WIRELESS TECHNOLOGIES CREATING COMPETITION IN THE LOCAL EXCHANGE MARKET: HOW WILL LOCAL EXCHANGE CARRIERS COMPETE?

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The local exchange market is no longer a monopoly for the dominant local exchange carriers ("LECs") who provide local telephone service to the public. The idea of the local loop as a "natural monopoly" has been challenged for several years primarily by technological developments that have created new ways to provide local service. Some analysts maintain, however, that LECs still have a monopoly over access service to the local loop, despite technologies that "bypass" LEC facilities to provide service directly to the consumer. In the 1990s, LECs must compete with alternate local ex-

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2 See, e.g., William J. Baumol & Gregory Sidak, The Pricing of Inputs Sold to Competitors, 11 Yale J. on Reg. 171
change service providers, including those providers introducing innovative wireless services in the local exchange market. Although there are other competitors to the LEC in the local loop,⁸ wireless service providers are the focus of this article.⁴

It is noteworthy that the term "new wireless service provider" may prove to be a misnomer because many of the companies providing new wireless services are well-established telecommunications companies, including several Bell Operating Companies ("BOCs") (e.g., forming joint ventures to complete Personal Communications Services systems). In discussing "new wireless service providers," it is the service and not necessarily the provider that is new to the local exchange market. If anything, current providers will be expanding into different service areas and forming new strategic alliances. Although consumers are becoming more comfortable with the "information technologies revolution" through, for example, the use of personal computers and access to the Internet, consumers will still be wary of replacing the wired telephone and the local access provider that has served them for over a decade.⁶

Wireless technologies in the local exchange market will change the manner in which every American consumer views local telephone service. Wireless services, such as Personal Communications Services ("PCS"),⁶ are becoming viable competitors to the BOCs in the local exchange market.⁷ The local wireline exchange will no longer continue to be profitable for BOCs unless they diversify their product bases. Initially, consumers will purchase the new generation of wireless services as a supplement to the wireline service they already utilize in their homes, as is currently the case with cellular service. This may not be the case for business users, who may switch more readily to wireless services if those services prove to be more cost-effective than their current wireline service. The business market alone may dictate which service providers will be successful in local exchange service because the business sector accounts for a large portion of the LECs' profits.⁹ Also, wireless services have the potential to be cheaper than copper in the local loop. "As of 1992, the established cellular carriers had invested about $10 billion, or about $1,000 per subscriber... [by comparison it costs them an average of about $1,500 to $2,500 to deploy a local copper loop, and those costs are not declining at all.]"¹⁰

This article examines two issues relating to the phenomenon of local loop competition from wireless services. The first issue is whether the introduction of wireless services in the local exchange market will render wireline local exchange service obsolete, or

(1994). The authors stated that "technological innovation and the prospect of falling regulatory barriers to entry now expose some portions of the local exchange to competition from cable television systems, wireless telephony, and rival wireline systems." Id. at 174. The authors concluded that "[n]evertheless, it is probable that certain parts of local telephony will remain naturally monopolistic." Id. Baumol and Sidak claimed that the primary 'bottleneck' (service over which BOCs still have a monopoly) is the LECs' control of facilities used to supply access service - that is, the service that provides the connection between messages received from outside areas and the local loop. Id.⁸

⁸ Spulber, supra note 1, at 39-40. Cable companies, for example, are now capable of delivering telephone services and other integrated telecommunications services. Id. See also Mark Berniker, Cablevision Upgrade Gives Connecticut New Services, Broadcasting & Cable, Aug. 28, 1995, at 14(Cablevision Systems Corp. is developing a suite of television, telephone, and PC-based services for certain customers in southern Connecticut.);

⁴ Although this article focuses on new wireless service providers, cellular operators have been in the market for over a decade and their sales are continuing to increase. See NAT. TELECOMMUNICATIONS AND INFO. ADMIN., U.S. DEP'T OF COM., REPORT (1995). Cellular operators are currently enrolling about 28,000 new customers per day. Id. See also Reed E. Hundt, Remarks at the VIP Luncheon of Phillips Business Information Inc. (Aug. 25, 1995) [hereinafter Phillips Luncheon Speech] (stating that "[t]he number of cellular subscribers grew last year by almost 50 percent, to more than 25 million. Wireless is the fastest growing sector of the U.S. economy in terms of new customers added").

⁹ If consumers do replace their old telephone service it may be with technologies that are already accustomed to, such as cable companies who can provide them with an integrated package of cable, broadcast and telephone service. See infra notes 140-153 and accompanying text.

¹⁰ PCS, discussed infra part III, is broadly defined by the Commission as a family of mobile or portable radio communications services with the ability to provide services to individuals and businesses. In re Amendment of the Commission's Rules to Establish New Personal Communications Services, Notice of Proposed Rulemaking & Tentative Decision, 7 FCC Rcd. 5676, para. 29 (1992) [hereinafter PCS NPRM].

¹¹ On July 26, 1995, American Personal Communications, Inc. ("APC"), a broadband PCS pioneer's preference winner, invited Senators Larry Pressler (R-S.D.) and Bob Packwood (R-Ot.) to the first public demonstration of APC's PCS system. With commercial operations of this system expected to begin this fall, it is anticipated that APC will be the first PCS provider in the United States. John Grotdal et al., APC Gives Public Viewing of PCS System; Sen. Packwood, Pressler Make Phone Calls, PCS Wk., Aug. 2, 1995, at 1, 8.

¹² See John J. Keller, Maw Bell: AT&T Eagerly Plots a Strategy to Gobble Local Phone Business, WALL ST. J., Aug. 21, 1995, at A1. Bell Atlantic's Vice Chairman stated that businesses and affluent individuals who use everything from local services to call-waiting, voice-mail, and multiple phone extensions "account for 75 percent of our profit margin." Id.

whether wireless services will simply continue to supplement the wireline local exchange. The answer depends on several factors including: the needs and desires of the consumer (both business and residential); the infrastructure and name recognition already established by the incumbent LEC in each region; the policies and regulations of the Federal Communications Commission ("FCC" or "Commission") concerning competitive issues in the local exchange market; and the ability of the BOCs to adapt to a rapidly changing marketplace.

The second issue is the extent to which the wireline market will suffer economic loss as a result of wireless technology use in the local loop. That is, the amount of profits that the wireline providers will lose to the wireless competitor. In addition, the LECs' preparation to compete effectively in such an environment will be a factor to be analyzed.

The answer to both issues depends on how much involvement the LECs have in providing wireless services themselves, primarily on an integrated basis with their current wireline exchange services, and whether they will provide other services in order to compete.

In order to provide customers with every communication need in one package, several RBOCs are positioning themselves to provide integrated services, termed "one-stop shopping." LECs have been making, and will continue to make, strategic moves to compete both in-region and out-of-region through their own facilities and also through separate subsidiaries (BOC affiliates). Assuming the wireline exchange will be in existence for many years to come, the percentage of the local exchange market lost to new wireless service providers will depend, in large part, on the ability of wireless service providers to anticipate the needs of customers and to build a strong customer base despite the presence of the incumbent BOC.

This article examines current trends in the local exchange market in five parts. Part I gives a historical overview of the local exchange market, focusing on the creation of the BOCs and the outdated notion of a "natural monopoly" that has been used to define the post-divestiture local exchange market. Part II explains the current and potential wireless services that will continue to influence competition in the local exchange market. In addition, Part II briefly summarizes the Commission's auction process for new wireless services, and discusses several obstacles that new wireless service providers are facing in their attempts to establish wireless systems in the local exchange market.

Part III analyzes the Commission's current regulatory position with regard to fostering local loop competition and the policies and regulations the Commission is implementing to help establish innovative wireless service providers as viable competitors in the local exchange market. Part IV discusses the methods used by the LECs to counteract impending competition in local exchange telephone service, an area that has been exclusively their own since the 1982 divestiture. Part IV also analyzes whether changes in the way service is provided in the local exchange market, brought about by the wireless technological innovations in the 1990s, will cause LECs to suffer economic loss, and if so, to what extent these effects will be minimized as a result of strategic planning by LECs.

Part V of this article examines the future of the local exchange market. Specifically, whether the opening of the local exchange market, dubbed the

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10 The term "LEC" for purposes of this article will be used to describe the seven Regional Bell Operating Companies ("RBOCs" or "BOCs") as well as all independent telephone companies that provide local telephone service. These terms are used interchangeably in this article, although the BOCs remain the dominant local exchange providers in most markets, and are the focus of this article.

11 The current regulatory position of the Commission with regard to allowing LECs to compete with new entrants in the local exchange market should not be overlooked. The Commission has the power to promote competition by implementing policy that allows for rapid developments in the telecommunications industry. In the alternative, the Commission could resist changes to regulatory barriers that currently make it difficult for BOCs to compete fully with other potential and current local loop providers. Despite the Commission's demonstrated willingness to aggressively pursue a competitive environment in the local exchange market for the benefit of the consumer, the agency continues to struggle with a regulatory and statutory structure that has been in existence for over 60 years. Although pending legislation, which may eliminate restrictions on BOCs and open up the local exchange market, may soon be enacted, LECs need the ability to strategize for the 21st century now and much of that strategy is dependent on Commission action that must effectively balance the needs of new wireless service providers and the incumbent LEC in any given region. See discussion infra part III.

12 See In re Motion of Southwestern Bell Mobile Systems, Inc. for a Declaratory Ruling that Section 22.903 and Other Sections of the Rules of the Commission Permit the Cellular Affiliate of a Bell Operating Company to Provide Competitive Landline Local Exchange Service Outside the Region in Which the Bell Operating Company is the Local Exchange Carrier, Motion for Declaratory Ruling, CWDS 95-5 (Oct. 25, 1995)(on file with author) (hereinafter SBMS Declaratory Ruling).

13 "In-region" refers to the service area in which a BOC provides local exchange service. "Out-of-region" refers to all other service areas (where other BOCs are the dominant LECs).

14 See discussion infra note 17 and accompanying text.
"last bottleneck" of communications, will realistically create a competitive environment for all service providers. Part V also discusses whether smaller companies and diverse new firms will be able to enter the local telecommunications market. Finally, Part V analyzes whether the actions taken by the Commission, in concert with changes made by state regulatory bodies and the courts, will provide for effective competition in the local loop.

I. LOCAL EXCHANGE MARKET OVERVIEW

Prior to 1982, the telecommunications market was dominated entirely by the Bell System. Several alleged antitrust violations ultimately led to a 1982 Consent Decree which was subsequently modified, becoming known as the Modification of Final Judgment ("MFJ"). The MFJ divided the telecommunications industry into two distinct areas: long distance and local exchange service. Consequently, long distance and equipment manufacturing were left in the hands of the American Telephone and Telegraph Company ("AT&T"). In addition, local exchange services were then divided among the seven Regional Bell Operating Companies ("RBOCs") (serving the seven regions of the country).

The local exchange has proven to be the most durable component of the old monopoly. In 1982, it seemed to Judge Greene, and indeed to most members of the industry, that the long-distance market was suited to competition whereas the local exchange was a "natural monopoly." The local exchange market has been defined as a "natural monopoly" by many industry experts because local exchange service has traditionally been provided by local telephone companies and diverse new firms will be able to enter the local telecommunications market. Finally, Part V analyzes whether the actions taken by the Commission, in concert with changes made by state regulatory bodies and the courts, will provide for effective competition in the local loop.


19 See generally KELLOGG ET AL., supra note 9, §§ 1.6, 1.7 (discussing break up of the Bell System).

20 The seven RBOCs are the operating companies: Ameritech, The Bell Atlantic Telephone Companies, BellSouth Telecommunications, Inc., New England Telephone and Telegraph and New York Telephone Company (NYNEX), Pacific Bell and Nevada Bell (Pacific Telesis Group), Southwestern Bell Telephone Company, and US West Communications, Inc.

21 KELLOGG ET AL., supra note 9, at 30-31.

22 Id. at 5-6.

23 Id. See also ALFRED E. KAHN, THE ECONOMICS OF REGULATIONS: PRINCIPLES AND INSTITUTIONS 113-26 (2d ed. 1989).

24 KELLOGG ET AL., supra note 9, at 6. See also James Wal-
ations. For example, new developments in switching have allowed customer premises equipment, such as the private branch exchange ("PBX") and local area networks ("LANs"), to render the concept of a natural monopoly obsolete. In addition, new wireless services bring to the local market the ability to "bypass" the local exchange. Notwithstanding recent developments, the local exchange has a long way to go before competition begins to thrive. The fact still remains that most "local traffic" makes its way through the local exchange at a profit to the dominant LEC. However, the RBOCs realized, probably sooner than most because of the position that they hold, that competition is beginning to make its way into the local exchange. The BOCs intend to be prepared and have begun to lay the groundwork to eliminate the restrictions that prevent them from engaging in conduct to increase their competitive edge as any other potential local exchange competitor is able to do at this time.

II. CURRENT AND POTENTIAL WIRELESS SERVICES

Voice telephone service was overwhelmingly provided by wireline network providers until the introduction of cellular phones. With the advent of cellular service in 1983, consumers gained the portability of mobile radio combined with service quality adequate for most users, although the majority of voice telephone service is still provided through landline infrastructure. Mobile service, specifically cellular service, has, up until now and maybe for some time to come, functioned primarily as an adjunct to the landline telephone network. The complete substitution of wireless voice services for voice telephony has never previously been a serious possibility due to the limited system capacity, limited service provision, relative expense and low service quality of cellular service.

Currently, all competitors depend on access to or interconnection with the local exchange market to enable them to provide service. This situation is changing as technological developments allow service providers to by-pass the local wireline network. Advancements in digital and wireless technologies are spawning new services, such as PCS or Personal Communications Networks ("PCNs") and the development of new mobile equipment. In addition, the advent of new services is speeding up the conversion of cellular service to digital technology.

Telecommunications companies desiring to provide local exchange service to compete with LECs will have to offer the consumer a variety of services that are low in cost, simple to use, and high in quality. Cellular service providers may have to make changes, although some analysts predict that PCS will not fare well meeting cellular head-to-head but that it will satisfy a new type of customer. In other words, PCS customers may not be the people who currently use cellular services because PCS may be their first wireless service. However, cellular providers are preparing for competition from PCS. Cellular carriers are reducing prices and packaging their services to better reflect customer preferences (e.g., high flat rates per month with more "free" minutes for customers who use their cellular phones extensively) and to better reflect what PCS providers might offer. The Commission expects the cost of cellular service to continue to decline as competition increases.

A number of services are currently being devel-
oped to compete with LECs in the local exchange. The Commission defined some of the services or devices being tested to include CT-2, CT-2 Plus, CT-3, PCN, wireless PBX, and wireless local loop. Although wireless service providers are the focus of this article, it is worth noting that the LECs also face competition from industries such as cable and telephone providers who plan to provide fiber for the "last mile" to the residential user's home. However, the cost of a fiber connection from a residence to the local exchange network is estimated to be as much as thirty percent higher than customer access to a wireless network. Thus, the possibility exists that wireless systems utilizing recent technological innovations may be positioned to compete with fiber for voice revenues and for data and video revenues as well.

A. New Wireless Services

Local Multipoint Distribution Service ("LMDS") is a technology that may provide services that compete with local exchange carriers in the provision of local exchange service.

Very high subscriber capacity for two-way video telecommunications is available through technology developed for use in the 28 GHz frequency band. Hub transceivers create small cells, typically six miles in diameter, which have the dual ability of transmitting to subscriber locations, and receiving the subscriber transmissions on a return path. This technology, combined with the availability of broadband microwave spectrum, results in sufficient capacity in the proposed LMDS system designs to provide wireless competition to the LECs. The Commission determined that "[n]ew providers will offer facilities-based competition to each other and traditional cable and telephone carriers - greatly enhancing customer choice.

Multipoint Distribution Service ("MDS"), or "wireless cable," uses over-the-air microwave facilities to transmit video programming. Wireless cable is generally a microwave station transmitting on a combination of MDS and Instructional Television Fixed Service ("ITFS") channels to numerous receivers with antennas (e.g., residences, businesses, government offices). The Wireless Cable Association International, Inc. estimates that there are 170 wireless cable systems in operation which serve approximately 700,000 homes, and experts predict that wireless cable will at least double its current subscriber base by the end of 1995. A MDS auction, the first auction of spectrum which will deliver video, began on November 13, 1995.

The Commission allocated 153 MHz of spectrum for PCS which is divided into three categories: broadband, narrowband, and unlicensed. PCS, which is licensed on a nationwide, regional, Major Trading Area ("MTA") and Basic Trading Area ("BTA") basis, is distinct from other mobile services, such as cellular networks, for several reasons.

Percent during the next two years . . . ." Id.

In re Amendment of the Commission's Rules to Establish New Personal Communications Services, Second Report and Order, 8 FCC Rcd. 7700, para. 8 n.11 (1993) [hereinafter PCS Second Report and Order]. The acronym CT-2 stands for a "cordless telephone second generation." Id.

Garrison & Taylor, supra note 1, at 28.

Id.

In re Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5 - 29.5 GHz Frequency Band, to Reallocation the 29.5 - 30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and For Fixed Satellite Services, Third Notice of Proposed Rulemaking and Supplemental Tentative Decision, 60 Fed. Reg. 43,740, para. 27 (1995) (to be codified at 47 C.F.R. §§ 21, 25 (1995)) [hereinafter LMDS Third NPRM/Tentative Decision]. Reply comments in this proceeding were extended to October 10, 1995. Id. The Commission tentatively concluded in the LMDS Third NPRM/Tentative Decision that it will permit both LMDS and Fixed Satellite Service ("FSS") systems to operate in the 28 GHz frequency band. An Order in response to these comments has not been released as of the publication of this article. Id.

Id. para. 27.

Id.

Id. para. 2. Services will include two-way radio, teleconferencing, telemedia, telecommuting, date services, and global networks. Id.

In re Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act, Report and Order, 10 FCC Rcd. 9589 (1995) [hereinafter MDS Report and Order]. MDS includes single channel MDS and Multichannel Multipoint Distribution Service ("MMDS"). Id. para. 1 n.2. There are a maximum of 33 microwave channels used for wireless cable in each market: 13 MDS channels and the excess capacity on up to 20 ITFS channels. Id. para. 6.

Id. para. 7.

Id. para. 8 n.13 (citing Comments of Wireless Cable Association International, Inc., to the FCC Rcd. in MM Dkt. No. 94.341, PP Dkt. No. 93-253, at 6 (Jan. 9, 1995)).

FCC Auction Bidder Information Package, Multipoint and/or Multichannel Distribution Service (MDS) - Authorizations for Basic Trading Areas, Nov. 13, 1995 (on file with author and available in Auctions Division, Wireless Telecommunications Bureau).

PCS Second Report and Order, supra note 37, paras. 54-55.

RAND McNALLY 1995 COMMERCIAL ATLAS AND MARKETING GUIDE (126th ed. 1995). The 51 MTAs and 487 BTAs...
PCS employs smaller cells than those of conventional cellular systems and operates at higher frequencies where there is less competition for spectrum. In addition, PCS networks have much greater system capacity and use less power. As a result, PCS phones are smaller and less expensive than their conventional cellular counterparts. Thus, PCS may be a fierce competitor for existing cellular and local exchange providers, especially for individual consumers who are not accustomed to phone portability from cellular systems. Many PCS industry representatives are optimistic about the numbers of customers who will subscribe to PCS. Personal Communications Industry Association ("PCIA") projected that by 2003 there could be nearly 31 million domestic PCS subscribers.

In 1993, the Commission granted pioneer’s preferences for companies to test PCS systems, one for narrowband PCS at 900 MHz (granted June 24, 1993) and three for broadband PCS at 2 GHz (granted December 23, 1993). The first PCS licenses already have been auctioned, and by the end of the next decade, PCS is estimated to be a fifty billion dollar industry, serving as many as 150 million people world-wide and sixty million people in the United States.

Wireless PBXs can be used to integrate a business’ wireline phones, pagers, cellular phones, wireless LANs, and other services. Thus, the major benefit of wireless PBX will allow telephone portability in office environments. The Commission has made available two 20 MHz blocks on an unlicensed basis (unlicensed PCS). Unlicensed PCS services are not considered mobile services by the Commission. They are designed for low-power, limited-range devices owned and operated by end users on their own premises. Services such as wireless LANs, wireless PBX and PDAs are considered unlicensed PCS services. One decisive factor in whether wireless services will render wireline service providers obsolete is the ability of wireless services to fully penetrate the voice market by offering substitutable voice services to business customers. Wireless PBXs, which are capable of providing the internal switching capacity for many business networks, are now being offered by most major telecommunications equipment manufacturers and have the potential to eventually substitute for wireline networks for many businesses.

B. Wireless Services Auctions

In 1993, Congress authorized the Commission to use competitive bidding to choose among mutually exclusive applications for initial licenses for most subscriber-based commercial wireless telecommunications services. To date, the Commission used competitive bidding for narrowband PCS, broadband

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60 Garrison & Taylor, supra note 1, at 28.
61 Id. Note also that cellular and enhanced specialized mobile radio service (ESMR) providers in the 800 and 900 MHz bands are currently developing microcell applications. Microcell technology permits the deployment of cell sites that are significantly smaller in their coverage area. With more cell sites, frequencies can be reused more often, thus increasing system capacity.

Barrett & Marchant, supra note 32, at 4.
62 Garrison & Taylor, supra note 1, at 28.

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64 In re Amendment of the Commission's Rules to Establish New Narrowband Personal Communications Services, First Report and Order, 8 FCC Rcd. 7162, para. 3 (1993); In re Amendment of the Commission's Rules to Establish New Personal Communications Services, Memorandum Opinion and Order, 9 FCC Rcd. 4957, para. 193 (1994). See also In re Amendment of the Commission’s Rules to Establish New Narrowband Personal Communications Services, Third Report and Order, 9 FCC Rcd. 1337, para. 7 (1994).
65 See FCC, BROADBAND PERSONAL COMMUNICATIONS SERVICES VISITORS AUCTION GUIDE, at Tab VII, Tab VIII (Dec. 5, 1994) [hereinafter VISITORS AUCTION GUIDE]. See also Barrett & Marchant, supra note 32, at 8 (citing Kurt A. Wimmer, Global Development of Personal Communications Services, COMM. LAW., Summer 1992, at 7).
66 PCS Second Report and Order, supra note 37, para. 18.
67 Id. para. 79.
68 Colmenares, supra note 53, at 41.
69 Garrison & Taylor, supra note 1, at 28.
70 Garrison & Taylor, supra note 1, at 28.
71 Garrison & Taylor, supra note 1, at 28.
PCS, and Interactive Video Data Service ("IVDS"). The Commission has also adopted competitive bidding rules for 900 MHz SMR service and MDS, and proposed competitive bidding rules for services such as 800 MHz SMR Service, LMDS, and 220 MHz Service. The Commission has expeditiously moved forward in fulfilling the Congressional mandates of "promoting economic growth and enhancing access to telecommunications service offerings for consumers, producers, and new entrants," through the use of competitive bidding.

The Commission allocated 120 MHz to broadband PCS, which is licensed in six bands. The A, B, and C blocks (each block containing 30 MHz MTA licenses), and the D, E, and F blocks (each block containing 10 MHz BTA licenses). On December 5, 1994, the Commission began an auction for ninety-nine broadband PCS MTA licenses (broadband PCS A/B Block auction). Originally, the Commission anticipated that three to six weeks would be needed to complete the auction. However, excluding holidays, the auction ran approximately sixty-two business days. The auction closed on March 13, 1995, after eighteen winning bidders generated $7,019,303,797 in revenues for the United States Treasury. The high bids for the top three markets were: $442.7 million (New York, B license); $493.5 million (Los Angeles, B license); and $385 million (Chicago, B license). Approximately three months later, on June 23, 1995, the ninety-nine broadband PCS licenses were granted. Winners of these licenses propose to build out their systems rap-

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69 In re Amendments of Parts 2 and 90 of the Commission's Rules to Provide for the Use of 200 Channels Outside the Designated Filing Areas in the 896-901 MHz and the 935-940 MHz Bands Allotted to the Specialized Mobile Radio Pool, Second Order on Reconsideration and Seventh Report and Order, 60 Fed. Reg. 48,913 (1995); see also In re Inquiry Relative to the Future Use of the Frequency Band 806-960 MHz and Amendments of Parts 2, 18, 21, 73, 74, 89, 91 and 93 of the Rules Relative to Operations in the Land Mobile Service Between 806-960 MHz, Memorandum Opinion and Order, 51 F.C.C.2d 945, paras. 43, 67 (1975), aff'd, NARUC v. FCC 525 F.2d 630 (D.C. Cir. 1976), cert. denied, 425 U.S. 992 (1976) (establishing SMR service in 1974 as a commercial dispatch service providing two-way voice communications on an allocated 14 MHz of spectrum in the 800 MHz band).

70 MDS Report and Order, supra note 44. See also FCC Auction Bidder Information Package, Multipoint and Multichannel Distribution Service (MMDS) Authorizations for Basic Trading Areas, Nov. 13, 1995.


72 LMDS Third NPRM/Tentative Decision, supra note 40, paras. 35, 37.

73 In re Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, Implementation of Sections 3(n) and 332 of the Communications Act, Regulatory Treatment of Mobile Services, Implementation of Section 309(j) of the Communications Act - Competitive Bidding, Second Memorandum Opinion and Order and Third Notice of Proposed Rulemaking.

74 In re Amendment of Rules to Establish New Personal Communications Services, GN Dkt No. 90-314, Memorandum Opinion and Order, 9 FCC Rcd. 4957, para. 17 (1994).

75 The 99 licenses included two in each of the 51 MTAs excluding the pioneers' preferences which were awarded in New York, Washington/Baltimore and Los Angeles/San Diego. FCC Grants 99 Licenses for Broadband PCS in Major Trading Areas, FCC News, June 23, 1995, at 1 [hereinafter FCC Grants 99 Licenses]. The nationwide narrowband PCS auction had six winning bidders for 10 nationwide licenses and raised a total of $617 million. See Visitors Auction Guide, supra note 55. The regional broadband PCS auction had nine winning bidders for 30 regional licenses, six in each of the five geographic regions. Id. Four of the winning bidders were designated entities. Infra, note 85 and accompanying text.


77 Id. This figure jumps to $7,736,020,384 when anticipated payments for pioneers preference awards are included. Id.

78 Id. at 1 (Attach. A).

79 FCC Grants 99 Licenses, supra note 71, at 1. The Commission noted the A/B Block licenses took 83 days to grant which signified a "significant increase in speed of licensing in
idly, offering service as early as the fall of 1996. Not all winners of the broadband PCS A and B block licenses will be direct competitors of the dominant LEC in any given region because many LECs are involved in the provision of PCS service. Unlike cellular service, the Commission did not impose separate subsidiary requirements on LECs who wish to provide PCS. The Commission only required LECs who planned to commence with PCS service to "implement an acceptable plan for nonstructural safeguards against discrimination and cross-subsidization." At least one such plan has already been filed by Pacific Bell Mobile Services ("PBMS"), a wholly-owned subsidiary of Pacific Bell, to ensure that regulated revenues will not subsidize PCS service, and that interconnection service will be provided in a non-discriminatory manner.

C. Obstacles to the Rapid Implementation of PCS

Of the six blocks allocated to broadband PCS, the C block contains 30 MHz licenses and the F block contains 10 MHz licenses. Blocks C and F are currently limited to bidders that qualify as "entrepreneurs." Obstacles to effective competition for both potential (C, D, E, and F block auction participants) and existing (A/B block auction winners) PCS licensees have recently become apparent. These problems create the possibility of slowing service to the public and include: the stay of the C block auction (for potential C block auction winners); prohibitions on fixed uses of PCS spectrum; and the costs of microwave user relocation.

1. The C Block Auction

Prior to the broadband PCS A/B Block auction, on November 23, 1994, the Commission released the *Fifth Memorandum Opinion and Order* in the Competitive Bidding Docket. This order revised some of the complex designated entity rules for Broadband PCS that were promulgated in previous Orders in the competitive bidding proceeding. The designated entity rules, as they have been defined, were designed to fulfill the Congressional mandate of providing opportunities for small businesses, rural telephone companies, and businesses owned by members of minority groups and women. Providing for these entities will ensure a diverse group of applicants participating in broadband PCS. The second broadband PCS auction, the C block auction, was designed to provide these opportunities for designated entities and entrepreneurs. In order to qualify to enter the auction, potential bidders must cer-

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tify compliance with financial caps. Only entities qualifying as entrepreneurs were permitted to enter the auction. 86 In addition, special provisions such as bidding credits were provided for qualifying designated entities. Initially these designated entities included small businesses, members of minority groups, and women.87

The C block auction was originally scheduled to begin on April 17, 1995, or thirty days after the completion of the A/B block auction, whichever came later. On January 6, 1995, Telephone Electronics Corporation ("TEC") filed an "Emergency Motion for Stay" (hereinafter "Emergency Motion") asking the Commission to stay its Competitive Bidding Fifth Report and Order88 and Competitive Bidding Fifth Memorandum Opinion and Order89 to the extent necessary to enable TEC to participate in the C block auction. At the same time, TEC challenged the Orders containing the rules for the C block auction in the United States Court of Appeals for the District of Columbia Circuit on the grounds that the provisions for designated entities were unconstitutional. On February 10, 1995, the Commission denied TEC's Emergency Motion. The Circuit Court, however, stayed the C block auction on March 15, 1995, two days after the close of the A/B block auction.90 The auction was rescheduled for August 2, 1995, after the Commission and TEC reached a settlement,91 and the stay was lifted.94

On June 12, 1995, just three days before applications to participate in the auction were due a second time (FCC Form 175s or short-forms), the Supreme Court ruled in Adarand Constructors, Inc. v. Peña95 that federal affirmative action programs must withstand a strict scrutiny judicial standard of review. In light of the Adarand decision, the Commission postponed the short-form filing date. On June 23, 1995, the Commission announced August 29, 1995 as the rescheduled date for the C block auction.96 Additionally, the Commission issued a Further Notice of Proposed Rule Making soliciting comment on proposed changes to the competitive bidding rules for the C block auction that would address the legal uncertainties raised by the Adarand decision.97

In response to the Competitive Bidding Further Notice, several commenters suggested ways in which the Commission could develop a supplemental record to assist in justifying the designated entity provisions.98 A new short form filing date and auction

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86 Competitive Bidding Fifth Report and Order, supra note 63, para. 7.
87 Id.
88 Id.
89 Competitive Bidding Fifth MO&O, supra note 81.
90 In re Implementation of Section 309(j) of the Communications Act - Competitive Bidding, Emergency Motion for Stay of Telephone Electronics Corp., in PP Dkt. No. 93-253 (Jan. 6, 1995).
92 Grant of Motion to Stay, Telephone Elec. Corp. v. FCC, No. 95-1015 (D.C. Cir. 1995).
93 In re Partitioning Plan of Bay Springs Telephone Company, PCS Primeco, L.P. and Peterson County Communications, L.P., Declaratory Order, 10 FCC Rcd. 6633 (Apr. 18, 1995). The Commission approved a partitioning plan that would allow Bay Springs Telephone Company (a subsidiary of TEC) to provide PCS service in part of the New Orleans/Baton Rouge MTA that was won in the A/B Block auction by PCS PrimeCo. The partitioning plan satisfied the Commission's rules because Bay Springs is a rural telephone company 47 C.F.R. § 24.720(e) (1995), and the requirements of 47 C.F.R. § 24.714(d)(1995) have been met.
96 FCC Sets August 29th Auction Date for 493 BTA Licenses Located in the C Block for Personal Communications Services in the 2 GHz Band, Public Notice (June 23, 1995) [hereinafter Auction Date]. See, e.g., Request for Comments in 800 MHz SMR Proceeding, Public Notice (July 25, 1995).
97 Auction Date, supra note 96.
98 In re Implementation of Section 309(j) of the Communications Act - Competitive Bidding, Further Notice of Proposed Rulemaking, 60 Fed. Reg. 34,201 (1995) [hereinafter Competitive Bidding Further Notice]. In the Competitive Bidding Further Notice, the Commission proposed to eliminate all gender- and race-based provisions contained in the competitive bidding rules for the C Block auction to avoid delay that may be caused by legal challenges to the existing rules that would likely result from Adarand, but emphasized that its goal of providing opportunity for women and minorities in the PCS industry remained unchanged. The Commission determined that special provisions for minorities and women were constitutional under the "intermediate scrutiny" standard of review articulated in Metro Broadcasting, Inc. v. FCC, 497 U.S. 547, 564-65 (1990). In Metro Broadcasting, the Court held that Congressionally mandated minority programs (even if not remedial in the sense of being designed to compensate victims of past governmental or societal discrimination) "[w]ere constitutionally permissible to the extent that they serve important governmental objectives within the power of Congress and are substantially related to achievement of those objectives." Id.
99 In re Implementation of Section 309(j) of the Communications Act - Competitive Bidding, Race & Gender Based Provi-
date were set. On July 18, 1995, the Commission released the Sixth Report and Order in the competitive bidding docket. This Order revised the C block auction rules to make them neither race nor gender-specific as the Competitive Bidding Further Notice had proposed.

In addition, the 49.9% equity option for attracting investment was extended to all bidders. Again, on July 27th, two days before the short forms were due, the D.C. Circuit granted a stay of the FCC’s amended equity structure rules for the C block auction (e.g., the provision of 49.9% equity option to all C block applicants) this time to Omnipoint Corporation (“Omnipoint”). The auction was stayed indefinitely pending the outcome of the case. Oral arguments were held on September 28, 1995 in the D.C. Circuit Court of Appeals and the court dissolved the stay that was granted to Omnipoint. In light of the court’s action, the Commission announced that the C block auction would commence on December 11, 1995.

On October 18, 1995, the United States Court of Appeals for the Sixth Circuit once again stayed the C Block Auction. On October 25, 1995, Justice Stevens, Circuit Justice for the Sixth Circuit, vacated the stay after finding that “the harm to the public caused by a nationwide postponement of the auction would outweigh the possible harm to Radiofone.” On October 30, 1995, the full United States Supreme Court declined to overturn Justice Stevens’ Order dissolving the Sixth Circuit’s stay. Thus, the short form applications were due November 6, 1995 and the auction was set to commence on December 11, 1995. The auction rules now offer special provisions to all small businesses, including those small businesses owned by members of minority groups and women, to avoid the problem of having to tailor them to a strict scrutiny standard.

The primary concerns for would-be C block licensees are the headstart afforded to A and B block operators who have already begun construction on networks, which will be functional by mid-1996, and the litigation uncertainty which may cause potential investors to turn down investment opportunities.


FCC Seeks Comment on Changes to C Block Auction Rules for Broadband PCS, FCC News, June 23, 1995, at 2. The short-form filing date was set for July 28, 1995, five business days after the rules were published in the Federal Register. Id.

Competitive Bidding Sixth Report and Order, supra note 99.

Id.

Omnipoint Corp. v. FCC, No. 95-1374 (D.C. Cir. 1995).

Id.

FCC Sets Auction Date of December 11, 1995 for 493 BTA Licenses Located in the C Block Band, Public Notice (Sept. 29, 1995).

Id.


Id.

One of the problems the Commission faces is providing a record to demonstrate specific acts of discrimination as required under a strict scrutiny test. Because PCS is a new service, there is no documentation as to how minorities and women have been affected in this service. One possibility is an industry-wide “Croson study.” See Richmond v. J.A. Croson Co., 488 U.S. 469, 491, 500, 509 (1989). Croson requires that a governmental unit seeking to use race or gender criteria would need to establish: (1) discrimination against persons in the class of individuals to be assisted by the program; (2) government participation in the discrimination, or passive participation in the otherwise established discrimination; (3) consideration of non-race or gender-based alternatives, remedies and the reasons for their rejection; and (4) evidence sufficient to focus a remedy with a limited duration to benefit groups experiencing discrimination and to minimize adverse impact on those affected by the remedy. Id. However, this project would be time consuming and expensive.

See, e.g., In re Deferral of Licensing of MTA Commercial Broadband PCS, Order, 10 FCC Rcd. 7780 (Apr. 12, 1995) [hereinafter First Deferral Order]. The Commission noted that auctioning the A and B blocks first would “in fact provide designated entities with important information about the value of PCS licenses that would assist them in attracting capital and formulating bid strategies.” Id. para. 4. Moreover, the Commission noted that the “overriding public interest in rapid introduction of service outweighed the risk of A and B block winners gaining a headstart advantage.” Id. The Commission responded to a petition requesting the Commission defer licensing the A and B blocks by declining to defer licensing. See Competitive Bidding Fourth Memorandum Opinion and Order, 9 FCC Rcd. 6858 (1994) (affirming that the Commission always intended to employ a sequence of auctions to license broadband PCS). The Commission received two pleadings in opposition to the First Deferral Order and seeking a stay of the A and B block license grants (CommOne and Go Communications, filing jointly; NAACP, NABOB and Percy Sutton, filing jointly). The Commission again declined to defer licensing. See In re Deferral of Licensing of MTA Commercial Broadband PCS, Memorandum Opinion and Order, 78 Rad. Reg. (P & F) 1209 (June 23, 1995) [hereinafter Second Deferral Order].

Indeed, the fear of litigation was one of the reasons cited by commenters responding to the Competitive Bidding Further Notice in light of Adarand who, even though they could qualify for the special provisions, stated that the Commission should eliminate all preferences for minorities and women and hold the
Early market entrants potentially will gain an advantage by catching the customer base that currently has an unfilled need for integrated wireless services. Although the question of who the major PCS players will be is still unresolved, time is of the essence, and C block licensees may be playing catch-up to major companies who have already infiltrated the local exchange market. The Commission’s decision to eliminate race and gender-based preferences was based in part on the idea that this action would avoid another stay of the auction which would diminish the ability of designated entities to compete if and when they win licenses. If this is the case, the public may benefit from rapid implementation of PCS service, but also lose, because the service providers will be the same few major telecommunications companies who already control other services in the local exchange market and who have won A/B block licenses. Even post-Adarand, FCC Chairman Reed E. Hundt stated:

...the C block auction] offers the greatest opportunity this country has ever known to get small, women and minority-owned businesses in on the ground floor of an emerging industry. Although Adarand has caused us to reevaluate some of our auction rules in light of the Supreme Court’s decision, we still believe that the auction represents a unique opportunity for all of us.

Although the stay of the C block auction will not affect the provision of PCS services by A/B block auction winners, it may affect the diversity and number of companies that compete with BOCs for local exchange market customers. "The Commission remains committed to diversifying ownership in the telecommunications industry in . . . emerging technologies, where the Commission believes that entrepreneurial opportunity in new industries is likely to be dominated by established firms, to the longer run detriment of the industry and the economy as a whole." If the Commission is committed to preventing the PCS industry from being dominated by established firms, it will have to act expeditiously to ensure that the C block auction gets underway. One opportunity, deferring grant of licenses won in the A/B block auction, has passed, despite numerous requests for license deferral both before and after licensing was complete. The ramifications of the delay in the C block auction remain to be seen.

2. Prohibition on the Provision of Fixed Services

Despite the delay of the C block auction, PCS promises to change the face of local exchange. A/B block auction winners recognize that part of the success of PCS service will be determined by the type of service PCS providers will be permitted to provide. Several parties have requested that the Commission clarify that PCS providers will be permitted to provide integrated fixed services along with their wireless offerings. Section 24.3 of the Commission’s rules provides the language addressing fixed uses. Section 24.3 allows PCS licensees to use fixed services only to the extent that the fixed use is ancillary to the mobile operations they provide. At this time, the Commission has not defined the term “ancillary” in this context. Thus, PCS licensees are uncertain as to the extent that fixed services will be considered ancillary to mobile operations.

The Commission noted, in adopting Section 24.3 of the rules, that the limited amount of spectrum allocated to PCS was available to meet the primary purpose of serving people who demand mobile services, and that the need for fixed services can generally be accommodated in other frequency bands or through other media.

The Commission stated, in a response to an inquiry concerning the use of fixed service in PCS,
that it expressly intended the definition of PCS to be sufficiently inclusive to accommodate a wide range of services and technologies, including new and creative applications. The Commission anticipates that PCS will be provided by a variety of technologies and will be integrated into, and work with, competing networks. The question then becomes whether “integrated” can be used interchangeably with “ancillary” for the purpose of fixed service use. It is unlikely that a PCS provider will attempt to establish a traditional “fixed” network similar to the wireline exchange, therefore PCS providers should be given the flexibility to use fixed services in whatever capacity they need to provide the best possible PCS service to consumers. Although, it seems that the Commission may be leaning towards interpreting Section 24.3 of the rules in this way. The Commission currently requires PCS licensees to seek a waiver to demonstrate that a fixed service best meets the demands of the service area.

The Commission can reasonably expect several waiver requests from wireless service providers who need to integrate fixed use into their systems in order to fulfill the needs of consumers. An interpretation of Section 24.3 of the rules allowing broad flexibility in the provision of fixed services would be in the public interest, because it would allow PCS providers to use all available forms of technology to develop their systems without having to worry about whether the system’s fixed service rules. This flexibility would help make PCS more competitive with landline LECs because the service would be more comparable. Nevertheless, the Commission has yet to clarify this issue even as providers begin to build out PCS systems. The answer the Commission provides will define the shape that PCS will take, and possibly the success of competition in the local loop from this service.

3. Microwave Relocation

The spectrum allocation for broadband (and unlicensed) PCS was a reallocation of fixed point-to-point microwave service frequencies. In the Emerging Technologies Docket, the Commission established a two-stage process for relocation of microwave incumbents currently operating on 2 GHz frequencies allocated to licensed broadband PCS. The first phase is a two-year voluntary negotiation period (three years for public safety incumbents) during which PCS licensees may negotiate with microwave incumbents regarding relocation, but incumbents are not required to relocate. The second phase is a one-year mandatory negotiation period (two years for public safety incumbents) during which the microwave incumbent must agree to relocation provided the PCS licensee meets its relocation obligations under the rules. The two-year voluntary negotiation period for 2 GHz microwave incumbents operating in the broadband PCS “A” and “B” blocks began on April 5, 1995, the date that the A/B block auction winners filed their long-form applications. Negotiation over relocation of microwave users may take much longer than was originally anticipated, and controversy over the best way to handle the process has already occurred. The Commission received a Petition for Rulemaking Report and Order and Third Notice of Proposed Rulemaking, 7 FCC Rcd. 6886 (1992).

Id. In re Amendment of the Commission’s Rules to Establish New Personal Communications Services, Fourth Memorandum Opinion and Order, 10 FCC Rcd. 7955 (1995). The Commission amended negotiation procedures for mandatory relocation of existing microwave facilities to provide for the use of independent estimates of the cost to replace an existing facility in resolving a dispute between licensees of existing facilities and new service providers. Id.

Wireless Bureau Announces Initiation of Voluntary Negotiation Period for A and B Block PCS Licensees and 2 GHz Incumbent Microwave Licensees, Public Notice (Apr. 19, 1995). Accordingly, the voluntary negotiation period for non-public safety microwave licensees in the A and B blocks expires on April 5, 1997. Id.

For public safety microwave licensees operating in the A and B blocks, the three year voluntary negotiation period expires on April 5, 1998. Id.

Phillips Luncheon Speech, supra note 4. Chairman
regarding a plan for sharing the costs of microwave relocation.\textsuperscript{131} PBMS stated that its goal in developing the plan is to "create an equitable cost sharing plan that avoids controversial determinations such as direct cost versus premium cost, degree of interference, and 'benefit' of relocation."\textsuperscript{138} Instead of separating direct and premium costs, PBMS proposes to depreciate relocation costs so that later entrants do not obtain a smaller cost.\textsuperscript{133}

On October 13, 1995, the Commission released a Notice of Proposed Rulemaking proposing a plan for sharing the costs of relocating microwave facilities operating on the 2 GHz band. The proposal is based on the PBMS proposal as modified by the Personal Communications Industry Association ("PCIA").\textsuperscript{134}

Although microwave relocation has not yet surfaced as an insurmountable problem, like the C block auction delay, it threatens to affect smaller PCS providers the most. Frankly, larger companies with deep pockets, although they are likely to engage in vigorous negotiation, can afford to relocate any and all incumbents on their spectrum. As the situation currently exists, although several PCS licensees may benefit from the relocation of a microwave link, there is no mechanism in place to share the cost among those who benefit - creating a potential "free rider" problem. Relocation may be more of an issue for small PCS companies, especially given the capital intensive nature of actually building out the PCS system. Certainly all potential PCS providers knew about the incumbent microwave users when bidding for spectrum began. Nevertheless, the outcome of the rulemaking allowing costs to be shared could potentially benefit smaller providers more than larger companies. However, if the Commission requires the first PCS providers to locate on a spectrum block to continue paying all relocation costs, this will cause more harm to smaller providers than larger ones.

### III. COMMISSION'S CURRENT REGULATORY POSITION ON COMPETITION IN THE LOCAL LOOP

As discussed in Part II of this article, the Commission is faced with several decisions (i.e., handling the C block auction, permissible fixed use clarification and microwave relocation costs) that will, in large part, determine how inclusive the group of new generation wireless service providers will be. Regardless of how inclusive the PCS providers group becomes, the Commission indicated an interest in promoting competition to LECs in the form of a "wireless local loop" and indicated that wireless local loop service could replace the "last mile" to the home with a radio link.\textsuperscript{136} The Commission stated that "[its] intention is to foster a market environment in which cellular and PCS licensees compete with a variety of telecommunications services" and it has taken action concerning PCS and in other proceedings to promote competition.\textsuperscript{136} For example, PCS licensees can use their spectrum to provide any type of mobile service which allows them to respond more effectively to market demand than to other commercial mobile radio service ("CMRS") providers (because other allocations tend to be for a specific type of service such as telephone or paging). Additionally, the Commission concluded that it has a significant interest in promoting the nationwide availability of number portability because this will, in turn, promote competition in the local exchange and the inter-


\textsuperscript{132} Id. at ii.

\textsuperscript{133} Id.

\textsuperscript{134} In re Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation, Notice of Proposed Rulemaking, Dkt. No. 95-157 (Oct. 13, 1995).


\textsuperscript{136} In re Amendment of the Commission's Rules to Establish New Personal Communications Services, Notice of Proposed Rulemaking and Tentative Decision, 7 FCC Rcd. 5676, para. 70 (1992) [hereinafter NPRM/Tentative Decision].
state telecommunications markets. In the CMRS proceeding, the Commission recognized that "[t]echnology and consumer demand, facilitated by [its] general policy not to restrict the services that can be provided over any particular band, are prompting commercial service providers to follow marketing strategies that blur the differences between the various services comprising the wireless marketplace." The Commission also noted that the distinction between services (such as voice and data) are disappearing, primarily because service providers are attempting to meet the demand of their customers for "one-stop shopping" (defined as the ability to buy a mixture of different mobile services from one carrier).

A. Recognizing Competition in Local Markets

In several recent proceedings, the Commission demonstrated its willingness to recognize that competition currently exists in the local exchange market. For example, the Commission recently granted Nynex a waiver of access charge rules. Nynex requested a waiver of Parts 61 and 69 of the Commission's rules to permit it to use different methods for assessing access charges. Nynex favored a comprehensive reform of the access charge and jurisdictional separation rules, claiming that "the existing rules impose special hardships upon Nynex because of the competitive market conditions" in a particular area in New York. The Commission concluded that "competitive developments in LATA 132, which comprises the New York City metropolitan area, [justified] a waiver." One Commissioner issued a separate statement in this proceeding to reiterate that the Commission "also [sought] to encourage competition in local telephone services. The waivers [the Commission] granted last month for Rochester Telephone represented one modest contribution on [the Commission's] part to the development of a more competitive local telephone marketplace." Today's action is another timely step forward. The Commission noted that state authorities are also moving toward creating competition in local exchange services. New York and Illinois are two states leading the effort to increase competition in the local exchange market, and others are following suit.

For example, "AT&T is testing local service in Rochester, NY." Surprisingly, within a couple of weeks after the AT&T plan was implemented, "3,000 customers signed up, quickly growing to 7,000 converts." AT&T's local service was ten percent cheaper than the local monopoly's and one customer stated, "AT&T calls constantly to see if I'm happy. I didn't hear a peep from the phone company for 23 years." If this response is any indication of customer sentiment, LECs may need to start paying more attention to customers now, before

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138 In re Implementation of Sections 3(n) and 332 of the Communications Act, Third Report and Order, 9 FCC Rcd. 7988, para. 56 (1994) [hereinafter CMRS Third Report and Order].
139 Id.
141 Id. para. 1.
142 Id.
143 Id.
144 In re Rochester Telephone Corporation Petition for Waivers to Implement Its Open Market Plan, Order, 10 FCC Rcd. 6776 (1995) [hereinafter Rochester Petition] (granting Rochester Telephone a waiver of Part 69 of the rules, enabling it to recover three types of access charges: the subscriber line charge, the common carrier line charge, and the charge for changing a presubscribed interexchange carrier). Rochester Telephone characterizes this new form as better suited to its new structure, having recently organized itself to facilitate local exchange competition in and around Rochester, New York. Furthermore, this new form facilitates a competitive local marketplace. Id. US West requested a similar waiver to enable it to provide unbundled common lines. The Commission sought comment on the request. See also Pleading Cycle Established for Comments on US West's Petition for Waiver of Commission's Rules to Establish Unbundled Common Lines, Public Notice (July 8, 1995).
145 Nynex Waiver Order, supra note 140, para. 4 (Separate Statement of Commissioner Susan Ness, stating that,"[o]ur decision today is testimony to the importance of cooperation in the construction of a competitive framework.").
146 Rochester Petition, supra note 144. For example, the New York City Public Service Commission ("NYPSC") permitted competition in the provision of local exchange service. The NYPSC has certified new competitive entrants as LECs and has given them rights comparable to those of incumbent LECs such as Nynex. Id.
147 Berniker, supra note 3, at 14. Cablevision Systems Corp. in Connecticut, "through its Cablevision Lightpath subsidiary, has applied to Connecticut regulators to offer phone service in the state." Id. Wilt Hildenbrand, vice president of technology, Cablevision systems Corp., stated "[s]tructurally, we think we can do it, but there's still a lot we have to learn about offering residential telephone services." Id. Simultaneously, "Southern New England Telephone, the leading telco in Connecticut, plans to compete directly with cable operators in the state with video, data and voice services." Id.
148 Keller, supra note 8, at A6.
149 Id.
150 Id.
other companies get in on the ground floor. "Reaching out to local communities, AT&T has installed 880 communications 'nodes' or local network points nationwide, about five in each Bell calling area."  

In Illinois, Ameritech proposed opening its market in exchange for entry into long distance. The PCS proceeding, the Commission recognized that allowing a few large entities to dominate PCS through nationwide licenses could prove to be anticompetitive and hinder the Commission's efforts to promote competition in the local market. However, as previously discussed, several recent events indicate the PCS market may indeed be dominated by a very few "large entities."

B. Cellular/PCS Cross-ownership

The cellular/PCS cross-ownership rules were designed to foster competition in the wireless services market and to allow more than just the major telecommunications companies to participate in wireless services. PCS spectrum was originally allocated, in part, to dissolve the duopoly created by the two-player cellular system. Although the cellular/PCS cross-ownership rules may create a limited delay for some A and B block winners in their efforts to establish PCS systems, thus creating more time for LECs to prepare to compete, the rules are important to the fair distribution of wireless services opportunities.

Several companies chose to divest before the auction, to gain bidding eligibility. Pacific Telesis conducted a 1.5 billion dollar initial public offering spin-off of the company's wireless communications subsidiary, now called AirTouch Communications. Sprint Corporation ( "Sprint"), a partner in a PCS joint venture with WirelessCo, L.P., and PhillieCo, L.P., holds twenty-nine PCS licenses and must divest some of its cellular markets to comply with the Commission's auction rules. Sprint recently requested that the Commission grant a limited waiver of the ninety day deadline for completion of cellular divestiture set forth in Section 24.204(f) of the Commission's rules. PCS license winners cannot hold more than a twenty percent interest in a cellular provider that serves ten percent or more of the population in a given MTA. Unless the Commission grants a waiver of the divestiture rules, Sprint argued that it will have to reduce its market ownership by 1.7 million pops in Dallas, Philadelphia, and Des Moines MTAs by September 21, 1995. Sprint contended that a waiver would prevent the delay of prompt introduction of PCS, therefore not granting a waiver would be contrary to the public interest.

The Commission granted a similar waiver request to Cincinnati Bell Telephone Company ("CBT") and, in doing so, stated that "Section 24.204 [was] designed to increase the number of affiliated competitors in each PCS market and to safeguard the competitiveness of those markets . . . ." However, CBT's waiver differed from the Sprint request because it was filed prior to the auction and requested permission to bid in the auction. CBT could not divest prior to the auction because it was involved in litigation in the Delaware Chancery Court, thus, the timing of the resolution of this matter was beyond CBT's control. The Commission denied CBT's additional request to retain its impermissible partnership interests and unconditionally hold an in-market 30 MHz license, indicating the Commission's firm belief that long-term cross-ownership of these two competing wireless services would greatly reduce competitive forces in any given market.

On September 21, 1995, the Commission granted Sprint a waiver through September 21, 1996 to com-
complete a spin-off of its cellular holdings to come into compliance with the Commission’s divestiture rules. The Commission conditioned the waiver upon Sprint’s submission of a plan to the wireless Telecommunications Bureau’s Commercial Wireless Division within sixty days of the publication of the Order in the Federal Register. The plan must demonstrate how Sprint will achieve complete separation between the activities of Sprint Cellular and Sprint Telecom (the PCS subsidiary that is a partner in WirelessCo, a PCS provider) in areas served by Sprint Cellular. The Commission granted the waiver because it found “that grant of the waiver would be in the public interest” and that “[a] spin-off of the entire Sprint cellular company to its shareholders is far more pro-competitive than the more limited divestiture required by Section 24.204 of the Commission’s rules.”

Radiofone, Inc., a cellular licensee in southeast Louisiana, also filed a waiver request with the Commission, requesting that the Commission waive Sections 20.6 and 24.204 of the rules to permit Radiofone to participate in the upcoming C block auction and bid on the three Louisiana BTAs in which Radiofone and its affiliates provide cellular service. Radiofone directly holds four cellular licenses in southeast Louisiana, and indirectly controls some southeastern Louisiana licenses. Thus, absent a waiver, if Radiofone were a successful bidder in the C block auction, it would be in violation of Section 24.204 of the Commission’s rules unless Radiofone divested the required amount of cellular spectrum. In addition, if Radiofone were to obtain the BTAs of its choice, having 30 MHz of PCS spectrum combined with its existing 25 MHz of cellular spectrum in the same region would make Radiofone in violation of Section 20.6 (the spectrum aggregation cap).

Radiofone contends that a waiver would be in the public interest because, inter alia, Radiofone would be able to bring new technologies to its customers in the southeastern Louisiana region through its expertise in cellular service, and Radiofone would be permitted to utilize the economies of scale and scope that would be realized from providing PCS in areas where it currently provides cellular service.

C. Wireline Exchange in SMR Service

Recently, the Commission eliminated the prohibition on wireline telephone common carriers which prevented them from holding or controlling SMR and commercial 220 MHz licenses. In addition, the Commission eliminated its prohibition on the provision of dispatch service by providers of CMRS, including cellular licensees, other licensees in Public Mobile Services, and PCS licensees. The prohibition on wireline carriers was intended to reduce incentives for wireline carriers to engage in discriminatory interconnection. In repealing the prohibition, the Commission stated that “wireline participation would serve the public interest by promoting competition, lowering costs, and expanding consumer choice.” The Commission acknowledged that it was “unaware of any pending complaints alleging discriminatory interconnection filed by unaffiliated cellular providers against wireline carriers with cellular affiliates.” The absence of complaints may be interpreted as a showing of good faith that can be imputed as wireline carriers pursue dispatch in the future. By allowing wireline carriers to participate in SMR and 220 MHz, the Commission indicated that it is examining every aspect of telecommunications service to consider whether competition is being promoted.

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163 *Sprint* *Waiver Request*, supra note 156.
164 Id. para. 20.
165 Id. para. 16.
166 Radiofone’s request differs from Sprint’s Request in one crucial aspect - it requests a permanent waiver of the rules, as opposed to an extension of time to divest its cellular interests. See Letter from Lawrence D. Garvey to Rosalind K. Allen, Chief, Commercial Radio Division, Wireless Telecommunications Bureau, FCC (July 27, 1995) [hereinafter *Radiofone Waiver Request*].
168 *Radiofone Waiver Request*, supra note 166.
170 Id.
171 Id.
172 *Radiofone Waiver Request*, supra note 166.
174 Id. para. 1 n.3.
175 Id. para. 18. LECs and LEC affiliates providing CMRS are subject to the accounting safeguards in Part 64 of Commission’s rules concerning cost allocations and affiliate transactions and to the accounting requirements set forth in Part 32 of the Commission’s rules. Id. para. 23 n.75.
176 Id. para. 22.
D. Competition in LMDS

In the LMDS proceeding, the Commission considered whether LECs should be permitted to be LMDS licensees. Parties commenting in favor of allowing LECs to participate in LMDS contend that LECs do not have monopoly power in the context of LMDS and, therefore, should be given the opportunity to provide LMDS service. In addition, they contend LEC participation would benefit the public interest (i.e., resources and expertise would allow LECs to provide LMDS to the public rapidly). Moreover, commenters argued that imposing restrictions would be beyond the Commission's authority.

The Commission tentatively concluded that there are no statutory or regulatory restrictions that prohibit a LEC from holding an interest in a wireless cable operator or LMDS licensee that does not otherwise meet the statutory definition of a cable system. The Commission concluded, and the D.C. Circuit upheld the conclusion, that the telco-cable cross-ownership ban does not apply to wireless cable facilities. In addition, the Commission asked for comments on such issues as: (1) the extent this spectrum (allocated for LMDS) can be used to provide service that is competitive with local telephone service, particularly the provision of access services to residential and business subscribers; and (2) the possibility that allowing a LEC to acquire LMDS licenses in its service area will eliminate a potential and important new source of competition in the local exchange market. The Commission goes on to ask whether, "given the LECs current monopoly status with regard to the provision of local exchange service, would LECs be likely to acquire LMDS spectrum as a means of forestalling competitive entry in the local exchange market?"

At least in this proceeding, the Commission is still basing its solicitation of comments on "LECs current monopoly status."

In contrast, the Commission’s rulings in other proceedings, and indeed in the LMDS proceeding, have indicated the Commission’s belief that competition already exists in the local exchange, and that competition is currently developing at a rapid pace. However, the Commission’s reference to LECs “current monopoly status” may be an indication that the Commission is not yet ready to abandon the monopoly theory entirely, at least until competition evolves from its current state. This situation creates the cyclical argument that competition cannot evolve fully until the Commission recognizes that competition currently exists. Therefore, LECs do not enjoy monopoly status. As a solution, the Commission should eliminate regulatory barriers that prevent BOCs from fully competing with new services. “Incumbent LECs seek deregulation as soon as competition is allowed in order to have the flexibility to compete . . . [n]ew LECs argue entry only provides the illusion of competition until the essential technical and economic prerequisites have been established and effective competition emerges.” Part of fostering competition includes allowing LECs to diversify their service offerings.

In the same proceeding, the Commission noted that “cable operators [were] emerging as a potentially significant source of competition to LECs in the provision of local telephone services.” The Commission then sought comments on whether “LMDS spectrum might be an important adjunct to cable facilities that can be used in the provision of

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177 LMDS Third NPRM/Tentative Decision, supra note 40.
178 Id. para. 99 n.96.
179 Id. para. 100.
180 American Scholastic TV Programming Found. V. FCC, 46 F.3d 1173 (D.C. Cir. 1995).
181 LMDS Third NPRM/Tentative Decision, supra note 40, para. 100 nn.98, 99.
182 Id. para. 101.
183 Id.
184 See, e.g., Nynex Waiver Order, supra note 140.
185 LMDS Third NPRM/Tentative Decision, supra note 40, para. 106.
187 LMDS Third NPRM/Tentative Decision, supra note 40, para. 106.
local telephone services in competition with LECs. In addition, the Commission contends that MDS licensees may find the two-way capacity of LMDS services appropriate for the provision of local telephone services in competition with LECs. It therefore sought comments on whether MDS licensees should be prohibited from acquiring an LMDS license within their service areas, "[i]n particular, [the Commission requested] parties' comments on whether antitrust issues would be raised by the same entity holding both types of licenses capable of providing wireless cable competition." The Commission's resolution of the comments in this proceeding will be telling in the analysis of just how much competition in the local loop the Commission currently envisions and anticipates for the near future.

E. Universal Service

The phrase "universal service" was reportedly first coined in 1910 by Theodore Vail, President of AT&T. In the context of telephone service, universal service is reflected in "the goal of at least one telephone with private line service in every home in America." Today's definition of universal service is still unsettled. Definitions range from basic dial tone to ISDN to broadband services yet to be determined. Universal service has become an important point of contention as the local exchange marketplace becomes more competitive and includes new providers using new technologies. The issue of how to handle universal service must be addressed as new services penetrate the local market, in order for the transition to competition in the local market to be complete. The Commission implemented a number of universal service programs that seek to promote the availability of telephone service to all members of the public. The BOCs, in particular, need the Commission to address this issue to prevent them from carrying the burden of universal service while other wireless competitors reap the benefits. Some states have already addressed this issue in opening up their local markets. "Maintaining universal service has been the single most constant theme in Judge Greene's [MFJ] waiver jurisprudence" during the past decade. Federal and state regulators need to decide how universal service should be defined (and how existing programs should be modified) in the new competitive environment.

IV. LEC STRATEGIES TO COMPETE

A. Background

115 billion dollars is collected annually by local exchange carriers. About $28 billion of this is for access charges. "Toll calling represents another $12 billion of the market and local service is about $48 billion." The remaining $27 billion is comprised of cellular [service], directories, international [calls] and other services [e.g., equipment sales]. Although BOCs are prohibited from providing long distance services from one LATA to another, they can charge companies who provide the service for use of their local exchange facilities.

LECs will continue to hold a market share in the
local exchange market due to their existing infrastructure, experience in advertising and marketing, and name recognition in the region (i.e., loyal customer base). The question is, how much will wireless services cut into their profits? Some industry experts believe that “wireless access may be cheaper over the long run than copper wire . . . [and] wireless access will take a dominant share of the business.”

Industry experts believe in the survivability of LECs in the wired local exchange because competition “will inevitably drive down access charges and toll rates, redistribute the universal service subsidy among all service [providers] . . . and cause the local exchange carriers to cut costs.” Even if the wired connection does not become cheaper than wireless access, analysts posit, wireless access may not need to be cheaper to survive because “the local loop is making the transition from a slow-speed, narrow-band connection to a high-speed broadband connection.”

“Fixed costs are a source of economies of scale that is . . . significant in [the] telecommunications [industry].” “The fixed costs of establishing a network system are the costs of facilities such as transmission lines, costs which are not sensitive to the level of transmission on the lines.” The BOCs already have their networks in place and will be able to use those networks as they prepare to provide integrated services. BOCs are responding to imminent competition by building and buying new facilities. By 1996, BellSouth plans to deploy broadband network of its own and have Atlanta covered with fiber. US West’s purchase of twenty-five percent of Time Warner for $2.5 billion gives it a stake in Time Warner Cable, as well as Time Warner’s affiliated competitive access providers (“CAPS”).

B. Integrated Wireline and Wireless Service Offerings

The RBOCs have recently looked at innovative ways to provide competition in the local exchange market outside of the region where they serve as the LEC. The A block cellular operator in Chicago, Illinois, Southwestern Bell Mobile Systems (“SBMS”), the cellular affiliate of Southwestern Bell Telephone, contends that it will keep its customers even after the PCS players, AT&T Wireless and PCS PrimeCo L.P., introduce service. However, SBMS is taking steps to ensure its ability to compete. On June 21, 1995, SBMS filed a Declaratory Ruling Request with the Commission seeking clarification of Section 22.903 of the Commission’s rules regarding limitations on the provision of out-of-region landline exchange services. SBMS requested that the Commission clarify that neither Section 22.903 nor any other section of the Commission’s rules imposes separate subsidiary or other structural safeguards on the provision of out-of-region landline local exchange service by the cellular affiliate of a BOC.

Section 22.903 is an example of a structural safeguard that was adopted before the Commission or the courts envisioned that BOCs would have the ability to provide the type of integrated service SBMS wishes to provide. The original version of Section 22.903 was adopted as Section 22.901 in 1981, when the Commission amended Part 22 of its rules to provide for the authorization of two cellular licensees in each market — one wireline carrier and one non-wireline carrier. In order to deter wireline carriers from using their market power to engage in anticompetitive practices in the provision of

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908 Id.
909 Id.
910 Id. at 20-21.
911 Spulber, supra note 1, at 31.
912 Id. at 31-32.
913 John S. Harrison, Assault on a Stronghold, FORT., June 15, 1994, at 38.
914 Id.
915 Id.
916 Sakelaris, supra note 34.
917 Section 22.903 of the Commission’s rules was amended effective January 1, 1995. See also In re Revision of Part 22 of the Commission’s Rules Governing the Public Mobile Services, Report and Order, 9 FCC Rcd. 6513 (1994). See also 47 C.F.R. § 22.903(a),(b)(1994). SBMS argued that “the [Commission’s] rules permit the cellular affiliate of an RBOC, acting on its own behalf or through a closely-integrated corporate affiliate, to provide landline local exchange service, both indirectly (through resale) and directly through the ownership or lease of landline local exchange facilities, provided that the proposed service is outside the region in which the BOC affiliated with the cellular carrier is the . . . LEC.” SBMS Declaratory Ruling, supra note 12, para. 1.
cellular service, the Commission required all wireline carriers to establish separate subsidiaries to provide cellular service.\textsuperscript{19} Section 22.901(b) was also added to the rules and stated, in pertinent part, that wireline cellular licensees “may not own facilities for the provision of landline telephone service.”\textsuperscript{20} In 1981, the two available services were wired local exchange and cellular service. A service that would integrate wireless and wireline services was not contemplated. Separate subsidiary requirements were placed on all wireline carriers to prevent them from “using predatory pricing tactics or misallocating the shared costs of cellular and conventional wireline service . . . .”\textsuperscript{21}

In 1982, the Commission changed the rule to apply separate subsidiary requirements for cellular service only to AT&T because the costs of structural separation for carriers unaffiliated with AT&T outweighed the potential benefits stemming from the separate subsidiary requirement.\textsuperscript{22} The Commission concluded that informal complaint procedures, applied in addition to the strict interconnection requirements, would adequately protect against improper activity by these cellular carriers.\textsuperscript{23} Restrictions were placed on AT&T because the Commission determined that AT&T’s size and dominant position in the telecommunications industry (i.e., monopoly power) gave it the unique ability to engage in anticompetitive activities with respect to cellular service that would be difficult to detect absent structural separation rules.\textsuperscript{24} The Commission noted that: (1) the structural safeguards imposed on AT&T would prevent any cross-subsidization or interconnection abuses; and (2) the costs of structural separation for AT&T were duplicative staffs and diseconomies resulting from separate transmission facilities.\textsuperscript{25} In 1983, post-divestiture, the Commission transferred the separate subsidiary requirements to the BOCs.\textsuperscript{26}

SBMS proposed to provide what it described as “competitive landline local exchange” (“CLLE”) service in some or all of the markets in which it currently provides cellular service.\textsuperscript{27} According to SBMS, this would enable SBMS to offer “one-stop shopping” to consumers through integrated offerings of CLLE and wireless services.\textsuperscript{28} “To provide CLLE on a competitive and cost-effective basis, SBMS proposed to integrate landline facilities with its existing cellular network and switches.”\textsuperscript{29} SBMS would then be able to combine “cellular and CLLE operations such as credit confirmation, billing and collection, customer care, and financial control,” thus providing a package comparable to PCS service.\textsuperscript{30}

SBMS contended that it was probable that PCS PrimeCo and other competitors would seek to provide similar integrated services in competition with SBMS in Southwestern Bell’s in-region territories.\textsuperscript{31} SBMS further noted that these companies (including PCS PrimeCo which consists of four BOCs) would have no separation requirements.\textsuperscript{32} According to SBMS, CLLE service would provide a competitive alternative to existing LECs in the markets where it was offered.\textsuperscript{33} SBMS asserted it had neither monopoly power nor market influence outside the region in which Southwestern Bell was the incumbent LEC.\textsuperscript{34} As previously noted, the question of whether BOCs still maintain monopoly power in-region is currently at issue given new local

\textsuperscript{19} Id.

\textsuperscript{20} 47 C.F.R. § 22.901(c)(1)(1994).

\textsuperscript{21} 1981 Order, supra note 218, para. 48.

\textsuperscript{22} In re Inquiry Into the Use of the Bands 825-845 MHz and 870-890 MHz for Cellular Communications Systems and Amendment of Parts 2 and 22 of the Commission’s Rules Relative to Cellular Communications Systems, Memorandum Opinion and Order on Reconsideration, 89 F.C.C.2d 58, 60 (1982) [hereinafter 1982 Order].

\textsuperscript{23} Id. paras. 45-46.

\textsuperscript{24} Id. para. 46.

\textsuperscript{25} Id. paras. 43-45.

\textsuperscript{26} In re Policy and Rules Concerning the Furnishing of Customer Premises Equipment, Enhanced Services and Cellular Communications Services by the Bell Operating Companies, Report and Order, 95 F.C.C.2d 1117, paras. 57-59, 90 (1983), aff’d sub nom. Illinois Bell Tel. Co. v. FCC, 740 F.2d 465 (7th Cir. 1984).

\textsuperscript{27} SBMS Declaratory Ruling, supra note 12, para. 8. “SBMS currently provides cellular service in several markets [outside of SWBT’s LEC service area] including Chicago, Boston, Washington/Baltimore, [and several markets in upstate New York]. SBMS proposes initially to provide integrated cellular and CLLE services in Rochester, New York.” Id. at i-ii. SBMS has also applied with the Illinois Commerce Commission for permission to provide CLLE service in the Chicago area. Id. at i n.1.

\textsuperscript{28} For example, CLLE users would potentially be able to use a hand-set that operates as a landline-based cordless telephone inside a building and as a cellular telephone when taken outside. Id. at 8.

\textsuperscript{29} Id. para. 19.

\textsuperscript{30} Id. SBMS intends to offer customers “one-stop shopping” and unified billing for combinations of wireline and wireless service. Id.

\textsuperscript{31} Id. at n.51.

\textsuperscript{32} Id.

\textsuperscript{33} Id.

\textsuperscript{34} SBMS noted that it was not seeking to acquire the existing LEC in any market, rather SBMS would be in direct competition with the incumbent LEC. Id. para. 2 n.3.

\textsuperscript{35} Id.
exchange market competitors.

On October 25, 1995, the Commission denied SBMS's Declaratory Ruling request but granted SBMS a waiver of Section 22.903. Thus, SBMS would be permitted to offer integrated services using its existing cellular facilities, systems and personnel to compete directly with incumbent LECs and other wireless service providers in the local exchange market. Denial of the declaratory ruling means that other BOCs will need to request similar relief if they wish to provide similar CLLE packages. In granting SBMS a waiver, the Commission stated that "[it found] merit in SBMS's contention that when the language in Section 22.903 was first adopted, the Commission did not contemplate RBOCs providing out-of-region cellular service." In addition, the Commission found that, because SBMS is structurally separate from Southwestern Bell Telephone, there was no need to impose additional structural separation requirements on SBMS. Moreover, the Commission reasoned that there was little risk of SBMS obtaining preferential local exchange access in areas not served by SWBT and that requiring SBMS to create a structurally separate entity to provide CLLE would impose a significant and unnecessary regulatory burden on a potentially valuable service.

On August 25, 1995, BellSouth Corporation ("BellSouth"), filed a request similar to that of SBMS, requesting authorization to resell cellular service without being subject to structural separation requirements contained in Section 22.903 of the Commission's rules. BellSouth's request differed from SBMS's Declaratory Ruling request however, because BellSouth did not specify whether it was seeking authority to resell cellular service both in-region and out-of-region. In addition, grant of the request would allow BellSouth to buy cellular service from its own cellular subsidiary. Thus, as a reseller, BellSouth could potentially obtain service from one or both of the two licensed carriers in a market at the same wholesale price available to any other similarly situated reseller. In the fourteen years since the rule was adopted to protect the cellular industry from potential cross-subsidization and discriminatory interconnection practices by LECs, BellSouth claimed the Commission never found any evidence of wireline cross-subsidization of cellular service. The Commission requested and received comment (both in opposition and in support) on this request. Not surprisingly, the majority of comments in support of the request were filed by RBOCs or their cellular affiliates who may wish to provide similar service in the future, whereas the comments in opposition to the request were filed by new PCS providers and companies such as MCI and Nextel, that believe that granting a request such as this would be anticompetitive given the lack of actual competition currently in place in the local exchange. BellSouth contended that authorization to resell cellular service was needed immediately to permit BellSouth's PCS subsidiary to develop a working business and a customer base before it completes the construction of its PCS network.

BellSouth included a chart in its authorization request illustrating that "[BOCs] are effectively precluded from designing end-to-end networks and organizational structures to deliver services in the most efficient manner possible." Among other services that BellSouth determines BOCs are prohibited from providing, BellSouth pointed out that AT&T, Sprint (including the PCS venture WirelessCo, L.P.) and GTE were all permitted to provide cellular service, whereas BOCs cannot provide even cellular resale

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356 In re Motion of Southwestern Bell Mobile Systems, Inc. for a Declaratory Ruling that Section 22.903 and other Sections of the Commission's Rules to Permit the Cellular Affiliate of a Bell Operating Company to Provide Competitive Landline Local Exchange Service Outside the Region in which the Bell Operating Company is the Local Exchange Carrier, Memorandum Opinion and Order, DA 95-1572 (1995).
357 Id. para. 19.
358 Id. para. 18.
359 Id.
360 Id. para. 19.
361 In re BellSouth Corporation Request for Authorization to Engage in Resale of Cellular Service Without Structural Separation Pursuant to Section 22.903 of the Commission's Rules, Request for Resale Authorization, (1995)[hereinafter BellSouth Request](on file with author). BellSouth noted that structural separation rule deprived BellSouth of the ability to offer its customers one-stop shopping for wired and wireless services. BellSouth argued that circumstances have changed dramatically since structural separation requirements were adopted. On June 22, 1995, the Wireless Telecommunications Bureau issued a declaratory ruling in response to BellSouth's request for clarification of the scope of the cellular structural separation rule. In re BellSouth Corporation, BellSouth Telecommunications, Inc., BellSouth Cellular Corp., Petition for Declaratory Ruling, DA 95-1401 (June 22, 1995).
362 BellSouth Request, supra note 240, at 1.
363 Id.
364 Id. at 1.
366 BellSouth Request, supra note 240, at 20.
367 Id. at 22.
without the use of a separate subsidiary. BellSouth did not distinguish itself from providers such as GTE and AT&T and requested that the Commission treat BellSouth in a similar manner to GTE regarding structural separation requirements.

On October 11, 1995, Ameritech Communications Inc. ("ACI") requested a limited waiver of Section 22.903. ACI is a newly-formed, structurally separate subsidiary of Ameritech Corporation that is seeking authority to provide wireless and wireline services, both long distance and local, as a facilities based carrier and through resale on an unseparated basis. The Wireless Telecommunications Bureau established a comment cycle which closed on November 9, 1995.

Although the requests of Southwestern Bell, BellSouth, and Ameritech were all unique, the Commission should anticipate similar waivers from other BOCs and BOC affiliates as they seek opportunities in regions other than their own and as they strategize to develop integrated service packages. For example, Bell Atlantic and US West supported BellSouth’s request and proposed that the Commission extend relief to all the BOCs. The Commission must determine whether competition from new services and service providers does in fact take away the use of a separate subsidiary. BellSouth did not distinguish itself from providers such as GTE and AT&T and requested that the Commission treat BellSouth in a similar manner to GTE regarding structural separation requirements.

C. PCS Joint Ventures

PCS is generally viewed by the local exchange carriers as a way to extend the reach of the local public switched telephone network. Consequently, these companies have teamed up with other service providers to offer PCS. PCS licensees include a number of cable, wireline telephone, and cellular telephone company consortia, including WirelessCo, L.P. (Sprint Telecommunications, Inc., Cox Cable and Comcast Telephony), PCS PrimeCo, L.P. (Bell Atlantic Personal Communications, Inc., NYNEX PCS, Inc., AirTouch Communications, Inc., and US West, Inc.), and AT&T Wireless.

In the Chicago market, AT&T Wireless and PCS PrimeCo won broadband PCS MTA licenses. AT&T Wireless is planning to offer “in-building wireless” service which gives customers a single phone they can use in their office complex and at home, under both flat and mobile rates. This service allows AT&T a way to get back into the provision of local services. It is highly unlikely that PCS PrimeCo will offer a competing service such as this because it has a disincentive to compete with the incumbent LEC. BOCs do need to be mindful of the spectrum aggregation rules adopted by the Commission.

Bell Atlantic, NYNEX, and Pacific Telesis Group announced the formation of a joint venture into interactive video networks in October of 1994. This joint venture, Tele-TV, plans to compete with cable TV companies by delivering a combination of cable, video-on-demand and other interactive services using wireline and wireless technologies. Tele-TV could...
potentially service more than thirty million homes in six of the top seven markets.261 "Ameritech, BellSouth and Southwestern Bell Cellular announced a definitive agreement with Disney Corporation to develop and package video programming and interactive services."262 Companies are also forming consortiums to participate in the C block auction for PCS, including many rural telephone companies. For example, Roseville Telephone Company recently announced a PCS consortium called West Coast PCS L.L.C., which intends to pursue BTA licenses in California, Oregon, Washington, and Nevada.263

D. Mergers

Beginning in 1993, there have been a series of proposed mergers and alliances that will position major telephone companies to compete for the future.264 "The advent of PCS is having a profound effect on the present marketplace by being a precipitating factor in major mergers and joint ventures in the wireless industry.265 BOCs need to position themselves to compete and need to form alliances for this purpose. In September 1993, US West completed the acquisition of a 25.51 percent stake in Time Warner Entertainment.266 The Commission granted an eighteen-month waiver of its cable-telco cross-ownership rules to enable Time Warner to divest its eight cable systems located in U.S. West's region.267 This alliance will enable US West to compete with other local exchange telephone companies by providing integrated telephone and cable operations. LECs are not the only providers determined to provide integrated wireline and wireless services. The recent AT&T/McCaw Cellular merger could prove to be a threat to the BOCs.

In November 1992, McCaw Cellular Communications, the largest cellular telephone service provider in the United States, agreed to a one-third acquisition by AT&T, the largest interexchange carrier in the United States, and to grant AT&T the option to acquire eventual control of McCaw. AT&T announced that it would exercise its option to acquire 100 percent of McCaw.268

The 1994 merger, a $12.6 billion acquisition,269 in effect recreates for certain markets a more technologically advanced version of the former Bell System. A fiber-optic interexchange network will be joined at each end by a wireless version of the local exchange. The wireless access lines are, for the time being, still dependent on the LEC’s wire-based local loop for switching.270

However, for AT&T and McCaw, which at the time of their merger announcement had combined assets of sixty-six billion dollars, the costs of installing their own switches, would not be insurmountable compared to the monetary benefits to be derived from creating their own wireless local exchange271 to by-pass the local loop.272 McCaw Cellular, now called AT&T Wireless, will use the AT&T name to sell its products.273 When the McCaw Cellular unit switched to the AT&T label for the company’s paging services, the number of potential customers calling the service went from 600 to 6,000 customers a week.274 BellSouth executives contend that “[i]f AT&T comes into our business, they’ll take thirty percent of our base within three to five years.”275

BOC cellular affiliates are also planning mergers to compete with potential new wireless service providers in their markets. On May 19, 1995, the Commission granted NYNEX Mobile Communications

nally had a deal with Creative Artists Agency (CAA), but, following the departure of CAA’s Michael Ovitz to Walt Disney Co., that business arrangement ended. Id. Despite ending the agreement with CAA, Tele-TV will retain CAA’s Robert Kavner and Jim Griffiths on a consulting basis. Id.

261 In re Petition of Arizona Corp. Comm’n To Extend State Authority Over Rate And Entry Regulation of All Commercial Mobile Radio Services and In re Implementation of Sec-

tions 3(n) and 332 of the Communications Act, Report and Order and Order on Reconsideration, 10 FCC Rcd. 7824, para. 24 (1995).

262 Barrett, supra note 264, at 46.


264 In re Petition of Arizona Corp. Comm’n To Extend State Authority Over Rate And Entry Regulation of All Commercial Mobile Radio Services and In re Implementation of Sec-

265 Video Programming NOI, supra note 259, para. 55 n.100.


269 Barrett, supra note 264, at 46.

270 Id.

271 Keller, supra note 8, at A1, A6.

272 Id. at A1.
Company ("NYNEX Mobile") and Bell Atlantic Mobile Systems, Inc. ("BAMS") permission to transfer control of eighty-two radio licenses to Cellco Partnership ("Cellco"), a new partnership consisting of subsidiaries of both NYNEX Mobile and BAMS. In this transfer of control Order, the Commission discussed the impact on competition in the affected cellular markets as a result of the merger. The Commission found that the merger would not result in anti-competitive effects but would provide some pro-competitive effects. The relevant geographic markets (the cellular service coverage areas) are completely separate. The Commission declined to find a regional or national geographic market. BAMS and NYNEX have agreed to divest ownership interests in A-side cellular systems in the ten markets in which they currently both have interests (i.e., in the two competing cellular systems). However, in opposition, McCaw Cellular argued that the BAMS/NYNEX Mobile merger would reduce future competition by effectively dissuading BAMS and NYNEX from "competing with each other in wireless services other than cellular," such as PCS. The Commission disagreed stating that "there is no lack of firms vying to enter PCS ... the alliance of BAMS and NYNEX Mobile will not reduce the number of entrants into PCS below the maximum possible under our rules.

E. Legislation

Since many of the companies that provide telecommunications services today, as well as those poised to enter competitive local service markets, will likely operate in multiple state jurisdictions, uniform guidelines for regulatory policy development would appear to be in the national interest. A new telecommunications bill, set for final battle in Congress, has precipitated massive lobbying efforts on the part of local exchange carriers, in particular the seven RBOCs, and the long distance carriers alike. The major focus of the pending legislation is to abolish, restrict or limit government regulation of telephone companies. Statutory barriers to entry of new LECs could be eliminated. The legislation will go before a House-Senate Conference Committee this fall. Different versions of the bill were passed earlier this summer by each chamber. However, President Clinton is threatening to veto the final bill because "[i]nstead of promoting investment and competition, [the legislation] would promote mergers and concentration of power [in a few major companies]."

The provisions in the Senate bill provide that an RBOC and any affiliate that provides telephone exchange service must create a separate subsidiary to provide inter-LATA services except if those services are incidental, not including information services, or out-of-region. This provision would allow BOC affiliates such as SBMS to provide local exchange services out-of-region without creating a separate subsidiary. Upon enactment and subject to some safeguards, RBOCs may provide incidental inter-LATA service to (1) provide audio, video, or other programming services to subscribers; (2) provide a telecommunications service between LATAs within a cable system franchise area; and (3) provide and procure information storage located between LATAs.

Upon enactment, H.R. 1555 will allow for an RBOC to provide inter-LATA service within a particular state upon approval by the Commission of a verification that the RBOC satisfied certain competitive conditions within that state. RBOCs may begin seeking approval for entry eighteen months after enactment of H.R. 1555, and may provide incidental

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Footnotes:

71 Id. paras. 14-15, 22-25.
72 Id. para. 15.
73 Id. paras. 17-19.
74 Id. paras. 22-23.
75 Id. para. 38 n.58.
76 Id. para. 38 n.61.
77 Keith Bissell, Hold the Phone! A National Telecommunications Policy Is Within Our Grasp, FORT., Nov. 15, 1994, at 32, 34.
78 The BOCs have an impressive group of lobbyists including Lynn Martin, ex-Labor Secretary; Roy Neel, President Clinton's ex-Deputy Chief of Staff; and Griffin Bell, who served as Attorney General under President Carter. Marcia Stepanek.
79 Mike Mills, House Approves Phone, Cable Bill: Act Would Open Market for Local Calls, End TV System Rate Curbs, WASH. POST, Aug. 5, 1995, at A10. "Most consumers, if they know about the bill, learned of it from the millions of dollars worth of advertising that has been spent as part of the battle between the [RBOCs] and the long distance industry." Id.
81 Stepanek, supra note 283, at H1.
82 S. 652, supra note 285, at § 102; see also 141 CONG. REC. S8573 (daily ed. June 16, 1995) (emphasis added). Additional exception to services for which a separate affiliate is required are "services authorized under an Order entered by the United States District Court." Id.
interLATA service at any time.\footnote{H.R. 1555, supra note 285.}

The legislation also contains provisions for RBOC entry into the manufacture of telecommunications equipment and customer premises equipment, provision of electronic publishing, alarm monitoring, telemessaging services, and payphone services.\footnote{Id.} In addition, the legislation addresses the preemption of state regulation, interconnection requirements and other issues that directly affect competition in the local exchange market.\footnote{Id.}

F. Restrictions Preventing LEC Competition

LEC\textsuperscript{s} are restricted by the courts, the Commission, state regulation and lack of legislative reform. As previously discussed, the states have begun to be responsive to changes in the local market. Statutes vary from state to state. Some prohibit local exchange competition, while others require a showing that the incumbent carrier cannot provide adequate service. In addition some states apply a public interest standard.\footnote{Id. “State Commission’s policies range from open entry to retention of monopoly status for the provision of local exchange service.”}\footnote{Morris, supra note 190, at 4.} The BOCs need to be able to act as full-service networks, providing integrated service to customers in order to compete with wireless technologies. Currently, the MFJ prevents the BOCs from offering long distance service, manufacturing telephone equipment and providing video information services.\footnote{Id.} The MFJ’s line-of-business-restriction prohibits an RBOC from transporting calls across LATA boundaries.\footnote{Id.} The Cable Communications Policy Act of 1984\footnote{United States v. American Tel. & Tel. Co., 552 F. Supp. 131 (D.D.C. Cir. 1982), aff’d sub nom. Maryland v. United States, 460 U.S. 1001 (1983).} prohibits a telephone company from providing video programming in its area of telephone service.\footnote{Id.}

Although a comprehensive review of the MFJ-imposed restrictions placed on BOCs is beyond the scope of this article, suffice it to say that many of the purposes for the restrictions no longer exist in today’s competitive market. It may be that with either the pending legislation, or action by the courts, the MFJ may be eliminated even before the Commission reevaluates its regulatory position on the provision of services in the local exchange. Many parties favor a comprehensive reform of the structural and non-structural safeguards, as well as the jurisdictional rules governing cellular and wireline services.\footnote{Sidak, supra note 268, at 1225 n.5.} As previously discussed, BOCs are beginning to file waivers with regards to some of the existing regulations, in order to allow the BOCs to more freely plan for the provision of wireless services. These waivers, and more, may be filed in the coming months, indicating that a comprehensive review of both the MFJ and FCC regulations is needed. Moreover, some companies oppose waivers under these circumstances, because instead of granting the waivers, they argue, the Commission should use these opportunities to conduct broad-based inquiries to develop a plan to reform the telecommunications regulations during the transition from monopoly to competition.\footnote{In re NYNEX Petition for Waiver, Memorandum Opinion and Order, 10 FCC Rcd. 7445, para. 1 (1995). See Comments of Illinois Commerce Commission (“ICC”), filed July 20, 1995, in response to SBMS Declaratory Ruling, supra note 12, at 14-15.}

V. THE FUTURE OF THE LOCAL EXCHANGE MARKET

Technological developments in the telecommunication arena will benefit local exchange providers as well as wireless service providers. LECs will be able to provide a plethora of new services over the local wired network. Providers will be able to offer customers a phone in the home that operates over the local wired network and when they leave the home (or the immediate calling area) the phone will access an external wireless network.\footnote{Rochester Petition, supra note 144. AT&T and MCI opposed the Rochester Telephone waiver stating that the Commission should be determining whether the rules in question should be revised. MCI further asserted that independent proposals and test cases, like that presented by Rochester Telephone, were not particularly helpful. MCI also disagreed with Rochester Telephone’s suggestion that its Open Market Plan could become a test for a fully competitive local exchange market. Id. para. 8.}

\footnote{A Critical Piece of the Communications Puzzle, supra note 202, para. 21; see also SBMS Declaratory Ruling, supra note 12, at 8.}
The Commission encourages local loop competition and has recently addressed this issue in several proceedings. The development of wireless services is one of several potential sources of competition that the Commission identified in order to bring market forces to bear on the existing LECs. The Commission noted that, "[e]fficient provision of wireless service may also create alternatives for those not served by traditional wireline providers and should create competition for existing wireline and wireless services." Nevertheless, the Commission needs to continue to take action to promote competition and reevaluate current regulatory policies concerning competitive concerns. Whether the actions of the Commission, combined with state and federal regulation, will provide for effective competition in the local loop remains unclear because, while the federal legislation passed, it has not been enacted. Furthermore, the impact of PCS and other wireless services on the local exchange market remains undetermined.

Cellular providers who intend to integrate wireline services with existing cellular infrastructure in local exchange markets have the potential to provide competitive choices to the public rapidly. Two or more PCS licensees will set up systems as early as 1996, in markets currently serviced by two cellular operators per market. Although one Commission goal in allocating PCS spectrum was to create competition for existing wireline and wireless services, nevertheless, the Commission needs to continue to take action to promote competition and reevaluate current regulatory policies concerning competitive concerns. Whether the actions of the Commission, combined with state and federal regulation, will provide for effective competition in the local loop remains unclear because, while the federal legislation passed, it has not been enacted. Furthermore, the impact of PCS and other wireless services on the local exchange market remains undetermined.

Cellular providers who intend to integrate wireline services with existing cellular infrastructure in local exchange markets have the potential to provide competitive choices to the public rapidly. Two or more PCS licensees will set up systems as early as 1996, in markets currently serviced by two cellular operators per market. Although one Commission goal in allocating PCS spectrum was to create competition for the cellular duopoly currently in existence, many new entrants in the market are current cellular operators that have won licenses in the PCS auction (most of them in alliance with each other or other companies), which will allow them to expand their present service area into adjoining markets. It may be that a small number of major players dominate this market through mergers and joint agreements, as well as participating in auctions for licenses in services such as PCS, where the costs of licenses may prove prohibitive to all but the major established telecommunications companies. Further, each service provider in any given market may not be able to obtain the customer base it needs to survive, given the number of licenses the Commission granted in each area.

Notwithstanding the Commission's goal of effective competition in the local exchange market, any one location in the country could feasibly receive a formidable array of competitive mobile services. Competing in this market will be difficult and extremely capital intensive. As previously discussed, the recent events surrounding the C Block auction make it evident that smaller, economically disadvantaged companies may still not be given the opportunity they need to compete, despite the efforts of both Congress and the Commission. Customers want access to people and information, at anytime and anywhere. The Commission wants consumers to be given this opportunity and stated that "[w]e believe that mobile services will play an increasingly important role in the nation's telecommunications networks, and we believe that nondiscriminatory access to mobile services will give consumers the opportunity to realize the expanding benefits of wireless technologies . . . ."

This article briefly discusses some of the issues faced by major players in the local exchange market today. It is not yet certain whether all the potential service providers in each market will survive. Consumer choice is a phenomenon that is predicted with no great amount of certainty, but it is widely accepted that name recognition, convenience, accessibility of services, and marketing strategy can influence consumers. In order for developing services in the local exchange market to benefit the consumer, wireless technology must provide quality services and enhanced competition, thereby keeping costs of quality service low.

The Commission seems committed to creating at least the opportunity for competition in the local exchange market. The assumptions on which the everyday consumer bases his current perception of the local exchange market will evolve as new wireless...
systems provide innovative services to the consumer and challenge the dominance of the LEC in the local exchange market. The BOCs do not intend to be left behind. BOCs are seeking ways to provide new services, maintain customer loyalty, and use the advantages that exist by virtue of their present influence on the local exchange market, to their benefit, in the race to compete. The BOCs are engaging in strategic planning, such as forming joint ventures with other telecommunications companies, lobbying for provisions favorable to them in the pending telecommunications legislation, and filing for waivers of Commission rules that place restrictions on their ability to compete. According to several of the BOCs, waivers will enable them to (1) compete more effectively with wireless service providers in their local exchange market, and (2) diversify their offerings to counteract a possible decrease in profits resulting from new local service providers. In addition, it is unlikely that BOCs, no matter how integrated wireless and wireline exchange service become, will allow the wireline exchange to become obsolete. However, the future of the local exchange market will become evident as the local exchange market takes on a new face in the 1990s and beyond.