The Conditional Access System: The Dynamics of À La Carte Pricing for Cable Television in India

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In 2002, a new law was passed in India requiring the introduction of a nationwide conditional access system (CAS) (addressable cable), but administrative problems and court challenges delayed its implementation until 2007 and limited it to some localities in the four largest cities. At a substantive level, the outcome is in accord with incrementalist theories of policymaking that argue that radical policy changes mobilize opposition and fail in implementation. This article argues, however, that at a procedural level, the CAS controversy catalyzed a radical change in the telecommunications policymaking *process*, lending support to theories such as punctuated equilibrium, which acknowledge the possibility of radical change. In conclusion, lessons for telecommunications policymaking in India and other developing countries are put forward.

Introduction

The introduction of a conditional access system (CAS), or addressable cable, has been one of the most controversial issues in cable regulation in India. A 2002 amendment to the Cable Television Network (Regulation) Act of 1995 made it mandatory for all cable systems in the country to install addressable cable boxes for each subscriber within a period of six months, beginning on January 15, 2003 ("CAS Bill Passed," 2002). But the implementation of the proposal has been delayed time and time again because of intense lobbying by industry groups, protracted litigation, and bureaucratic delays, to the extent that more than eight years later, only a few selected areas in the four major cities have implemented CAS.

There was little indication of controversy in the quick and smooth manner in which Parliament passed the 2002 amendment. After a governmental task force recommended conditional access in late 2001, a bill mandating it was introduced in Parliament and won approval in little over a year (this is described in detail in Section 3, A Brief Timeline of CAS). But this apparent consensus in the law-making stage quickly unraveled in implementation. A number of interest groups—cable systems, program providers, consumers, and local governments—entered the fray on different sides of the issue, eventually

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involving the courts as well. The federal government repeatedly deferred deadlines, shifted jurisdiction over CAS from one agency to another, and eventually failed to implement the system in wide swathes of the country.

Economic analyses show that a shift to à la carte pricing from the traditional practice of tiered bundled pricing in the cable industry results in significant economic consequences for both consumers and producers (Bakos & Brynjolfsson, 1999; Crawford, 2005; Crawford & Cullen, 2007; Ford & Koutsky, 2006). When radical changes such as this are proposed, they are likely to generate opposition from various quarters, reducing their chances of successful implementation. In recent years, a significant body of opinion has emerged in the field of public policy theory to explain why policy systems change only gradually and incrementally. Theories such as Charles Lindblom's disjointed incrementalism (Lindblom & Woodhouse, 1993) and the "composite republic" framework (Hayes, 2006) assert that policy change is an iterative movement toward better policy solutions, involving multiple small and easily reversed steps. The CAS controversy in India seems to exemplify this theoretical position.

But if radical changes in policy were defeated as predicted by the incrementalist policy theories, it is the contention of this paper that the CAS episode did effect a long-term and perhaps more consequential change in the *processes* by which telecommunications policy is made in India. In an effort to manage the controversy over CAS, the government was forced to put in place decision systems and institutional arrangements that departed radically from the earlier parliamentary/ministerial decision-making patterns. As a result, a new policymaking system is emerging that is more transparent, open to stakeholder input, contractually based, and rule-bound than the closed, policymaking-by-fiat system that preceded it. The paper seeks to show that at the procedural level, radical change did happen, or was at least initiated. At this level, there is support for nonincremental theories of policy change, such as Kingdon's (2002) multiple streams framework and the punctuated equilibrium model (Baumgartner & Jones, 1993; True, Jones, & Baumgartner, 1999).

The present case study of the conditional access system in India covers the period approximately from the initiation of the CAS proposal in late 2001, to 2007, when the last major changes to the CAS regime were made. In addition to the intrinsic worth of discussing policymaking in an emerging market with some of the highest growth rates in telecommunications and broadcasting in the world, this study also has the theoretical justification of applying various public policy theories, developed primarily in the Western context, to a democratic polity in the developing world. It also illustrates the difficulties of accommodating new communication technologies into an existing socio-political order; new technologies often activate new interest groups that challenge established actors, and making room for them in the policy process fundamentally alters established modes of decision making. We discuss these themes further in the conclusions.

The outline of the article is as follows. To provide an analytical framework for the case study, Section 2 reviews various theories of the policymaking process, differentiating between theories that posit only gradual change in policy systems and those that admit the possibility of nonincremental change. Section 3 presents a general timeline of the CAS controversy; the primary materials cited include legislation passed by the Indian Parliament; regulatory documents such as tariff orders,

recommendations, and consultation papers produced by the Ministry of Information and Broadcasting (MIB) or the Telecommunications Regulatory Authority of India (TRAI),; position papers from industry groups; and news reports. Next, Section 4 returns to the theoretical concerns: it evaluates the evidence in support of incremental and nonincremental theories of policy change. In the final section, conclusions are presented on the nature of India's still-evolving telecommunications regulatory regime.

Theories of Public Policymaking

A growing body of theoretical work has emerged that attempts to conceptualize and model the policymaking process. A broad categorization of these theories is between those that posit only incremental change in policies and those that admit the possibility of radical change. Lindblom's influential theory of "disjointed incrementalism" (Lindblom & Woodhouse, 1993) or Hayes's "composite republic" framework, which fall in the former category, argue that a policy maker functioning with insufficient information and bounded rationality, and constrained by formal checks and balances, will find it impossible to achieve what Lindblom calls the "rational-comprehensive ideal"—a complete and single-step solution to a policy problem. Instead, decision making proceeds by trial-and-error, incremental modifications to existing policy. Large-scale policy change occurs relatively rarely, in response to an external shock to the system or to a dramatic change in the identity or relative power of decision makers.

In contrast to these incrementalist theories, others are more open to the possibility of nonincremental change. John Kingdon (2002) elaborated the "multiple streams framework," which argues that policy results from the interaction of a "problem stream" of social issues requiring policy attention, a "policy stream" of subject experts and partisan groups advocating competing solutions, and a "politics stream" of elected officials and bureaucrats. Major policy change may occur when a "policy entrepreneur," usually a top-level official, for example the president of the United States, senses an opportunity to bring the three streams together. Sometimes, policy entrepreneurs misjudge the timing or scope of a policy initiative, resulting in its failure. Thus, in the multiple streams framework, the policy process could be marked by sharp discontinuities, abrupt reversals, and external influences.

Other perspectives also permit nonincremental change. The theory of interest group dynamics (Hayes, 2006, see especially Chapter 4, pp. 44–62) argues that interest groups with conflicting agendas and differential endowments of power and influence compete to obtain advantageous policy outcomes, but also to enhance their power vis-à-vis other groups. Their objective is not to find the best solutions to policy problems, but to achieve outcomes that maximize their power vis-à-vis other groups. Interest group theories could be "maximal" or "liberal" to the extent the outcome represents a private or a public good. Interest group maximalism is represented by capture theory, in which one group, usually industry, secures its private interests by co-opting and dominating policymakers. Interest group liberalism (Lowi, 1979) is a more optimistic version that argues that eventually all potential groups will be drawn into the policy process, yielding outcomes that approximate the public interest.

The theory of punctuated equilibrium, another nonincremental theory, seeks to explain why policy displays long periods of stasis and incremental change, interrupted by occasional dramatic shifts (Baumgartner & Jones, 1993; True, Jones, & Baumgartner, 1999). It posits two interrelated spheres of

action: a macro-political arena and a policy subsystem. Normally, policy issues remain at the level of the policy subsystem, consisting of subject specialists and other interested parties, which are conservative environments where only incremental change occurs. Dramatic change can occur only when a new mobilization or political realignment occurs at the macro-political level.

This brief survey is not intended to be an exhaustive listing of policymaking theories.¹ Instead, the aim is to cite theories that directly address the issue of policy change, whether it is incremental or radical. Collectively, they provide an organizational and sense-making framework for the case study that follows. As the case study shows, new communication technologies often catalyze change in established policy systems by recruiting new participants into the policy process, both as consumers and as service providers, while established players seek to reinforce the *status quo*. The resulting dynamic can result in either incremental change or a more dramatic shift. We now turn to the case study to find out which body of theory is supported.

A Timeline of CAS

From its inception, a number of stakeholders have acted in shifting alliances to support or oppose CAS. The list includes government agencies, the multi-system operators, broadcasters, local cable companies, consumers, and the courts. To facilitate understanding of the events described in this section, we begin with short descriptions of these *dramatis personae*.

The Ministry of Information and Broadcasting (MIB): The MIB is one of the ministries of the federal government, usually headed by a minister of cabinet rank and operated by a professional bureaucracy led by members of the Indian Administrative Service. Until 1990, the MIB was directly responsible for operating the television network Doordarshan and the radio network All India Radio. The Prasar Bharati Act of 1990 created a new, autonomous corporation to oversee the two public broadcasters. Thereafter, the MIB has taken on a regulatory role, especially after the advent in the 1990s of private FM radio stations, satellite broadcasters, and cable systems.

Ministry of Communication and Information Technology (MCIT): Another ministry of the federal government, the MCIT is composed of three departments, which oversee posts, telecommunications, and information technology, respectively. It oversees the state-owned service providers Bharat Sanchar Nigam Limited (BSNL) and the Mahanagar Telephone Nigam Limited (MTNL) as well as the equipment manufacturer Indian Telephone Industries (ITI). Formerly directly in charge of operations, the MCIT now has a policymaking and regulatory role after operations were spun out to the newly formed BSNL and MTNL in 2000.

Telecommunications Regulatory Authority of India (TRAI): Created by the TRAI Act of 1997, this is a regulatory agency that combines executive, judicial, and policymaking functions. The Authority

¹ Theories not listed here include the institutional choice models, the Advocacy Coalition Framework (ACF), policy diffusion and lesson-drawing, constructivist frameworks, the policy domain models, etc. See Sabatier (1999) for a broad survey.

comprises one chairperson, not more than two full-time members, and not more than two part-time members appointed for five-year terms. Usually, the members are retired senior bureaucrats, justices from the Supreme Court or the High Courts, or technocrats.

Multi-System Operators (MSOs): MSOs in India function both as cable system operators in some markets, and as redistributors of programming to smaller independent cable systems that are their affiliates. They rarely produce their own content, but some of the larger MSOs are vertically integrated with broadcasters. For example, the largest MSO, Wire and Wireless India (formerly Siti Cable) is owned by Zee Entertainment Enterprises, the foremost broadcaster in India, with an impressive lineup of very popular cable networks. Other large MSOs include Hathway, Incable, Sumangali Cable Vision, and the smaller regional player Ortel.

Local cable operators (LCOs): India has an enormous number of LCOs, many of them individually owned small businesses serving as few as 300–400 homes. Recent estimates put the total number of independent LCOs at 60,000 (Telecommunications Regulatory Authority of India [TRAI], 2010). These collectively serve about 70% of the total market of 87 million cable homes. The rest of the market is served directly by cable systems owned by the MSOs. LCOs do not have in-house programming capabilities. Most do not even negotiate directly with broadcasters for programming rights, relying instead on affiliation agreements with the MSOs to obtain bouquets of programming. For example, Wire and Wireless India (formerly Siti Cable) has 4000 LCO affiliates (Wire and Wireless, 2011).

Broadcasters: India has a number of public and private television program providers, including both terrestrial and satellite providers. Long dominated by the state-owned (now corporatized) Doordarshan, Indian television now has multichannel broadcasters such as Zee Entertainment Enterprises (formerly Zee Telefilms) and Rupert Murdoch's Star Television.

Consumers: Consumer activism and advocacy in India are relatively recent phenomena, with organized groups emerging only in the 1960s. A Consumer Protection Act passed in 1986 codified protections against unfair business practices and created consumer disputes courts at the district, state, and national levels. However, the track record of these courts has been far from perfect, and the overall level of consumer protection in the country remains abysmal. On the CAS issue, advocacy has often been taken up by neighborhood groups called Residents' Welfare Associations, especially in the big cities such as New Delhi. While not lacking in energy, these groups have rarely been able to speak with one voice on any issue.

Courts: India has a multi-tier judiciary, with the Supreme Court of India at the national level, the High Courts at the state level, and District and Sessions Courts at the district level. Key decisions on CAS were taken by the Delhi High Court and the Madras High Court, based respectively in New Delhi and in the southern city of Chennai. In addition to the courts, the Telecommunications Disputes Settlement and Appellate Tribunal (TDSAT) is a specialized three-member tribunal, created in 2000, that adjudicates disputes between the government and a telecommunications licensee, between service providers, or between service providers and consumers. It is also empowered as an appellate authority for any decision

or order of the TRAI (Telecommunications Regulatory Authority of India Act [TRAI Act], 2000, Chapter IV, section 14(a)).

With the principal actors identified, we now present a chronological account of CAS, beginning with the advent of cable in India. Until 1992, there were practically no cable systems in India, except for a few satellite master antenna television (SMATV) systems in the remote areas. The arrival that year of Star TV, a Hong Kong-based satellite broadcaster, contributed to a huge increase in demand for cable. However, most systems that emerged during this period were small-scale, low-quality neighborhood networks concentrated in the densely populated urban areas, carrying programs that were often pirated from satellite networks or broadcasters (Jayakar, 1994). The resulting chaos prompted Parliament to legislate the Cable Television Network (Regulation) Act of 1995.

The 1995 Cable Act marked a significant turning point in Indian media regulation. First, the formalization of a nationwide registration system for LCOs legitimized the entry of private actors into Indian broadcasting, which had been dominated until then by a government monopoly. Second, the Cable Act defined cable as primarily a medium for the retransmission of audiovisual programming, placing it under MIB regulation. By the end of the decade, the cable sector had become a dynamic and highly competitive industry in which corporate interests were well represented.

The movement toward a conditional access system began when the MIB appointed a Task Force in September 2001 to explore the possibility of addressable cable ("Sushma, Jaswant to Meet," 2001). The immediate catalyst appears to have been complaints about increases in cable prices ("Consumer Organization Demands Regulatory Authority," 2002; "Who Decides?" 2001) and allegations from program providers that cable systems routinely underreported subscriber numbers and cheated the providers out of royalty payments (Task Force, 2001). The Task Force had representatives of private commercial broadcasters (represented by the Indian Broadcasting Federation), MSOs, program providers, LCOs, and consumer activists as well as an official from the Ministry of Consumer Affairs and technical experts. In December 2001, the Task Force recommended an addressable cable system for pay channels while allowing consumers to access a "basic tier" of free-to-air programming without a set-top box. Basic tier prices should be regulated by government, while the composition, tiering, and prices of pay channels should be left to market forces (Task Force, 2001).

Armed with the Task Force report, the MIB tabled a proposal for amending the 1995 Cable Act before the federal cabinet of ministers, which approved it in May 2002 ("CAS Gets Union Cabinet Clearance," 2002). A bill was then introduced in Parliament and passed by both the upper and the lower house by December 2002, with relatively little opposition ("CAS Bill Passed," 2002; "CATV Act CAS Amendment Gets Lower House's Nod," 2002; "The Rajya Sabha CAS Debate," 2002). It amended the Cable Act adding a new section 4A, which mandated the "transmission of programs of a pay channel through an addressable system [hereinafter referred to as Conditional Access System (CAS)]."

While the bill was pending in Parliament, key stakeholders came out in favor of or against the measure. On one side, in favor of CAS, were consumer groups, cable MSOs and, surprisingly, some LCOs—an uneasy alliance, given that one of the motivators for CAS was consumer complaints against

LCOs for hiking subscription rates. Consumers expected CAS to limit these increases. MSOs too saw advantage in CAS, expecting it to level the playing field for themselves against program providers and to protect them against unpredictable royalty rate increases by the latter (Choudhry, 2002). But LCOs may have been deterred from opposing the measure because many were aligned with MSOs through direct ownership or affiliation arrangements. Some, perhaps with MSO instigation, even adopted coercive tactics to bring the bill to a speedy vote ("Delhi Cable TV Operators Plan TV Blackout," 2002). Opposition to CAS came principally from program providers, but differences of opinion soon emerged between the more popular advertising-funded networks and the pay networks, respectively led by Zee TV and the Star TV group, with the former in favor and the latter against ("IBF Move to Oppose CAS," 2002; "Zee TV Chieftain," 2002). Once the bill cleared Parliament and further opposition appeared futile, the last holdouts too signaled their compliance ("IBF Comes Out in Support of CAS," 2002).

Thus, by December 2002, the MIB had apparently achieved all of its policy and political objectives. In little over a year, the MIB had navigated the cable amendment through Parliament, convinced the electorate of its pro-consumer credentials, and quelled dissent from powerful industry players. Early in 2003, the MIB announced initial rules requiring cable operators in the four major metropolitan areas of Chennai, New Delhi, Kolkata, and Mumbai to begin retransmitting all pay networks through an addressable system within six months; that is, by July 15, 2003 (Ministry of Information and Broadcasting [MIB], 2003a). The expectation was that after a "pilot" phase in the four metros, CAS would be extended over the rest of the country.

But as details of the proposed system began to emerge from the government and from the media, a firestorm was ignited. LCOs complained about the unavailability and high cost of set-top boxes, lack of trained technicians for installation, and insufficient time to negotiate new programming contracts. The larger MSOs and their affiliated LCOs continued to be in favor of CAS, but consumer groups, once the staunchest supporters of CAS, began to voice apprehensions about the pricing of cable subscriptions, additional fees for set-top boxes, and equipment rentals. The loss of consumer support was critical, because political parties and state governments too changed sides once consumers lost faith in CAS. ("Imposing CAS on Consumers Most Unfair," 2004; "West Bengal Conveys Reservations on CAS," 2004). All of these complaints were related to, and compounded by, the short time frame for the transition—six months. With practically no cable system ready to implement CAS by the July 15 deadline, the MIB had no

² Popular, advertising-funded networks may be expected to survive the implementation of CAS relatively unscathed, because their popularity would ensure continued subscription by a large number of consumers. But less popular advertising networks would lose subscribers if they were no longer offered as part of a popular bundle. Pay networks, on the other hand, might benefit from CAS in the sense that the system would eliminate the cable systems' underreporting of subscribers and increase their royalty revenues. But they too would be negatively impacted by the loss of subscribership and the prohibition of bundling under a la carte pricing. These calculations are also complicated by the fact that several networks used a combination of pay and advertising funding. Thus, only the most popular advertising-funded program providers welcomed CAS: Zee TV and Sahara TV were among this group, which broke with the rest of the program providers and came out in support of CAS early.

choice but to extend the deadline by two and a half months to September 1, 2003; in another climbdown, the MIB conceded that CAS would not be implemented throughout the four metros, but only in selected areas within these cities (MIB, 2003b).

Even these concessions proved inadequate. Opposition from small LCOs was especially stiff in the capital city of New Delhi. With the extended September deadline only hours away, the MIB knuckled under and officially withdrew the implementation of CAS in the capital territory (MIB, 2003c). In Kolkata and Mumbai too, opposition from city officials effectively aborted the move to CAS even though legally the requirement was still in place. The only metro where CAS became operational on September 1 was the southern city of Chennai ("Chennai Only Taker for CAS," 2003).

Both supporters and opponents of CAS now moved their battles into court. On a pro-CAS petition filed by some MSOs and their affiliated LCOs, the Delhi High Court ruled against the MIB, quashing the government notification withdrawing the implementation of CAS in New Delhi ("CAS Ball Back in Government Court," 2003). CAS opponents had no success. A case filed by a consumer group was rejected by the Delhi High Court (*Consumer Coordination Council v. Union of India*, 2003), which ruled that the government should within a period of three months assess and take remedial measures for "all the loopholes, difficulties of consumers, effects of implementation and problems, if any, arising out of the implementation" (quoted in MIB, 2004).

With controversies and legal difficulties showing no signs of abating, the government abruptly decided to remove CAS from the MIB's direct supervision. The most immediate catalyst for this move was the Delhi High Court's *Consumer Coordination Council v. Union of India* ruling, in which it had opined that "there has to be some regulatory body in terms of the synopsis of comments which have been filed by the respondent to see [to] the implementation" (quoted in TRAI, 2004a). Accordingly, the government issued a new notification on January 9, 2004 (Ministry of Communication and Information Technology [MCIT], 2004a), transferring authority over aspects of CAS to TRAI, which, as the telecommunications regulator, appeared to be a suitable candidate. Using a provision under Section 2(1)(k) of the TRAI Act (2000), the notification redefined broadcasting and cable as "telecommunications services" making them subject to TRAI's jurisdiction. The same day, the MCIT issued a notification detailing TRAI's responsibilities, including regulating the rates for pay channels and determining the periodicity of rate revisions (MCIT, 2004b).

Soon after these official notifications, TRAI began its own rule-making process by issuing a call for consultation to the cable industry (TRAI, 2004c).³ Among other issues, the note sought comments on the rates that consumers will pay to LCOs and the sharing of pay channel revenues between LCOs, MSOs, and broadcasters. Comments were to be filed with TRAI by January 30, 2004, just a little over two weeks after the note was publicized. Until a final determination of rates was made, TRAI ruled in its "First Tariff

³ The consultation process is a statutory requirement for TRAI. Unlike an old-line ministry such as the MIB, which often administered by fiat, the TRAI is a regulatory body whose enabling legislation incorporates a requirement for transparency in decision making. Chapter III, Article 11(4) of the TRAI Act, 1997, states that "The Authority shall ensure transparency while exercising its powers and discharging its functions" (quoted in TRAI, 2004c).

Order" (TRAI, 2004b) that the charges paid by cable subscribers to LCOs, by LCOs to MSOs, and by LCOs and MSOs to broadcasters would be frozen at the rates prevailing on the date of the Delhi High Court's order.

On February 23, 2004, TRAI produced its Interim Recommendations, based on the comments received from various stakeholder groups such as cable operators, broadcasters, MSOs, and consumers (TRAI, 2004a). Given the complexity of the policy choices, TRAI recommended that the implementation of CAS be denotified or kept in abeyance indefinitely until all aspects are finalized. Accepting this recommendation, the government withdrew all its prior notifications on CAS with effect from February 27, 2004 (MIB, 2004). In April 2004, TRAI produced another comprehensive Consultation Paper, No. 9 of 2004, summarizing feedback from all stakeholders, examining addressable cable systems and cable price regulation in foreign countries, and identifying a host of issues to be resolved before a final CAS notification could be produced (TRAI, 2004d). But despite these periodic informational reports, there was no actual progress on implementing CAS. One newspaper declared that the "issue had finally been buried" ("Implementation of CAS Put Off indefinitely," 2004). Only in the southern city of Chennai did CAS become operational, because a local MSO obtained a legal judgment from the Madras High Court staying the implementation of the federal government orders ("High Court Stays CAS Suspension," 2004).

Meanwhile, TRAI produced a series of tariff orders from 2004 through 2006 (TRAI, 2004e; 2004f; 2005) supplementing the "First Tariff Order" (TRAI, 2004b), which gradually put in place a rate regime for cable, but with no forward movement on CAS. Impatient with the lack of progress, a group of MSOs led by Hathway Cable again approached the Delhi High Court to seek a time-bound implementation of CAS. On March 10, 2006, the Delhi High Court ruled in favor of the plaintiffs and directed the federal government to implement the CAS within four weeks in the three metros of Mumbai, Kolkata, and Delhi (*Hathway Cable and Datacom Pvt. Limited v. Union of India and others*, 2004). After further appeals secured a slightly longer deadline, the government issued a new notification identifying the areas in the three major metros where CAS would be implemented with effect from December 31, 2006 (MIB, 2006). Chennai, the fourth metro, where CAS was already in force based on the Madras High Court's 2004 judgment, was not subject to these new orders. This—limited CAS implementation in selected areas of the four major metros—is the status quo as of this writing.

Incremental or Nonincremental Change?

Building on the chronology of developments in the previous section, we now turn to a more analytical treatment of stakeholder dynamics in light of the theories of policy change discussed in Section 3. Our thesis is summarized as follows: at a substantive level, the case seems to support incrementalist theories of policy change, but at a more long-term, institutional level it is argued that the CAS debates resulted in a more radical transformation of the decision-systems in Indian telecommunications policymaking. In the following paragraphs, the arguments in support of incrementalist theories are presented first, followed by those for theories that admit the possibility of radical transformation.

The Case for Incrementalist Theories

For all intents and purposes, the initial motivation for CAS came from one source: Minister for Information and Broadcasting Sushma Swaraj in the National Democratic Alliance (NDA) coalition government. Having initiated the idea, Swaraj also proved to be an adept legislative tactician, obtaining approval from her cabinet colleagues and passage through Parliament, just fourteen months after the idea was first proposed. In this phase, Minister Swaraj appears to fit the mold of Kingdon's (2002) "policy entrepreneur"; she chose a promising issue from the "problem stream" of general public concern (cable rate inflation); identified a potential solution from the "policy stream" (CAS); and successfully navigated it through the politics stream (the legislation).

A critical factor aiding the MIB in the legislative phase was the unity of the interest groups in favor, and divisions in the opposition. On one hand, the government presented a unified front in the form of a determined executive and a compliant Parliament. In India's parliamentary system, the party or coalition that enjoys a majority in the lower house, the Lok Sabha, forms the government. Thus, it was relatively easy for Swaraj to move the Cable Act amendment through Parliament. On the other hand, the anti-CAS camp was divided. The economic models cited earlier suggest that the main battle lines on à la carte pricing would be between consumers in favor and producers, including programmers and cable operators, in opposition. In India, a complicating factor was the systematic underreporting of subscriber numbers by LCOs: since CAS was expected to improve the accuracy of reporting and therefore increase royalty payments to programmers, some programmers came out in favor of CAS. Opposition from the natural opponents of à la carte pricing, the LCOs, was muted because of the vertical linkages between LCOs, MSOs, and programmers.

A second factor was the very vagueness of the CAS proposal. Though the public was certainly concerned about rising cable rates, the initial debates did not address some questions that were to achieve greater salience during implementation (for example, channel prices and rentals for set-top boxes). Even the Task Force report, on the basis of which the MIB justified its CAS initiative, shows, with the benefit of hindsight, agreement only on generalities, along with some inherent contradictions (Task Force, 2001). So long as the proposal remained only an idea, stakeholders could point to elements within it that could advance their partisan economic interests. Consumers saw the potential for lower rates, while programmers expected CAS to generate more royalty revenues through better subscriber counts; both failed to recognize the inherent contradiction between these two expectations. Ironically, the very vagueness of the proposal helped the MIB to build consensus around it, but it proved counterproductive later in implementation.

The MIB lost the support of key constituencies when CAS moved into implementation. The most critical of these constituencies was consumers, in whose name the measure had been initially proposed. For them, concern centered on the cost of the set-top boxes and the possible impact on monthly subscription rates. LCOs, thought they had always been adamantly opposed to CAS, had remained relatively voiceless in the legislative phase because of the speed with which the measure had moved through Parliament and because of a split between the larger MSO-affiliated LCOs and the smaller independent systems. But eventually the smaller independent LCOs coordinated their actions and became

potent opponents of CAS implementation, especially in Delhi. Political parties, too, were strongly beholden to local cable operators, since the small business constituency they represented was important for political contributions and campaign activism.

Thus, the preponderance of evidence in the CAS case supports incrementalist theories such as Lindblom's disjointed incrementalism (Lindblom & Woodhouse, 1993) and Hayes' "composite republic" framework (Hayes, 2006). As predicted by these theories, any radical change is opposed by stakeholders with a vested interest in the current system, the strength of the opposition rising in proportion to the extent of the departure from the status quo. If competing motivations and disorganized opponents contributed to the MIB's success in the legislative phase, opposition eventually arose in implementation, resulting in a virtual stalemate, if not a policy reversal. At a substantive level, therefore, the case study supports incrementalist theories of policymaking.

The Case for Theories of Radical Transformation

Prior to the 1990s, media policymaking was the exclusive preserve of the MIB. The television network Doordarshan and the radio network All India Radio, were both state-owned monopolies and the MIB's "media units." At this time, there was no scope for policymaking in the Indian media system, since policy was conceived of, implemented, and evaluated within the MIB and its subsidiary units. Regulations were produced essentially by government fiat.

It was with the same mindset that the MIB approached new media regulation, even though two events in the meantime had brought about fundamental changes in the Indian media landscape. The first was a 1995 decision of the Indian Supreme Court that the airwaves were public property (*The Secretary, Ministry of Information and Broadcasting v. Cricket Association of Bengal*, 1995), opening the door for private radio broadcasting and, eventually, private television broadcasting. The second event, also in 1995, was the Cable Television Networks (Regulation) Act, legalizing private cable systems, which had until then operated informally and quasi-legally. These changes brought in hundreds of new private actors into the Indian media system. Initially, their power to influence policy was minimal because most were small and medium enterprises in a disorganized industry. Their collective bargaining power began to be felt only in the next decade, as instanced in the CAS debates.

Despite these far-reaching changes in the media environment, the MIB's decision-making style continued much as before. Three deficiencies of MIB decision making are particularly relevant. First, the MIB lacked regular and systematic procedures for soliciting public comments. Government procedures as codified in documents such as the *Manual of Office Procedure* (Ministry of Personnel, Public Grievances and Pensions, 2003) and the *Civil Service Conduct Rules* (Muthuswamy & Brinda, 2009) were designed to insulate government functionaries from public pressure and preserve their decision autonomy. Formal mechanisms, such as the Federal Communications Commission (FCC)'s Notices of Proposed Rulemaking in the United States, were not in place to alert the public about policy proposals and seek comments.

Second, internal checks-and-balances, while present, were often ineffective in practice. In India's parliamentary system, the federal cabinet is expected to be a collective decision-making body, where all

proposed policies and programs are subject to vigorous debate and criticism. In the initial years of the republic, this was indeed the case, with many strong leaders with independent visions and voices represented in the cabinet (Austin, 1999). But that tradition of vigorous debate weakened over time under the pressure of an increasing workload, with the result that many measures do not get the required close scrutiny, especially on matters considered to be within the exclusive area of competency of a single ministry. Parliament, another forum for debate and criticism, has also often failed to exercise its oversight responsibilities (Kapur & Mehta, 2006). In terms of legislation, the principal tools of oversight are the various parliamentary committees, particularly the Departmentally Related Standing Committees (DRSCs) with jurisdiction over specific ministries. For the MIB, the relevant DRSC is the Standing Committee on Information Technology (Parliament of India, n.d.). However, in practice, various procedural deficiencies have weakened the oversight role of these parliamentary committees, including rapid turnover in membership, lack of administrative support, and unwillingness to summon ministers to proffer direct testimony (Kapur & Mehta, 2006).

The third deficiency in the MIB's decision-making process was the lack of staff with relevant technical and industry experience. While the ministry is led by a political appointee, its senior administrators are drawn from the professional civil service. The bureaucrats of the Indian Administrative Service filling these senior positions are trained as generalists, whose early careers are spent in district-level (roughly analogous to a U.S. county) administration. In mid and late career these officials are expected to serve for relatively short stints in different federal departments and ministries. While many are bright and dedicated, these administrators often do not have the requisite background or experience in specific fields and, therefore, may not be able to advise their political superiors on the technical aspects of complex policy questions.

These deficiencies in the MIB's decision processes did not matter so long as it was functioning within the relatively closed and static media system that prevailed prior to 1995. The close partnership between the MIB, its chief operational units, and the few private parties (such as program producers) that existed at this time was like a "policy subsystem" (Baumgartner & Jones, 1993), impervious to outside input and influence. But the Supreme Court's 1995 "public airwaves" decision and the emergence of the cable sector had brought myriad new players into the industry. Consumers too, in an increasingly competitive media environment, had become an assertive interest group. But the MIB's closed decision-making system refused to acknowledge these new actors until its CAS initiative ground to a virtual halt.

It was in the context of the MIB's insurmountable legal and administrative difficulties that TRAI took on cable regulation. Compared to the MIB, TRAI has a decision-making process much more in tune with the new industry environment. First, unlike the MIB, TRAI has a statutory responsibility to ensure transparency in its decision making (cited in TRAI, 2004c). In practice, TRAI has relied on "consultation notes" roughly modeled on the FCC's Notices of Proposed Rulemaking (NPRMs), calling for comments on specific regulatory questions. The comments received are compiled and made available to the public (for example, see TRAI, 2004d). The regulations and gazette orders issued by TRAI have explanatory statements, linking decisions to the comments received from various stakeholders. TRAI also has a system of registering consumer groups and non-governmental organizations (NGOs) active in the

telecommunications and broadcasting sectors, to be consulted on issues of interest. As of March 2010, TRAI reported that it had registered 41 such consumer groups/NGOs (TRAI, 2010).

Second, TRAI, as a specialized regulatory body, has more in-house technical and policy expertise on broadcasting and telecommunications than the MIB. TRAI's 177-strong staff (as of March 2010) is composed mostly of officials on deputation for two-year renewable terms from other government departments (TRAI, 2010). To retain experienced staff, TRAI encourages deputations to be renewed for multiple terms, and it is more recently seeking to build up its own cadre of full-time employees. TRAI also retains external consultants for specific projects.

Third, TRAI, unlike the MIB, is an independent regulatory agency with no direct role in the executive branch of government. Its regulatory authority is derived solely from the TRAI Act passed by Parliament in 1997 and the executive orders of the MIB or the MCIT. TRAI itself has no role in legislation except on a consultative basis. While this circumscribes the powers of TRAI, it also limits the ability of the agency to take unilateral actions without prior effort in consensus-building through public agenda-setting and consultation. As the CAS case demonstrates, it may be a mistake for a government agency to advance a policy agenda without adequate groundwork.

Fourth, and finally, TRAI decisions, unlike those of the MIB, are subject to formal review in multiple fora. As mentioned previously, TDSAT is an appellate tribunal specially empowered under Article 14 of the TRAI Act to review any decision or order of the TRAI. Any TRAI decision may also be appealed to the courts. Finally, TRAI's administrative procedures are also subject to review by the MIB and MCIT and, ultimately, by Parliament.

Perhaps nothing demonstrates the changed model of telecommunications policymaking in India than the new-found litigiousness of various stakeholders and the support they have found in the judicial system. In the CAS case, key interventions were made by the Delhi High Court and the Madras High Court. Both courts have consistently supported the implementation of CAS—through the Delhi High Court's decisions in the civil writ petitions of December 2003 and in *Hathway v. Union of India* in March 2006; and in the Madras High Court's judgments in March 2004. In siding with the petitioners and against the government in these cases, the courts have given considerable weight to legislative intent. They interpreted the 2002 amendment authorizing a nationwide addressable cable system as an unambiguous statement of Parliament's will, and they have rejected all government arguments that the executive has discretion in implementing or suspending the measure at its whim. In *Hathway v. Union of India*, for example, the Delhi High Court ruled that the executive's authority extended only to making the Act operational once it decides that certain conditions have been fulfilled, but not to nullifying the Act once it has been made operational. The courts' stress on legislative intent is significant; it marks a decoupling of the legislative role of Parliament from the implementation role of the executive, and it reasserts the judiciary's constitutionally sanctioned role as an arbiter between the two.

Thus, in the CAS issue, we see the transition away from a policymaking system where decisions are dominated by generalists with relatively little industry experience, with limited scope for external consultation, few and ineffective internal checks and balances, and almost unlimited executive discretion

due to the lack of formal mechanisms of oversight, and in which the legislator (Parliament) and policy implementer (MIB) are closely aligned. This model has been called the "statist" model of telecommunications policymaking (McDowell, 1997). Replacing this is a decision model in which there is structural separation in the policymaking process between the legislator (Parliament), implementer (TRAI), overseer (MIB and MCIT), and reviewer (TDSAT and the courts). TRAI is statutorily obligated to make its decision making transparent through wide public consultation, open dissemination of the comments received, and better explanation of its policy choices. TRAI's staff is better trained technically, and its decisions are subject to multiple levels of formal review.

Thus, at the level of the decision-making systems, the CAS controversy did catalyze a radical change in the policymaking process. The government was eventually forced to transfer authority from the MIB to TRAI due to persistent legal and administrative difficulties. This lends credence to nonincremental theories of policy change. As they predict, dramatic change can occur in policymaking systems when, as a result of a new technology or a political realignment, a new set of actors is introduced into the policy system. In India, new private sector actors had been entering the telecommunications industry since the mid-1990s but had remained relatively unorganized. The CAS case mobilized these previously quiescent stakeholders, such as consumer groups and small LCOs, and it crystallized differences between MSOs, program providers, and broadcasters. In the newly litigious environment, the courts too played a more active role, establishing that legislative intent may be different from executive interpretation. Thus the CAS controversy catalyzed the radical transformation of the Indian telecommunications policy-making system.

While the new TRAI-centered decision system has several positive attributes compared to the previous "statist" model, it is still a work in progress. It suffers from numerous lacunae and weaknesses that will need to be remedied if Indian telecommunications policy-making is to be set on a sound footing. In the next section, we present our recommendations.

Conclusions and Recommendations

This case study is a classic example of the changes catalyzed in policy systems by the advent of new communication technologies. As we saw, a unidimensional approach of modifying only the policies while leaving the policymaking process intact is unlikely to succeed. New technologies force changes at multiple levels of the policy system: the policies themselves must be realigned to encompass the new technology; the new interest groups that enter the policy space as consumers and service providers have to be accommodated in the decision process against the opposition of established players; and the very modality of decision making, the institutional environment itself, undergoes change. These changes necessarily involve adjustments and modifications within the parameters of each policy system: although change is inevitable, the outcome is anything but predictable. This explains why countries confronted with technological change often respond in dramatically different ways to it.

There are several lessons to be learned from this case. First, there is much to be criticized in the role of the MIB. As the government agency responsible for broadcasting and cable and the originator of the CAS proposal, it fell to the MIB to spearhead its implementation. However, it proved unequal to the

task. Unrealistic deadlines, lack of communication and reversals in the face of pressure eventually proved to be the MIB's undoing. More time in the initial phase to study the technical options and build consensus might have done much to launch CAS on a sounder footing.

This case also highlights the importance of public communication and awareness-building preparatory to major policy initiatives. Much of the confusion surrounding the CAS issue was a result of lack of communication, compounded by contradictory reports in the media. The government could have anticipated many questions (for instance, about the cost of set-top boxes) and taken preparatory steps to allay consumer concerns. Haste in the initial stages, followed by long periods of inaction, did much to turn subscribers against what was originally billed as a consumer-friendly initiative.

The MIB's initial haste in CAS implementation was compounded by the lack of well-defined consultation mechanisms. The MIB, as an old-line ministry more attuned to the public service broadcasting era, has not developed the institutional policies and procedures for regular consultations with industry stakeholders. It has a tendency to govern by fiat, which is less effective in dealing with highly contested policy questions. TRAI, in contrast, has its "consultation note" process—similar to the FCC's NPRMs—through which it periodically solicits comments from stakeholders. TRAI is legally obligated to ensure transparency in its decision making. As a regulatory agency, it may also summon witnesses and seek formal testimony from individuals and firms. Thus, contrasted to the MIB, TRAI functions in a richer and more broad-based information environment.

While TRAI's decision-making mechanisms are clearly superior to those of the MIB, its role in CAS is open to criticism too. In spite of its statutory status as an independent regulatory agency, TRAI displayed a reluctance to act without political directive. Having witnessed the legal and public relations problems of the MIB, TRAI was a reluctant to act until it was forced to by the courts. This was perhaps prudent, but it made TRAI a temporizing force in the CAS debates. Second, TRAI too was not immune to the MIB's tendency to set unrealistic deadlines. For example, it sometimes asked for comments to be submitted within two weeks of announcing a consultation note, which may conform to the letter of the law mandating public consultation, but misses its spirit.

The CAS debate also reveals the strong role played by the courts. Indian courts have a long history of independence and activism in public causes. In this case, too, the courts took an active role, haranguing and threatening the government to secure speedy implementation for CAS. However, they too showed a tendency to set unrealistic deadlines. While some of the Court's impatience was due to the government interminable delays and obfuscations, it might also betray a lack of appreciation for the technical and managerial challenges involved. Courts better versed in the complexities of the industry and the specifics of policy might be able to render more realistic judgments; the creation of TDSAT as a specialized appellate tribunal is a welcome development in this respect. It may also be desirable to designate one of the High Courts, or a special bench in one of the High Courts, to exclusively hear appeals on telecommunications policy.

In many ways, the CAS case illustrates how governments can go wrong in implementing policies and programs. Fortunately, in dealing with the fallout from this hastily conceived initiative, the Indian

government appears to be moving toward a more transparent and open telecommunications policymaking system. The strength or longevity of this move is uncertain as of this writing, but it is in the right direction.

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