The Last Mile: A Race for Local Telecommunications Competition Policy

Craig D. Dingwall(1)

Introduction

Although this is the sixty-first year since the adoption of the Communications Act(1) and it has been several years since AT&T's divestiture of its local exchange carriers (LECs),(2) state and federal regulators and legislators are seemingly in a race to develop federal and state policies governing local dial tone competition and alternative access to customers in the so-called "last mile" of switching and local-loop facilities. Notwithstanding the rhetoric about the perceived fast pace of access and local exchange services competition,(3) the Bell Operating Companies (BOCs) still dominate the local exchange and control bottleneck access facilities. Although corporate telecommunications takeovers were valued at over $40 billion in 1994 and more mergers are predicted,(4) the touted information highway will be of little use to customers who have no on-ramps to alternative service providers.

In the wake of the demise of S. 1822 last year(5) and the House and Senate passing their respective telecommunications bills this year,(6) many states are now addressing a myriad of local competition issues and are understandably not inclined to wait for possible future preemptive federal legislation. Notwithstanding the significance of those telecommunications legislative reforms, many of the details for implementing switched local competition have been and will continue to be determined by the states. State regulators have an in-depth knowledge of their local markets and can develop policies which fit the unique characteristics of individual states. While many state/local competition regulatory proceedings and legislative proposals are pending to address such important and complex issues as collocation, interconnection rates, universal service funding, and number portability and assignment, the daunting possibility of a patchwork of varying state/local competition rules suggests the need for a consistent national approach and collaboration, where feasible, to develop uniform local competition requirements and safeguards. Sweeping federal telecommunications legislation, if adopted, will require further regulatory work, oversight, and significant network and technical changes in the states to implement local competition policies.

The need for consistent, procompetitive regulatory policies is critical for service providers attempting to develop national and international strategies and for consumers who demand easy access and seamless interconnection for a variety of services, as they travel among different states and countries. This Article will review some of the many impediments and proposed solutions for a fully competitive local telecommunications market.

I.Background

The consent decree (Decree) entered in United States v. American Telephone & Telegraph mandated the divestiture of local telephone operating companies from AT&T into BOCs.(7) The Decree divided the country into 164 Local Access and Transport Areas (LATAs), and, subject to certain exceptions, allows BOCs to provide telecommunications services within (intraLATA), but not between (interLATA) LATAs.(8) This restriction may be removed "upon a showing by the petitioning BOC that there is no substantial possibility that it could use its monopoly power to impede competition in the market it seeks to enter."(9) To date, this standard has not been satisfied, and the interexchange (interLATA) line of business restriction remains substantially in place.(10)

In 1993, Rep. Jack Brooks (D-Tex.) and Rep. John Dingell (D-Mich.) introduced H.R. 3626 in the House of Representatives which provided several dates after which BOCs may petition the Attorney General and the Federal Communications Commission (FCC or the Commission) for permission to provide services restricted by the Modified Final Judgment (MFJ).(11) The House of Representatives passed H.R. 3626 on June 28, 1994. House Telecommunication Subcommittee Chairman Edward Markey (D-Mass.) and Rep. Jack Fields (R-Tex.) sponsored H.R. 3636,(12) which would have required local phone companies to allow competitors to have access to their networks. Neither bill passed the Senate.

The Senate Commerce, Science, and Transportation Committee approved a telecommunications reform bill (S. 1822),
sponsored by Sen. Ernest Hollings (D-S.C.) on August 11, 1994.(13) Senate Bill 1822, which would have required that BOCs face substantial competition in their local telephone market before they could offer long-distance services, was pronounced dead on September 24, 1994, due to BOC opposition and other factors.(14)

With the Senate and the House this year passing their sweeping telecommunications bills, S. 652 and H.R. 1555, respectively, the spotlight now shifts to President Clinton who has threatened to veto H.R. 1555 unless several provisions are deleted or revised. President Clinton is reportedly concerned that H.R. 1555 would allow an "excessive number of in-region buyouts between telephone companies and cable (TV) operators, substituting consolidation for competition and leaving customers in small towns with no rate protection in most cases and no foreseeable expectation of competition."(15) The 188-vote House margin on H.R. 1555 and the 63-vote margin on S. 652 in the Senate are wide enough to sustain vetoes. Moreover, as of the publication deadline for this article, S. 652 and H.R. 1555 have not yet gone to the Conference Committee and further changes to these bills are likely.

The significant debates regarding various draft bills revolved around simultaneous local, cable, and interexchange competition on a date specific, versus federal oversight and review over a checklist of requirements and safeguards to determine whether the local exchange is competitive prior to BOCs providing interexchange service. As noted above, cable deregulation is also a critical issue as cable companies strive to expand their services into telephony.

Under the Decree and existing legislation, the states continue to regulate intrastate telecommunications matters, including intrastate intraLATA and local competition issues. As discussed below, several state commissions and legislatures have local competition issues pending before them, and the results to date have been mixed.

II.Despite Intense Long-Distance Competition, Local and Switched Access Telecommunications Services Are Not Yet Competitive.

Competition promotes better products and services produced more efficiently, at lower prices and reduced costs. Accordingly, intense competition in the long-distance market has brought consumers better services at lower costs. AT&T's share of the overall market for interstate minutes has declined from more than 80 percent in late 1984 to 58 percent in the third quarter of 1994.(16) Adjusted for inflation, the average revenue per minute of the major interexchange carriers (IXCs) has fallen by over 63 percent since 1985, while the average cost per minute of long-distance calling has decreased from forty-one cents to fourteen cents since divestiture in constant 1993 dollars.(17)

Despite reductions in revenue per minute among major IXCs, AT&T recently reported its best long-distance and equipment revenues since the 1984 divestiture.(18) Since 1988, competition in the long-distance markets has reduced annual long-distance charges by more than $20 billion, while AT&T's, MCI's, and Sprint's long-distance calling volumes have grown by nearly 80 percent in the last five years.(19) Moreover, according to a Yankee Group survey, approximately 16.6 percent or 16.1 million U.S. households changed their long-distance carriers within the past year.(20) Studies have also shown that intraLATA toll rates are lower in states that have introduced competition or eliminated the barriers to intraLATA toll competition.(21) While access charges have dropped since divestiture, more than half of the reduction in long-distance prices is due to factors other than access charge reductions.(22)

In light of the experience in the interexchange long-distance market, competition in the local exchange market will likely produce similar benefits, including a choice of local telephone company, lower prices, better service quality, and new services and features. Notwithstanding the benefits of a competitive market, the markets for local exchange and switched access services are not yet competitive. BOCs currently hold almost the entire market share for local exchange services,(23) and, with limited exceptions, most customers still do not have access to alternative local exchange service providers. Competitive access providers (CAPs) generally provide dedicated, high-capacity access services to a limited number of buildings in a handful of cities, and account for less than 1 percent of intrastate or interstate access revenues.(24) During the first six months of 1993, only .45 percent of Sprint's payments for local access went to alternative access providers,(25) while only .14 and .6 percent of AT&T's and MCI's access payments, respectively, went to CAPs in 1992.(26) Not surprisingly, the BOCs' ratio of cash flow to sales from 1985 through 1993 was 31.5 percent as compared to 22.9 percent for other S & P Telecommunications Companies.(27) According to a recent FCC Common Carrier Bureau report titled Common Carrier Competition, LECs continue to earn 97 percent of all access revenues—about the same percentage as the old Bell System's share of toll revenues in 1981.(28)
While intense competition in the long-distance market has produced significant benefits for consumers, the local telecommunications market is not yet effectively competitive. According to an Economic Strategy Institute (ESI) study, *Ensuring Competition in the Local Exchange*, it will be at least five years before a majority of U.S. residents have an alternative to their current LEC's offerings. According to the ESI study, during the transition to competitive markets, the BOCs still will control six regulatory "choke points"—local number portability, network unbundling, network interconnection, local exchange service resale, reciprocal compensation for terminating traffic, and universal service support mechanism reforms—each of which could forestall local exchange service competition. The ESI study further shows that local competition is "effectively nonexistent when compared with interexchange competition." ESI contends in its report that most states have not yet adopted regulatory frameworks for providing CAP-telco interconnection at nondiscriminatory prices. Cellular services and personal communications services (PCS) are not yet cost-effective alternatives to incumbent telcos' wireline carrier access services in most areas. Cable TV operators must overcome numerous technical hurdles before they can begin using coaxial cable plants for switched local exchange phone services, and cable TV companies face an upgrade cost of approximately $1200 per subscriber to provide telephone service. Several regulatory and technical barriers need to be addressed, and safeguards should be implemented to promote local telecommunications competition.

### III. Significant Developments and Remaining Challenges

#### A. Background

Although states now allow 10XXX intrastate, intralATA toll competition, only a few state commissions have authorized switched local dial tone competition and have made any significant progress in actually implementing substantial local competition. For example, the Maryland Public Service Commission approved the applications by MFS, MCI, and Teleport to provide local telecommunications services to business customers. Yet, further work remains to be done in developing permanent, cost-based, reciprocal intercarrier compensation arrangements. Similarly, the New York Public Service Commission (NYPSC) recently approved Frontier Corporation's (formerly Rochester Telephone) so-called Open Market Plan, which divided Frontier's local exchange operations in Rochester into two subsidiaries: R-Net, a price-cap regulated network operator, and R-Com, a lightly regulated retail service provider. However, the Open Market Plan fails to address some critical implementation issues (e.g., full number portability and access to rights-of-way), and it is subject to modification pending the outcome of the New York PSC's ongoing Competition II proceeding. Moreover, new entrants to the Rochester local exchange marketplace are essentially reselling the incumbent LEC's local service at a discount, rather than bringing actual facility-based local competition to the marketplace.

Critics of the Open Market Plan further argue that resellers are hamstrung by wholesale rates that are only 5 percent below the incumbent's retail rates and do not allow resellers to recover their marketing, billing, collection, and operation costs. Opponents of the Open Market Plan also contend that the amount Frontier charges interconnectors for access to an unbundled local loop is higher than the amount it charges end users for the equivalent part of a bundled service package. They also complain about excessive charges for construction of cages for interconnectors' physically collocated equipment, excessive rates for DS1 and voice-grade cross-connects, and refusal to provide online access to directory assistance and toll-free 800-number databases.

So far, the Frontier Corporation has benefited from the Open Market Plan. Based upon 1995 first quarter results, Frontier's revenue increased 4.2 percent to $283 million from $272 million, net income grew to $25.5 million—almost a 25 percent jump from the same quarter a year earlier, and earnings per share rose from twenty-three cents to thirty-eight cents during the year. In addition, Frontier's number of access lines increased 1.3 percent after one quarter under the Plan. Frontier announced that a 14.7 percent increase in long-distance revenue and an 11.7 percent gain in the local communications services-segment fueled its improved results.

Nevertheless, two Illinois Commerce Commission hearing examiners recommended rejection of Ameritech's proposal to open its local telephone exchange to competition concurrent with BOC entry into the long-distance market. The hearing examiners expressed concerns similar to those noted by opponents of the Open Market Plan, including the lack of number portability and the lack of local competition. In response, Ameritech endorsed the hearing examiners'
The proposal for implementation of switched local service competition in Illinois, including network unbundling, intraLATA toll presubscription, and local number portability.(45)

The Illinois Commerce Commission later cancelled and annulled Illinois Bell Telephone's "Customers First" tariff filings and ordered the company to file new tariffs for the provision of unbundled services, interconnection and reciprocal compensation, and other matters.(46) A staff report showed that the unbundled network component tariff elements appeared to be priced below their cost.(47) The Illinois Commerce Commission required that the sum of unbundled loop, port, and monthly connection charges be less than or equal to the charge for a network access line. This raised concerns that other elements, particularly collocation and interim number portability charges, could be overpriced to compensate for the low network component prices.(48)

The U.S. Department of Justice supported the Ameritech proposal, which allows Ameritech to resell long-distance service in exchange for unbundling local loops, offering dialing parity, and providing number portability. Although AT&T requested that Illinois and Michigan regulators allow it to offer local service as part of the Ameritech trial, initially AT&T will likely resell Ameritech, GTE, and Centel service as it does with respect to Frontier's local service in Rochester.

The results among state legislatures are equally mixed. As noted above, several states recently passed local competition legislation.(49) Most state legislative measures require all local market entrants, including local resellers, to obtain state certification by showing they have the capability and resources to provide service. Many state/local competition legislative measures—including those from Iowa, North Carolina, Utah, and Virginia—also require the state commission to find that certification is in the public interest.(50) Moreover, most state/local competition legislative measures permit the state commissions to adopt lenient regulation of new local entrants' rates. Additionally, legislative measures generally charge state regulators with (1) developing permanent local competition rules addressing unbundled interconnection to essential facilities and competitive equity issues such as local number portability, (2) abolishing prohibitions against resale of switched local exchange service, (3) establishing a financial support system for universal service, and (4) adopting alternative price-based regulation of incumbent telephone companies, with significant variation in how to structure telco price-regulation systems.(51) Despite these similarities, there are many differences among state legislative measures regarding the effective dates of local competition,(52) the specific type and duration of price regulation, the exemptions for small telcos per number of access lines,(53) and the required LEC infrastructure investments.

While some states have made progress in addressing critical local competition issues, much work remains to be done before effective local and switched access competition becomes a reality. Just as it has taken years for new entrants to gain market share in the interexchange market, local competition will not happen overnight and thus far has been mired in litigation and delay. Actual, effective, facilities-based local competition must precede BOC entry into the interLATA telecommunications market, and minimum safeguards are necessary to promote effective local competition. At a recent press briefing, Anne K. Bingaman, U.S. Department of Justice, Assistant Attorney General, Antitrust, correctly rejected "date-certain" and "market-share-test" approaches to lifting interLATA line-of-business restrictions, and instead endorsed a "middle ground" involving case-by-case Justice Department analysis of each local service market.(54) Ms. Bingaman said that the Justice Department will support interLATA service waiver requests only when the following three basic principles are met: (1) "Steps to foster the emergence of local competition must be taken in particular states;" (2) "The effectiveness of those steps must be tested by actual marketplace facts, by an assessment by the Department of Justice of the state of competition in a particular . . . market;" and (3) "BOC participation in those [interLATA] markets must be accompanied by appropriate safeguards."(55) In addition to removing legal barriers to local competition, Ms. Bingaman called for the following prerequisites for instituting local competition: interconnection and reciprocal compensation for terminating traffic, network unbundling and resale of local services, intraLATA toll-call dialing parity, implementation of local number portability, and arrangements for new market entrants to obtain pole attachments and access to conduits.(56)

Similarly, IXCs, CAPs, and others have advocated eliminating franchise restrictions and existing subsidies, gaining access to customers, funding universal service, obtaining number portability and dialing parity, providing cost-based intercarrier compensation, and implementing differential regulation as preconditions for an effectively competitive market.(57) The Pressler Bill, S. 652,(58) which Majority Leader Dole (R-Kan.) noted as "the most important bill [the
Senate] has considered all year," addresses many of these critical components. Among the safeguards are nondiscriminatory access on an unbundled basis to Bell network functions and services that are "equal in type, quality and price" to what a Bell offers itself; white pages listing of a competitor's customer numbers; access to 911, directory assistance, BOC databases, and network signalling; local-loop transmission; unbundled local switching; dialing parity; reciprocal compensation for origination and termination of local telephone calls; and resale of local service.(59) While these safeguards are not exhaustive, they are some of the minimum requirements necessary for local competition to develop.

Regrettably, S. 652 and H.R. 1555 do not include a critical, strong oversight antitrust role for the Department of Justice in reviewing Bell company proposals to enter the long-distance market. Until recently, IXCs generally favored the House Bill insofar as it would have forced regional Bell companies to "open their monopoly local phone markets to a competitor with their own networks before they could offer long-distance."(60) As passed in the House, H.R. 1555 would allow the BOCs to "enter the long-distance market without first having to show that their local phone systems face widespread competition."(61) Specifically, H.R. 1555 would allow BOCs to enter the long-distance market more easily by enabling them to apply for market entry after six months without having a facilities-based competitor.(62) This reduces the amount of time in which the FCC has to draw up a checklist of items to gauge local phone competition to only six months.(63) H.R. 1555 would also remove the requirement of resale at "economically feasible" wholesale prices, limiting the role of the Department of Justice to determine BOC entry into the long-distance market, and changing joint-marketing rules to let more small long-distance firms partner with the BOCs.(64) Also, unlike S. 652, H.R. 1555 would sunset BOC separate subsidiary requirements after eighteen months. The potential adverse effects of H.R. 1555 upon local exchange competition are already evident, as Ameritech signalled that it may abandon its "Customers First" plan if telecommunications legislation favorable to Ameritech and other BOCs is adopted in Washington.(65) Ameritech later clarified that the details of its "Customers First" plan may be affected by pending federal legislation.(66)

B. Resale, Eliminating Franchise Restrictions, and Gaining Access to Customers

Although states have opened short-haul (10XXX intraLATA) toll calls to competitors, clearly more progress is necessary to eliminate franchise restrictions that limit or prohibit potential competitors from entering the local exchange market. As noted above, only a few states(67) have authorized local competition. Actual implementation of viable local competition has been very limited and subject to many of the above impediments.

The local competition battle is fierce, and the stakes are high. According to the FCC, telecommunications industry revenues rose to $170.2 billion in 1993, including $79.4 billion from toll calls, $59.2 billion from local service, and $31.5 billion from access charges.(68) Most of the access service revenues represent billings of LECs to IXCs.(69) Even where franchise restrictions have been eliminated, many CAPS, IXCs, and other alternative service providers continue to experience problems accessing buildings, conduits, and rights-of-way. New entrants require nondiscriminatory access to conduits and rights-of-way. Otherwise, prospective competitors may need to rely on lengthy and expensive regulatory adjudication and court litigation to gain necessary access to customers. Absent such access, incumbent LEC local-loop facilities are often the only readily available means of reaching customers. Thus, there should be no restrictions on resale of the same class of telecommunications services.(70)

While access to customers through wireless technology, such as PCS, is promising, developing PCS facilities could take years and cost billions of dollars. Similarly, upgrading existing cable television company facilities to digital quality—able to provide integrated voice, data, video, and broadband capabilities—could cost over $100 billion.(71) While providing access to existing cable subscribers, upgrading cable facilities may not provide access to all potential customers.(72) Current estimates suggest that "the investment required for the introduction of competitive telephony ranges from $800 to $1100 per subscriber."(73) The network architecture of video servers, set-top boxes, software control, and billing systems is complex, while the lack of industry-wide standards for key technical components (e.g., servers and network transmission protocols) is hampering software development in critical areas, such as billing systems.(74) According to the Yankee Group's financial model, the investment for cable telephony must be cut to $500-$600 per subscriber to yield a positive cash flow over a seven-year period.(75) It could cost some cable television companies and their partners as much as $8 billion over the next several years to implement their cable/PCS strategy.(76) Some cable companies also face poor customer service reputations, lack of customer loyalty, high cost of
cable/CAP/wireless integration, and geographically limited CAP switching availability.(77)

Just as MCI, Sprint, and other new entrants to the interexchange market offered discounts to entice customers to change service providers, alternative local service providers may also need to offer discounts to encourage customers to leave their current local service provider.(78) If and when cable TV companies begin to provide local dial tone service to their customers, such customers will be reluctant to switch dial tone providers unless they are able to retain their existing telephone number as discussed below.

C. Access Charges, Universal Service, Unbundling, and Subsidies

Access charges account for forty-five cents per dollar of total long-distance expenses.(79) IXCs' payment of access charges to LECs to connect to their customers through LEC facilities provides significant contribution to LECs. Many believe that this contribution helps to keep local service rates low, thereby fulfilling important universal service goals and helping to ensure an available carrier of last resort.(80) Telephone subsidies, largely funded by IXCs' access charge payments, are estimated to be in the range of $17.5 to $20 billion per year.(81) Local competition will not become a reality, however, unless noneconomic, embedded subsidies are eliminated. Replacing this inequitable imbalance with cost-based prices and a universal fund—that recovers competitively neutral contributions for basic residential telephone service from all participants in proportion to the share of the telecommunications market served by each telecommunications service provider—would better promote competition without sacrificing important universal service goals.(82) All providers of local exchange service, if selected by customers eligible for universal service support, should have an opportunity to receive assistance from contributed universal service funds.(83)

Also, when BOCs compete with long-distance carriers in providing intralATA toll or other services, detailed regulation and cost analysis are necessary to ensure appropriate pricing of essential bottleneck access facilities and to avoid cross-subsidization of competitive BOC services with revenues from noncompetitive services. Unbundled network components (e.g., links, ports, feeders, and distribution elements) and switched access elements are critical to enable prospective competitors to purchase only those functionalities that they need at cost-based prices. Yet, varying degrees of network component and access element unbundling exist in intrastate tariffs throughout the country, further complicating the strategic planning and purchasing decisions of would-be competitors. Parity between interstate and intrastate access rates where intrastate access rates exceed interstate rates, and eliminating existing access subsidies, such as the residual interconnection and carrier common line charges, would also help to bring switched access charges closer to cost and reduce the threat of bypassing LEC access facilities. Tariffed nonrecurring charges, which impose significant monetary penalties upon IXCs for switching access suppliers, further stymie access to alternative access vendors and should be eliminated as they are additional barriers to the development of viable local competition.

Imputation is another critical competitive safeguard which, if properly implemented, requires LECs to impute access charges plus the incremental costs of providing toll services in their toll rates. Just as intralATA toll competition will not develop without imputation, due to a potential anticompetitive price squeeze whereby the access rates charged to IXCs exceed LECs’ intralATA toll rates,(84) local rates should also reflect underlying costs and move toward cost-based rates subject to appropriate universal service policies.

D. Collocation, Interconnection, and Reciprocal Intercarrier Compensation

The recent reversal of the FCC's physical collocation rule,(85) which required LECs to set aside part of their central offices for use by CAPs, clouds the prospect of future procompetitive switched collocation policies. Virtual collocation equivalent to physical collocation, or physical collocation at LEC tandems, central offices, and serving wire centers is critical to interconnecting to LEC networks in a cost-efficient and technically efficacious manner.

Switched local phone competition, particularly the ability to let customers interconnect phone calls, is still not fully permitted in most states.(86) New entrants to the local exchange market will be unable to compete unless they can interconnect with other local service providers and obtain cost-based nondiscriminatory interconnection to essential
network components. The lack of cost-based, reciprocal intercarrier compensation arrangements remains a barrier to entry in many areas. Absent incremented cost-based interconnection rates, interim in-kind exchange arrangements or capacity-based programs described below, new entrants will understandably neither be attracted to markets where they pay more to terminate calls over existing LEC facilities than they receive for calls which terminate over their network nor to markets in which they receive little or no compensation.

Mutual compensation for call termination should encourage competition and interconnection while covering relevant costs, but neither mirroring existing access charge levels, nor serving as a source of subsidies. Existing reciprocal intercarrier compensation arrangements, which reimburse new entrants for intercarrier calls terminated over their networks, are generally not cost-based, and often allow new entrants little or no profit margin. Even if intercarrier compensation arrangements were cost-based, new entrants would still have difficulty competing with incumbent LECs' subsidized local exchange rates, because embedded loop costs generally exceed flat residential local service rates.

The "co-carrier" agreement, whereby MFS and NYNEX pay each other for local calls completed between their networks at a rate equal to 48 percent of the rate charged to end users in New York, is somewhat encouraging. However, MFS and other new entrants have not had the same success with other BOCs, and, as discussed below, the lack of true number portability is a barrier to entry. Prodded by regulators, Ameritech announced its plan to sign a similar deal with MFS in Chicago. Three months after NYNEX and MFS reached an intercarrier compensation agreement in New York, they agreed to pay each other one and a half cents per minute to terminate local calls in Massachusetts. This rate represents a "half-call" concept, whereby the one and a half cents rate equals roughly half of the NYNEX telcos' average retail, per-minute rate for an entire local call. In addition, MFS will receive terminating switched access charges on interexchange calls that terminated to MFS customers.

In ruling on MFS's application to operate as a local exchange carrier in areas served by Bell Telephone of Pennsylvania in Philadelphia and Pittsburgh, Administrative Law Judge Robert A. Christianson concluded that in-kind exchange ("bill and keep") arrangements may be the fairest and simplest interim measure. Some LECs challenged "bill and keep" on constitutional grounds, claiming that it takes a portion of their networks for public use without compensation, in violation of the Takings Clause of the Fifth Amendment and Article I, Section 10 of the Pennsylvania Constitution.

The California Public Utility Commission also adopted an interim "bill and keep" method for intercarrier compensation on local call termination, and the Connecticut Department of Public Utility Control ordered "bill and keep" for an initial eighteen-month period subject to true-up for out of balance traffic situations through alternative mutual compensation plans.

In addition to the minutes-of-use and "bill and keep" intercarrier compensation approaches discussed above, capacity-based programs compensate service providers according to the cost of the capacity required to terminate each other's traffic. Proponents of capacity-based programs generally support interconnection rates based upon the long-run incremental cost of capacity. Like "bill and keep," capacity-based programs can be particularly effective in markets with flat-rate retail pricing.

E. Number Portability and Assignment

Full-service provider database local number portability, which allows customers to change local service providers without changing telephone numbers, has not been implemented. Meaningful local competition will not develop if customers must incur the time and expense (e.g., new stationary and signs) of changing their telephone number in order to change carriers. MFS estimates that 75 percent of customers are not going to change their phone number unless there is a significant economic benefit for doing so, while nearly half of potential customers surveyed by MCI said that they would not switch to new MCI local service if they could not keep their numbers. Experience with 800 service demonstrates the importance of full number portability, as consumers are understandably reluctant to switch carriers when it means changing toll-free 800 telephone numbers. For competitive local carriers, the problem of full number portability is analogous to that of equal access faced by the IXCs in the early 1980s.
Interim number portability solutions, such as Direct Inward Dialing (DID) trunks, remote call forwarding (RCF), and tandem/route indexing, are not the same as full number portability and suffer from technical and operational deficiencies.(103) Similarly, personal phone numbers, which use a special area code to allow people to be reached at the same number anywhere they travel, do not allow customers to change carriers without changing their telephone number and often have monthly service fees.(104) The New York PSC recently endorsed a six month full (database) local number portability trial, scheduled to begin in February 1996, and several state commission-initiated committees are working on a full local number portability solution. During the Rochester Telephone Open Market Plan hearings, however, the New York PSC staff estimated that it could take up to five years to deploy necessary full number portability technologies.(105) Similarly, the Yankee Group believes that it will be several years before customers nationwide can change their local telephone provider as transparently as they now change their long-distance carrier under equal access.(106)

The FCC recently moved to take a leadership role in the local number portability debate by initiating a broad notice of proposed rulemaking in Docket 95-116,(107) In its notice, the FCC said that "number portability appears to offer substantial public interest benefits because it provides consumers personal mobility and flexibility in the way they use their telecommunications services, and because it fosters competition among service providers."(108) The FCC further stated that "its rulemaking is the first step in developing a national number portability policy and sought comment on whether it should adopt specific rules promoting the development of number portability and what those rules should be."(109)

New entrants should also have nondiscriminatory access to blocks of telephone numbers (NXXs), databases (e.g., directory assistance, LIDB, advanced intelligent network, and 800-number databases), 911, telephone relay, telephone directories, and operator services necessary to offer service. NXX codes, currently assigned through Bell Communications Research,(110) should be assigned by an independent administrator to promote rapid, nondiscriminatory access to such codes.

F. Dialing Parity

Although customers can place intraLATA toll calls over their IXC of choice by dialing a so-called 10XXX five digit access code before dialing the number they are calling, the same intraLATA toll call can be placed over LEC facilities without dialing such an access code. IXCs and others charge that this disparity amounts to unequal access. Only a few states have authorized 1+intraLATA toll competition,(111) and, even where authorized, it is generally being phased in slowly due to technical considerations and implementation delays. For example, although the New York PSC approved 1+intraLATA presubscription several months ago, NYNEX-NY’s initial customer contact procedures stated that NYNEX-NY representatives will not initiate discussion about intraLATA presubscription with end user customers, will not provide information about other intraLATA carriers to customers, and will not accept requests to change intraLATA service providers directly from the customer.(112) Several IXCs and other parties challenged NYNEX-NY’s proposed customer contact procedures at the New York PSC, and revised procedures are under consideration.

G. Differential Regulation

Regulation should correspond to market power. BOCs which have significant market power and are able to leverage control of essential bottleneck facilities should be subject to greater regulatory oversight than nascent new entrants with little or no market power. As long as there is no parity in the marketplace, parity of regulation is inappropriate. For example, certification and regulatory requirements for new entrants, such as geographic service coverage and cost-based, economic regulation (e.g., cost studies), are inappropriate for new entrants which lack market power. Similarly, price lists in lieu of tariffs may be appropriate for new entrants, subject to making the terms and conditions of service offerings available for public inspection upon request.

IV. Jurisdictional Considerations
With the convergence of technology and telecommunications, cable and other industries' jurisdictional lines have blurred while turf battles have grown. Just as telephone companies want to provide video services over their networks, cable television companies want to provide local telephone services over their facilities. Some IXCs have demonstrated an interest in providing entertainment and content-related services, while media firms are searching for alternative distribution channels for their programming. Moreover, some electric companies have demonstrated an interest in upgrading their facilities to provide communications-like services. This cornucopia of convergence has manifested itself in multiple mergers and alliances, including the failed Bell Atlantic/TCI merger, the Sprint venture with several cable companies, the MCI/News Corp. partnership, and the AT&T/McCaw merger.

In the wake of this activity, federal, state, and local jurisdictional lines often clash and further complicate the transition to competition. As noted above, under the Decree, the states continue to regulate intrastate telecommunications matters, including intrastate intralATA and local competition issues. In opposition to MFS Communications' petition asking the FCC to direct LECs to unbundle the local loop portion of local exchange networks, several state regulators and LECs argued that the Communications Act does not give the FCC authority to establish a federal unbundling mandate that would result in improper preemption of state authority over local networks. The New York Department of Public Service said it is "firmly committed to encouraging competition" through a "federal-state partnership," but opposed federal rulemaking "on the grounds that the Commission's jurisdiction does not extend to requiring the unbundling of local-loop facilities." The Department of Public Service pointed out that Section 152(b)(1) of the Communications Act preserves states' jurisdiction over services, charges, facilities, and practices "for or in connection with intrastate communications services." The Department of Public Service also noted that the U.S. Supreme Court, in Louisiana PSC v. FCC, ruled that the FCC's authority over interstate facilities does not entitle it to preempt the states, even if state regulations "frustrate" an FCC policy goal. Competitive local service providers and some IXCs supported the MFS proposal but urged the FCC to go beyond unbundling to address intercarrier compensation and local number portability.

Similar jurisdictional issues with respect to service provider local number portability, database administration, reciprocal interconnection rates, and other critical components for a competitive market are likely, depending upon the outcome of federal telecommunications legislation. Even absent federal legislation, FCC preemption may be appropriate for certain issues, such as local number portability, which require a national solution where it is impossible for conflicting federal and state regulations to coexist, or where a conflicting state policy "would unavoidably affect the federal policy adversely."

The blurring of lines of demarcation among cable, telephony, and computer services creates additional jurisdictional challenges. The provision of customer premises equipment (CPE), inside wiring, and enhanced services by traditionally nontelephony service providers further raise jurisdictional issues. The ability of the FCC and the states to exercise regulatory authority over noncarriers is yet to be fully explored by the courts.

In addition to obtaining appropriate reciprocal interconnection rates, gaining access to rights-of-way is one of the most significant hurdles to overcome in the "race" toward a competitive local telecommunications market. Within the last fifteen years, interexchange carriers have spent billions of dollars building or upgrading their networks, obtaining zoning approvals and waivers, and gaining access to rights-of-way. Prospective competitors in the local exchange market will likely have a similar experience. For example, to cover the nation, PCS players will have to build 100,000 cell sites, including thousands of towers. The effort will require leasing rooftops and plots of land, clearing thousands of complex zoning rules, and allaying the fears of hundreds of neighborhood groups. Compliance with local ordinances and/or obtaining waivers from local jurisdictions will be costly and time consuming.

The pending comprehensive federal telecommunications legislation, if it becomes law, could have a significant impact upon the jurisdictional balance. Not surprisingly, the Clinton Administration and interexchange carriers generally support, while BOCs oppose, a continuing role for federal oversight in determining whether a particular market has become competitive such that BOCs may start providing in-region interexchange services. Federal oversight will clearly require coordination with state and local jurisdictions as to the type of services provided, the type and amount of traffic carried by alternative service providers, infrastructure development, market entrants, and barriers to entry.

Even with the prospect of broad, preemptive federal legislation, it will ultimately be up to the states to implement such
policies and report on the status of local competition within their respective jurisdictions. For example, the so-called "manager's amendment" to H.R. 1555 clarifies that the FCC's rules on equal access and interconnection do not preclude the enforcement of state rules or regulations on access and interconnection that are consistent with the requirements of "the Act."(127) Avoiding a patchwork of different levels of competitive entry and barriers to entry will require collaboration and a national local competition policy.

V. Federal and State Local Competition Policies

Given the varied state regulatory and legislative local competition proposals, the prospect of pending federal telecommunications legislation becoming law, and the possibility of different rules and requirements in multiple jurisdictions, the need for a coordinated approach is clear. It is far from certain whether pending federal legislation will become law this year, or what form such legislation, if and when it becomes law, ultimately will take. Equally uncertain is the extent to which federal telecommunications legislation, if and when it becomes law, will preempt state rules and franchise restrictions which might otherwise stifle the development of local competition or complicate a uniform federal policy. One thing that is clear, however, is the need for a national local competition policy.

There should be actual, effective, and demonstrable local competition; and competitive benchmark criteria, such as those proposed by Anne Bingaman, that should be satisfied before the interLATA line of business restriction is removed. Rather than a premature removal of this line of business restriction, the requirements of Senate Bill 652 must also be satisfied prior to an effectively competitive local telecommunications market. Absent continuing federal court review over the MFJ waiver process, a strong antitrust role for the U.S. Department of Justice in reviewing BOC proposals to enter the long-distance market is critical to foster the development of switched local competition.

While there is no perfect bright-line, market share test for determining when there is actual, effective local competition, consumers' ability to obtain local telephone services from alternative providers that are economically, technically, and functionally equivalent to those of the incumbent LEC provider is critical. Where there are no economically, technically, and functionally equivalent local service alternatives, safeguards similar to those discussed above and U.S. Department of Justice oversight are necessary for a competitive local exchange market.

Even with preemptive federal legislation, local competition policies will likely take several months or years to implement and could be subject to protracted litigation. If federal preemptive telecommunications legislation becomes law, federal, state, and local coordination will be particularly critical to address implementation, service quality, and complaint issues.

At the Federal-State-Local Telecom Summit, Vice-President Albert Gore announced that federal, state, and local regulators have agreed to abide by set objectives that will guide future regulatory and policy efforts, including promoting competition as the best stimulus for innovation and efficiency. This confirmed the need for open access to local telephone networks and affirmed the importance of universal service.(128) At the Summit, representatives from all levels of government agreed that any federal telecommunications legislation passed this year should provide a general framework within which state and local regulators could operate and which grants a greater degree of state and local regulatory authority over telecommunications companies.

Projects are underway to harmonize state regulations.(129) Many state and local regulators and legislators are advocating their interests at the federal level with respect to proposed federal legislation, and they likely will be called upon to apply their extensive knowledge of their markets and experience to implement any national local telecommunications policies. Notwithstanding the prospect of preemptive federal telecommunications laws addressing local competition issues, the FCC and the states should continue to expand coordination through the Joint Board process to address critical local and switched access competition issues and safeguards. State regulators already participate in the Joint Board which provides substantial input into the FCC's universal service policies and could provide similar input on other unresolved local competition issues.

Notwithstanding the recently passed bills in the House and Senate, but not yet approved by the President, many believe that the course of telecommunications regulation will largely be decided outside of Washington.(130) Any federal telecommunications legislation, if and when it becomes law, will likely set broad outlines for competition, rather than dictate every detail.(131) In addition, significant telecommunications regulatory and legislative changes, such as those
previously discussed in this Article, have already occurred and will continue to develop in the states and at the local level. While prompt adoption and implementation of federal telecommunications laws described above are critical to the orderly development of local competition, collaboration among federal, state, and local regulators and legislators will likely be necessary to implement a national, local competition policy.

Conclusion

The rapid pace of technological telecommunications developments and consumers' demand for seamless telecommunications services demonstrate the need for a national telecommunications policy. Competition for local telephone service is in the very early stages of development. Barriers to entry must be eliminated, and safeguards must be established in order to foster a competitive environment. The MFJ's restriction on BOCs providing interLATA services should not be lifted until there is actual, effective, and demonstrable local competition, such that customers have access to alternative providers of economically, technically, and functionally equivalent local services. Although many of the switched local exchange competition details are being developed in the states, broad federal telecommunications laws consistent with the guidelines described in this Article are necessary. Collaboration among federal, state, and local officials to implement a national local competition policy may also help to eliminate barriers to entry and to establish minimum safeguards to foster a competitive, local telecommunications market.

(1)Director, State Regulatory Affairs/East, Sprint Communications Company L.P.,

Washington, D.C.; A.B. San Diego State University, 1978; M.B.A., J.D. University of San Diego, 1982. The views in this Article are those of the Author and not necessarily those of Sprint Communications Company L.P. or its affiliates. ©1995 Craig D. Dingwall.


(3)Local exchange service, as used in this Article, means the transmission and utilization of switched two-way voice and voice-grade data communications and associated usage. "Interexchange telecommunications' means telecommunications between a point or points located in one exchange telecommunications area and a point or points located in one or more other exchange areas or a point outside an exchange area." Am. Tel. & Tel., 514 F. Supp. at 229. As defined in the Modification of Final Judgment (MFJ), an exchange area or an exchange is a geographic area established by a BOC in accordance with the following criteria:

(1) any such area shall encompass one or more contiguous local exchange areas serving common social, economic, and other purposes, even where such configuration transcends municipal or other local governmental boundaries;

(2) every point served by a BOC within a state shall be included within an exchange area;

(3) no such area which includes part or all of one standard metropolitan statistical area . . . shall include a substantial part of any other standard metropolitan statistical area . . . unless the Court shall otherwise allow; and

(4) except with approval of the Court, no exchange area located in one state shall include any point located within another state. Id. at 229.

Telephone exchange service is generally defined as "service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers inter-communicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge." 47 U.S.C. § 153(r) (1982).

(4)Telecommunications Mergers Eclipse Drug Industry in 1994 Activity, Comm. Daily,


(7) Am. Tel. & Tel., 552 F. Supp. at 178-79.

(8) The MFJ also required interLATA equal access for all competitors, and imposed
line-of-business restrictions prohibiting Regional Bell Operating Companies (RBOCs) from engaging in the provision of interexchange services, information services, manufacturing telecommunications products and customer premises equipment, marketing such equipment, and advertising directories. Id. at 186. The information service ban was lifted in 1993. United States v. Western Elec. Co., 993 F.2d 1572, 1579 (D.C. Cir. 1993).

(9) Am. Tel. & Tel., 552 F. Supp. at 231.

(10) Although Judge Greene recently allowed BOCs to resell long-distance services to
their cellular customers subject to certain conditions, such as separate marketing arms for long-distance service, certification that local cellular markets are competitive, and distribution of business among more than one long-distance provider. United States v. Western Elec. Co., No. 82-0192, slip op. at 1 (D.C. Cir. Apr. 28, 1995).


(13) S. 1822, supra note 5.

(14) Edmund L. Andrews, Bill to Revamp Communications Dies in Congress, N.Y.
Times, Sept. 24, 1994, § 1, at 1.

(15) House Telecom Bill Pleases Cable TV, Telco Interests; Conference Committee


(17) Robert E. Hall, Long Distance: Public Benefits from Increased
Competition 8 (1993); MCI Telecommunications Corporation, Preserving Long Distance Competition and Promoting Local Competition: 21st Century Telecommunications Policy 1-7 (1994) [hereinafter Preserving Long Distance Competition]. Sprint announced that it will give customers a flat rate of 10¢ per minute for calls anywhere in the U.S. between the hours of 7 p.m. and 7 a.m., while MCI unveiled steeper price cuts which can cut the cost of a long-distance call by as much as 50% and a repackaged version of its Friends & Family plan. John J. Keller, MCI and Sprint Unveil Deep Discounts, New Services in Fresh Fight With AT&T, Wall St. J., Jan. 6, 1995, at A3.


(19) Investigation by the Dep't on its own motion into IntraLATA and Local Exchange
competition in Massachusetts: Before the Massachusetts Dep't of Pub. Util., D.P.U. 94-185, 9, May 19, 1995 (Sprint Comm. Co. L.P. Testimony of Mark Sievers) [hereinafter Sievers's Testimony].


(22) Hall, supra note 17, at 10; Preserving Long Distance Competition, supra note 17, at III-8.


(25) Sprint Opposition, supra note 24, at 24.

(26) Id. (citing testimony of Robert Allen, AT&T Chairman, before the Senate Comm. on Commerce, Science and Transportation, Sept. 8, 1993).


(30) Id.


(32) Id.
With 10XXX intraLATA competition, short-haul toll calls originating and terminating within the same LATA may be completed over an IXC's facilities by dialing a 10XXX code. Some states, such as New York, have also approved 1+intraLATA toll competition, whereby callers can place intraLATA toll calls over their carrier of choice by dialing 1+ the area code and the telephone number.

The state commissions in Connecticut, Florida, Georgia, Iowa, Illinois, Maryland, Massachusetts, Michigan, New York (effective Jan. 1, 1996), Ohio, Pennsylvania, Tennessee, Utah (effective May 1, 1996), and Washington permit switched local exchange service, although interconnection terms and other local competition issues are still pending in many of these states. Additionally, state legislation in Colorado, Iowa, Hawaii, Oregon, Minnesota, North Carolina, Texas, Virginia, and Wyoming may open these states' switched local-exchange markets to competition in 1996. The California Public Utility Commission adopted interim rules authorizing switched local competition effective Jan. 1, 1996. However, further work remains to be done on several key issues such as unbundling requirements, LEC resale restrictions, and compensation for interim number portability. See Local Competition Advances Like Wildfire in Western States, State Tel. Reg. Rep., July 27, 1995, at 1, 3-5; Majority of Eastern States Build Stable Local Competition Base, State Tel. Reg. Rep., July 13, 1995, at 3, 8-9.

Application of MFS Intelnet of Maryland, Inc. for Authority to Provide and Resell Local Exchange and Interexchange Telephone Service; and Requesting the Establishment of Policies and Requirements for the Interconnection of Competing Local Exchange Networks; In re the Investigation by the Comm'n on its own Motion into Policies Regarding Competitive Local Exchange Tel. Serv. (Case No. 8594), Order No. 71155, State of Maryland Pub. Serv. Comm'n, Phase II (Apr. 25, 1994) (addressing local service and reciprocal interconnection costs by approving the applications of MFS, MCI, and TCG to provide local service to business customers in Maryland for an interim 6.1¢ per call (2.2¢ per minute) inter-carrier compensation rate) [hereinafter Maryland Pub. Serv. Comm'n].

Petition of Rochester Tel. Corp. for Approval of Proposed Restructuring Plan (Case 93-C-0103) and Petition of Rochester Tel. Corp. for Approval of a New Multi Year Rate Stability Agreement (93-C-0033), Opinion & Order Approving Joint Stipulation and Agreement, State of New York Pub. Serv. Comm'n, Op. No. 94-25 (Nov. 10, 1994) [hereinafter Open Market Plan or Plan]. The New York Commission also recently approved AT&T's, Time Warner's, and Frontier Communications' local dial tone tariffs to provide local service in Rochester, New York. Several other potential competitors already have intracity authority throughout New York State.


Id. at 9-10.

Frontier Boosts Market Share in First Quarter of Open Market Plan, Local Competition Rep., May 1, 1995, at 8, 8.

Id.

(44) Id.


(48) Id.


(51) Id. at 3-5.


(53) For example, Florida exempts LECs with less than 100,000 access lines from competition until 2001. North Carolina restricts local competition for LECs with fewer than 200,000 access lines unless the LEC elects price regulation, and New Hampshire restricts competitor entry where LECs have less than 25,000 lines. *Id.*


(56) Id. at 6.
(57) See, e.g., Sievers's Testimony, supra note 19.


(59) FCC Report, Bill's Journey of Many Steps Leads to Bell Long-Distance

(60) Barbara Woller, Bedlam Surrounds Deregulation Bills, USA Today, July 11, 1995,
at 4B.

(61) Long-Distance Companies Can't Get Through to Congress in Telecommunications

(62) RHCs, Gingrich Pushing for Summer Telecom Vote; IXCs Say They Can't Support

(63) Id. See also Phone Competition Rules in House Bill Could Be Reworked by GOP,

(64) See Summer Telecom Vote, supra note 62, at 1; Phone Competition, supra note 63,
at A4.

(65) Leslie Cauley, Ameritech May Not Open Market if Phone Bill Passes, Wall St.

(66) Id.

(67) See supra note 49.

(68) Telecommunications Industry Revenue, supra note 24, at 4; Telecommunications Industry Revenue Rose, Comm.

(69) Telecommunications Industry Revenue, supra note 24, at 4.

(70) Sievers's Testimony, supra note 19, at 34.

(71) Preserving Long Distance Competition, supra note 17, at V-16.

(72) Sprint cable partners—TCI, Cox, and Comcast—have approximately 18 million
customers with lines passing 30 million homes. John J. Keller, Sprint Talks with Cable-TV Concerns in Push to
Expand New Wireless Venture, Wall St. J., Jan. 26, 1995, at B8. Eight other cable companies have signed letters of
intent with Sprint, extending the Sprint venture's coverage to nearly 40 percent of U.S. homes.

(73) Cable Strategies for Competitive Telephony: Assessing the Sprint/Cable Alliance,

(74) Frost & Sullivan, U.S. Cable TV and Associated Technology Markets:

(75)Cable Strategies, supra note 73, at 12.


(77)The Yankee Group Wireless/Mobile Communications Planning Service, 


(78)Surveys reveal that customers believe that local telephone companies provide better network quality, reliability, and customer service than cable TV companies. Eighty-four percent of the customers are satisfied with their local telephone service. Less than 50 percent are satisfied with their cable TV company, although 60 percent of telco subscribers would change providers for a reduction of 10-15 percent of current rates. Cable Strategies, supra note 73, at 12.

(79)Preserving Long-Distance Competition, supra note 17, at III-13; PCS Phase, supra note 77, at 35.

(80)But see Hatfield Associates, The Cost of Basic Universal Service (1994) (suggesting that urban, densely-populated areas may not require universal service subsidies).


(82)See, e.g., Sievers's Testimony, supra note 19, at 32-34; Benchmark Cost Model:

A Joint Submission by MCI Telecommunications, NYNEX, Sprint, and U.S. West, CC Dkt. No. 80-286 (Sept. 12, 1995) (providing a benchmark estimate of the monthly cost for providing basic telephone services—voice-grade access to the public switched network, residential one-party service, touch tone, white page directory listing, and access to directory assistance, operator, and emergency services—in each Census Block Group within a state); Teleport Communications Group, Universal Service Assurance II: A Blueprint for Action (1994) (proposing that a universal service assurance fund be set up and administered by an independent agency and funded by all telecommunications carriers. The size of the fund would be determined according to Total Service Long Run Incremental Cost principles.) See also Hatfield Associates, supra note 80; Comments of Sprint Corp., In Re Amend. of Pt. 36 of the Commission's Rules and Estab. of a Joint Board, in CC Dkt. No. 80-286 (Dec. 2, 1994).

(83)Sievers's Testimony, supra note 19, at 33-34.


(85)Bell Atlantic Tel. Cos. v. FCC, 24 F.3d 1441 (D.C. Cir. 1994).


(87)The Connecticut DPUC ruled that interconnection will be established at points
where it is most efficient and technically feasible. At a minimum, carriers may interconnect offices, tandems, mutually acceptable meet points or any other agreed upon location. DPUC Investigation into the Unbundling of the Southern New England Telephone Company's Local Telecommunications Network, (Dkt. No. 94-10-02), Decision, State of Connecticut Dep't of Pub. Util. Control, 57 (Sept. 22, 1995); Maryland Pub. Serv. Comm'n, supra note 35. See also, In re the Application of City Signal, Inc., for an Order Establishing and Approving Interconnection Arrangements with Ameritech Michigan, Opinion and Order, Michigan Pub. Serv. Comm'n, Case No. U-10647 (Feb. 23, 1995) (granting US Signal Corporation's request for co-carrier status through interim interconnection arrangements, including a reciprocal compensation rate of .015¢ per minute for terminating local calls to each other's networks).

(88)For example, the so-called Open Market Plan provides, in relevant part, that "R-Net shall pay and receive reciprocal compensation for the exchange of local message traffic between it and other carriers . . . equal to R-Net's then-applicable access charges," excluding the intrastate Carrier Common Line Charge. Open Market Plan, supra note 36, at 45-46.


(91)Samuels, supra note 86, at 42.


(93)Id.

(94)Id.


(96)Under "bill and keep," each carrier terminates other carriers' traffic at no charge. The originating carrier bills the originating subscriber and keeps the billed revenues. Id.

(97)Pennsylvania Pub. Util. Comm'n, supra note 95, at 19 & nn. 54 and 55 (citing

(98)Order Instituting Rulemaking on the Commission's Own Motion into Competition for Local Exchange Service (R.95-040043); Order Instituting Investigation on the Commission's Own Motion into Competition for Local Exchange Service (I.95-04-044), Pub. Util. Comm'n of the State of California, Decision 95-07-054 (July 24, 1995).


(100)Geographic number portability allows the customer to change locations without changing telephone numbers.


(102)Heather Burnett Gold, Local Number Portability: The Key to True Local Exchange Competition, Presentation to NECA/Pacific Telesis Access Demand Meeting (Dec. 8, 1994).

(103)DID delivers calls via DID trunks to the terminating carriers' switch for processing.

With RCF, the incumbent carrier forwards the original number to the new carrier's number. Tandem/Route indexing, a combination of RCF and DID, uses a tandem switch as a hub to route calls. DID trunking and RCF increase call setup time, do not support provision of CLASS-type features (e.g., Caller-ID), are not suitable for data transmission, require additional switching and transport costs, preclude direct connection between new local exchange providers and IXCs, and require continued dependence on the incumbent carrier. In addition, DID requires new entrants to incur additional costs from interconnecting at each end office from which numbers are "ported," and RCF requires two telephone numbers for each ported number, thereby accelerating the exhaustion of NXXs and NPAs. The Level Playing Field: An Interim Report, State of New York Dep't of Pub. Serv., Case 94-C-0095 (Module 2), 19 (Sept. 1, 1994).


(106)Cable Strategies, supra note 73, at 13.


(108)Id.
At divestiture, Bellcore was created when AT&T transferred assets to a newly formed organization that would supply the technical and nontechnical functions to the BOCs that were previously provided by AT&T. See generally, United States v. Western Elec. Co., 569 F. Supp. 1057, 1118-19 (D.C. Cir. 1983). Several BOCs are considering selling Bellcore. See Leslie Cauley, Baby Bells Propose to Sell Off Bellcore In Move to Resolve Conflicting Interests, Wall St. J., Oct. 10, 1994, at A3.

1+intraLATA presubscription allows consumers to presubscribe their intraLATA toll carrier, just as they currently select their interLATA long-distance carrier. As of the publication deadline for this Article, intraLATA presubscription has been ordered in Connecticut, Florida, Illinois, Kentucky, Michigan, Minnesota, New York, North Dakota, Ohio, West Virginia, and Wisconsin. "Iowa, Minnesota, and South Dakota have allowed independent companies to implement 1+intraLATA presubscription networks. Investigation into IntraLATA Presubscription: Before the New Jersey Board of Public Utilities, Dkt. No. TX 9409388, 8 & nn. 1-2, Apr. 10, 1995 (direct testimony of Michael J. Nelson on behalf of United Tel. Co. of NJ, Inc. and Sprint Comm. Co. L.P.). "Arizona, California, Delaware, Georgia, Idaho, Kansas, Massachusetts, Montana, New Jersey, Oregon, Pennsylvania, Texas, Virginia, and Washington "are actively studying 1+intraLATA presubscription issues." Id.

See generally Sprint's Complaint filed with the New York Pub. Serv. Comm'n (Case Nos. 28425 and 92-C-0665) (Track II) (June 23, 1995).


For example, Kansas City Power and Light announced a program to install wireless meter-reading devices in Kansas City.

States, LECs Slam MFS Petition on Unbundling of Local Loops, Telco Competition Rep., Apr. 27, 1995, at 3-4 [hereinafter MFS Petition].


MFS Petition, supra note 115, at 3-4.

Id.


Computer & Communications Indus. Ass'n v. FCC, 693 F.2d 198, 216 (D.C. Cir.
Nadler, supra note 121, at 507-08.


Id.

Woller, supra note 60, at 4B. Section 245 of H.R. 1555, in its present form, provides for FCC review of compliance with federally mandated requirements for state PUC verification of BOC entry into the interLATA market. See H.R. 1555, supra note 6.


For example, the Southern Growth Policies Board, sponsored by governors of 13 Southern states, initiated a project to identify policy recommendations for the regional harmonization of state regulations among the several states. The NARUC Communications Committee formed a work group to identify issues and to establish principles to assist states in assessing and implementing policies on local competition. James Bradford Ramsay, IntraLATA Regulatory Developments, Address at the NECA-Pacific Telesis Access-Demand Conference (Dec. 7-9, 1994).

Telecoms Deregulation, Competition Calling, The Economist, July 1, 1995, at 59, 59.

Id.