kets for residential local exchange service. But even wireline services in such markets are going to be vulnerable to competition from wireless technologies.[24] In the meantime, however, a monopoly over unprofitable services that regulators require the operating company to provide is no fulcrum for leveraging market power. The operating company has no ability to raise price to generate profits on long-distance service because competitors have targeted those subscribers who would make gains from leverage attractive.

THE AMERITECH PROPOSAL

In March 1993 Ameritech requested approvals from the Commission and a temporary waiver from the judgment court to offer interLATA service.[25] In return for being granted the opportunity to provide in-region interLATA services on a trial basis, Ameritech would support all actions sought before state and federal regulators, and before the judgment court, to open local markets within its region to other carriers.

The Ameritech plan assumed a significance that transcended the issue of competition in long-distance in the Great Lakes region. The plan demonstrated how many concessions a operating company would have to make to receive authorization to provide interLATA service. Ameritech first proposed its plan to the Antitrust Division of the Department of Justice in December 1993.[26] The Antitrust Division, whose support would have increased the likelihood that the judgment court would grant Ameritech's waiver request, considered the proposal with maximum delay and then so constricted the scope of the trial that it could not produce results that would help answer questions about the competitive effects of entry.

In July 1994 four other Bell operating companies filed a motion to vacate the entire consent decree—an action that signaled that they would pursue a unified strategy to secure the judgment

24. *See, e.g.*, Daniel F. Spulber, *Deregulating Telecommunications*, 12 YALE J. ON REG. 25 (1995).

25. Petition of Ameritech for Declaratory Ruling and Related Waivers to Establish a New Regulatory Model for the Ameritech Region (filed before the FCC Mar. 1, 1993).

26. AMERITECH CORP., 1993 SEC FORM 10-K, at 9 (1994).

court's approval to enter interLATA markets.[27] Pacific Telesis followed in 1994 with its own motion to vacate the decree's interLATA ban to the extent that it affected California.[28] While four of these operating companies took polite exception to the Ameritech plan, one of them excoriated it on grounds that its implementation would result in "a massive shift of power from state and federal regulators, and the decree court, to the Department of Justice."[29]

The Ameritech plan indeed offered limited prospects for establishing an operating company competitor in long-distance services in the Great Lakes region. Originally, Ameritech proposed to offer interLATA services originating or terminating anywhere in its region (comprising Indiana, Illinois, Michigan, Ohio, and Wisconsin). Following the filing of opposition comments by the interexchange carriers and negotiations with the Antitrust Division, Ameritech in April 1995 acquiesced to a revised proposal to *resell* interLATA services originating or terminating *only in the Grand Rapids, Michigan, LATA and a portion of the Chicago LATA*.[30] Ameritech would be prohibited from using its own facilities to provide interLATA transport.

The Antitrust Division did not so much constrict the scope of the plan as denude it of policy significance. This was because the plan could not be undertaken over any reasonable time horizon. Before Ameritech could commence interLATA service, it had to satisfy an eight-part test on conditions for opening its local markets and it had to file with the Antitrust Division a ten-part "compliance plan" that certified the finding that, among other things, "actual competition (including facilities-based competition) in local ex-

27. Motion of Bell Atlantic Corporation, BellSouth Corporation, NYNEX Corporation, and Southwestern Bell Corporation to Vacate the Decree, United States v. Western Elec. Co., No. 82-0192 (D.D.C. filed July 6, 1994).

28. Motion of Pacific Telesis Group to Vacate the Decree, United States *v.* Western Elec. Co., No. 82-0192 (D.D.C. filed 1994).

29. *Ameritech Open Market Plan Attacked by Other RHCs*, COMMON CARRIER WK., May 8, 1995 (*quoting* memorandum circulated to other Bell operating companies by Southwestern Bell Corp. Vice President Thomas Barry).

30. Proposed Order to Permit an Interexchange Trial by Ameritech Submitted by the Department of Justice, United States v. Western Elec. Co., No. 82-0192 (D.D.C. filed Apr. 3, 1995).

change telecommunications exists in the Trial Territory."[31] Even without considering the inevitable delay of litigation to follow on these aspects of the plan before the decree court,[32] completion of those steps would take so many years that there would not likely be empirical evidence produced from it all on the effects on prices and outputs of local operating company entry into interLATA markets.

There is still the second question: what is required? The criterion by which one would expect the Antitrust Division in the first instance, and the decree court in the second, to evaluate Ameritech's waiver request is section VIII(C) of the AT&T consent decree.[33] That section provides:

> The restrictions imposed upon the separated BOCs by virtue of [the line-of-business restrictions contained in] section II(D) shall be removed upon a showing by the petitioning Bell Operating Company that there is no substantial possibility that it could use its monopoly power to impede competition in the market it seeks to enter.[34]

By its direct language, section VIII(C) would require that the decision to grant Ameritech's waiver request would rest on a finding of whether Ameritech's *probable conduct* in interLATA markets would impede competition in those markets. But to avoid having to make this finding, the Antitrust Division employed the legerdemain of basing its proposed order not on section VIII(C), but on section VII of the decree.[35] Nothing in section VIII(C) suggests that its logic fails to apply if the Antitrust Division characterizes the waiver request as a "temporary" lifting of the line-of-business restriction.

31. *Id.* at ¶ 11(b)(i).

32. Paul H. Rubin & Hashem Dezhbakhsh, *Costs of Delay and Rent-Seeking Under the Modification of Final Judgment*, 16 MANAGERIAL & DECISION ECON. 385 (1995).

33. United States *v.* American Tel. & Tel. Co., 552 F. Supp. 226 (D.D.C. 1982).

34. *Id. See* KELLOGG, THORNE & HUBER, *supra* note 27, at 370–99; United States *v.* Western Elec. Co., 900 F.2d 283 (D.C. Cir. 1990).

35. Ameritech Proposed Order at 1.

But, more conveniently, section VII said nothing about evaluating the probable effect on competition in the markets that the operating company sought to enter. Indeed, by its plain language, section VII was nothing more than legal boilerplate concerning the ability of the decree court to retain jurisdiction for the purposes of construing, carrying out, modifying, or enforcing the decree, or punishing violations of it.[36] But to say that the decree court retained jurisdiction over Ameritech to consider its interLATA proposal (a proposition never in dispute) in no way answered the question of what the legal test should be for evaluating the relevant economic effects of that proposal. Section VII does not enunciate an operative test in the way that section VIII(C) does. In that respect, section VII has been described as a more lenient "public interest" standard for modification of the decree when the waiver request is "uncontested"—that is, when it is supported by AT&T and the Department of Justice,[37] as has been the case with the revised version of the Ameritech proposal ultimately filed with the decree court.

And how does one define the public interest for purposes of section VII? In an attempt to keep section VII from becoming amorphous, the U.S. Court of Appeals for the D.C. Circuit in 1990 held that "the appropriate question under section VII is whether the proposed modification would be *certain* to lessen competition in the relevant market,"[38] and it rejected the possibility that an incipiency theory based on leveraging could satisfy that test.[39] Moreover, the

36. Section VII provides in its entirety:

> Jurisdiction is retained by this Court for the purpose of enabling any of the parties to the Modification of Final Judgment, or, after the reorganization specified in section I, a BOC to apply to this Court at any time for such further orders or directions as may be necessary or appropriate for the construction or carrying out of this Modification of Final Judgment, for the modification of any of the provisions hereof, for the enforcement of compliance herewith, and for the punishment of any violation hereof.

United States *v.* American Tel. & Tel. Co., 552 F. Supp. 226 (D.D.C. 1982).

37. KELLOGG, THORNE & HUBER, *supra* note 27, at 386–94.

38. United States *v.* Western Elec. Co., 900 F.2d 283, 308 (D.C. Cir. 1990) (emphasis added).

39. *Id.* at 296.

D.C. Circuit defined market power as the Bell operating company's "ability to raise prices or restrict output *in the market it seeks to enter*."[40] Thus, the D.C. Circuit established that section VII should be applied in the same manner as section VIII(C), except that a denial of the proposed entry by the Bell operating company had to be based on a finding that a lessening of competition in the market to be entered would be "certain" rather than "substantially possible."

Nonetheless, in Ameritech's case the Antitrust Division turned the supposedly more lenient section VII standard into one more demanding than section VIII(C). In so doing, the Antitrust Division swept under the rug the question of the competitiveness of interLATA services in the Great Lakes region.

The Division's requirement that Ameritech offer interLATA services only on a resale basis was especially ominous. It is widely recognized that a Bell operating company could initiate interLATA service within its operating region with small incremental investment, given that it already provided *intra*LATA toll service over its own facilities.[41] In effect, the Bell operating company would connect in series its contiguous intraLATA networks to provide continuous interLATA transport across its region. But that operating company has no cost advantage in reselling the capacity of an interexchange carrier. It can charge a price that, by definition, is no lower than the bulk price at which the facilities-based carrier would sell it such capacity. Ameritech could only be as price competitive in its sale of interLATA services as AT&T, MCI, and Sprint permitted.

The situation would be considerably different if Ameritech were allowed to use its own facilities to provide interLATA services within-region. Ameritech's price floor would no longer be what the interexchange carriers permitted, but rather the incremental cost to Ameritech of modifying and using its existing toll network to carry calls among the various LATAs in its region. Ameritech is the single company capable of providing interLATA competition in the Great Lakes region for it is the only firm that has a full-scale fiber optic network traversing that region that is not now supplying

40. *Id.* (emphasis added).

41. *See, e.g.*, Brandon & Schmalensee, *supra* note 24, at 349–50, 353.

interexchange services.

The perversity of the Antitrust Division's response to the original Ameritech proposal becomes apparent. By rejecting Ameritech's original proposal to permit its facilities-based provision of interLATA services within-region, the Division shielded AT&T, MCI, and Sprint from the one carrier possessing the resources necessary to give them a run for market share. How an antitrust authority charged with protecting consumer welfare, by expanding competitive opportunity, could produce so convoluted a result is mystifying.

The Antitrust Division squeezed the competitive vitality out of the Ameritech plan. In its original form, the plan would have yielded insights on the pricing significance in interLATA markets of economies between Ameritech's production of local exchange services and in-region interLATA services. In its constricted form, the plan would reveal nothing about system cost differences and their competitive ramifications. Rather, the plan at most would provide an indication of the market value of a Bell operating company's trademarks in interLATA resale services—hardly an issue that goes to the heart of market "competitiveness." Further, the constricted plan prohibits, at the Antitrust Division's insistence, Ameritech's joint marketing of local services and interLATA resale services. Thus, even with respect to the experiment that the Antitrust Division consented to support, it made sure to destroy any opportunity for consumers to reap the benefits of Ameritech's economies of scope in marketing. All this, of course, the Antitrust Division has done to protect consumers from the risk that Ameritech would monopolize the interLATA long-distance markets in the Great Lakes region.

THE AIRTOUCH INITIATIVE

The restrictive nature of the Department of Justice's response to the Ameritech proposal is matched, at least, by that in its treatment of AirTouch as a potential long-distance competitor. The Pacific Telesis Group, the Bell operating company serving California and Nevada, decided in December 1992 to spin off its wireless and other unregulated activities from its regulated local exchange operations. The share distribution to shareholders created two completely separate and independently managed corporations.[42] The new wireless company is now known as AirTouch Communications.

Pacific Telesis intended the spinoff to exempt AirTouch from the restrictions that the consent decree places on Bell operating companies. Pacific Telesis wrote in 1993 that it "expected that the spin-off [would] eliminate many of the financial, legal and regulatory constraints that have impeded the Corporation's efforts to grow and compete, including, for the wireless businesses, those restraints established as part of the Consent Decree."[43] Sam Ginn, the chairman of AirTouch and the former chairman of Pacific Telesis, subsequently explained that the burden of complying with the consent decree had foreclosed attractive business opportunities.[44] One example that he gave was the following:

> [Before the spinoff, Pacific Telesis] bought a cellular company in Michigan that covered the southern half of Michigan and the northern half of Ohio. At the time of the acquisition, the [acquired] company provided long-distance service to its customers. To satisfy the line of business restrictions of the consent decree, we had to rearrange the [acquired] company's entire network, take down all of the long-distance connections, and inform our customers that we didn't provide that service anymore. Even if one were to assume that a bottleneck exists in the local exchange, which I do not believe applies in California, what in the world did that have to do with a market in another location? Moreover, if there was a dominant player in the Michigan and Ohio market at the time, it was Ameritech, not PacTel.[45]

By ridding itself of such regulatory constraints, Pacific Telesis could provide its stockholders with opportunities to use its knowledge of technologies to build wireless long-distance systems for entry into new markets. As William J. Baumol and J. Gregory Sidak noted in

42. PACIFIC TELESIS GROUP, 1992 FORM 10-K, at 4-10 (1993).

43. *Id.* at 5 (1993), *quoted in* BAUMOL & SIDAK, *supra* note 3, at 19.

44. Sam Ginn, *Restructuring the Wireless Industry and the Information Skyway*, 4 J. ECON. & MGMT. STRATEGY 139 (1995).

45. *Id.* at 142.

1994, "PacTel Wireless could quickly, if imperfectly, replicate the AT&T-McCaw merger by acquiring or merging with one of AT&T's competitors in the interexchange market—MCI, Sprint, or LDDS."[46]

In April 1994 the Pacific Telesis Group formally divested AirTouch. The two companies have since then separately traded and have shared no directors, officers, employees, assets, or control. The directors of Pacific Telesis reiterated that AirTouch would be "freed from the line-of-business restrictions imposed [upon the Bell operating company] at divestiture."[47] As such it would be able to enhance its cellular services by integrating it with interexchange long-distance wired services and to pursue satellite-based long-distance communications as well.[48] Within one year of completing the transaction, however, AirTouch would find itself unable to pursue that strategy.

On August 15, 1994, MCI complained to the Department of Justice that AirTouch was still bound by the consent decree and had failed to obtain a waiver before providing interexchange services.[49] On January 11, 1995, the Department of Justice informed AirTouch that it was a "successor" to a Bell operating company, as defined in the decree, and was consequently subject to the decree's interLATA entry restrictions.[50]AirTouch filed a motion with the judgment court seeking a declaratory judgment to the effect that it was not subject to the decree.[51] The Department of Justice opposed AirTouch's motion.[52] As of November 1995, the court had not ruled on the motion. While the issue remains pending, AirTouch has agreed not to extend its business activities to areas prohibited to Bell operating companies under the decree.[53] In effect, the Department of Justice

46. BAUMOL & SIDAK, *supra* note 3, at 19.

47. PACIFIC TELESIS GROUP, 1993 ANNUAL REPORT 2 (1994).

48. *Id.* at 21.

49. Letter from Anthony C. Epstein, Jenner & Block, to Richard Liebeskind, Assistant Chief, Communications and Finance Section, Antitrust Division, U.S. Department of Justice (Aug. 15, 1994).

50. AIRTOUCH COMMUNICATIONS, INC. 1994 SEC FORM 10-K, at 23 (1995).

51. *Id.* at 23

52. *Justice Dept. Seeks Limits on AirTouch*, N.Y. TIMES, Mar. 14, 1995, at D10.

53. AIRTOUCH COMMUNICATIONS, INC. 1994 ANNUAL REPORT 23 (1995).

has succeeded in impeding for nearly a year the competitive entry of AirTouch into interLATA long-distance markets.

The irony in the Department of Justice position becomes apparent upon comparing it with Department policy on the same matters with AT&T. Divested of its local monopolies, AT&T was free to enter all other markets while the Bell operating companies remained restricted to their local exchange businesses. Under the Department's interpretation, AirTouch, although severed completely from the operations of its former parent, a Bell operating company, would remain similarly restricted. To bring the policy full circle, AT&T, the erstwhile parent of all entities subject to the decree, provides both wireless local exchange and cellular long-distance service through its recent acquisition of McCaw, the nation's largest cellular operator. Yet the Department of Justice argues that the decree, implemented to enhance competition, prevents independent AirTouch from competing against AT&T-McCaw in providing cellular long-distance service.

One can only ask at this stage whether the Department, misled by bottleneck arguments, has become lost. There is no bottleneck rationale for placing control over the wireless local exchange. In most markets the Commission has licensed two cellular operators and, in 1995, issued two additional licenses for each market for the technically more advanced personal communications services, which will increase the number of wireless operators in most markets to four. Eventually, there will be eight wireless network operators in every market in the country. The judgment court, however, has identified a new rationale for control with respect to cellular operators. On April 28, 1995, the court ruled that the Bell operating companies may offer interLATA service on a resale basis to their cellular customers if they meet certain safeguards against potential discrimination.[54] It conceded that cellular operators do not themselves maintain control over an "essential facility" that would give rise to potential discrimination against competitors in an adjacent market such as interexchange service. Rather, the court identified the Bell operating companies' "mobile bottleneck" as the reason for concern, given that they have near complete control over

54. United States *v.* Western Elec. Co., 890 F. Supp. 1 (D.D.C. 1995).

interexchange services between mobile telephone switching offices and the long-distance carriers. Because those connections apply for nearly all cellular long-distance calls, the Bell operating companies have "the ability to control a part of virtually every interexchange cellular call, just as the landline bottleneck (monopoly control over the wire-based local exchange) gives those companies similar, albeit more complex, control over every wired interexchange call."[55] By pointing to the potential anticompetitive significance of the mobile link to landlines bottleneck and implementing safeguards to prevent abuse, the court implemented the policy of incipiency once again.

Whether or not one agrees with the court's reasoning, it is certain that AirTouch does not control a landline bottleneck— it was divested from Pacific Telesis. Thus, AirTouch should not be subject to the decree, and it should not need a conditional waiver to provide cellular long-distance service. Yet to spend a year litigating the question epitomizes the most salient characteristic of the consent decree oversight process: It is a regulatory regime of litigation delay that prevents entry into markets lacking competitive prices and service offerings.

Achieving Competition in InterLATA Services by Legislative Reform

Another route to develop competition in long-distance services is the passing of federal telecommunications legislation that would promote the entry of the operating companies into the interLATA markets. In light of the excess capacity that exists in long-distance service provision, it is unlikely that any firm would enter the interLATA market by constructing new facilities. The incumbent operating companies, however, have the capacity to provide interLATA services within their respective regions in existing facilities for providing intraLATA services. The question is whether "reform" legislation would address that most likely class of potential entrants in ways that would inject price competition into long-distance service markets.

Unfortunately, the 1995 experience with such legislation

55. *Id.* at 8

provides a negative answer to this question. The Telecommunications Act of 1996, of massive scale and detail, calls for a total restructuring of telecommunications by developing cross-entry of all types of carriers into each others markets. But when dealing with entry into long-distance services, it squandered the opportunity to create real interLATA competition over any reasonable time horizon. Instead, the Act would create a new regulatory regime that could delay operating company entry into interLATA services longer than the existing waiver process under section VIII(C) of the consent decree.

The Act allows an operating company to offer long-distance service outside its own service region immediately "after the date of enactment."[56] But it may provide interLATA service in its own region only after the Commission verifies that the company has met certain competitive conditions.

This distinction was a late addition in the House and Senate conference formulating the Act. Earlier versions of the House and Senate bills made no such distinction between long-distance services offered in-region, and those offered out-of-region. As a concession to the established interexchange carriers it was notable. The operating companies' home regions are where they might be reasonably expected to present the sharpest challenge to the current long-distance carriers; by preventing them from entering markets in those regions, the Act dilutes the potential deregulatory benefits from facilities-based entry. Moreover, despite the operating companies current availability, they must wait for the Commission to write more than 80 rules, deciding issues as vital as how new rivals for local phone service will pay the operating companies for interconnection, and as mundane as how rivals will obtain physical access to local service tandems.[57] But in general these conditions require that the operating company promote entry of the long-distance carriers into their local service markets before they are allowed access to long-distance markets. Section 151 of the new Act amends Title II of the Communications Act of 1934 to add specific interconnection

56. Telecommunications Act of 1996, Pub L. 104-104, 110 Stat. 56 (Feb. 8, 1996).

57. Gruley & Karr, *Passage Reflects Bipartisan Push*, WALL ST. J. (Feb. 2, 1996).

requirements that must be implemented before the Commission authorizes an operating company to provide in-region interLATA services. That authorization would be forthcoming upon the successful fulfillment of the following: an in-region test, and a "competitive checklist."[58] All conditions must be satisfied for an operating company to gain permission from the Commission. Though daunting for its technicality, the checklist is reproduced herein in its entirety to indicate the economic, legal, and engineering complexities that the operating companies face in their quest to enter interexchange markets. The requirements are as follows:[59]

> *Presence of Facilities-Based Competition.* [The first In-Region test requires that an] operating company have one or more binding agreements specifying the terms and conditions under which it provides access and interconnection to one or more unaffiliated providers of telephone exchange service.
>
> *Failure to Request Access.* If, after 10 months from the date of enactment of the Act, no such providers have requested access and interconnection, and the company has submitted a statement of the terms and conditions of such access and interconnection that has been approved by its state commissions [then the In-Region Test has been met].
>
> *Interconnection Tests— "Competitive Checklist"*[60]
>
> (A) Nondiscriminatory access [has been provided] on an unbundled basis to the network of the operating company for any requesting telecommunications carrier at any technically feasible point, that provides a service that is at least equal in quality to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection, on terms and

58. *Id.* § 271(c).

59. Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56 (Feb. 8, 1996).

60. *Id.* Section 271(c)(2).

conditions which are just, reasonable, and nondiscriminatory, within six months of the date of enactment of the Telecommunications Act.

(B) Nondiscriminatory access [has been provided] to the poles, ducts, conduits, and rights-of-way owned or controlled by the Bell operating company at just and reasonable rates;

(C) Local loop transmission [has been provided] from the central office to customer premises, unbundled from local switching of other services [to any requesting carrier]..

(D) Local transport from the trunk side of a wireline local exchange carrier switch unbundled from switching or other services [has been provided].

(E) Local switching unbundled from transport, local loop transmission, or other services [has been provided].

(F) Nondiscriminatory access [has been made available to]:

  (i) 911 and E911 services;

  (ii) directory assistance services to allow the other carrier's customers to obtain telephone numbers; and

  (iii) operator call completion services.

(G) White pages directory listings [have been made available] for customers of the other carriers' telephone exchange services.

(H) Until the date by which telecommunications numbering administration guidelines, plan, or rules are established, nondiscriminatory access to telephone numbers for assignment to the other carrier's telephone exchange service customers [has been provided]. After that date, compliance [has been achieved] with such guidelines, plan or rules.

(I) Nondiscriminatory access to databases and associated signaling necessary for call routing and completion [is available].

(J) Until the date by which the Commission issues regulations to require number portability, interim telecommunications number portability [is available] through remote call forwarding, direct inward dialing trunks, or other comparable arrangement, with as little impairment of function, quality, reliability, and convenience as possible. After that date, full compliance with such regulations [has been achieved].

(K) Nondiscriminatory access [has been realized] to such services or information as are necessary to allow the requesting carriers to implement local dialing parity.

(L) Reciprocal compensation arrangements [have been agreed to] on a nondiscriminatory basis for the origination and termination of telecommunications.

(M) Telecommunications services [have been] made available for resale, under reasonable and non-discriminatory conditions.

The various elements of this checklist would, at a minimum, provide rich new material for litigation to delay entry into interLATA exchange markets. But some elements of the list are more important than others—more likely to be so important strategically that the operating company is inhibited from entering long-distance markets. The impression is that there are three "deal-breaking" requirements likely to arise: (1) access to an operating company's unique resources; (2) use of the operating company's facilities for independent network access by the other carrier; and (3) pricing of those types of access.

Access to Operating Company Resources: Data Bases and Signaling

Characteristic of strategically important requirements, section I specifies that the operating company provide "[n]ondiscriminatory access to databases and associated signaling, necessary for call routing and completion." That obligation for technical "access" in fact has far-reaching strategic consequences. A telephone call involves two connections, to a voice path and a control path. The control path is a high-speed network with physical links that contain information concerning whether or not the number dialed is busy, how the call should be billed, and how the call should be routed. The voice path carries the actual telephone conversation and converges with the control path at the end office switch.

What is involved in this checklist requirement that such information be shared is provision to other carriers of an operating company's control paths. That would imply that other carriers have control of the intelligence in the company's Signaling System 7 (SS7) network,[61] which would allow remote control of a call through someone else's facilities. With SS7, moreover, control of a local call can reside in two alternative places: the switch and a service control point involved in real time in the processing of calls. There would also be a handing over of non-real-time components of local telephone service—namely, the service management system, which involves hooking up customers, and the service creation environment, which actually creates new services.

This would confront the operating company with significant risks concerning network reliability and cost recovery. Because of reduced control over the reliability and quality of network operation, the customer may correctly or incorrectly impute to the operating company the responsibility for unsatisfactory service. The operating company's provision of this access to its signaling system also raises issues in revenue generation—if it were to price at incremental cost, it would fail to recover hundreds of millions of dollars of fixed costs in the software embedded in SS7 systems.

But the strategic issues are more critical. With unbundled access to signaling, an operating company could lose all its local toll traffic. AT&T, for instance, could purchase the trigger that is activated as soon as the customer's telephone is taken off the hook. From that point in time AT&T would control the call; the operating company would provide access, but neither select the carrier nor rout the call. AT&T itself would become the only carrier of the call and could even prevent the customer from using dialing codes to connect to another interexchange carrier. In essence, AT&T could establish itself as the bottleneck by itself deploying SS7 technologies

61. *See* BELL COMMUNICATIONS RESEARCH, BOC NOTES ON THE LEC NETWORKS, 1994 6-255 to 6-288 (1994).

of the operating companies.

This requirement of unbundled access to signaling thus poses an issue over which the operating company and the interexchange carrier will likely reach an impasse. The interexchange carrier can keep the operating company from entering interLATA services by making demands that the operating company price access to these elements at the (zero) marginal costs. The operating company will have to deny such demands, because the software implementation interexchange carrier's access to signaling gives it the means to capture the local toll markets without investing substantial resources.

Access to Operating Company Resources: Network Access

Implementation of the checklist also requires the operating company to provide "interconnection services" to other carriers in local exchange service markets *à la carte*. Interconnection services include switched local access and other functions used to terminate a local call on the terminating carrier's network. The other functions are local loop transmission, local transmission, and access to poles, conduits, and rights-of-way.

Given that the operating company is required to offer these network elements on an unbundled basis, the relevant question is, what advantage does this provide the entering interexchange carrier? The answer to that question is straightforward: mandatory provision of interconnection services allows the entrant to configure selectively its service territory, and thus to limit its facilities to serve only higher profit margin customers. Such a strategy is feasible only if the entrant is able to terminate calls throughout the service territory of the operating company. Mandated interconnection provides that capability.

The incumbent local exchange company will have to maintain its complete local network, while the entrant serves just the high-profit "midtown" network. But in addition the incumbent is required to ascertain that those two networks are interconnected. This checklist requirement guarantees that the operating company will not have the same subscriber mix but rather have fewer high-profit subscribers.

Whether or not the interconnection requirement is a burden on the operating company is a pricing issue. Entrants will argue for "cost-based" prices such as those set equal to the long-run incremental cost of access.[62] But incremental cost pricing of access would prevent the operating company from recovering its fixed network costs as well as earnings to provide service as the carrier of last resort.

The incumbent carriers have proposed to set access prices equal to long-run incremental costs plus a markup to cover joint and common costs. In practice, that or any other markup is likely to be the source of intense debate. But given that the goal is to conform to the checklist, incremental cost pricing could become the ransom for which the operating company obtains the right to provide long-distance service.

Access to Operating Company Resources: Interconnection and Unbundled Access

Critical to meeting the checklist requirements is the demonstration that there is interconnection and unbundled access to the basic elements of local service. More specifically, the operating company's network functions have to be priced on an unbundled basis to other carriers entering local service markets so that other carriers cannot claim that they constitute barriers to entry. Given that a regulatory

62. In fact, in California's local exchange competition proceedings, MCI has argued that interconnection services be priced to recover only their direct economic costs. On MCI's behalf, Nina Cornell has stated:

> It is appropriate for the incumbent LECs [Bell operating companies] and competitive local carriers both to recover their direct costs and profits only from retail customers because carriers go into business to supply retail services, not interconnection services. The need to supply and to use interconnection services is a consequence of the need to interconnect networks, and, while necessary, should not be the source of recovery of indirect costs or profits.

Phase II Testimony of Dr. Nina Cornell, on Behalf of MCI Telecommunications Corporation, Before the Public Utilities Commission of the State of California, at 44, Dkt. Nos. R.95-4-043, I.95-04-044 (Oct. 10, 1995).

authority sets prices, the authority decision or review of tariffs must result in prices high enough to cause the facilities to be used efficiently, but low enough that they be used.

Congress or the Commission must mandate that the state regulatory agencies price access to the local exchange, and access to the local exchange carrier's unbundled basic service elements, according to the efficient component-pricing rule.[63] This rule would price access at long-run incremental cost plus opportunity costs, equal to the contribution of margin necessary globally to cover joint and common costs. This satisfies two economic criteria. The first is productive or technical efficiency, requiring that the total costs of providing any given set of services should be no greater than the minimum attainable. The second criterion is efficiency in exchange, such that the allocation of products should leave an individual better off without making another worse off.

The rule is being considered in Illinois,[64] Michigan,[65] and California,[66] and it may have been considered in Maryland.[67] Each of the commissions in those states has been pressured by the interexchange carriers to consider other rules that would force the operating company to sell interconnection for less or at a level that fails to contribute to the recovery of joint and common costs. The experience in setting prices in Michigan indicates the process to come in all the states where entry by the Bell operating company into interLATA services will be subject to the checklist process. In late 1995 the Michigan Public Service Commission presided over Ameritech's request for approval to provide interLATA service under conditions similar to those in the 1995 federal act. Ameritech

63. BAUMOL & SIDAK, *supra* note 3, at 93–116; William J. Baumol & J. Gregory Sidak, *The Pricing of Inputs Sold to Competitors*, 14 YALE J. ON REG. 171 (1994).

64. Dkt. No. 95-048 (Ill. Commerce Comm'n Nov. 3, 1995).

65. In the Matter, on the Commission's Own Motion, to Establish Permanent Interconnection Arrangements Between Basic Local Exchange Services, Case U-10860 (Mich. Pub. Serv. Comm'n 1995).

66. Order Instituting Rulemaking on the Commission's Own Motion into Competition for Local Exchange Service, R.95-04-043, I.95-04-044 (1995); Alternative Regulatory Framework for Local Exchange Carriers, Invest. No. 87-11-033, 33 C.P.U.C.2d 43, 107 P.U.R.4th 1 (Cal. Pub. Util. Comm'n 1989).

67. MFS Intelenet of Md., Inc., Case No. 8584, Order No. 71155, 152 P.U.R.4th 102 (Md. Pub. Serv. Comm'n 1994).

had to have the public service commission's certification, which required that structural conditions in markets for local services be free of barriers to entry created by Ameritech. In effect, finding those conditions called for answering the question: How much of a discount on retail prices would Ameritech tolerate in setting its wholesale rates for long-distance carriers entering local service markets, given that Ameritech had to show the Commission that "competition" exists in its local exchange markets?

The voluminous testimony of economists and engineers presenting arguments for various wholesale rate discounts provides an answer. For a reseller that takes basic exchange services at wholesale from Ameritech, the marginal cost of self-providing retail services cannot exceed 10 percent of the retail price. But the discount sought by the interexchange carriers is in the range of 20 to 30 percent. Such a discount would produce a 60 percent profit margin on retailing, roughly equal to the profit margin that AT&T, MCI, and Sprint realize on interLATA services. And why should they enter those markets unless it would yield margins comparable to those already achieved in the tacitly collusive interLATA markets? By waiting for the answer, the interexchange carriers determine the timing of Ameritech's entry into their interLATA markets. The experiment in Michigan has been intended to demonstrate how an operating company becomes a competitive long-distance carrier, in both local toll and interLATA toll markets. But it has not done that, and has instead shown that the regulatory litigation of prices has become the means by which to prevent both local and long-distance entry.

CONCLUSION

Basic change in regulatory policy should be able to further the development of open and competitive markets in long-distance telephone services. These policies calling for change have been embedded in the waiver process of the judgment court, which so resisted change that it gave the impression of complete inactivity. Now the legislative reform initiative in the new Telecommunications Act promises basic movement of the barriers to new long-distance market competition. But it does not appear to be able to deliver on its promise given the way it structures the regulation of entry of potential competitors into these long-distance service markets. Perhaps AT&T, MCI, and Sprint will compete more in television advertising of "discount" plans with famous actresses. But those advertisements do not imply that they cut each other's prices to gain market share in the way that the trucking companies and airlines did when they were deregulated in the late 1970s. There has been no concrete proposal to deregulate telecommunications. That is because policy makers have placed virtually no weight on the benefits to consumers from interLATA competition from the operating companies. The objective instead of both old waiver and new checklist policy has been to prevent supposed incipient monopolization of the interLATA market by the operating companies.

The wrong objective leads to the wrong process, by which the entrant into long-distance markets seeks to qualify on a checklist of conditions in local exchange markets. In reality that company could spend years trying to satisfy the requirements of the list in proceedings not different from that considering Ameritech's restructuring, or AirTouch's introduction of long-distance wireless services. This approach by its nature stimulates protracted litigation that will ensure that the operating companies will not enter interLATA markets on a timely basis.

One can even envision a scenario in the implementation of the new legislation in which competition in interLATA services diminishes. AT&T currently has a significant first-mover advantage in bundling the local exchange services in its McCaw cellular service offerings with AT&T wireline long-distance services. If AT&T can implement such an "end-to-end" strategy over the near term, and if it adds enhanced services to those offerings, then high-volume subscribers would not want another carrier. In the meantime, MCI's wireless plans would be incomplete and Sprint's personal communications services network would not yet be operational.

Under those circumstances, the operating companies would be the only carriers able to respond strategically to AT&T—but, of course, they cannot because of the impediments under the new legislation to their rapid entry into interLATA markets. To be sure, the new legislation grants "relief" to the operating companies to offer interLATA services in conjunction with their wireless services. But the extent to which the checklist has to be worked over before they can offer even that service is not now predictable. And given the checklist, then AT&T, by participating in the proceedings before each state public utility commission, as a potential entrant-reseller of retail local services can ensure that qualifying according to the list will be quite protracted. Thus, even though an operating company in principle should be able to bundle local and long-distance services it too could be left far behind.

The current experience in the waiver proceedings, and in the 1995-1996 legislative "reform" process, provides an indication of how policy intended to make telecommunications competitive is vulnerable to strategic delay. The incumbent long-distance carriers can for the foreseeable future forestall competitive entry into interLATA markets. The conclusion to be drawn from such a state of affairs is that antitrust and regulatory policies bar effective competition that would follow from inducing entry into long-distance markets. The failure of antitrust and regulation to make markets competitive continues to the continuing detriment of consumers seeking prices in line with costs of providing service.

Appendix One

Discount Plan Summary

TABLE A1-1 SUMMARY OF AT&T DISCOUNT PLANS			
Plan Name	**Start Date**	**End Date**	**Plan Description**
Pro WATS I	01/01/88	12/31/99	For a monthly fee of $5, a customer receives a 10% discount on all Dial Station calls made during any time period Day, Evening, Night/ Weekend, or Holiday. There is a non-recurring service order charge of $10 per order. [08/03/94]
Small Business Option	06/04/91	12/31/99	For a monthly fee of $22.50, a customer receives 100 minutes of Interstate Dial Station calls (regardless of the time of day or distance of the call). This monthly fee must be paid whether or not the customer uses the 100 minutes of calling time. Interstate calls made in addition to the initial 100 minutes will be billed at $0.225 per minute. A condition of the plan is that a customer may only subscribe to one interstate optional calling plan at a time. The customer will also receive a discount on his interstate bill equal to 10% of his total Intrastate Dial Station calls (already discounted under AT&T's State Calling Plan) made during the same billing period. There is a non-recurring service order charge of $5 per order. [08/03/94]

TABLE A1-1
SUMMARY OF AT&T DISCOUNT PLANS (CTD.)

Plan Name	Start Date	End Date	Plan Description
Block of Time -- One-Hour Plan (i.e., Reach Out America "ROA")	07/01/87	12/31/99	For a monthly fee of $7.50, a customer receives one hour of calling time during the Night/Weekend time period (Mon.-Fri. 5 p.m. - 8 a.m., Sat. & Sun. all day). This monthly fee must be paid whether or not the customer uses the one hour of Night/Weekend calling time. This plan applies only to customers who are not also subscribing to the Evening and/or Day Options. Calls made during other time periods will be billed at the appropriate specified rates. The charge for all calls made in excess of the initial one hour during the Night/Weekend time period will be $0.10 for each additional minute. In addition, a ROA customer receives a 5% discount on International Dial Calls which would otherwise be charged at International Standard and receives a 5% discount on his total Intrastate Dial Station charges excluding those calls already discounted under another plan. There is a non-recurring service order charge of $5 per order. [08/03/94]
Block of Time -- One-Hour Plan with Evening Option (ROA)	07/01/87	12/31/99	For a set monthly fee of $7.80, a customer receives all of the discounts under the One-Hour Plan but in addition receives a discount on calls made during the Evening time period (Sun.-Fri. 5 p.m. to 10 p.m., Holidays which fall on Mon.-Fri. 8 a.m. to 5 p.m.). This monthly fee must be paid whether or not the customer uses the one hour of Night/Weekend calling time. Charges for any calls made during the Evening time period will first be determined under the appropriate rate schedule and then that total will be discounted by 40%. The Evening Option discount does not apply to any calls made during the Night/Weekend or Day time periods. There is a non-recurring service order charge of $5 per order. [08/03/94]

TABLE A1-1
SUMMARY OF AT&T DISCOUNT PLANS (CTD.)

Plan Name	Start Date	End Date	Plan Description
Block of Time -- One-Hour Plan with Evening & Day Option (ROA)	12/01/88	12/31/99	For a monthly fee of $8.70, a customer receives all of the discounts under the One-Hour Plan with Evening Option but in addition receives a discount on calls made during the Day time period (Mon. - Fri. 8 a.m. to 5 p.m.) excluding Holidays. This monthly fee must be paid whether or not the customer uses the one hour of Night/Weekend calling time. Charges for any calls made during the Day time period will be first determined under the appropriate rate schedule and then that total will be discounted by 10%. This plan is only available to customers who have already subscribed to the One-Hour Plan with Evening Option. There is a non-recurring service order charge of $5 per order. [08/03/94]
Block of Time -- Half Hour Plan (ROA)	10/30/89	12/31/99	For a monthly fee of $4.00, a customer receives one-half hour of calling time during the Night/ Weekend time period (Sun. - Fri. 10 p.m. to 8 a.m., Sat. all day, and Sun. until 5 p.m.). This monthly fee must be paid whether or not the customer uses the one-half hour of Night/ Weekend calling time. The charge for all calls in excess of the initial one-half hour during the Night/Weekend time period is $0.12 for each additional minute. The customer also receives a 20% discount on calls made during the Evening time period (Mon. - Fri. 5 p.m. to 10 p.m. and Holidays 8 a.m. to 5 p.m.). All other calls will be billed at the appropriate rates. There is a non-recurring service order charge of $5 per order.[08/03/94]

TABLE A1-1 SUMMARY OF AT&T DISCOUNT PLANS (CTD.)			
Plan Name	**Start Date**	**End Date**	**Plan Description**
True USA Promo	01/10/94	01/09/96	Under this LDMTS Basic Schedule Discount Promotion, a customer enrolled in this promotion receives a discount based on "Combined Monthly Usage" (CMU) and "Eligible LDMTS Usage" based on the following schedule: CMU between $10.00 and $24.99 receives a 20% discount; CMU between $25.00 and $74.99 receives a 20% discount; and CMU greater than $75.00 receives a 30% discount. The above discounts are applied to the Eligible LDMTS Usage when CMU is in the specified range. Under this plan, CMU is define as: "a Customer s billed usage and service charges (...), for a monthly billing period for the combined total of domestic and international Dial Station calls, domestic and international CIID/891 Card Calls (...), domestic and international Operator Handled Calls, AT&T DIRECTory LINK Service calls, AT&T SelectCall Service calls and AT&T EasyReach Service calls (...)." "Eligible LDMTS usage is defined as Combined Monthly Usage minus any international call usage." Eligible LDMTS Usage includes intrastate calls unless they are already similarly discounted under an AT&T intrastate tariff. [08/03/94]