necessary. Second, it was authorized to seek information, advice and inputs from any source it deems necessary. Third, it was enabled to investigate *suo motu* any matter which in its opinion constituted the public interest. Finally, it was permitted to inspect facilities, books and records of operators/service providers.

The TRAI's jurisdiction, according to this latest communication from the DOT, extended to virtually all activities pertaining to the telecommunications sector, except those matters falling within the purviews of the Monopolies and Restrictive Trade Practices Act and Consumer Protection Act. Moreover, within its jurisdiction, the TRAI was to be the principal adjudicatory authority, and its orders and directions were to be binding upon service providers, Government and all other concerned persons. Subordinate civil courts, in particular, were to have no competence over matters within its jurisdiction. Dissatisfied parties were permitted, however, to appeal TRAI decisions in appellate High Courts, as well as in the federal Supreme Court.

Finally, with regard to administrative procedure, the TRAI was mandated to ensure accountability in the liberalization process partly through the transparency of its own decision-making process. Hence, the DOT stipulated that all parties who would potentially be affected by TRAI decisions would be afforded adequate notice and opportunity for a hearing. Moreover, it provided that all TRAI decisions would be recorded and published in an Annual Report.

There was considerable enthusiasm for the specificity of the information that the DOT had provided with regard to the TRAI's functions, especially among prospective private bidders. However, they soon became disillusioned with this latest disclosure, as the DOT took no concrete steps to establish the regulatory body[62] in spite of its frequent allusions to the latter's normative role.

Equally seriously, the failure of the DOT to give the TRAI institutional form left the former free to ignore its many conflicts of

62. Sharma, *supra* note 60.

interest in the liberalization process. Allowed by default to persist in its roles as regulator and service provider, the DOT thus continued to announce and administer guidelines that purported to be definitive, but were, at best, incoherent.

For instance, the DOT announced as part of its final package of regulations that it would assume responsibility for setting basic service tariffs for the first year of private operation, at appropriately "economical" levels. These price levels, however, were universally considered to be low even by the standards of developing Asia, and would have required at least periodic upward revision to allow service providers eventually to profit from their operations. The DOT refused, however, to guarantee that such adjustment would be undertaken in the future. Indeed, it even refused to rule out the possibility that these tariffs would be maintained in unrevised form well beyond their initially specified duration of one year.[63] The only concession it was prepared to make was to provide for regular review of the tariff by the TRAI, *after* the latter had been established. Given, however, that the regulatory body had not been given institutional shape at that time this regulation was announced, this provision was effectively rendered moot. Consequently, private providers were forced to accept artificially deflated initial tariff levels.[64]

Similarly, the DOT issued a regulation requiring foreign bidders to "strike a balance in their coverage between urban and rural areas,"[65] but refrained from specifying both the dimensions and relative importance of that balance. Hence, private operators were left without a sense of how much weight the DOT would give to this criterion in evaluating license bids.

Additionally, with regard to the choice of appropriate technology by service providers, the DOT announced what facially seemed to be both a sensible and intelligible set of guidelines. Initially, it seemed to allow private operators wide latitude in the choice of technology, as long as they did not dump antiquated technology in India. Indeed, the department only imposed two explicit restrictions on private operators' discretion in this regard. First, the DOT emphasized the use of wireless and optical fiber in the switching networks,[66] and proscribed the use of copper wire in all but

63. *Foreign Telecom Service Suppliers Welcome*, MARKET REP., Mar. 21, 1995, *available in* LEXIS.

64. Mark Nicholson, *Survey of Asia-Pacific Communications*, FIN. TIMES, May 9, 1995, *available in* LEXIS.

65. *Id.*

66. In other words, from the service provider's central office to the customer's premises.

the last five hundred meters of a connection. Second, it also required private operators to conform to its preference for the GS standard throughout the national network.[67]

Within weeks of these announcements, however, the DOT issued another set of regulations that effectively introduced severe restrictions on the providers' free choice of operating technology: it barred private operators from designing network expansions in such a way that they would be conducive to the provision of multimedia services at some point in the future.[68] It justified this decision on the grounds that the prospective providers of basic services—defined intuitively, it will be recalled, as voice telephony—did not have to concern themselves with issues pertaining to the transmission of multimedia; and that these would be addressed at a later date by providers of value added services. The impact of this decision, of course, effectively thwarted the plans of private operators to build in potential for technological innovation in the local loops within which they were to provide service.

In yet other instances, the DOT was guilty not so much of mis-statements or substantive errors of policy design, but of omissions that had equally negative impacts. Most notably, the DOT's so-called "definitive" guidelines persisted in failing to provide information about the weights the department would assign to each of the criteria used to evaluate private bids.[69] Additionally, they gave no indication of permissible financing arrangements, such as the Build-Operate-Transfer (BOT), or Build-Operate-Lease (BOL) models, that private operators would be able to consider in making competitive tenders.[70]

The volume and magnitude of such material mis-statements and omissions suggests that something other than the simple inexperience of *dirigiste* bureaucrats and politicians with economic and regulatory liberalization was at work. Indeed, the DOT's piecemeal disclosures of policy and procedure, the almost studied incoherence of its initiatives and, above all, its repeated delays in establishing the TRAI, belie its efforts to perpetuate its "capture" of the regulatory apparatus governing the telecommunications sector. In this regard, the DOT's second decision of March 21, 1995, in which it announced its decision to refrain from

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67. *India Telecom News*, MARKET REP., Mar. 22, 1995, *available in* LEXIS/Nexis.

68. N. Vasuki Rao, *Indian Telecom Agency, Private Firms Avert Clash*, J. COM., Aug. 2, 1996, *available in* LEXIS/Nexis.

69. Mark Nicholson, *Indian Summer for Telecoms*, FIN. TIMES, Apr. 13, 1995, *available in* LEXIS/Nexis.

70. *Id.*

"corporatizing" its operations, provides arguably the most poignant instance of such efforts.

This decision may be traced back to the outset of the liberalization process, when a number of external consultants had urged the DOT to divide itself into four regional units mandated to compete with private sector telecommunications firms as independent public sector corporations. These external advisers had argued that such a step, if taken in tandem with the establishment of the TRAI, would have unequivocally signaled to private telecom firms that the regional units of the DOT had been shorn of their power as government departments; and would henceforth be forced to compete for contracts with private operators on a level playing field.[71]

The Communications Minister, Sukh Ram, who took the decision to not corporatize operations, defended it on the grounds that corporatization would have imposed upon the DOT an "unsupportable financial burden" of about US$ 3 billion. Additionally, he claimed that up to 80% of the current revenues of the DOT would have to have been dedicated to the provision of salaries and worker compensation benefits for employees of the newly created corporate sub-units. Finally, he maintained that the sunk costs of purchasing and installing new equipment would have required similar magnitudes of financing. In Ram's view, the DOT could only have financed these investments by recourse to commercial bank lending, thereby incurring the unaffordable liability of high interest rate payments. So onerous would the resulting repayment obligations have been that, ultimately, the GOI would have had to have privatize the corporatized units in the interest of fiscal health. This eventuality, he concluded, "was clearly against the national interest, and needed no further elaboration."[72]

His argument can quite easily be shown to be a concatenation of red herrings. First, there is no reason to believe that the financial burden of corporatization would have been any more onerous than that incurred to finance MOC and DOT operations under the Nehruvian regime. The chief difference between the two scenarios is that the latter allowed the DOT to rely on central government budgetary support generated from the fiscal deficit to finance its activities, whereas corporatization would have obviated the possibility of such recourse.

Moreover, corporatization would have offered the DOT a chance to raise revenues independently of its federal budgetary allocation. As independent corporate entities, the regional divisions of the Department

71. *Telecom Policy Leaves Questions*, MARKET REP., Mar. 21, 1995, *available in* LEXIS.
72. *Id.*

would have been able to leverage their combined asset base of over US$13 billion to issue a variety of bonds in both domestic and international capital markets. In this way, the DOT could have entirely avoided the high interest rates of commercial bank finance.[73]

Additionally, Ram's arguments about the prospect of high wage, worker compensation and capital costs was not, in itself, an argument against corporatization. Essentially, these issues represent a structural problem that was of as much concern under the Nehruvian regulatory regime, as it would have been under a corporatized operational framework. Again, the only reason the DOT did not have to address the problem under the unreformed regulatory framework is that it was able to rely on budgetary outlays from the GOI to finance these expenses. Corporatization would have merely required DOT to meet these costs for the first time in its institutional history.

The comprehensively specious character of these objections to corporatization, and the visceral quality of Minister Ram's refusal to even discuss the merits and costs of privatization, thus suggest that the DOT and its political masters were doing their utmost to retain control of a regulatory regime that had conferred upon them extraordinary advantages.[74] Essentially, they were deploying a strategy predicated on obfuscation, delay and the sheer arbitrariness of a sovereign's fiat, to minimize the liberalization of the sector to the maximum possible extent. Given, however, that a certain amount of liberalization seemed inevitable in light of the GOI's severely weakened fiscal resources, they sought to employ these tactics to retain as many of their old privileges as they could in the new environment. In this way, they could not only take advantage of the windfall opportunities for corruption that inevitably manifested themselves in an uncertain regulatory environment, but also endowed themselves with structural advantages to allow them to compete more effectively (if unfairly) against private competitors. The cornerstone of this strategy, of course, was to attempt to continue for as long as possible in their multiple roles as policy-maker, regulator, licensor, operator and manufacturer of telecommunications hardware.

Viewed in this context, corporatization can be seen to have demonstrably threatened this agenda, particularly if it were combined with the establishment of the TRAI. Not only would it have physically

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73. *Id.*

74. For example, because the DOT is a government department, it is exempted from all tax obligations.

disaggregated the DOT, but it would have also deprived it of budgetary support and political power, and compelled it to become financially independent of the GOI. In such an eventuality, the vested interests of corrupt politicians and bureaucrats animating the DOT would have proven singularly incapable of preserving their capture of the telecommunications sector. Hence, they brought the full strength of their resources to bear against this particular means of structural reform.

In any event, the DOT was not so successful in this strategy of obfuscation and delay that it was able to ride roughshod over the concerns and suspicions of prospective private sector bidders. On 22 March, 1995, the department's equivocation drew hundreds of detailed queries from these parties, and forced it to postpone the deadline for the submission of basic services tender offers from March 31 to April 28, while it addressed these questions and misgivings.[75] Soon thereafter, the DOT found itself under judicial scrutiny. The Kohima High Court, which had heard one of the public interest suits against both the substance and mechanics of the NTP, issued a stay order against the Policy while it heard plaintiffs' arguments against the latter. The DOT appealed to the Supreme Court against the order, and in the process, was forced to indefinitely postpone the evaluations of bids received from private sector operators while its case was pending.[76]

By May 9, 1995, it was increasingly apparent that the established timetable for completion of the competitive bidding process and the commencement of operations was wildly unrealistic. More importantly, there was an increasing sense of fear in official circles, and particularly in the DOT, that judicial intervention in the liberalization process would be fatal to the department's efforts to safeguard its sectoral interests.[77] Hence, it prompted the DOT finally to clarify a number of important issues.

First, on May 26, 1995, the DOT established a transparent procedure to assign weights to the criteria used to evaluate private bids. It provided that relative size of the license fees submitted by a bidder would be accorded the greatest weight (72%), while network roll-out provisions (10%), the extent to which a bidder was going to serve rural needs (15%) and the use of indigenous equipment (3%) would all be given much lower

75. Mark Nicholson, *India Extends Phone Deadline*, FIN. TIMES, Mar. 22, 1995, at 7.

76. *Id.*

77. Mark Nicholson, *Survey of Asia Pacific Telecommunications*, FIN. TIMES, May 9, 1995, at 30.

emphasis.[78]

Additionally, on May 29, 1995, the DOT clarified certain service obligations that were incumbent on private operators, as well as permissible financing strategies. For instance, it reiterated that it was incumbent upon the latter to provide basic services throughout the Circle for which they would be licensed. The department added, however, that it would reduce by 40% the "access fees" they would have to pay to use certain unleased portions of the DOT's network.[79] Moreover, it agreed to pay them for government use of their lines.[80] Finally, it specified that private operators should plan on financing network expansions through Build-Lease-Transfer financing arrangements, rather than Build-Operate-Transfer (BOT) ones. These announcements, which were designed to have a palliative effect on the increasingly impatient private sector, were largely successful: by June 7, 1995, thirty-three consortia of Indian and foreign telecom firms had placed bids for all twenty Circles.

But between June 20 and June 23, however, industrial action by the three major telecommunications labor unions, which together had a combined membership of 450,000 workers, briefly called the entire liberalization into question. Protesting the GOI's efforts to involve private sector and foreign participation in the provision of basic services, and acutely afraid of the impact of such policies on employment opportunities,[81] they closed telephone exchanges throughout the country. Additionally, they halted telex and telegraph services, and refused to carry out emergency repairs in most of India's twenty-five states.[82]

In response, the GOI took an uncharacteristically firm stance. Noting that the strike was illegal under the Essential Commodities Act, R. Takkar, Telecommunications Secretary, said, "Any attempt to derail the process of licensing private sector providers for basic telephone services will not be allowed to proceed."[83] Accordingly, he placed army telecommunications engineers on high alert, in case they had to be pressed into service to

78. John Fernandez, *Telecoms Terms Revised,* AUSTRALIAN FIN. REV., May 26, 1995, *available in* LEXIS.

79. Sharma, *supra* note 60.

80. Shiraz Sidhva, *India Moves to Simplify Telecoms Bidding: Ministry Agrees to Pay Competitive Rates for Use of Private Operators' Networks,* FIN. TIMES, May 29, 1995, at 4.

81. Pratap Chakravarty, *Strike disrupts telecommunications across India,* AGENCE FRANCE PRESSE, June 19, 1995, *available in* LEXIS, News Library, Wires File.

82. *Id.* Telephone services in the major metropolitan centers, which are automated, were not affected, however.

83. *Id.*

prevent the disruption of emergency services.[84]

Concurrently, however, he attempted to placate the strikers. He stated that the DOT had already had begun to retrain 172,000 DOT employees for re-employment in the private sector by 1997. Also, he observed that since the department would remain very much a basic services provider, and its operations had been growing annually by 70%, there was no threat to employment levels in the public sector.[85] This combination of carrot-and-stick tactics had its desired effect: on June 21, the unions called off the strike, saying that they had been "greatly reassured" by the MOC's understanding of their predicament.[86]

The liberalization process thus resumed shortly thereafter, and by June 23, 1995, the DOT had short-listed bids from 16 consortia consisting of Indian telecommunications firms and their East Asian, Western European, North American and Australian partners.[87] The bidding was formally closed on August 31, 1995, and the DOT's final decision on license awards was expected in late September 1995.[88]

But when the department began to evaluate the submitted bids on September 1, it became apparent that a small Indian company with annual revenues of US$62 million, Himachal Futuristic Communications, Ltd. (HFCL) had submitted bids for 9 of the twenty Circles that together totaled over US$27 billion. Even the combined net worth of its consortium (which comprised Bezeq of Israel (26% equity stake) and Shinawatra of Thailand (16% equity stake) amounted only to US$ 1.25 billion. All other bids were one-half to one-third the size of the combined HFCL offers.[89]

Morever, there were discrepancies between what the HFCL offers entailed in terms of network expansion, and what the proven capacity of the consortium indicated it was capable of. While its roll-out plan effectively mandated it to install three million telephone lines a year, its seemed able to lay only a maximum of about three to four hundred thousand a year.[90]

It was in the context of the consternation engendered by these grave

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84. Abhik Kumar Chanda, *Indian Telecom Workers To Launch Strike Against Privatization*, AGENCE FRANCE PRESSE, June 18, 1995, *available in* LEXIS, News Library, Wires File.

85. *Id.*

86. *Id.*

87. A very large number of blue-chip foreign telecommunications companies submitted bids in conjunction with Indian partners. Among them were AT&T, Sprint, NYNEX, US West, and Bell South.

88. *Telecom Licenses*, MARKET REP., June 26, 1995, *available in* LEXIS.

89. *New Telecom Licenses*, MARKET REP., Sept. 11, 1995, *available in* LEXIS.

90. *Id.*

discrepancies that DOT publicly began to consider imposing limits (or "caps") on the number of Circles for which a private operator might be licensed to provide basic services. Specifically, Minister Ram intimated that if a cap was in fact imposed, thereby leading to the inability of a winning bidder to operate basic services in a given Circle, the second highest bidder would be invited to match the former winner's bid. If it would not do so, Ram hinted that DOT would pursue a fresh round of public tenders.[91]

The DOT imposed such caps on November 6, 1995, after two months of rampant public speculation about the matter. It announced an upper limit of three Circles for each consortium bidding for basic services license. If any consortium's bid was selected to provide basic services in more than three Circles at the end of the tender process, that group would have to choose three of them. The remaining Circles would be offered to the next highest bidder in each Circle, if the latter party agreed to match the winner's offer. If, on account of this revised procedure, certain Circles were left without basic service providers, a fresh round of competitive bids would be solicited for them.[92] In defense of this seemingly arbitrary decision, the DOT maintained that it had always reserved the right to restrict the number of Circles awarded to one operator, to prevent the emergence of private monopolies; and that since HFCL had so significantly outbid its competitors in nine Circles, such an eventuality was virtually certain in the absence of preventive action by the government.[93]

Public reaction to the capping changed drastically over time. Initially, HFCL's competitors believed that the imposition of caps would have a hugely adverse impact on HFCL.[94] It soon became apparent to them, however, that the DOT's intervention had actually proved extremely beneficial to the latter consortium. Given that its resources were comparatively limited, HFCL could not possibly have succeeded in providing basic services in all nine Circles. Moreover, even if it had proven capable of doing so, its bid was so exorbitantly in excess of the expected returns that it quickly would have found itself bankrupt.

The DOT's imposition of licensing caps thus helped the consortium

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91. *Id.*

92. Kapil Saha & Jonathan M. Bensky, *Telecom Service Plan*, MARKET REP., November 6, 1995, *available in* LEXIS. With regard to cellular services, each bidder was allowed licenses for a maximum of two Circles in the A and B categories. They were, however, assured that there would be no restriction on C category circles.

93. *Id.*

94. *Id.*

in three ways. First, by giving up its rights to six of the nine Circles under DOT orders, HFCL avoided forfeiting the US$51 million security deposit it had submitted to the GOI in the course of bidding for nine Circles. Second, it could cherry-pick the three most lucrative Circles of the nine it had won operating rights to.[95] Third, the DOT's action had effectively prevented it from bankrupting itself. The magnitude of the benefits, combined with partly corroborated speculation that HFCL had bribed Sukh Ram to intervene on its behalf, predictably outraged other bidders.

But before the other consortia could organize a coherent protest against this intervention, the DOT once again threw the entire liberalization process into confusion on November 14, 1995, by rejecting all bids for 10 of the 20 Circles. Using a previously unannounced criteria of "reasonable levy" as the decisive factor in evaluating the bids, the DOT maintained that the bids received in these Circles were "unreasonably low,"[96] and called for fresh bids for them to be submitted by January 1, 1996. Additionally, the Department stipulated that it would establish "reserve prices" for licenses in each Circle below which priva te sector bids could not fall. Significantly, the price floors were benchmarked to HFCL's extravagant offer. Since none of the other private operators were willing to pay such amounts for individual Circle licenses, they suspected that this particular change in policy had been established to invite and camouflage bribes to DOT and MOC officials. In other words, since no private service provider was willing to pay the specified amount, they would have to procure the licenses by directly paying those corrupt officials in charge of licensing policy. The presence of an official reserve price would merely make it easier for the two parties to concoct a set of bid figures for purposes of public disclosure.[97]

By this time, the general disgust of private operators with the entire liberalization process was plainly apparent, and many of them began to consider abandoning or postponing their involvement in the Indian telecommunications market. This widespread dissatisfaction in the private sector with the progress of the liberalization was compounded further on December 11, 1995, when Opposition parties and public interest groups opposed to the central government's telecom policy filed a public interest action against the implementation of the Policy, as it

95. *Id.*

96. N. Vasuki Rao, *Telecom Firms Confused as India Rejects Some Bids*, J. COM., Nov. 14, 1995, at 3A.

97. Shiraz Sidhva, *Rao Urged to Sack Telecoms Minister*, FIN. TIMES, Dec. 11, 1995, at 5.

was currently constituted, in the Supreme Court. They objected, among other things, to the government's failure to establish an independent TRAI before inviting competitive bids from private sector telecommunications firms.[98] Additionally, they called for the removal of Sukh Ram as Minister of Communications, on the grounds that his manipulation of the bidding process—and particularly, his introduction of license caps and the reserve price—had been designed to favor HFCL, which was based in his home state of Himachal Pradesh.[99] Amicus briefs also alleged that the Minister had received generous bribes in return for such naked favoritism.

On December 19, 1996, the Supreme Court responded by issuing a stay order forbidding the DOT to *issue* any basic service licenses before January 9, 1996, while it considered the merits of the petition.[100] The impact of this order on the bidding for 13 yet unlicenced Circles that was scheduled by the DOT to begin on January 1, 1996, was disastrous. Combined with steadily increasing press coverage of the irregularities that had attended the liberalization process, it persuaded many major private providers, such as AT&T and US West, who had been discouraged by the insensibly high mandated reserve price, to abstain from the tender process.[101] Thus, when the DOT finally tallied the received bids, they amounted to a humiliating total of five. Eight Circles, therefore, were still without franchised basic service providers.

In late January and early February, however, two events restored a measure of confidence in the stalled reform process. On January 27, the Rao Government submitted an ordinance establishing the TRAI as a statutory body to the President of India, who signed it into law.[102] While no formal measures were taken to actually set up the body,[103] this move was widely perceived to be a sign of the government's resolve to forge ahead with liberalization.

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98. *Id.*

99. Sidhva, *supra* note 97. Cellular telephone service licenses, however, were issued at this time to private consortia for five of the twenty Circles.

100. Shirish Nadkarni, *India in Telecoms Tangle*, S. CHINA MORNING POST, Dec. 19, 1995, at 6.

101. Rao, *supra*, note 96.

102. T.H. Chowdhary, *India's Liberalization Hangs in the Balance*, TELECOMMUNICATION (INT'L EDITION), June, 1996, *available in* LEXIS.

103. A major problem was the fact that no senior member of the judiciary was prepared to serve on the TRAI. Most senior High Court judges and Supreme Court Justices considered the TRAI to be hierarchically inferior to the federal appellate courts, since they were empowered to hear appeals from TRAI decisions; and therefore, were unwilling to trade the prestige of a higher court for a lower one.

Then, on February 2, the Supreme Court affirmed the constitutionality of the NTP. Writing for a three judge bench, Chief Justice A. M. Ahmadi dismissed the action filed by public interest groups and opposition parties in 1995, which challenged the government's National Telecom Policy as unconstitutional. The Court also upheld the validity of the bidding procedures and the central government's power to grant licenses.

The DOT and Sukh Ram lost no time in proclaiming that the decision exonerated their actions, and issued two letters of intent to two private operators that had applied for basic service licenses in five states.[104] Also, the department resumed its evaluation of the bids submitted during the second round of bidding, and prepared to hold a third round of bidding in nine of the twenty Circles.[105]

In response, private operators took favorable public notice of the developments, but aggressively lobbied the central government for sweeping changes in the tariff structure of India's basic telephone services, even before the formal inauguration of TRAI. Specifically, they requested that private operators be allowed to develop a new framework for the monthly rental of DOT infrastructure to reduce their expected losses in the initial years of operation in the relatively unprofitable basic services sector.[106]

The DOT ignored these efforts, and in June, took action that again suggested the endemic arbitrariness of the reform process, as well as the continuing fact of its regulatory capture by vested interests in government: without warning, it announced new regulations that placed the entire cost of interconnection with its own network on private operators. Over the course of a fiscal year, these outlays were estimated to amount to about $30 per line per annum (approximately 8% of the estimated annual revenue of each line,) or a total burden of US$420 million on each operator. When combined with the license fees that would have to be paid as a threshold requirement, the new interconnect charges would effectively transfer 33% to 40% of the private operators' revenues back to the DOT, their direct competitor.[107]

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104. *Indian Court Gives Approval to Telecommunication Privatization*, AGENCE FRANCE PRESSE, Feb. 19, 1996, *available in* LEXIS/Nexis.

105. *Government to Hold Third Round of Tendering for Telephone*, REUTERS TEXTLINE, Feb. 20, 1996, *available in* LEXIS.

106. *India Urged to Change Telephone Tariff Structure*, XINHUA NEWS AGENCY, Apr. 5, 1996, *available in* LEXIS.

107. Rao, supra note 96.

Private service providers reacted angrily to this new requirement, and threatened to take legal action against DOT. In response, the DOT postponed the deadline for signing the interconnection and license agreements by six weeks.[108]

Then, in a separate development, the Central Bureau of Investigation (CBI), the apex federal criminal law enforcement agency, recovered $1 million in cash during a raid on two of Sukh Ram's New Delhi houses. The minister, who was in London for medical treatment, was immediately removed from his post and suspended from the ruling Congress (I) party.[109] On the same day, the Bureau filed a criminal case against Ram.[110]

Desperate to limit damage to the public credibility of the reform process, the GOI announced on April 24 that it would review the US$3 billion worth of pending phone licenses bids. Also, it undertook to conduct a thorough investigation of the bidding process thus far,[111] although it took great pains to stress that not all awarded licenses were at risk, however. For instance, it insisted that the cellular licenses granted to operators in the four largest urban centers of Delhi, Bombay, Madras and Calcutta, which had been issued a few years ago, would not be reassessed. Moreover, operators who had successfully bid for *cellular* licenses in the 20 Circles, already paid their license fees and were preparing to commence work in December 1996, would similarly be exempted from review.[112] Yet again, however, sectoral liberalization was effectively stalled.

On September 9, 1996, the DOT attempted to respond to investor discontent by reducing by 30% its announced interconnection charges. Additionally, it abolished the license *registration* fee for basic services providers.[113] A month and a half later, five consortia signed letters of intent for five of the unfranchised Circles after lengthy discussions with the DOT. The firms continued to lobby for further reductions in interconnection charges, however, and persuaded the DOT to extend the deadline for the final payment of license fees from December 1, 1996 to December 31, 1996.[114]

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108. *Id.*

109. *Indian Lawmaker Wants Phone Licenses Suspended*, REUTERS, Aug. 21, 1996, *available in* LEXIS.

110. *Id.*

111. Harbaksh Singh Nanda, *India to Review All Phone Licenses*, BC CYCLE, Aug. 24, 1996, *available in* LEXIS. Sukh Ram was arrested on his return to India.

112. *Ali Baba and the Mobile Phones*, ECONOMIST, Aug. 24, 1996, *available in* LEXIS.

113. XINHUA NEWS AGENCY, Sept. 9, 1996, *available in* LEXIS.

114. D. Ravi Kanth, *India Leaves Telecom Alliances Dangling*, ASIA TIMES, Nov. 18, 1996, *available in* LEXIS.

Another outstanding complaint harbored by these firms, however, pertained to the DOT's refusal to permit them to carry cellular traffic to their subscribers on intra-Circle voice telephony networks without paying premium interconnect charges for use of public sector switching facilities. Although the department had specified in the initial tender document that they would be able to do so, it now maintained that cellular operator could only accede to each of the Circles through the DOT network.[115] Seeking to exert pressure on DOT to alter this policy, the nine consortia that currently held letters of intent for basic services[116] in 13 Circles threatened to withhold delivery of license fee payments and also filed a civil suit in the Delhi High Court.

The DOT retaliated by threatening to withhold permission for individual members of the joint venture consortia to change business partners.[117] Additionally, it announced that if license payments were not promptly made, it would encash the security deposits entrusted to it by the bidding parties.

After further negotiations, the two sides arrived at a compromise on January 8, 1997. On its part, the DOT offered significantly easier financial terms to private operators. First, it agreed to cut interconnect charges by a further 13%. Additionally, it permitted private operators to assign their licenses to private financial institutions as collateral to raise funds.[118] Finally, the DOT agreed to appoint an independent arbitrator to resolve disputes with private operators until the establishment of the TRAI.[119] Soon thereafter, a number of disgruntled private operators, such as British Telecom and Bell Canada International, returned to the basic services market.[120]

On January 17, the federal Cabinet took the initiative from the DOT,

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115. *Telecom Sector Reforms Top Gokak's Agenda*, REUTERS TEXTLINE, Nov. 23, 1996, *available in* LEXIS.

116. At this point in time, many major international telecommunications firms, such as British Telecom, Deutsche Telekom, Singapore Telecom, France Telecom, Telekom Malaysia, and US West had temporarily pulled out of the basic services bidding process.

117. M. Ahmed, *DOT Threat to Block Partner Change If Fees Are Not Paid*, BUS. STANDARD, Nov. 30, 1996, *available in* LEXIS.

118. *Port Rates Cut For Basic Telecom Services*, BUS. STANDARD, Jan. 8, 1997, *available in* LEXIS.

119. D. Ravi Kanth, *Telecom Cuts Pave Way For Selloff*, ASIA TIMES, Jan. 9, 1997, *available in* LEXIS.

120. D. Ravi Kanth, *British Telecom Returns the Call*, ASIA TIMES, Jan. 14, 1997, *available n* LEXIS.

and approved a blueprint for the establishment of the TRAI.[121] Half a month later, it announced a series of tax incentives for the sector that effectively allowed basic service providers access to the same financial advantages enjoyed by investors in other areas of infrastructure development.[122] Chief among these were the grant of a general tax holiday for up to five years, as well as the drastic reduction in duties for capital equipment imports. Additionally, external borrowing limits for telecommunications companies were relaxed and increased to well over 50 per cent of project cost, from 35 per cent.[123]

These concessions were very well received by private operators, and lent considerable impetus to their reviving interest in the basic services subsector. Hence, when the DOT announced a third round of tenders on February 20, and also removed the license caps imposed by Sukh Ram, many foreign telecom operators publicly expressed their confidence in the liberalization process.[124]

The strongest indication that the reform process had finally been placed on sounder footing came two months later, however, when Parliament cleared the TRAI Bill on April 24, and gave the body institutional shape.[125] Although there was some apprehension that the TRAI would not function independently of the DOT, these fears were allayed when, on 26 April, the body issued its first judgment in a matter directed to its attention by the Delhi High Court.

The dispute at issue concerned the DOT's refusal to permit private operators to carry cellular traffic on the intra-Circle voice telephony networks. It will be recalled that the latter had filed a civil suit in the Delhi High Court to protest this ruling in November 1996. This litigation had been pending even as the DOT and the private consortia attempted in early 1997 to salvage the reform process. When the suit finally came up for review on March 4, the institutional establishment of the TRAI was virtually complete, and only required final Parliamentary clearance. Aware that the sectoral regulator would be able to review the case in a very short time, the High Court Bench directed the suit to the TRAI for its consideration.

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121. D. Ravi Kanth, *Another Hurdle Gone for Telecom Operators*, ASIA TIMES, Jan. 17, 1997, *available in* LEXIS.

122. The Center for Monitoring the Indian Economy, *Telecommunications*, (Apr., 1996) <http:// www.indiaserver.com>.

123. Lisa Vaughan, *Import Curbs Delay for India*, FIN. TIMES, Jan. 31, 1997, at 5.

124. *Government to Hold Third Round of Tendering for Telephone Services*, REUTER TEXTLINE, Feb. 20, 1996, *available in* LEXIS.

125. Vandana Gombar, *Indian Telecom Sector Gets New Regulator*, ASIA PULSE, Apr. 24, 1997.

After reviewing the case, the TRAI held for the private operator plaintiffs and quashed the DOT order at issue. In a strongly worded opinion, it directed the DOT to permit private operators to connect cellular traffic to their local loop customers of basic services, without paying premium interconnect charges for use of public sector switching facilities. Additionally, it ruled that, as per the terms of the original tender document, all future tariff revisions by the DOT would have to be undertaken only after private operators were given an opportunity for a public hearing in which they would be able to put their views on the record. All final changes would also have to be approved by the TRAI.[126]

Predictably, private sector reaction to this decision was ecstatic. By ruling against the DOT, the TRAI had simultaneously proven that the terms of tender offers could be enforced, and that it was not a creature of the DOT. Hence, while it was not necessarily a guarantee against the occurrence of procedural and substantive irregularities in the liberalization process, it had proven that it could provide remedies to such eventualities. Hence, while numerous other problems pertaining to the adequacy of systemic provisions for competition and innovation remained unaddressed, a measure of procedural regularity was been introduced into the trajectory of reform. This factor, combined with increasing public and judicial scrutiny, as well as the growing stake of the domestic private sector in the liberalization of basic services, has probably made the reform process irreversible.

III. ASSESSMENT OF INSTITUTIONAL AND POLICY REFORM INITIATIVES

The Indian experience with the liberalization of basic telecommunications services offers important lessons in regulatory policy for developing countries. Chiefly, it exemplifies an attempt at systemic reform that was so haphazardly conceived and implemented that it should not be replicated elsewhere in the developing world. By extension, it offers significant opportunities to infer how a more effective liberalization process might have been conceived and implemented.

The fundamental mistake committed by the GOI in designing and executing its reform of the sector was to ignore the central fact of its regulatory capture by vested interests in the DOT. Quite simply, it could not afford to overlook the fact that the DOT and MOC had so effectively

126. *TRAI Quashes DOT Order on Fixed to Cellular Tariff Hike*, ECONOMIC TIMES, Apr. 26, 1997.

entrenched themselves in the sector that they would prove natural impediments to reforms that sought to alter the *status quo*. By giving them primary responsibility for designing and executing sectoral liberalization, the GOI compounded its mistake, and effectively legitimated the DOT's enduring conflict of interest: for the greater part of the process, the DOT had official sanction to simultaneously function as service provider, regulator, licensing authority, adjudicatory authority and hardware manufacturer.

Therefore, as a threshold matter, the TRAI should have been established before regulatory and institutional changes were even seriously debated or given form in official circles. Its neutral oversight of policy formulation and implementation would have eroded the plenary authority of the DOT and MOC to craft policies favorable to their interests, and thereby infused into the process a very welcome sense of regularity and fairness. Additionally, the TRAI's availability as an adjudicatory authority would have provided another very necessary check on the DOT and MOC. In the process, much of the corruption and procedural discrepancies that discouraged private sector participation on various occasions could have been eliminated. Finally, the presence of the TRAI would have considerably weakened the rhetorical power of arguments against liberalization that were predicated on considerations of national security. A powerful independent regulator that was nevertheless affiliated to the GOI could credibly have claimed that its oversight was sufficient to safeguard the country's vital interests.

To be sure, it is encouraging that this problem has been addressed and largely rectified, albeit belatedly. But a number of other consequential problems with the NTP's provisions for the liberalization of basic services remain unaddressed.

First, the NTP's treatment of basic services does not adequately encourage innovation. The importance of salutary technological change in a sector such as telecommunications cannot, of course, be overstated. Innovation, more than anything else, will ensure the increasing utility and sophistication of basic services.

The NTP's conception of "basic" and "value-added" services discourages innovation, however. It meticulously specifies the content of "value-added" services, but refrains from all definition of "basic" services, and furthermore, predicates sectoral regulation on these categories. In the process, it effectively freezes the ability of the regulatory regime to organically evolve new conceptions of value-added services over time. Moreover, it permanently fixes the definition of basic services at the DOT's current conception of the category, namely, voice telephony.

In deploying these two concepts, the NTP should have pursued the more obvious strategy of specifying the content of *basic* services, and leaving value-added services as a minimally defined, organically evolving, residual category. In this way, it would have provided a functional definition of that range of services that could legitimately be considered essential at the present time, and thereby provided for its expansion over time. Similarly, the definition of value-added services in residual terms would have recognized that as conceptions of basic service changed and expanded beyond voice telephony, so too would definitions of their value-added counterparts. A regulatory policy that recognized this essential mutability of these basic categories would thus have been consummately conscious and encouraging of the importance of technological innovation.

Second, the DOT's construction of the NTP also inadequately aligns the economic goals of service providers (both public and private) with the public interest imperative of establishing optimally competitive, cost-effective regulatory arrangements that encourage innovation.

For instance, in providing for the financing of network improvement and expansion, the DOT's two-fold insistence on high license fees and rigid tariff rates impedes private providers from expanding and upgrading basic services to the maximum possible extent. In large part, the deterrent quality of this policy derives from the DOT's lack of attention to the role of sunk and marginal costs in the effective provision of basic services.

It is well established that the biggest impediment to the extension of basic services are the prohibitively high sunk costs of physically constructing or extending the existing network. Once the infrastructure is in place, however, the marginal costs of extending service to new customers is minimal.

Given this well-known principle, it is curious that the DOT persists in levying sizeable license fees. By imposing these charges on private Circle licenses, the DOT effectively increases the sunk costs of service provider. The only way for the latter to then maintain its profit level is to increase prices. But given the fairly rigid tariff regime that is currently in place, private operators of basic services cannot charge amounts in excess of the government specified price ceiling. Hence, they are not even free to pass on their increased operating costs to consumers. Constrained on both fronts, private operators will thus only invest in network upgrading and expansion to the extent that their returns on investment generate an acceptable level of profit. Ultimately, then, this policy enables the dedication of only a portion of the available capital for investment in network coverage and quality.

There are two possible solutions to this problem. On the one hand,

the DOT can maintain its levy of license fees and remove the tariff ceiling, thereby permitting private operators to pass on the extra costs to consumers and dedicate optimal levels of direct investment to network improvement. This course of action, however, involves a price increase in services that both the GOI and the NTP have determined essential. Hence, it is quite arguably contrary to the public interest, and eviscerates a telecommunications policy concerned with such issues of social equity as universal access. Therefore, it is not an ideal way to resolve the predicament.

On the other hand, the DOT can either abolish or markedly reduce the license fees to the point that they are no more than *de minimis* charges. In such an eventuality, the private operators would not be free to raise tariffs (given that these would still be subject to a government-imposed ceiling.) But they would be able to invest money in the procurement and installation of more sophisticated technology capable of reducing their sunk costs, such as wireless switches. Additionally, they would also be free to invest in research and development efforts to devise more cost effective transmission and other equipment. In this way, private operators would be encouraged to both upgrade the technology used in its geographic area of operations, as well as to foster innovation.

The main objection to this latter course of action is likely to be framed in terms of a key objective of the NTP, namely, that it was partly formulated to increase the GOI's revenue base and thereby improve its balance of payments profile. Arguably, the NTP should not be concerned with such a goal. However, if it must do so, it must be asked whether this aim is best realized by levying license charges. Alternative measures, such as a modest tax on the *use* (not *provision*) of *value-added* services, would serve equally well as a means to consolidate the GOI's revenues. First, they would increase neither sunk nor marginal costs, and have none of the deleterious social and economic impacts that high tariffs and sub-optimal levels of investment would entail. Second, they would not impose costs on the use of vital basic services and thus inhibit their use by poor consumers. The costs of the tax would fall upon value-added services, and most probably, on relatively affluent individuals and businesses.

A third outstanding problem with the NTP is that its implementation by the DOT has not introduced optimal levels of competition in the basic services arena. Therefore, as an attempt to deregulate either the telecommunications sector as a whole, or basic service provision in particular, it has been considerably less than a complete success.

To be sure, the NTP did admit competition into the local loop in that it established duopolies in each of the Circles. Moreover, it is also

relatively well-established that a duopoly-based regime can be an important and useful step in facilitating the transition from *dirigisme* to full competition.[127] But there is little indication that the arrangements established by the DOT are transitional in nature. For its part, the DOT recognized no clear timetable for the progressive introduction of other basic service providers into each Circle. Moreover, it does not bode well for competition that each successful bidder was licensed to exclusively operate its basic service franchise for a fifteen year period, with the possibility of ten-year extensions.

Additionally, the DOT's competition policy is hamstrung in yet another respect: it has preserved the monopolies of the DOT and VSNL in long-distance and international operations. Indeed, the department's interpretation of the NTP virtually disallowed the dilution of these monopoly stakes, and enabled them to continue indefinitely.

These limitations have had important and adverse consequences for the provision of basic services, most notably with regard to the ability of private operators to cross-subsidize less profitable, but vital, operations, (for instance, to provide universal access to basic services,) with revenues derived from more profitable undertakings (such as long-distance and international carriage). Given that private bidders are restricted to a limited revenue base derived from local loop earnings, their capacity to finance basic services provision *from ongoing operations* was inherently limited.

This need not have been the case. First, there was simply no justification—on economic, social or other grounds—for the DOT and VSNL to retain monopoly control over long-distance and international service. Second, the introduction of competition into the two latter categories of service provision could have been instrumental in designing a qualitatively superior regulatory regime for basic services.

Such a regime would have established a temporary and transitional duopoly (consisting of a private operator and the DOT) in each of the Circles, in which successful private bidders would have been licensed to provide a limited number of explicitly defined basic services (e.g., voice telephony). Also, it would have provided clear guidelines on the progressive introduction of other private operators into the local loop after a reasonable period of years, and opened long-distance and international service provision to private sector and foreign participation.

Additionally, each Circle would have been drawn in such a way that

127. ICICI, *supra* note 40, at 35.

it included both profitable and unprofitable areas of operation. A suitable ratio of profitable to unprofitable areas for each Circle would have been defined by stipulating that profits derived from operations in the former be totally offset by losses in the latter, assuming that the operator was using some relatively unsophisticated baseline technology (e.g., copper wireline transmission networks). In this way, the policy would have ensured that even if the private service provider relies on an (acceptable but) relatively rudimentary technology, it would have been assured *ex ante* of breaking even in undertaking local loop basic service operations.

To earn a profit on its operations, the private provider would have to do two things. First, it would have to compete in the long-distance and international service markets on the basis of the basis of price and service quality. Second, it would have to introduce more cost-effective technologies—financed perhaps by its long-distance and international operations—into the local loop. In this way, it would be able to minimize its sunk costs and better offset the marginal costs of extending basic services to new consumers throughout its "command area." Thus, the private operator would increase its profit margins and derive a tangible economic benefit from its local loop undertakings, while promoting the objective of universal access to basic services.

IV. CONCLUSION

The establishment of the TRAI and the renewed interest of private sector operators in basic services are encouraging signs of the vitality of the liberalization process. But as this brief discussion of the government's approach to such issues as competition and technological innovation reveals, its efforts to reform the old Nehruvian regime of regulation are clearly far from complete.

That so much still remains to be accomplished three years after the announcement of the NTP attests to the fact that, in addition to being poorly designed and intermittently bent to the wishes of vested interests, the Policy is also the product of a collective official mind that is fundamentally ambivalent about the free market. In spite of an aggressive, ongoing and largely successful deregulation of the wider economy, the GOI and the Indian political establishment have not yet convinced themselves that market forces are an unqualified benison. Hence, even as the GOI fitfully moves towards a more genuinely competitive telecommunications sector, particularly in the area of basic services, there is ample evidence that it will struggle to preserve certain aspects of the old regulatory and economic arrangements, such as the social welfare

functions of the public sector.

But while an unequivocally Neoliberal scheme of telecommunications regulation may be a very long time in coming to India, the trajectory of reform precipitated by the GOI's efforts to implement the NTP in the arena of basic services demonstrates that progress of a sort is being made. Marred though it has been by haphazard design and erratic execution, the process has subjected overweening government regulation of the sub-sector to the scrutiny of the courts and popular opinion, and given the private sector real stakes in its continuation. Hence, although its implementation thus far has been tortuous, the NTP has probably made the further liberalization of the telecommunications sector both inevitable and irreversible.