FCC 96-182

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
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NOTICE OF PROPOSED RULEMAKING

Adopted: April 19, 1996 Released: April 19, 1996

Comment Date: May 16, 1996
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By the Commission:

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I. INTRODUCTION AND OVERVIEW

1. In enacting the Telecommunications Act of 1996 (1996 Act),[1] Congress sought to establish "a pro-competitive, de-regulatory national policy framework" for the United States telecommunications industry.[2] The statute imposes obligations and responsibilities on telecommunications carriers, particularly incumbent local exchange carriers (LECs), that are designed to open monopoly telecommunications markets to competitive entry.[3] The 1996 Act also includes provisions that are intended to promote competition in markets that already are open to new competitors. The 1996 Act seeks to develop robust competition, in lieu of economic regulation, in telecommunications markets.[4] The Act envisions that removing legal and regulatory barriers to entry and reducing economic impediments to entry will enable competitors to enter markets freely, encourage technological developments, and ensure that a firm's prowess in satisfying consumer demand will determine its success or failure in the marketplace.

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[1] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 [hereinafter 1996 Act].

[2] S. Conf. Rep. No. 104-230, 104th Cong., 2d Sess. 1 (1996) [hereinafter Joint Explanatory Statement].

[3] According to Senator Larry Pressler, "The more open access takes hold, the less other government intervention is needed to protect competition. Open access is the principle establishing a fair method to move local phone monopolies and the oligopolistic long distance industry into full competition with one another." 141 Cong. Rec. S7889 (daily ed. June 7, 1995) (statement of Sen. Pressler). Senator Ernest F. Hollings has said, "Competition is the best regulator of the marketplace. But until that competition exists, until the markets are opened, monopoly-provided services must not be able to exploit the monopoly power to the consumers' disadvantage. Competitors are ready and willing to enter the new markets as soon as they are opened." *Id.* at S7984 (statement of Sen. Hollings).

[4] In some areas, increased competition has already made possible significant reductions in economic regulation. *See, e.g.*, *Motion of AT&T Corp. to be Reclassified as a Nondominant Carrier*, Order, 11 FCC Rcd 3271 (1995), *recon. pending*; *Policy and Rules Concerning the Interstate, Interexchange Marketplace*, Notice of Proposed Rulemaking, FCC 96-123 CC Docket No. 96-91, (rel. March 25, 1996) (proposing to forbear from requiring tariffs for nondominant interexchange carriers).

2. Congress entrusted to this Agency the responsibility for establishing the rules that will implement most quickly and effectively the national telecommunications policy embodied in the 1996 Act. Those rules should promote the competitive markets envisioned by Congress.[5] As Senator Pressler has observed, "Progress is being stymied by a morass of regulatory barriers which balkanize the telecommunications industry into protective enclaves. We need to devise a new national policy framework -- a new regulatory paradigm for telecommunications -- which accommodates and accelerates technological change and innovation."[6] The purpose of this proceeding is to adopt rules to implement the local competition provisions of the Communications Act of 1934, as amended by the 1996 Act, particularly Section 251. These rules will establish the "new regulatory paradigm" that is essential to achieving Congress's policy goals.

3. This rulemaking is one of a number of interrelated proceedings designed to advance competition, to reduce regulation in telecommunications markets and at the same time to advance and preserve universal service to all Americans. We are especially cognizant of the interrelationship between this proceeding, our recently initiated proceeding to implement the comprehensive universal service provisions of the 1996 Act and our upcoming proceeding to reform our Part 69 access charge rules.[7] Although these proceedings will be conducted in separate dockets, and the 1996 Act prescribes different completion dates for two of the proceedings, we intend to conduct and conclude all of these proceedings in a comprehensive, consistent, and expedited fashion. We ask commenters in this proceeding to bear in mind the relationship between these parallel proceedings and to frame their proposals within the pro-competitive, deregulatory context of the 1996 Act as a whole.

A. Background

4. In contrast to the 1996 Act, the common carrier provisions of the Communications Act of 1934 were grounded in the notion that interstate telecommunications services would be offered and regulated on a monopoly basis. For decades, state legislatures also followed this traditional approach in regulating LECs' intrastate services. Local and long distance

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[5] According to Representative Fields, "[Congress] is decompartmentalizing segments of the telecommunications industry, opening the floodgates of competition through deregulation, and most importantly, giving consumers choice . . . and from these choices, the benefits of competition flow to all of us as consumers -- new and better technologies, new applications for existing technologies, and most importantly . . . lower consumer price." 142 Cong. Rec. H1149 (Feb. 1, 1996)(statement of Rep. Fields).

[6] 141 Cong. Rec. S7881-2, S7886 (June 7, 1995) (statement of Sen. Pressler).

[7] *Federal-State Joint Board on Universal Service*, Notice of Proposed Rulemaking and Order Establishing Joint Board, FCC 96-93 CC Docket No. 96-45, (rel. Mar. 8, 1996) (*Universal Service NPRM*) (proposing rules to implement Section 254 of the 1996 Act). This proceeding also is relevant to our price cap regulations and our regulation of the interstate, interexchange marketplace. *Price Cap Performance Review for Local Exchange Carriers*, Second Further Notice of Proposed Rulemaking, FCC 95-393 (rel. Sept. 20, 1995) (*Price Caps Second Further Notice*) (soliciting comments on proposed and other possible changes to the price cap plan to reflect emerging competition in telecommunications services); *Price Cap Performance Review for Local Exchange Carriers*, Fourth Further Notice of Proposed Rulemaking, 10 FCC Rcd 13659 (1995) (*Price Caps Fourth Further Notice*) (seeking comment on issues relating to revisions of the long-term price cap plan); *Policy and Rules Concerning the Interstate, Interexchange Marketplace*, Notice of Proposed Rulemaking, FCC 96-123 CC Docket No. 96-91 (rel. March 25, 1996) (proposing to forbear from requiring tariffs for nondominant interexchange carriers). We also plan to initiate a proceeding that will review our existing jurisdictional separations rules in the context of the new statute.

telephone monopolies were created and maintained on the grounds that the provision of telecommunications services was a natural monopoly[8] and, consequently, service could be provided at the lowest cost to the maximum number of consumers through a single regulated telecommunications network. The monopoly paradigm was thought to further goals of universal service, service quality, and reliability. The Modification of Final Judgment (MFJ) that required AT&T to divest the Bell Operating Companies (BOCs) in 1984 was not so much a repudiation as a reduction in the scope of this paradigm.[9] It reflected the judgment that the markets for interexchange services, telecommunications equipment, and information services could become competitive. At the same time, the local exchange continued to be treated as a natural monopoly that required rigorous regulatory oversight by state and federal authorities.

5. Even as the MFJ was implemented, academic criticism of the natural monopoly model for the local network was developing. During the past 12 years, many commenters and businesses have asserted that technological innovation has eroded any arguable natural monopoly in the local exchange, and that government should eliminate any legal impediments to entry. This view is now embodied in the 1996 Act. The extent to which it can be proved in the marketplace depends on the capabilities of inventors, entrepreneurs, and financiers, as well as this Commission and its state counterparts. At the time the 1996 Act was signed, 19 states had in place some rules opening local exchange markets to competition, including seven states in which competing firms had already begun to offer switched local service.[10] Even these 19 states, however, vary widely in their efforts to promote competitive entry into local markets. Moreover, as of 1996, more than 30 states had not adopted laws or regulations providing for local competition. Many of those states that had not adopted laws or regulations permitting local competition had provisions that specifically limited competitive entry into local telecommunications markets. Section 253(a) of the 1996 Act prohibits these affirmative legal barriers to entry,[11] and authorizes the Commission to preempt enforcement of such entry barriers.[12]

6. We believe that, in enacting the 1996 Act, Congress recognized that although

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[8] A market is characterized as a natural monopoly if a single firm can serve the market at a lower cost than two or more firms. This result is due to one provider being able to exploit economies of scale throughout the range of output likely to be demanded by the market. *See, e.g.,* Alfred Kahn *The Economics of Regulation* Vol. II 119 (1988); *see also* Daniel Spulber *Regulation and Markets* 3 (1989).

[9] *United States v. AT&T*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983), *vacated sub nom. United States v. Western Elect. Co.*, slip op. CA 82-0192 (D.D.C. Apr. 11, 1996).

[10] The following states have competing firms offering switched local service: Massachusetts, Michigan, California, Illinois, Maryland, New York, and Washington. At least some local competition rules are in place in Virginia, North Carolina, Colorado, Louisiana, Arizona, Connecticut, Florida, Georgia, Iowa, Ohio, Oregon, and Tennessee. *See* Common Carrier Competition, CC Report No. 96-9, Federal Communications Commission, Common Carrier Bureau, Spring 1996. "Generally, new competitors are small and are still experimenting in the market." *Id*. at 3.

[11] Section 253 provides that "[n]o State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service." 1996 Act, sec. 101, § 253(a).

[12] 1996 Act, sec. 101, § 253(d).

removing legal barriers to entry is necessary, it is still not sufficient to enable competition to replace monopoly in the local exchange. Congress acknowledged that incumbent LECs have constructed and put in place high quality, reliable, redundant local networks that can provide virtually ubiquitous service, and that they possess an approximate 99.7 percent share of the local market as measured by revenues.[13] Because of this existing infrastructure, an incumbent LEC typically can serve a new customer at a much lower incremental cost than could a new entrant that is denied access to the incumbent LEC's facilities, and thereby is denied access to as many central office switches and as much trunking and subscriber loops as the incumbent LEC operates. Moreover, because virtually all existing customers subscribe to the incumbent LEC, a consumer of local switched service would not subscribe to a new entrant's network if the customer could not complete calls to the incumbent LEC's end users. As Congress appeared to recognize in enacting section 251, if the incumbent LEC has no obligation to interconnect and to arrange for mutual transport and termination of calls, it could effectively block or greatly retard entry into switched local service by using its economies of scale and network externalities as impediments to entry.

7. Congress expressly recognized that "it is unlikely that competitors will have a fully redundant network in place when they initially offer local service, because the investment necessary is so significant."[14] AT&T, for example, in filings before the Commission, has estimated that it would have to invest approximately $29 billion to construct new facilities in local markets in order to be able to provide full facilities to reach 20 percent of the 117 million access lines served by the BOCs.[15] Similarly, cable[16] and wireless[17] systems will

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[13] *Telecommunications Industry Revenue: TRS Fund Workshop Data*, FCC Industry Analysis Division, Feb. 1996, Tables 14 and 15 show that LEC revenues in 1994 were $98.4 billion, while total Competitive Access Provider revenue was $287 million. Even though competitive access provider (CAP) revenues have grown to approximately $1.15 billion in 1995, they still represent a *de minimis* portion of the market. *Local Telecommunications Competition Annual 1995-96*, Connecticut Research, Glastonbury, Conn. (1995) at i-5, Table 1.3.

[14] Joint Explanatory Statement at 148.

[15] AT&T submission, Mar. 18, 1996. By contrast, AT&T's capital construction cost for 1995 was $4.96 billion. *See* Merrill Lynch, *Telecom Services-Long Distance, Fourth Quarter Review: How Much Longer Can the Equilibrium Last? The Catalyst: The Telecommunications Act of 1996*, Feb. 15, 1996 at Table 6. Since January 1994, MCI Metro has spent $500 million to deploy a total of 2,338 route miles of fiber and 11 switches in 25 cities across the country.

[16] Cable systems pass 96 percent of homes in the United States. *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Second Annual Report, 11 FCC Rcd 2060 (1995) (based on a total of 91.6 million television households as of year-end 1994). The provision of telephony over cable systems, however, is largely in the experimental stages today. For example, Motorola recently announced that it will provide cable-telephony products to TCI Telephony Services, enabling TCI to begin cable-based telephony services in the Chicago area this year. Motorola Multimedia Announces Purchase Agreement with TCI, Press Release (September 21, 1995). As of October 1995, Time Warner was providing telephony to approximately 50 homes in the Rochester area. *The Big Boys Come Calling*, N.Y. Times, Oct. 19, 1995, at 1. Some other cable operators have announced plans to deploy cable-telephony systems by the end of 1996. *See* Paul Farhi, *Alexandria Cable Firm to Offer Phone Service; Company Would Compete With Bell*, Wash. Post, Feb. 17, 1996, at B1. Virtually all cable systems, however, will require significant network upgrades in order to provide telephony service, including additional deployment of fiber optic cable, additional electronics, and back-up power systems.

require substantial investment before either is capable of providing a widespread substitute for wireline telephony services.

8. In the 1996 Act, Congress boldly moved to restructure the local telecommunications market so as to remove economic impediments to efficient entry that existed under the monopoly paradigm. In order to offset the economies of scale and network externalities that would inhibit efficient entry of competitors into markets currently monopolized by incumbent LECs, the 1996 Act requires those LECs to offer interconnection and network elements on an unbundled basis, and imposes a duty to establish reciprocal compensation arrangements for the transport and termination of calls.[18] As the 1996 Act further recognizes, these duties of incumbent LECs are only meaningful in conjunction with the Act's limitations on the rates that can be charged; otherwise, an incumbent LEC could offer interconnection, unbundling, and transport and termination, but at prices that perpetuate its market power.[19] To constrain the incumbent LEC's ability to perpetuate its market power through the pricing of interconnection and unbundled elements, Congress specified that the prices for such transactions should be cost-based and just and reasonable.[20] By freeing new entrants from having to build facilities that totally duplicate the LECs' networks, the 1996 Act has dramatically increased the opportunities for competitive entry and minimized the otherwise overwhelming competitive advantages of large established carriers. We also note that the new law provides for exemption, suspension, or modification of certain requirements, under certain conditions, with respect to small and rural LECs.[21]

9. Different entrants may be expected to pursue different strategies that reflect their competitive advantages in the markets they seek to target.[22] For example, interexchange carriers and competitive access providers may combine their own facilities with unbundled loops and other LEC elements and perhaps augment their own loop facilities over time.

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[17] Although wireless technologies are continuing to develop, some wireless carriers, particularly in urban areas, currently face serious capacity constraints. These will be alleviated through the conversion from analog to digital service, further advances in compression technology, and the deployment of personal communications service (PCS). Huge investments to reduce cell size and increase frequency reuse may be required to give wireless systems a significant fraction of the traffic-carrying capacity of the incumbent LECs' networks. There is also currently a significant price difference between wireless and wireline service. A wireless call, for example, is typically priced at several times the price of a wireline call. Sprint Spectrum offers an introductory price for its wireless service of $15 per month, which includes access to the system, 15 minutes of air time, and $.31 per minute thereafter. *See A Beginner's Guide to the Cellular Maze*, Wash. Post, Dec. 4, 1995. In contrast, the average price paid by residential customers for local wireline service is about $.03 per minute. *See Trends in Telephone Service*, FCC Industry Analysis Division, Feb. 1995, Tables 6 and 19.

[18] 1996 Act, sec. 101, §§ 251(b)(5), (c)(2), and (c)(3).

[19] Because the ability to send and receive calls between a new entrant's customers and an incumbent LEC's customers is essential to the new entrant's viability, we believe that incumbent LECs have vastly superior bargaining power in negotiations for mutual termination.

[20] 1996 Act, sec. 101, §§ 252(d)(1), (d)(2).

[21] 1996 Act, sec. 101, § 251(f).

[22] For example, in Rochester, AT&T has entered the local market by reselling capacity on the local network, while Time Warner plans to offer local service over its cable system, which will be interconnected with the local network. *See The Big Boys Come Calling, supra* note 16.

Cable systems may choose to develop more extensive networks within their service areas, and thus require fewer unbundled elements from LECs; but, like all entrants, they will require termination arrangements with incumbent LECs. Outside their franchise areas, or in areas not passed by their existing systems, cable companies will need to find some other technique for offering telecommunications services, such as resale of incumbent LEC services or purchase of unbundled LEC elements.[23]

10. In addition to imposing interconnection, termination, and unbundling requirements in the 1996 Act, Congress also provided for entrants to be able to resell a LEC's retail services.[24] Even if an entrant planned to construct its own facilities, it may still face marketing disadvantages, because of the time it takes to construct a new network. Resale enables new entrants to offer at the outset a conventional service to all customers currently served by an incumbent LEC. Some entrants also may choose to rely on resale as part of a longer term strategy as well.

11. At the same time, Congress plainly intended for LECs in the future to be vigorous competitors, to continue to offer high quality service, and to play a vital role in delivering universal service to all Americans. Nothing in the 1996 Act suggests that Congress intended to divest incumbent LECs of all or part of their local networks, even if some portions continue to be natural monopolies. Indeed, the Act expressly confirms that incumbent LECs may earn a reasonable profit for the interconnection services and network elements they provide.[25]

12. Consistent with this perspective on competition, we also note that the purpose and, given proper implementation, the likely effect of the unbundling and other provisions of the 1996 Act is not to ensure that entry shall take place irrespective of costs, but to remove both the statutory and regulatory barriers and economic impediments that inefficiently retard entry, and to allow entry to take place where it can occur efficiently. This entry policy is competitively neutral; it is pro-competition, not pro-competitor. Our discussion of the 1996 Act in this and other proceedings, therefore, is phrased in terms of removing statutory and regulatory barriers and economic impediments, in permitting efficient competition to occur wherever possible, and replicating competitive outcomes where competition is infeasible or not yet in place.

13. This foregoing discussion has focused on obligations created by the 1996 Act for incumbent LECs in order to reduce economic impediments to efficient market entry by new competitors. The statute, however, also creates general duties for all telecommunications carriers, and obligations for all local exchange carriers, whether classified as "incumbent" LECs or not.[26] These provisions are also important to facilitating competitive local telecommunications markets. We discuss those provisions below.

B. Overview of Sections 251, 252 and 253

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[23] Because of local franchising, a given cable operator may not have cable facilities in all parts of the geographic market in which it intends to offer telecommunications service.

[24] 1996 Act, sec. 101, § 251(c)(4).

[25] 1996 Act, sec. 101, § 252(d)(1).

[26] 1996 Act, sec. 101, § 252(a), (b).

14. In adding new sections 251, 252, and 253 to the Communications Act of 1934, Congress set forth a blueprint for ending monopolies in local telecommunications markets. As discussed above, sections 251(b) and (c) impose specific obligations on incumbent LECs to open their networks to competitors.[27] Section 251(b)(5), in particular, requires all LECs, including incumbent LECs, to "establish reciprocal compensation arrangements for the transport and termination of telecommunications."[28]

15. Section 251(c) imposes on incumbent LECs three key and separate duties. They must make available to new entrants and existing competitors in local telecommunications markets interconnection, services, and unbundled network elements, and offer for resale at wholesale rates any telecommunications service that the incumbent LEC provides at retail to subscribers. Specifically, section 251(c)(2) requires an incumbent LEC to interconnect with any requesting telecommunications carrier at any technically feasible point in the LEC's network for the transmission and routing of telephone exchange service and exchange access. Section 251(c)(3) requires incumbent LECs to unbundle their network facilities and features so that an entrant can choose among them, combine them with any of its own facilities, and offer services that will compete with the incumbent's offerings. In addition, section 251(c)(4) directs an incumbent LEC to offer for resale, at a wholesale rate, any telecommunications service the incumbent LEC offers to end users at retail. Viewed as a whole, the statutory scheme of section 251(b) and (c) enables entrants to use interconnection, unbundled elements, and/or resale in the manner that the entrant determines will advance its entry strategy most effectively.[29]

16. Section 251(d)(1) directs the Commission to establish rules to implement the requirements of section 251, including the core interconnection, unbundling, and resale provisions of section 251(c). These rules, however, have much broader implications than merely implementing the requirements of section 251. In fact, these rules are central to a number of functions contemplated by the 1996 Act. As discussed below, these rules in varying ways relate to such issues as: (1) the voluntary negotiation process between incumbent LECs and telecommunications carriers; (2) the arbitration process; (3) state commission approval of arbitrated agreements; (4) the FCC's review of arbitrated agreements when a state commission fails to act; (5) judicial review of state commissions' and this Commission's actions; (6) statements of generally available terms and conditions by BOCs; (7) removal of barriers to entry; and (8) BOC entry into interLATA services.

17. Section 251(f)(1) provides that the obligations under section 251(c) shall not apply to a rural telephone company, as defined in the 1996 Act, "until (i) such company has received a bona fide request for interconnection, services, or network elements, and (ii) the State commission determines . . . that such request is not unduly economically burdensome, is technically feasible, and is consistent with section 254 (other than sections (b)(7) and

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[27] 1996 Act, sec. 101, § 251(c). In addition, as discussed below, sections 251(a) and 251(b) impose other obligations on all telecommunications carriers and all LECs, respectively.

[28] 1996 Act, sec. 101, § 251(b)(5).

[29] Section 251(c)(2) would permit a cable operator to interconnect its facilities with an incumbent LEC's network. Section 251(c)(3) would enable a competitive access provider to combine its own switches and transport facilities with incumbent LEC loops in order to serve end users. Section 251(c)(4) would enable a new firm to enter a local market quickly and offer the incumbent LEC's subscribers resold services while the entrant constructed its local facilities.

(c)(1)(D) thereof."[30] Section 251(f)(2) provides that a LEC "with fewer than 2 percent of the Nation's subscriber lines" may petition the state commission for a suspension or modification of the requirements set forth in sections 251(b) and (c).[31]

18. Section 252 sets forth the procedures that incumbent LECs and new entrants must follow to transform the requirements of section 251 into binding contractual obligations. Under section 252, incumbent LECs and new entrants initially must seek to agree on the terms and conditions under which LEC facilities and services are made available to the new entrant. To the extent that the resulting agreements are based on voluntary negotiations rather than state arbitration, those agreements are not required to satisfy the provisions of sections 251 and our regulations issued thereunder, but such agreements must not discriminate against a telecommunications carrier not a party to the agreement, and all portions must be consistent with the public interest, convenience, and necessity.[32]

19. If an incumbent LEC and requesting carrier are unable to reach a negotiated agreement, section 252(c) authorizes a state commission to resolve disputed issues by arbitration, and requires the state commission to "ensure that such resolution and conditions meet the requirements of section 251, including the regulations prescribed by the Commission pursuant to section 251." The Commission's section 251 rules also guide states in their subsequent review of arbitrated arrangements.[33] A state commission may reject an arbitrated agreement (or any portion thereof) pursuant to section 252(e)(2)(B) "if it finds that the agreement does not meet the requirements of section 251, including the regulations prescribed by the Commission pursuant to section 251." The rules adopted in this proceeding also will guide the Commission in a similar context. In the event that the Commission must assume the responsibility of a state commission under section 252(e)(5), the section 251 rules will provide the substantive standards the Commission will apply to arbitrate and approve agreements pursuant to section 252.

20. Thus, the statutory scheme of sections 251 and 252 contemplates that the obligations imposed by section 251 and our regulations will establish the relevant provisions that will frame the negotiation process and will govern the resolution of disputes in the arbitration process. We recognize that the section 251 rules will tend to influence negotiations, pursuant to section 252(a)(1) and (2), between incumbent LECs and requesting carriers seeking interconnection, access to unbundled network elements, and resale of LEC services.[34] At least in some cases, the implementing Section 251 rules may serve as a *de facto* floor or set of minimum standards that guide the parties in the voluntary negotiation process.

21. Sections 271 and 273 create incentives for the BOCs to implement promptly the mandates of sections 251 and 252. Pursuant to section 271, a BOC may not offer interLATA

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[30] 1996 Act, sec. 101, § 251(f)(1).

[31] 1996 Act, sec. 101, § 251(f)(2).

[32] 1996 Act, sec. 101, § 252(e)(2)(A).

[33] *See* 1996 Act, sec. 101, § 252(e)(2).

[34] As a practical matter, it seems reasonable to expect that requesting carriers will seek to negotiate terms and conditions that are, overall, at least as advantageous as those available pursuant to the Commission's rules.

services within its service area ("in region") until it is approved to do so (on a state-by-state basis) by the Commission, and section 273 allows a BOC to enter manufacturing at the same time the BOC is approved to offer in-region interLATA services.[35] One of the requirements for obtaining approval for in-region interLATA services under section 271 is that the BOC must produce either an interconnection agreement that, among other things, has been approved under section 252 or, under certain circumstances, a statement of generally available interconnection terms and conditions. Under section 252, interconnection agreements that are arbitrated have to comply with section 251's mandates, as do all BOC statements of generally available terms. In addition, all agreements and statements must comply with a "competitive checklist" set out in section 271, several requirements of which expressly reference the mandates of section 251.[36] In these respects, compliance with section 251 and our regulations thereunder is a prerequisite to BOC entry into in-region interLATA services. But compliance may also facilitate BOC entry under section 271 in less obvious ways. For example, in reviewing a BOC application, the Commission must also consult with the Department of Justice and the relevant state commission, and it must decide whether granting the application serves the public interest. Each of these consultations and determinations could, in theory, be affected by considerations of the extent to which the BOC is regarded as complying with section 251 and our rules. Thus, the Commission's section 251 rules will play a central role regarding BOC entry into in-region interLATA services under section 271.

22. Section 253 bars state and local regulations that prohibit or have the effect of prohibiting entities from offering telecommunications services.[37] It also authorizes the Commission to preempt any law or regulation that is violative of this section.[38] The section 251 rules should help to give content and meaning to what state or local requirements the Commission "shall preempt" as barriers to entry pursuant to section 253.

23. Moreover, the section 251 rules will assist the judiciary in reviewing actions of state commissions and the Commission in this area. Subsection 252(e)(6) provides that any party aggrieved by a state determination regarding a negotiated or arbitrated agreement or a statement of generally available terms may bring an action in federal district court "to determine whether the agreement or statement meets the requirements of section 251," presumably including our rules thereunder. The federal district court will thus have to refer to our implementing regulations in determining whether a state commission acted properly in approving or rejecting an arbitrated agreement. Similarly, Commission action in this area will be subject to review by federal circuit courts of appeal. This might include, for example, review of Commission decisions regarding BOC petitions to provide interLATA services pursuant to section 271 or review of Commission action preempting state or local regulations pursuant to section 253. In all of these cases, the court will look to the Commission's section 251 rules to guide its review of the Commission's action.

24. These statutory provisions and the Commission's rules implementing the

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[35] Under the terms of the MFJ, the BOCs were barred from manufacturing telecommunications equipment. Section 273 of the 1996 Act repealed that judicial prohibition and allows BOCS to manufacture such equipment subject to certain conditions.

[36] 1996 Act, sec. 101, § 271(c)(2)(B).

[37] 1996 Act, sec. 101, § 253(a).

[38] 1996 Act, sec. 101, § 253(d).

requirements of section 251 are designed to end the era of monopoly regulation for American telecommunications markets. By dismantling entry barriers and reducing the inherent advantages of incumbent LECs, they establish a national process for enhancing competition, increasing consumer choice, lowering rates, and reducing regulation. The Commission's rules implementing section 251 will have a pervasive and substantial impact in a variety of contexts under the 1996 Act and will serve as the cornerstone of the pro-competitive provisions of the statute. These rules will assist incumbent LECs, telecommunications carriers, state commissions, the FCC, and the courts in defining rights and responsibilities regarding interconnection, unbundling, resale, and many other issues under the 1996 Act.

II. PROVISIONS OF SECTION 251

A. Scope of the Commission's Regulations

25. Section 251(d)(1) instructs the Commission, within six months after the enactment of the 1996 Act (that is, August 8, 1996), to "establish regulations to implement the requirements of [section 251]."[39] The Commission's implementing rules should be designed "to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition."[40] In addition to directing the Commission to establish rules to implement section 251, section 253 further requires the Commission to preempt the enforcement of any state or local statute, regulation, or legal requirement that "prohibit[s] or [has] the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."[41]

26. These specific statutory directives make clear that Congress intended the Commission to implement a pro-competitive, de-regulatory, national policy framework envisioned by the 1996 Act.[42] Given the forward-looking focus of the 1996 Act, the nationwide character of development and deployment of underlying telecommunications technology, and the nationwide nature of competitive markets and entry strategies in the dynamic telecommunications industry, we believe we should take a proactive role in implementing Congress's objectives. Thus, we intend in this proceeding to adopt national rules that are designed to secure the full benefits of competition for consumers, with due regard to work already done by the states that is compatible with the terms and the pro-competitive intent of the 1996 Act.

27. In accomplishing this objective, we need to determine the extent to which our rules should elaborate on the meaning of the statutory requirements set forth in sections 251 and 252. For example, we could adopt explicit rules to address those issues that are most critical to the successful development of competition, and with respect to which significant variations would undermine competition. This approach would further a uniform, pro-competitive national policy framework, as envisioned by the statute, and yet still preserve

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[39] 1996 Act, sec. 101, § 251(d)(1).

[40] Joint Explanatory Statement at 1.

[41] 1996 Act, sec. 101, § 253.

[42] Joint Explanatory Statement at 1.

broad discretion for states to resolve, consistent with the 1996 Act, the panoply of other individual issues that may be raised in arbitration proceedings. This approach also would facilitate rapid private sector deployment of advanced telecommunications and information technologies and services by swiftly opening all telecommunications markets to competition. We seek comment on such an approach and whether it would accomplish Congress's goal of promoting efficient competition in local telecommunications markets throughout the country.

28. We see many benefits in adopting such rules to implement section 251. Such rules should minimize variations among states in implementing Congress's national telecommunications policy and guide states that have not yet adopted the competitive paradigm of the 1996 Act. Such rules also could expedite the transition to competition, particularly in those states that have not adopted rules allowing local competition, and thereby promote economic growth in state, regional, and national markets.[43]

29. The adoption of explicit national rules to implement section 251 would not necessarily undermine the initiatives undertaken by various states prior to the enactment of the 1996 Act, and in fact, we anticipate that we will build upon actions some states have taken to address interconnection and other issues related to opening local markets to competition. Some states have been in the forefront of the pro-competitive effort to open local markets to competition, and these approaches may comport with the 1996 Act despite the fact that many of them pre-date it. Building on the progress made by these states, explicit national rules could be modelled on existing state statutes or regulations to the extent that they comply with the terms of the 1996 Act. For example, the Commission could conclude that a particular state's approach to unbundling of network elements is consistent with the 1996 Act and that it therefore may serve as a useful model for a national rule on unbundling. The Commission might also conclude that a range of different approaches used by several states to interconnection arrangements comply with the Act and therefore would be acceptable under a national rule. Throughout this item, we seek comment on the extent to which existing state initiatives are consistent with the new federal statute and, to the extent they are, the wisdom of using existing state approaches as guideposts or benchmarks for our national rules.

30. Explicit national rules implementing section 251 can be expected to reduce the capital costs of, and attract investment in, new entrants by enhancing the ability of the investment community to assess an entrant's business plan. Such rules would also permit firms to configure their networks in the same manner in every market they seek to enter. Uniform network configurations could achieve significant cost efficiencies for new entrants; if new competitors were required to modify their networks in different markets solely to be compatible with a patchwork of different regulations, they would likely incur additional expense, thereby increasing the cost of entry, a result that would be inconsistent with the pro-competitive goals of the statute.[44]

31. Explicit national rules under section 251 also could expedite the implementation of other provisions of the 1996 Act that require incumbent LECs, new entrants, the states,

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[43] More than 30 states do not have rules governing local competition in place today; most of those states have not commenced proceedings to adopt the necessary rules.

[44] A uniform network design can be expected to reduce start-up costs, accelerate innovation, enhance interoperability of networks and equipment, and reduce the administrative burdens for both incumbent LECs and entrants.

federal courts, and the Commission to apply the requirements of section 251 in other contexts. Section 252 provides that incumbent LECs and entrants initially will seek to arrive at interconnection and unbundling arrangements through voluntary negotiations. By narrowing the range of permissible results, concrete national standards would limit the effect of the incumbent's bargaining position on the outcome of the negotiations. In addition, the application of explicit national rules under section 251 could provide important guidance to federal district courts that are charged with reviewing state determinations of whether particular arbitration agreements are consistent with section 251 (presumably including our rules thereunder). Moreover, the absence of such rules could lead to varying or inconsistent decisions by individual district and circuit courts concerning the core requirements of the 1996 Act. We believe that such a result would be inconsistent with the intent of Congress in passing comprehensive telecommunications legislation.

32. Further, rules that elaborate on the statutory requirements of section 251 would establish clear guidelines that we will need to carry out our responsibilities under the 1996 Act. We will need explicit rules to guide our arbitration of disputes between incumbent LECs and new entrants if we are required, under section 252(e), to assume those responsibilities. In addition, BOCs must satisfy the checklist set forth in section 271(c)(2)(B) before they may offer in-region, interLATA services. The checklist requires BOCs to comply with specific provisions of section 251. Thus, the Commission needs to articulate clear rules that clarify what constitutes compliance with section 251 for purposes of our review under section 271.

33. On the other hand, there may be countervailing concerns that could weigh against rules that significantly explicate in some detail the statutory requirements of sections 251 and 252. Adopting explicit national rules, in certain circumstances, might unduly constrain the ability of states to address unique policy concerns that might exist within their jurisdictions. The case for permitting material variability among the states could be strengthened if there are substantial state-specific variations in technological, geographic, or demographic conditions in particular local markets that call for fundamentally different regulatory approaches. We seek comment on the nature of such variations, and on whether there are such variations that require fundamentally different regulatory approaches. States may also seek, to the extent permitted by sections 251, 252, 253, and 254, to ensure the uninterrupted delivery of certain services by the incumbent where competition might arguably threaten those services. It might also be argued that there is value to permitting states to experiment with different pro-competitive regimes to the extent that there is not a sufficient body of evidence upon which to choose the optimal pro-competitive policy. If we were to decline to adopt explicit rules at all, in effect we would be permitting states to set different priorities and timetables for requiring incumbent LECs to offer interconnection and unbundled network elements. Such an approach means that we would balance the need to swiftly introduce telecommunications competition against other policy priorities. We seek comment on these issues.

34. We also note that, under section 252, states must implement any rules we establish under section 251. Section 252 assigns to the states the responsibility for arbitrating disputes between the parties, including resolving factual disputes. We seek comment on how our national rules can best be crafted to assist the states in carrying out this responsibility.

35. In the succeeding sections of this Notice, we invite parties to comment, with respect to each of the obligations imposed by section 251, on the extent to which adoption of explicit national rules would be the most constructive approach to furthering Congress' pro-competitive, deregulatory goals of making local telecommunications markets effectively competitive. We seek comment on the relative costs and benefits of constraining or

encouraging variations among the states in carrying out their responsibilities under section 252. We also invite parties to comment on whether our rules implementing section 251 can be crafted to allow states to implement policies reflecting unique concerns present in the respective states, without vitiating the intended effects of a scheme of overarching national rules. We further ask parties to comment on the consequences of fostering or constraining variability among the states.

36. As a separate matter, we note that section 251 and our implementing regulations govern the states' review of BOC statements of generally available terms and conditions, as well as arrangements arrived at through compulsory arbitration pursuant to section 252(b).[45] We tentatively conclude that we should adopt a single set of standards with which both arbitrated agreements and BOC statements of generally available terms must comply. We believe that this is consistent with both the language and the purpose of the 1996 Act. We seek comment on this tentative conclusion.

37. On a separate jurisdictional issue, we tentatively conclude that Congress intended sections 251 and 252 to apply to both interstate and intrastate aspects of interconnection, service, and network elements, and thus that our regulations implementing these provisions apply to both aspects as well. It would make little sense, in terms of economics, technology, or jurisdiction, to distinguish between interstate and intrastate components for purposes of sections 251 and 252. Indeed, if the requirements of sections 251 and 252 regarding interconnection, and our regulations thereunder, applied only to interstate interconnection, as might be argued in light of the lack of a specific reference to intrastate service in those sections, states would be free, for example, to establish disparate guidelines for intrastate interconnection with no guidance from the 1996 Act. We believe that such a result would be inconsistent with Congress' desire to establish a national policy framework for interconnection and other issues critical to achieving local competition. As Senator Lott observed, "In addressing *local* and long distance issues, creating an open access and sound interconnection policy was the key objective . . . ."[46] Representative Markey noted that, "[W]e take down the barriers of *local* and long distance and cable company, satellite, computer, software entry into any business they want to get in."[47]

38. We also tentatively conclude that it would be inconsistent with the 1996 Act to read into sections 251 and 252 an unexpressed distinction by assuming that the FCC's role is to establish rules for interstate aspects of interconnection and the states' role is to arbitrate and approve intrastate aspects of interconnection agreements. Because the statute explicitly contemplates that the states are to follow the Commission's rules, and because the Commission is required to assume the state commission's responsibilities if the state commission fails to act to carry out its section 252 responsibilities, we believe that the jurisdictional role of each must be parallel. We seek comment on our tentative conclusion. The argument has also been raised that sections 251 and 252 apply *only* with respect to intrastate aspects of interconnection, service, and network elements. We seek comment on this argument as well.

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[45] 1996 Act, sec. 101, §§ 252(b), (f).

[46] 141 Cong. Rec. S7906 (June 7, 1995) (emphasis added).

[47] 142 Cong. Rec. H1151 (Feb. 1, 1996) (emphasis added).

39. Section 2(b) of the 1934 Act does not require a contrary tentative conclusion. Section 2(b) provides that, except as provided in certain enumerated sections not including sections 251 and 252, "nothing in [the 1934] Act shall be construed to apply or to give to the Commission jurisdiction with respect to . . . charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communication service by wire or radio of any carrier . . . ."[48] As stated above, however, we tentatively conclude that section 251 applies to certain "charges, classifications, practices, services, facilities, or regulations for or in connection with intrastate communication service." In enacting section 251 after section 2(b) and squarely addressing therein the issues before us, we believe Congress intended for section 251 to take precedence over any contrary implications based on section 2(b). We seek comment on this tentative conclusion.

40. We note that sections 251 and 252 do not alter the jurisdictional division of authority with respect to matters falling outside the scope of these provisions. For example, rates charged to end users for local exchange service, which have traditionally been subject to state authority, continue to be subject to state authority. Indeed, that section 251 does not disturb state authority over local end user rates may explain why Congress saw no need to amend section 2(b) expressly, whereas it did see such a need in its 1993 legislation establishing commercial mobile radio service (CMRS).[49] In the 1993 legislation, Congress eliminated the authority of states to regulate the rates charged for CMRS and so may have felt that an express amendment to section 2(b) would be especially helpful. We seek comment on these issues as well.

41. We also seek comment on the relationship between sections 251 and 252 and the Commission's existing enforcement authority under section 208. Section 208 of the Act gives the Commission general authority over complaints regarding acts by "any common carrier subject to this Act, in contravention of the provisions thereof."[50] Does this mean that the Commission has authority over complaints alleging violations of requirements set forth in sections 251 or 252? If not, in what forum would such complaints be reviewed? In state commissions? In courts? Is there a relevant distinction here between complaints concerning the formation of interconnection agreements and complaints regarding implementation of such agreements? We also seek comment on the relationship between sections 251 and 252 and any other source of Commission enforcement authority that may be applicable. We further seek comment on how we might increase the effectiveness of the enforcement mechanisms available under the 1934 Act, as amended. We seek comment on how private rights of action might be used under sections 206-208 of the 1934 Act, as amended, and the different roles the Commission might play, for example, as an expert agency, to speed resolution of disputes in other forums used by private parties.

B. Obligations Imposed by Section 251(c) on "Incumbent LECs"

42. We now turn to the particular provisions of section 251 that the Commission is obligated to implement under section 251(d)(1). We begin with section 251(c) because we believe that provision is the cornerstone of Congress's plan for opening local telecommunication markets to competitive entry.

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[48] 47 U.S.C. § 152(b).

[49] 47 U.S.C. § 332(c).

[50] 47 U.S.C. § 208(a).

43. Section 251(c) establishes obligations for "incumbent local exchange carriers."[51] An "incumbent local exchange carrier" for a particular area is defined in section 251(h)(1) as a LEC that: (1) as of the enactment date of the 1996 Act, both "provided telephone exchange service in such area" and "was deemed to be a member of the exchange carrier association pursuant to Section 69.601 of the Commission's regulations," or (2) "is a person or entity" that, on or after the enactment date of the 1996 Act, "became a successor or assign of a member" of the exchange carrier association.[52]

44. In addition, under Section 251(h)(2), the Commission may, by rule, treat another LEC or class of LECs as an incumbent LEC if (1) "such carrier occupies a position in the market for telephone exchange service within an area that is comparable" to that of an incumbent LEC, (2) "such carrier has substantially replaced" an incumbent LEC, and (3) "such treatment is consistent with the public interest, convenience, and necessity and the purposes" of Section 251.[53] We seek comment on whether we should establish at this time standards and procedures by which carriers or other interested parties could seek to demonstrate that a particular LEC should be treated as an incumbent LEC pursuant to Section 251(h)(2).

45. We further seek comment on whether state commissions are permitted to impose on carriers that have not been designated as incumbent LECs any of the obligations the statute imposes on incumbent LECs. We understand that some states have found that the negotiation process between incumbent LECs and their potential competitors may move more smoothly if the arrangements offered by an incumbent LEC are made reciprocal. Under this approach, for example, a potential competitor would be required to make available to an incumbent LEC directory assistance information on the same basis that the LEC agreed to furnish the information. Some parties have alleged, however, that imposing on new entrants the obligations imposed on incumbent LECs would undermine the competitive goals of the 1996 Act.[54] We seek comment on whether imposing on new entrants requirements that the 1996 Act imposes on incumbent LECs would be consistent with the Act's distinction between the obligations of all telecommunications carriers, all LECs and the additional obligations of all incumbent LECs.

1. Duty to Negotiate in Good Faith

46. As noted in section I.B., above, if the parties fail to negotiate an agreement voluntarily, they must submit to arbitration.[55] Section 251(c)(1) states that "each incumbent local exchange carrier has the . . . duty to negotiate in good faith in accordance with section 252 the particular terms and conditions of agreements to fulfill the duties" described in

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[51] Incumbent local exchange carriers also have obligations under sections 251(a) and (b), as discussed *infra*, at Sections II.C. and D.

[52] 1996 Act, sec. 101, § 251(h)(1).

[53] 1996 Act, sec. 101, § 251(h)(2).

[54] Letter from Daniel L. Brenner, Vice President for Law and Regulatory Policy, National Cable Television Association, to Regina M. Keeney, Chief, Common Carrier Bureau, FCC (Apr. 15, 1996).

[55] 1996 Act, sec. 101, § 252(b).

section 251(b) for LECs and section 251(c) for incumbent LECs.[56] In addition, section 252(b)(5) provides that, pursuant to the arbitration process, the refusal of a party to "participate further in the negotiations, to cooperate with the State commission in carrying out its function as an arbitrator, or to continue to negotiate in good faith in the presence of, or with the assistance of, the State commission shall be considered a failure to negotiate in good faith."[57] The state commission is required to resolve, within 9 months after the incumbent LEC receives a request under section 252, any issues that were submitted for arbitration.[58]

47. We seek comment on the extent to which the Commission should establish national guidelines regarding good faith negotiation under section 251(c)(1), and on what the content of those rules should be. We note that carriers have submitted some information alleging that LECs already have employed certain tactics that the Commission should determine violate the duty to negotiate in good faith.[59] For example, carriers have alleged that incumbent LECs have refused to begin to negotiate until the requesting telecommunications carrier satisfies certain conditions, such as signing a nondisclosure agreement, or agreeing to limit its legal remedies in the event that negotiations fail. We believe that such tactics might impede the development of local competition, and may be inconsistent with provisions of the 1996 Act.[60] We seek comment on the extent to which these or other practices should be deemed to violate the duty to negotiate in good faith. We note that courts and the Commission previously have addressed issues regarding good faith negotiation.[61] We seek comment on specific legal precedent regarding the duty to negotiate in good faith that we should rely on in establishing national guidelines regarding section 251(c)(1).

48. A related issue is what effect section 252 has on agreements regarding service, interconnection, or unbundled network elements that predate the 1996 Act. Section 252(e)(1) states: "Any interconnection agreement adopted by negotiation or arbitration shall be submitted for approval to the State commission." Section 252(a)(1) states that an agreement for interconnection, service, or network element, "including any interconnection agreement negotiated before the date of the enactment of the Telecommunications Act of 1996, shall be submitted to the State commission under subsection (e) of this section."[62] We seek comment on whether these provisions require parties that have existing agreements to submit

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[56] 1996 Act, sec. 101, § 251(c)(1).

[57] 1996 Act, sec. 101, § 252(b)(5).

[58] 1996 Act, sec. 101, § 252(b)(4)(C).

[59] *See, e.g., Implementing Local Competition Under the Telecommunications Act of 1996, A Proposed Handbook for the FCC*, Association for Telecommunications Services (ALTS), March 1996 (ALTS Handbook) at 10. *See also* Letter from Richard J. Metzger, general counsel, ALTS, to Reed E. Hundt, Chairman, FCC (Mar. 25, 1996).

[60] *See e.g.*, 1996 Act, sec. 101, §§ 252(h), (i).

[61] *See e.g., Southern Pacific Communications Co. v. American Tel. & Tel.*, 556 F.Supp. 825 (D.D.C. 1983).

[62] 1996 Act, sec. 101, § 252(a)(1).

those agreements to state commissions for approval.[63] We also seek comment on whether one party to an existing agreement may compel renegotiation (and arbitration) in accordance with the procedures set forth in section 252.

2. Interconnection, Collocation, and Unbundled Elements

a. Interconnection

49. Section 251(c)(2) imposes upon incumbent LECs "the duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network . . . for the transmission and routing of telephone exchange service and exchange access."[64] Such interconnection must be: (1) provided by the incumbent LEC at "any technically feasible point within [its] network;"[65] (2) "at least equal in quality to that provided by the local exchange carrier to itself or . . . [to] any other party to which the carrier provides interconnection;"[66] and (3) provided on rates, terms, and conditions that are "just, reasonable, and nondiscriminatory, in accordance with the terms and conditions of the agreement and the requirements of this section and section 252."[67] The interconnection obligation plays a vital role in promoting competition by ensuring that a requesting carrier can on reasonable rates, terms and conditions transmit telecommunications traffic between its network and the incumbent's network in a reliable and efficient manner.[68]

50. We believe that uniform national rules for evaluating interconnection arrangements would likely offer several advantages in advancing Congress's desire to create a pro-competitive national policy framework regarding local telephone service. For example, national standards would likely speed the negotiation process by eliminating potential areas of dispute. We note that, in the past, disputes before the FCC between LECs and interconnectors have arisen most often where our rules lacked specificity, or where no

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[63] ALTS argues that preexisting interconnection agreements between BOCs and independent, incumbent LECs must be submitted to state agencies for approval and that the terms of those agreements must be made generally available pursuant to section 252(a)(1), (e) and (i). ALTS Handbook at 24. *See also* Letter from Richard J. Metzger, General Counsel, ALTS, to Craig A. Glazer, Chairman, Ohio Public Utilities Commission (April 1, 1996). *See also* Letter from Gary R. Lytle, Vice President, Federal Relations, Ameritech, to Reed E. Hundt (April 12, 1996) (responding to the April 1 letter from ALTS).

[64] 1996 Act, sec. 101, § 251(c)(2)(A).

[65] 1996 Act, sec. 101, § 251(c)(2)(B).

[66] 1996 Act, sec. 101, § 251(c)(2)(C).

[67] 1996 Act, sec. 101, § 251(c)(2)(D).

[68] Senator Burns has stated that the "rules on interconnection will empower competitors by ensuring that they can gain access on fair and reasonable terms to existing local telephone facilities . . ." 142 Cong. Rec. S687-01 (Feb. 1, 1996). Senator Pressler has explained that "Interconnection . . . will put new competitors . . . on the same footing with former monopolies." 141 Cong. Rec. S8188 (June 12, 1995).

standards had been adopted.[69] Lingering disputes over the terms and conditions of interconnection due to confusion or ambiguity create the potential for incumbent LECs to delay entry. For these reasons we tentatively conclude that uniform interconnection rules would facilitate entry by competitors in multiple states by removing the need to comply with a multiplicity of state variations in technical and procedural requirements.

51. We also, however, seek comment on the consequences of not establishing such specific rules for interconnection. We seek comment on whether there are instances wherein the aims of the 1996 Act would be better achieved by permitting states to experiment with different approaches. Would permitting substantial variation make it easier for states to respond more appropriately to technical, demographic, or geographic issues specific to that state or region without detracting from the overall purposes of the 1996 Act? For example, might technical differences, such as a lack of digital switching capability in a particular network, affect the technically feasible interconnection points on the network? Would variations in technical requirements among states affect the ability of new entrants to plan and configure regional or national networks? For example, how would variations in the definition of "technical feasibility," the number of required points of interconnection, and methods of interconnection, affect the ability of new entrants to plan and configure regional or national networks? How would such variations affect the entrant's ability to deploy alternative network architectures, such as synchronous optical network (SONET) rings, which may deliver telephone service more efficiently? Would a lack of explicit national standards reduce predictability and certainty, and thereby slow down the development of competition? Would a lack of explicit guidelines impair the state's ability to complete arbitration within 9 months of the date that the interconnection request was made, or our ability to evaluate BOC compliance under section 271 within 90 days? Would a lack of clear national standards impair our ability under section 252(e) to assume a state commission's responsibilities if the state commission fails to act to carry out its responsibilities under section 252?

52. We also encourage parties to submit information regarding the approaches taken by those states that have allowed interconnection.[70] A number of states already have adopted a variety of approaches to interconnection.[71] For example, New York sets basic "expectations" that constitute default provisions if the parties fail to agree. These provisions include the availability of two-way trunking facilities and combined trunking arrangements.[72] California has adopted what it calls a "preferred outcomes" approach. Under this approach, parties are encouraged to use 13 broad criteria regarding interconnection arrangements (the "preferred outcomes") that were established by the State commission to guide the negotiation

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[69] *See, e.g.*, *Local Exchange Carrier's Rates, Terms, and Conditions for Expanded Interconnection for Special Access*, Order Designating Issues for Investigation, 8 FCC Rcd 6909 (1993) (*Special Access Physical Collocation Designation Order*); *Local Exchange Carrier's Rates, Terms, and Conditions for Expanded Interconnection Through Virtual Collocation for Special Access and Switched Transport*, Phase II, Order Designating Issues for Investigation, 10 FCC Rcd 11116 (1995) (*Virtual Collocation Designation Order*).

[70] We note again that, although some states have implemented detailed interconnection rules, most states either have instituted only general guidelines, or have no interconnection rules at all. A number of states have not yet certified any new entrants to provide competitive local telecommunications services.

[71] Examples of various state substantive rules regarding different aspects of interconnection are discussed in more detail below.

[72] *See Order Instituting Framework for Carrier Interconnection*, Case 94-C-0095, (N.Y. Pub. Serv. Comm'n Sept. 27, 1995) (*NYPSC Interconnection Order*).

and arbitration process. Although parties may develop different outcomes, preferred outcomes receive expedited review and approval. Arbitration judges may also use the preferred outcomes as guidelines in cases where the negotiations fail, and they have the discretion to mandate interconnection provisions that go beyond the preferred outcomes.[73] With respect to each of the issues discussed below, we invite commenters to analyze the advantages and the disadvantages of the approaches states have adopted with respect to interconnection arrangements. We also seek comment on whether any elements of these state approaches would be suitable for incorporation into national standards implementing the 1996 Act. Finally, we ask commenting parties to identify state approaches to interconnection that they believe are inconsistent with or preempted by the 1996 Act, or that are inadvisable from a policy perspective.

53. We further seek comment on the relationship between the obligation of incumbent LECs to provide "interconnection" under 251(c)(2) and the obligation of the incumbent LEC, and all LECs, to establish reciprocal compensation arrangements for the "transport and termination" of telecommunications pursuant to 251(b)(5). The issue is significant mainly because, in section 252(d)(2), there is one pricing standard for "interconnection" under section 251(c)(2) and a separate one for "transport and termination" under 251(b)(5).

54. On the one hand, the term "interconnection," as used in section 251(c)(2), might refer only to the facilities and equipment physically linking two networks and not to transport and termination services provided by such linking -- in which case there is no overlap in the coverage of the two sections. On the other hand, the term "interconnection" as used in section 251(c)(2) might refer to both the physical linking of the two networks *and* to transport and termination services -- in which case there is considerable overlap. We seek comment on how to "interpret" the term "interconnection" in section 251(c)(2). Parties that advocate the broader meaning should also comment on the overlap in the coverage of the sections and how the overlap affects which section 252(d) pricing standards apply.

55. In the following paragraphs, we discuss the requirements of the 1996 Act concerning interconnection in more detail. More specifically, we address issues of technically feasible points of interconnection, just, reasonable, and nondiscriminatory terms and conditions, and quality and methods of interconnection.

(1) Technically Feasible Points of Interconnection

56. Subsection (c)(2)(B) requires that incumbent LECs provide interconnection "at any technically feasible point within the [incumbent LEC's] network."[74] We seek comment on what constitutes a "technically feasible point" within the incumbent LEC's network for purposes of this section. In this regard, we note that network technology continues to advance and emphasize that we seek to avoid a static definition that may artificially limit future interconnection. Is there a definition of "technically feasible" that will provide the necessary flexibility in determining interconnection points as network technology evolves? Further, to what extent, if any, should a risk to network reliability or other potential harm to the network be considered in determining whether interconnection at a particular point is technically feasible? We tentatively conclude that, if risks to network reliability are

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[73] *See Competition for Local Exchange Service*, Order, Decision 95-12-056 (Cal. Pub. Util. Comm'n Dec. 20. 1995).

[74] 1996 Act, sec. 101, § 251(c)(2)(B).

considered in determining whether interconnection at a certain point is technically feasible, the party alleging harm to the network will be required to present detailed information to support such a claim. We seek comment on these issues and our tentative conclusion concerning claims of network harm.

57. We also tentatively conclude that the minimum federal standard should provide that interconnection at a particular point will be considered technically feasible within the meaning of section 251(c)(2) if an incumbent LEC currently provides, or has provided in the past, interconnection to any other carrier at that point, and that all incumbent LECs that employ similar network technology should be required to make interconnection at such points available to requesting carriers. For example, many LECs already provide interconnection at the trunk- and loop-side of the local switch, transport facilities, tandem facilities, and signal transfer points.[75] We thus tentatively conclude that interconnection at those points should be technically feasible for all incumbent LECs that use technology similar to that used by LECs currently offering interconnection at those points. We believe that as technology advances, the number of points at which interconnection is feasible may change and acknowledge that the federal standard for minimum interconnection points should change accordingly.

58. Alternatively, we could allow states to determine whether interconnection at a greater number of points would also be technically feasible. We seek comment on whether allowing states to designate additional technically feasible interconnection points would make it more difficult for a carrier to develop a regional or national network. In this regard, commenters should address additional points at which LECs currently provide interconnection and on other possible points of interconnection that may be technically feasible. Because the statute imposes an affirmative obligation on incumbent LECs to provide interconnection at any technically feasible points in their networks, we further tentatively conclude that, where a dispute arises, the incumbent LEC has the burden of demonstrating that interconnection at a particular point is technically infeasible. We seek comment on this tentative conclusion.

59. We also invite parties to submit information concerning interconnection obligations and policies that state commissions have adopted for incumbent LECs to help us determine what points of interconnection states have found to be technically feasible. We note, for example, that the New York Public Service Commission (NYPSC) has established options for interconnection points that range from the incumbent LEC's premises to the requesting carrier's premises, and include any point in between. These options are deemed reasonable by the NYPSC, although they are not requirements (in contrast to other interconnection requirements, which New York sets up as default provisions). The parties are to negotiate the actual interconnection points, however.[76] We also seek comment on approaches that other states have adopted for determining the technical feasibility of interconnection at particular points. We also seek comment on which state policies are either inconsistent with the language of the 1996 Act or unwarranted from a policy perspective.

(2) Just, Reasonable, and Nondiscriminatory Interconnection

60. Section 251(c)(2)(D) requires that the interconnection provided by the incumbent

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[75] We also note that the Illinois Commission has ordered LECs to make available interconnection at subloop points. *See Adoption of Rules on Line-side Interconnection and Reciprocal Interconnection*, Interim Order, No. 94-0049 (Ill. Comm. Comm'n April 7, 1995).

[76] *See NYPSC Interconnection Order*.

LEC be "on rates, terms, and conditions that are just, reasonable, and nondiscriminatory."[77] We address the pricing of interconnection, collocation, and unbundled elements in section II.B.2.d below.

61. We seek comment on how to determine whether the terms and conditions for interconnection arrangements are just, reasonable, and nondiscriminatory. For example, should we adopt explicit national standards for the terms and conditions for interconnection? In particular, we seek comment on whether we should adopt uniform national guidelines governing installation, maintenance, and repair of the incumbent LEC's portion of interconnection facilities. We also seek comment on whether we should adopt standards for the terms and conditions concerning the payment of the non-recurring costs associated with installation.[78] We seek comment on whether the Commission should establish incentives to encourage incumbent LECs to provide just, reasonable, and nondiscriminatory interconnection and, if so, what those incentives should be. For example, should LECs be required to meet agreed upon performance standards for installing or repairing interconnection facilities and pay liquidated damages for any failure to satisfy the agreement?[79] Are there means of accomplishing this result that do not require the propagation of rules detailing specific performance standards?

62. If we were to establish national guidelines on this issue, we seek comment on state policies regarding the terms and conditions for interconnection that might serve as models. For example, with respect to meet point interconnection arrangements,[80] the state of Washington requires that each company pay for and be responsible for building and maintaining its own facilities up to the meet point, as is typical in this type of interconnection arrangement.[81] We note that New York permits earnest fees on interconnection arrangements to ensure the good faith nature of interconnection requests before the incumbent LEC begins construction or other necessary arrangements for interconnection. That fee is then applied to the requesting party's costs for interconnection.[82] We recognize, however, that LECs potentially could use such fees and other terms and conditions to delay and deter entry. We invite parties to comment on this approach as well as on other states' policies. We specifically seek comment on whether such policies are consistent with the pro-competitive and deregulatory tenor of the Act. We seek comment on whether any state substantive rules regarding the terms and conditions for interconnection might be adopted as a national standard, as well as comment on which state rules might be inconsistent with the 1996 Act.

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[77] 1996 Act, sec. 101, § 251(c)(2)(D).

[78] ALTS Handbook at 18.

[79] *See generally* Implementing the Telecommunications Act of 1996: Encouraging Local Exchange Competition, TCG, Apr. 4, 1996 (*TCG Submission*).

[80] A meet point is a point, designated by two carriers, at which one carrier's responsibility for service begins and the other's ends. A meet point interconnection arrangement requires each carrier to build and maintain its network to the meet point. Each carrier also pays its share of the cost of the interconnection arrangement.

[81] Washington Utilities and Transportation Commission, Fourth Supplemental Order, Docket UT-941464 *et al.* (Oct. 1995) (*Washington State Order*).

[82] *See* New York Optical Transport Service Tariff, No. 913 (1992).

(3) Interconnection that is Equal in Quality

63. Section 251(c)(2)(C) requires that the interconnection provided by the incumbent LEC be "at least equal in quality to that provided by the [incumbent LEC] to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection."[83] We seek comment on what criteria may be appropriate in determining whether interconnection is "equal in quality." We seek comment on whether these criteria should be adopted as a national standard, or whether competitive objectives would be achievable by allowing variations and experimentation among states. We also seek comment on relevant state requirements, such as those in Iowa, which prohibit a rate-regulated incumbent from providing inferior interconnection to another provider.[84] We invite parties to comment on this and other provisions that might guide our efforts in implementing the "equal in quality" requirement of the 1996 Act.

(4) Relationship Between Interconnection and Other Obligations Under the 1996 Act

64. Section 251(c)(2) further requires incumbent LECs to provide interconnection with the LEC's network "for the facilities and equipment of any requesting telecommunications carrier." In comparison, section 251(c)(6) imposes upon incumbent LECs "the duty to provide . . . for physical collocation of equipment necessary for interconnection."[85] We note that section 251(c)(6) regarding physical collocation does not expressly limit the Commission's authority under section 251(c)(2) to establish rules requiring incumbent LECs to make available a variety of technically feasible methods for interconnection. These methods may, for example, include meet point arrangement as well as physical and virtual collocation. We tentatively conclude that the Commission has the authority to require, in addition to physical collocation, virtual collocation and meet point interconnection arrangements, as well as any other reasonable method of interconnection. We seek comment on this tentative conclusion.

65. We seek comment on the various state requirements concerning methods for interconnection. For example, in the state of Washington, the commission has ordered that companies establish mutually agreed upon meet points for purposes of exchanging local traffic. Incumbent LECs may establish, through negotiations, separate meet points for each company, or a common hub by which multiple companies can come together efficiently.[86] Oregon requires that requesting carriers be permitted to interconnect with incumbent LECs by negotiating mutually acceptable arrangements, including meet points.[87] Maryland allows the incumbent LEC the option of using virtual or physical collocation, subject to commission

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[83] 1996 Act, sec. 101, § 251(c)(2)(C).

[84] Iowa Code, § 476.101(2).

[85] 1996 Act, sec. 101, § 251(c)(6).

[86] *Washington State Order*.

[87] *Applications for Certificate of Authorization to Provide Telecommunications Service in Oregon*, Order No. 96-021 (Oregon Pub. Util. Comm'n Jan. 12, 1996).

review.[88] We seek information on these and other similar state requirements. We seek comment on whether any state requirements concerning methods for interconnection might be appropriately adopted as a national standard. We also seek comment concerning those state requirements that may be inconsistent with the 1996 Act or inappropriate from a policy standpoint.

b. Collocation

66. Section 251(c)(6) of the Act requires incumbent LECs to provide "for the physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier, except that the carrier may provide for virtual collocation if the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations."[89] Section 251(c)(6) fosters competition by ensuring that a competitor may install equipment necessary for interconnection or access to unbundled network elements on LEC premises and gives competitors access to the LEC central office to install, maintain, and repair this equipment.

67. The establishment of national rules with respect to at least some issues regarding collocation would appear to offer several important benefits. For example, we believe that national standards would speed the negotiation process by eliminating potential areas of dispute. Lingering disputes or ambiguity regarding the parties' obligations may delay competitive entry. In addition, uniform standards would probably facilitate entry by competitors in multiple states by removing the need to comply with a patchwork of state variations in technical and procedural requirements. Finally, clear uniform rules could add speed, fairness, and simplicity to the arbitration process, and reduce uncertainty. We also note that beginning in 1992, the Commission adopted both physical and virtual collocation rules and that these rules were then used by several states to develop their own approaches to collocation.[90] We therefore tentatively conclude that we should adopt national standards where appropriate to implement the collocation requirements of the 1996 Act.

68. We also seek comment on the extent to which we should establish national rules for collocation that allow for some variation among states, and on the advantages and disadvantages of permitting such variation. Would permitting material variation foster competition and make it easier for states to respond more appropriately to issues specific to that state or region? Would variations in technical requirements among states affect the ability of new entrants to plan and configure regional or national networks? Would a lack of specific national standards reduce predictability and certainty, and thereby slow down the development of competition? Would a lack of explicit guidelines impair the state's ability to

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[88] *Chesapeake & Potomac Telephone Company of Maryland*, Order No. 70357 in Case No. 8533, (Md. Pub. Serv. Comm'n Feb. 11, 1993).

[89] 1996 Act, sec. 101, § 251(c)(6).

[90] *Expanded Interconnection With Local Telephone Company Facilities*, Report and Order and Notice of Proposed Rulemaking, 7 FCC Rcd 7369 (1992) (*Special Access Expanded Interconnection Order*); *Special Access Physical Collocation Designation Order*, 8 FCC Rcd 6909; *Expanded Interconnection With Local Telephone Company Facilities*, Memorandum Opinion and Order, 9 FCC Rcd 5154, 5166, ¶¶ 31-32 (1994)(*Virtual Collocation Expanded Interconnection Order*); *Virtual Collocation Designation Order*, 10 FCC Rcd 11116.

complete arbitration within 9 months of the date that the interconnection request was made, or our ability to evaluate BOC compliance under section 271 within the statutory time-frame? Would a lack of specific national standards impair our ability under section 252(e) to assume a state commission's responsibilities if the state commission fails to act to carry out its responsibilities under section 252?

69. We also encourage parties to submit information concerning specific state approaches regarding collocation that might provide useful models for national guidelines. In several states, including California and New York, incumbent LECs currently provide physical collocation. Under California's "preferred outcomes" approach,[91] the "preferred outcome" concerning physical collocation is similar to rules the FCC previously established for physical collocation.[92] California presently allows LECs to offer virtual or physical collocation. New York applies a comparably efficient interconnection (CEI) standard to both new entrants and incumbent LECs, that requires that interconnection be technically and economically comparable to actual physical collocation. New York does not have detailed physical collocation requirements under the CEI standard, but rather leaves such matters to negotiation between the parties.[93] Currently in New York, Rochester Telephone and NYNEX both offer physical collocation to satisfy the CEI standard. In other states, incumbent LECs currently provide only virtual collocation. Illinois, which had originally mandated physical collocation, recently adopted rules regarding virtual collocation. The state of Washington also permits virtual collocation and has stated that such charges for virtual collocation should be no higher than charges for physical collocation. The Washington Commission also concluded that, if meet point interconnection arrangements are established by mutual agreement, decisions about where equipment is placed will be resolved as part of that negotiation, and therefore a virtual collocation tariff probably would not be necessary.[94] Finally, Florida permits LECs to offer both virtual and physical collocation, but has left the details of such arrangements to negotiation between the parties.

70. We seek comment on whether one or more of these state collocation policies would be suitable for use as a national standard. We also seek comment on state policies that commenters believe are inconsistent with the goals of the 1996 Act, or that are inadvisable from a policy perspective. In this regard, parties are specifically asked to comment on the possible consequences of requiring new entrants with regional or national business plans to comply with divergent state requirements.

71. In light of our tentative conclusion that we should adopt national guidelines concerning physical and virtual collocation, we seek comment on what specific regulations would foster opportunities for local competition. For example, section 251(c)(6) mandates physical collocation at the "premises" of an incumbent LEC. Consistent with the ordinary

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[91] *See Competition for Local Exchange Service*, Order, Decision 95-12-056, (Cal. Pub. Util. Comm'n Dec. 20, 1995).

[92] The Commission's rules regarding mandatory physical collocation are no longer in effect. *Bell Atlantic Telephone Companies v. FCC*, 24 F.3d 1441 (D.C. Cir. 1994) (*Bell Atlantic v. FCC*).

[93] *NYPSC Interconnection Order*.

[94] Washington Utilities and Transportation Commission, Fourth Supplemental Order, Docket UT-941464 et al. (Oct. 1995).

meaning of the term "premises,"[95] we tentatively conclude that "premises" includes, in addition to incumbent LEC central offices or tandem offices, all buildings or similar structures owned or leased by the incumbent LEC that house LEC network facilities. We seek comment on this tentative conclusion. We also seek comment on whether structures housing LEC network facilities on public rights of way, such as vaults containing loop concentrators, or similar structures should be deemed to be LEC premises. We note that collocation of facilities inside such structures would still be subject to the technical feasibility and space availability limitations of section 251(c)(6).

72. Section 251(c)(6) requires the incumbent LEC to provide for the physical collocation of equipment necessary for interconnection or access to unbundled network elements. We seek comment on what types of equipment competitors should be permitted to collocate on LEC premises. Section 251(c)(6) also allows the incumbent LEC to provide virtual collocation instead of physical collocation in specific locations if "the local exchange carrier demonstrates to the state commission that physical collocation is not practical for technical reasons or because of space limitations."[96] We seek comment on whether we should establish guidelines for states to apply when determining whether physical collocation is not practical for "technical reasons or because of space limitations," and, if so, what those guidelines might be.[97] For example, to what extent, if any, should the risk of reduced reliability or other harm to the network be considered as a technical reason justifying a refusal to offer physical collocation, and what type of evidence must the LEC offer to prove its claim? We also seek comment on whether national guidelines may be necessary to prevent anticompetitive behavior by the manipulation or unreasonable allocation of space by either the incumbent LEC or new entrants.

73. Finally, we seek comment on whether we should adopt comprehensive national standards for collocation by readopting our prior standards governing physical and virtual collocation that we established in the *Expanded Interconnection* proceeding.[98] In that proceeding, we addressed standards governing, among other things, the following: space exhaustion and allocation; types of equipment that could be placed, or designated for placement, in incumbent LEC offices; points of entry; insurance; and exemptions from physical collocation requirements based on space limitations. We also seek comment regarding whether we should modify those standards, in light of: (1) the new statutory

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[95] "Premises" is defined as "a building together with its grounds or other appurtenances." Random House College Dictionary 1046 (revised ed. 1980).

[96] 1996 Act, sec. 101, § 251(c)(6).

[97] In the *Special Access Expanded Interconnection Order*, the Commission established general rules addressing collocation space limitation. The Commission stated that LECs should be required to provide virtual collocation when space for physical collocation is exhausted, and that LECs should be required to offer central office space on a first-come, first-served basis. The Commission also required that, although LECs did not have to relinquish space reserved for their future use, they were required to consider interconnector demand for central office space when remodeling or building new central offices just as they consider demand for other services when undertaking such projects. *Special Access Expanded Interconnection Order*, 7 FCC Rcd 7369 (1992). In the *Special Access Physical Collocation Designation Order*, the Commission set forth for investigation issues relating to space warehousing. *Special Access Physical Collocation Designation Order*, 8 FCC Rcd 6909 (1993).

[98] *Special Access Expanded Interconnection Order*, 7 FCC Rcd 7369; *Special Access Physical Collocation Designation Order*, 8 FCC Rcd 6909; *Virtual Collocation Expanded Interconnection Order*, 9 FCC Rcd 5154; *Virtual Collocation Designation Order*, 10 FCC Rcd 11116.

requirements; (2) disputes that have arisen in the subsequent investigations regarding the LECs' physical and virtual collocation tariffs;[99] or (3) additional policy considerations.[100] We also tentatively conclude, in light of the court decision in *Pacific Bell v. FCC*,[101] that our existing policies on expanded interconnection for interstate special access and switched transport services should continue to apply pursuant to our authority under sections 201 and 251(g). We seek comment on this tentative conclusion.

c. Unbundled Network Elements

74. Section 251(c)(3) imposes a duty upon incumbent LECs "to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252." Incumbent LECs are required to provide these network elements "in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service." In addition, section 251(d)(2) provides that the Commission, in determining which network elements incumbent LECs should unbundle, "shall consider, at a minimum, whether (A) access to such network elements as are proprietary in nature is necessary; and (B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer."[102]

75. Together, sections 251(c)(3) and 251(d)(2) foster competition by ensuring that new entrants wishing to compete with incumbent LECs can purchase access to those network elements that they do not possess, without paying for elements that they do not require.[103] The ability to purchase, at reasonable, cost-based prices, access only to those network elements a carrier needs allows new entrants to enter the LEC's market gradually, building their own networks over time, and purchasing fewer unbundled elements as their own networks develop. Further, new entrants can purchase access to those elements incumbent LECs can provide most efficiently, and at the same time build their own facilities only where

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[99] Tariffs for both virtual and physical collocation offerings filed by the LECs pursuant to the *Virtual Collocation Expanded Interconnection Order* are currently under investigation. *Special Access Physical Collocation Designation Order*, 8 FCC Rcd 6909; *Virtual Collocation Designation Order*, 10 FCC Rcd 11116. In these designation orders, we addressed disputes that arose over various standards issues, for example: space size, space warehousing, termination notice and reasons, cage inspections, and insurance.

[100] We address the pricing requirements for collocation in section II.B.2.d below.

[101] *Pacific Bell v. FCC*, No. 94-1547 (D.C. Cir. Mar. 22, 1996). The court remanded for reconsideration the Commission's virtual collocation order, 9 FCC Rcd 5145, concluding that the Commission's regulations implementing the 1996 Act would render moot the questions about the future effect of the order. The petitioners had argued that the Commission lacked statutory authority to order incumbent LECs to provide virtual collocation.

[102] 1996 Act, sec. 101, § 251(c)(3).

[103] The conferees recognized this critical function of section 251(c)(3): "[I]t is unlikely that competitors will have a fully redundant network in place when they initially offer local service, because the investment necessary is so significant. Some facilities and capabilities . . . will likely need to be obtained from the incumbent [LEC] as network elements pursuant to new section 251." Joint Explanatory Statement at 148.

it would be efficient.

76. In addition, the requirement that rates, terms, and conditions be just, reasonable, and nondiscriminatory: (1) prevents the incumbent LEC from offering unbundled elements on rates, terms, and conditions so overpriced or burdensome as to discourage competition; (2) enables new entrants to discipline the incumbent's pricing; and (3) allows entrants to take market share from the incumbent if the new entrant is more efficient or if the incumbent attempts to charge prices above competitive levels.

77. Section 251(d)(2) provides that the Commission will "determin[e] what network elements should be made available for purposes of subsection (c)(3)." As a result of this provision, and the obligation created by section 251(d)(1), we tentatively conclude that section 251 obligates the Commission to identify network elements that incumbent LECs should unbundle and make available to requesting carriers under subsection (c)(3). Rather than itemize an exhaustive list of network elements, however, some of which competing carriers may not desire, we further tentatively conclude that the Commission should identify a minimum set of network elements that incumbent LECs must unbundle for any requesting telecommunications carrier, and, to the extent necessary, establish additional or different unbundling requirements in the future as services, technology, and the needs of competing carriers evolve. We seek comment on these tentative conclusions.

78. Carriers may, of course, voluntarily negotiate agreements for unbundling elements that differ from those addressed by the Commission under section 251(c)(3).[104] In addition, section 252(e)(3) preserves a state's authority to impose other requirements of state law in its review of arbitrated agreements.[105] Thus, to the extent such requirements are consistent with the provisions of section 251(c)(3) and our rules,[106] we tentatively conclude that states may require additional unbundling of LEC networks.

79. In light of our obligations under sections 251(d)(1) and 251(d)(2), we also seek comment on whether and to what extent, beyond merely identifying network elements that incumbent LECs must provide on an unbundled basis pursuant to subsection (c)(3), the Commission should establish minimum requirements governing such unbundling. These requirements could include, for example, provisioning and service intervals, nondiscrimination safeguards, and technical standards. We believe that minimum national requirements governing the unbundling of network elements would likely offer several advantages. Such requirements would provide uniform technical requirements, and would enhance the ability of new entrants to take advantage of economies of scale and to plan and deploy networks stretching across state and LEC boundaries. We note that telecommunications equipment has heretofore been provided by national manufacturers selling to a nation-wide market, without substantial regional or state-to-state variation in equipment design. Minimum national requirements also may ensure some level of network and equipment interoperability between both competing and noncompeting carriers. Further, Commission minimums would reduce or eliminate the need for certain duplicative decision-making by the states, provide a ready

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[104] 1996 Act, sec. 101, § 252(a).

[105] 1996 Act, sec. 101, § 252(e)(3). Such requirements could include intrastate telecommunications service quality standards. Section 251(d)(3) also preserves the right of states to enforce consistent access and interconnection regulations. 1996 Act, sec. 101, § 251(d)(3).

[106] *See, e.g.,* 1996 Act, sec. 101, § 252(c)(1).

framework for the many states that have not acted to unbundle LEC networks, and speed the negotiation and arbitration processes by reducing any ambiguity in the parties' obligations. Thus, states could rely on a set of generally applicable minimum requirements, while prescribing additional rules of unbundling tailored to their particular circumstance.

80. We also seek comment on whether and to what extent we should establish national rules for unbundled network elements that allow for some variation among states. For example, we seek comment on the extent to which such rules should permit states to impose different obligations to address state-specific concerns and to experiment with alternative approaches, and whether permitting such variation would better achieve the goals of the 1996 Act. Would variations in technical requirements among states affect the ability of new entrants to plan and configure regional or national networks? Would a lack of explicit requirements impair a state's ability to complete arbitrations within the prescribed time-frame, or our ability to evaluate BOC compliance under section 271 within 90 days? Would a lack of clear national rules impair our ability under section 252(e) to assume a state commission's responsibilities if the state commission fails to act to carry out its responsibilities under section 252?

81. We also encourage parties to provide us with information regarding the policies that states have adopted to address network unbundling. While many states have not acted at all to unbundle LEC networks, several states have ordered some amount of LEC network unbundling. States such as Illinois, New York, California, and Maryland require, or plan to require, LECs to unbundle at least local loops. New York, for example, has implemented a request-based approach that requires unbundling only for requested elements (to date local loops and ports), and then only if essential facilities are involved. Other states, such as Maryland and Florida, require LECs to unbundle all network elements to the extent technically feasible and "reasonable" or "economically feasible," and address unbundling requirements for a specific element when that element is requested.[107] In contrast to these request-based approaches, some states, such as Colorado, Hawaii, and California, determine an essential or "key" set of LEC network elements that LECs must unbundle. We seek comment on the policies that other states have adopted.

82. Finally, with respect to each of the issues discussed below, we request comment on whether any existing state approaches, alone or in combination, would be suitable for incorporation into national rules implementing section 251(c)(3). We also ask commenting parties to identify state approaches that they believe are either inconsistent with the 1996 Act or that are inadvisable from a policy perspective.

(1) Network Elements

83. Section 3(29) defines a "network element" as both "a facility or equipment used in the provision of a telecommunications service" as well as "features, functions, and capabilities that are provided by means of such facility or equipment."[108] According to the Joint Explanatory Statement, "[t]he term 'network element' was included to describe the facilities, such as local loops, equipment, such as switching, and the features, functions, and capabilities that a [LEC] must provide for certain purposes under other sections of the

[107] 85 Md. PSC 38, 54 (1994).

[108] 1996 Act, sec. 3, § 3(29).

conference agreement."[109] We believe that under this broad definition, an entire local loop, for example, could constitute a single network element, or comprise several network elements.[110] An alternative interpretation, albeit one that would provide competitors less flexibility, is that a network element, once defined, cannot be subdivided. We seek comment on our more flexible interpretation of "network element," and how to apply the definition in accordance with the unbundling proposals discussed below.

84. We also seek comment on the apparent distinction, drawn in the definition of "network element" in the 1996 Act, between the "facility or equipment used in the provision of a telecommunications service," and the service itself. We request comment on the meaning and significance of such a distinction in general and with respect to particular elements. For example, because the nature of a network element, under the definition in the 1996 Act, is a facility or function, and is not dependent upon the particular services offered by means of such facility or function, does the purchase of access to such an element entitle, or indeed obligate the requesting carrier to provide the customer with all services, intrastate and interstate, that use the element? Under this reading of the statute, a telecommunications carrier that purchased local switching as a network element would use that element to provide whatever intrastate and interstate switching services the customer desired. As discussed more fully below in section II.B.2.e., such an entitlement or obligation to provide all of the services that a particular network element currently is used to furnish may distinguish network elements from existing access services.

85. In addition, we request comment on the relationship between section 251(c)(3),[111] concerning unbundling, and section 251(c)(4),[112] which addresses resale of incumbent LEC services. Specifically, may requesting carriers order and combine network elements to offer the same services an incumbent LEC offers for resale under subsection (c)(4)? Does subsection (c)(3) in effect provide new entrants with an alternative way to "resell" the services of incumbent LECs in addition to the specific resale provision in subsection (c)(4)? In this regard, we note that section 252(d) provides different pricing standards for these two subsections, and we ask commenters to address the implications of this difference.[113] To the extent that section 251(c)(3) contemplates the purchase of

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[109] Joint Explanatory Statement at 116.

[110] The simplest example of an existing local loop is a single twisted pair of copper wires connecting a customer premises to a LEC central office. Local loop traffic, however, may be combined with that of other loops prior to arriving at a LEC central office, such as where traffic from a single loop is switched or concentrated onto a single multiplexed line at a remote site. Thus, a "loop" may actually be composed of feeder plant (linking a LEC central office to a remote site), feeder/distribution interface elements at the remote site, and distribution plant (linking the remote site to a customer premises).

[111] Section 251(c)(3) imposes a duty upon incumbent LECs "to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point." 1996 Act, sec. 101, § 251(c)(3).

[112] Section 251(c)(4) imposes a duty upon incumbent LECs to "offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers." 1996 Act, sec. 101, § 251(c)(4).

[113] Some parties have asserted, for example, that allowing interexchange carriers to offer the same services over combined LEC network elements that the LEC already offers would enable such carriers to circumvent the section 271(e)(1) joint marketing restriction.

unseparated facilities (*i.e.* facilities used to provide both intra- and interstate services), as discussed above, we note that a telecommunications carrier would not necessarily be purchasing the same service(s) it would under section 251(c)(4). Does the difference, if any, between network elements and the services provided by means of such elements play a meaningful role in distinguishing these two subsections?[114] We invite parties to comment on these and any other issues raised by the interplay of subsections (c)(3) and (c)(4). Parties should base their comments on specific statutory language.

(2) Access to Network Elements

86. Section 251(c)(3) requires incumbent LECs to provide "access" to network elements "on an unbundled basis."[115] We interpret these terms as requiring incumbent LECs for a fee to provide requesting carriers with the ability to obtain a particular element's functionality, such as a local loop's function of transmitting signals from a LEC central office to a customer premises, separate from that of other functionalities or network elements, such as the local switch. Further, the term "unbundled" suggests that there must be a separate charge for each purchased network element.[116] We seek comment on this and any alternative interpretations of section 251(c)(3).

87. Section 251(c)(3) further mandates that incumbent LECs provide access to network elements on an unbundled basis "at any technically feasible point."[117] Parties are asked to identify and describe, in brief, each network element for which they believe access on an unbundled basis is technically feasible at this time. Further, we seek comment on whether a dynamic definition of "technically feasible" is practical for identifying elements beyond those discussed here,[118] and, if so, what such a definition should be. We also ask whether the states, rather than the Commission, may apply the definition during the arbitration process. We further request that parties comment on experiences with providing or purchasing access to elements currently unbundled by the states, and any state approaches to determining the technical feasibility of unbundling elements that the Commission could use in a national model. We also seek comment on whether the technical feasibility of interconnection at a particular point affects, at least in part, the technical feasibility of providing access to a network element on an unbundled basis at that point. Finally, because subsection (c)(3) imposes an affirmative obligation on incumbent LECs to provide unbundled elements, we tentatively conclude that LECs have the burden of proving that it is technically infeasible to provide access to a particular network element. We also tentatively conclude that the unbundling of a particular network element by one LEC (for any carrier) evidences the technical feasibility of providing the same or a similar element on an unbundled basis in another, similarly structured LEC network. We seek comment on these tentative conclusions.

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[114] For example, under the Illinois Local Switching Platform concept, discussed in detail below, requesting carriers may offer services by means of the unbundled platform that the incumbent LEC does not offer.

[115] 1996 Act, sec. 101, § 251(c)(3).

[116] "Access" is defined as the "ability or permission to approach, enter, . . . or use." *Random House College Dictionary* 9 (revised ed. 1980). "Unbundle" is defined as "to separate (the charges for related products and services usually offered in a single transaction at one all-inclusive price)." *Id.* at 1428.

[117] 1996 Act, sec. 101, § 251(c)(3).

[118] *See* section II.B.2.c.3. below.

88. In addition to technical feasibility, section 251(d)(2) requires that the Commission "consider, at a minimum, whether . . . access to such network elements as are proprietary is necessary, and [whether] the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer."[119] We seek comment on the extent to which the Commission must "consider" these standards, how these standards should be interpreted, and on any additional considerations, such as possible risks to network reliability or other harm. We note that the 1996 Act uses the terms "technically feasible" and "economically reasonable" together in other sections of the Act,[120] and we seek comment on what effect the absence of the term "economically reasonable" in section 251(c)(3) has on economic considerations. Further, we request comment on whether this omission could be construed to imply that Congress intended for carriers requesting unbundling to pay its cost, and on whether that construction is consistent with the intent of the 1996 Act.[121]

89. We also request comment on whether the Commission should establish minimum requirements governing the "terms" and "conditions" that would apply to the provision of all network elements. For example, should the Commission require incumbent LECs to provide network elements using the appropriate installation, service, and maintenance intervals that apply to LEC customers and services? Alternatively, should the Commission require LECs to comply with national or industry-based standards? Would minimum national requirements for electronic ordering interfaces reduce the time and resources required for new entrants to compete in regional markets? What standard unbundling terms and conditions, if any, should the Commission use in evaluating applications under section 271(b)? Would national rules aid the states in arbitrating agreements within the statutory period? If parties believe that the Commission should specify minimum terms and conditions, we seek comment on what those terms and conditions should be, and how those terms and conditions might be enforced. Parties are encouraged to cite specific examples from the states that could be incorporated into minimum national requirements.

90. In addition, we request comment on the meaning of the requirement in section 251(c)(3) that LECs provide unbundled network elements "in a manner that allows requesting carriers to combine such elements in order to provide . . . telecommunications service."[122] For example, should the required facilities or services associated with a particular network element vary depending on the services the requesting carrier wishes to provide or on the types of facilities the requesting carrier will use in combination with the requested elements? We also seek comment on the relationship between this provision and section 251(d)(2)(B), discussed above, which requires the Commission to consider whether the failure to provide access to an element would impair the ability of a requesting carrier to provide a desired service.

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[119] 1996 Act, sec. 101, § 251(d)(2).

[120] *See, e.g.*, 1996 Act, sec. 101, § 254(h)(2). The House Committee, in considering H.R. 1555, dropped the term "economically reasonable" from its unbundling provision, reporting that "this requirement could result in certain unbundled . . . elements . . . not being made available." H. Rep. 104-204, 71 (1995).

[121] In any event, access to network elements must be available at rates, terms, and conditions that are just, reasonable, and nondiscriminatory. 1996 Act, sec. 101, § 251(c)(3).

[122] 1996 Act, sec. 101, § 251(c)(3).

91. Section 251(c)(3) further requires incumbent LECs to provide requesting carriers with "nondiscriminatory" access to unbundled network elements.[123] That section also requires LECs to provide access on "terms, and conditions that are . . . nondiscriminatory."[124] We seek comment on what minimum requirements, if any, we should adopt to ensure that LECs do not discriminate among requesting carriers. For example, one criterion might be whether an end user could perceive any differences in the quality of service provided by one carrier as compared with another. Another criterion might be to require LECs to make it as easy to switch local service providers as it is for customers to switch interexchange providers. Further, unlike subsection (c)(2), which requires that interconnection offered requesting carriers be "at least equal in quality to that provided" by the LEC itself, subsection (c)(3) does not contain such a requirement. Nevertheless, we request comment on whether we can and should prohibit an incumbent LEC from providing requesting carriers with access inferior to that which it provides itself.[125]

(3) Specific Unbundling Proposals

92. We now consider particular network elements to which incumbent LECs must provide access on an unbundled basis under section 251(c)(3). As discussed above, we propose to identify a minimum number of elements that incumbent LECs must unbundle, and we seek comment on what minimum requirements of unbundling, if any, the Commission should adopt for each element. AT&T, for example, has publicly advocated that the Commission should require the unbundling of eleven network elements: loop distribution, concentration, and feeder plant; local and access tandem switches; dedicated and common transport; SS7 signalling links, signal transfer points, and signal control points; and operator services.[126] MCI advocates, in addition, the unbundling of loop and trunk ports from local switching.[127] Some LECs favor the unbundling of significantly fewer elements.[128]

93. We address below four categories of elements: loops, switches, transport facilities, and signaling and databases. For each of the proposed network elements discussed in these categories, we request that parties comment on the following issues:

(1) the technical feasibility of providing access to that or an equivalent element on an unbundled basis, how such access should be provided, and any demonstrable network reliability concerns;
(2) whether and to what extent LECs currently allow other carriers to access such elements;
(3) whether the Commission should establish a standard for defining the element, and if so, what level of technical detail is required in the definition, and what

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[123] *Id.*

[124] *Id.*

[125] We note that there may be network elements, such as particular switching functionalities unbundled from other functionalities, for which it is technically infeasible for LECs to provide equal access to requesting carriers.

[126] AT&T Letter to Regina Keeney, Chief, Common Carrier Bureau (Mar. 21, 1996).

[127] MCI Presentation to Chairman Reed Hundt (Mar. 29, 1996).

[128] Ameritech Letter to Regina Keeney, Chief, Common Carrier Bureau (Mar. 1996).

facilities or functionalities should be included or excluded from the definition;

(4) whether the Commission should establish minimum requirements for the terms and conditions of provisioning the element, and if so, what they should be;

(5) whether the failure to unbundle the element would impair a requesting carrier's ability to provide the services that it seeks to offer;

(6) whether proprietary interfaces or technology are involved in providing the element, and if so, whether unbundled access to the element is necessary; and

(7) any other issues presented by the unbundling of this element that are important to effectuating the goals of section 251(c)(3) and the 1996 Act.

(a) Local Loops

94. We propose to require incumbent LECs to provide local loops as unbundled network elements. The Joint Explanatory Statement accompanying the 1996 Act expressly cites the local loop as an example of a network element.[129] In addition, the competitive checklist of section 271(c)(2)(B) specifies the unbundling of local loops from local switching or other services as a precondition to BOC provision of in-region interLATA services.[130] Further, several states have ordered, and LECs currently offer, loops unbundled from local switching,[131] and thus we tentatively conclude that the unbundling of local loops is technically feasible.

95. We first seek comment on whether and the extent to which the Commission should prescribe a set of minimum requirements for unbundling and provisioning loops. For example, we could require only that incumbent LECs must, upon request, provide at central offices individual transmission links to customer premises regardless of the technology involved.[132] It appears, however, that in states that already have ordered loop unbundling, the general requirement to unbundle is merely the first step in a process of providing new entrants with meaningful facilities with which to compete.

96. The New York Commission, for example, having anticipated and addressed many of the problems associated with unbundling loops and ports, is still grappling with issues such as operational interfaces between carriers, the timing of loop provisioning relative to number porting, and underlying delivery systems supporting loop-provisioning.[133] In view of such complex and resource-intensive issues, we seek comment on whether there are minimum

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[129] Joint Explanatory Statement at 116.

[130] 1996 Act, sec. 151, § 271(c)(2)(B). Our obligation under that section to review BOC applications to provide such services implicitly requires some standard by which to judge the applications.

[131] NYNEX, Rochester Telephone, and Ameritech, among others, are providing unbundled local loops. NYNEX estimates, for example, that approximately 10,000 unbundled loops are currently in service in its region. Illinois defines a loop as "a transmission path capable of transporting analog or digital signals from the network interface at a customer's premises to a distribution frame, digital signal cross-connect panel, or similar demarcation which is accessible to the interconnector." Ill. Admin. Code tit. 83, § 790.10.

[132] We note that some local switches in LEC central offices can process concentrated loop traffic without prior demultiplexing of the individual loop traffic. This complicates the task of providing an interconnecting carrier access to a particular loop.

[133] *Order Considering Loop Resale and Links and Ports Pricing*, Case Nos. 95-C-0657, 94-C-0095, and 91-C-1174 (NYPSC Feb. 1, 1996).

requirements that would build upon the progress of preexisting state initiatives and facilitate the provisioning of unbundled loops. What requirements, for example, would avoid the need for duplicative decision-making by states and variations among states in the effectiveness of loop unbundling, while better enabling new entrants to plan and fund regional networks? To what extent is the avoidance of interstate duplication and variation necessary to achieving the goals of the 1996 Act? How should the Commission structure national requirements to provide sufficient flexibility to carriers and the states for use of different or new "loop" technologies or services?

97. In addition, we tentatively conclude that we should require further unbundling of the local loop. We seek comment on which subloop elements are technically feasible to unbundle. For example, the Commission could require incumbent LECs to provide access to loop feeder and distribution plant on an unbundled basis at remote switching or concentration sites, in addition to access to the switching or concentration equipment itself.[134] Hawaii, for example, divides local loop functions into these three categories.[135] Illinois also recently required LECs to provide subloop elements in response to a bona fide request.[136] Such requests may come from carriers deploying cable or fiber feeder facilities that lack distribution plant. We thus seek comment on whether requiring access to loops prior to their concentration or multiplexing would allow requesting carriers to provide services they could not provide at LEC central offices, and whether such access would involve proprietary equipment. Finally, we request comment on what minimum requirements for subloop unbundling, at this early stage where few if any states have addressed the issue, would pave the way for rapid adoption and provision of subloop elements.

(b) Local Switching Capability

98. In addition to the local loop, we tentatively conclude that incumbent LECs should provide unbundled local switching capability as a network element. The Joint Explanatory Statement expressly cites switching equipment as an example of a network element.[137] In addition, the competitive checklist of section 271(c)(2)(B) specifies the unbundling of local switching from transport, local loop transmission, or other services as a precondition to BOC provision of in-region interLATA services. Finally, we believe unbundling of local switching capability is critical to the implementation of section 251(c)(3) and the provision of competing telecommunications services.

99. Unlike a local loop, local switching equipment is often shared by thousands of customers. As a result, it may be difficult to identify or define the use of such equipment for a particular customer. One possible way to identify a switching element is to define the

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[134] In discussing the 1996 Act, Representative Watts of Oklahoma addressed the need for subloop unbundling: "As rules that define facilities-based competition are developed and implemented, I expect those charged with that responsibility to make certain . . . [that] all local exchange service providers . . . provide line-side interconnection and unbundling of the local loop into its functional sub-elements -- feeder and distribution." 142 Cong. Rec. H1145-06.

[135] Hawaii PUC Order No. 14129, 3 (August 14, 1995).

[136] Ill. Admin. Code tit. 83, § 790.320(b). To date, the Illinois Commission has not addressed a specific request for unbundled loop subelements.

[137] Joint Explanatory Statement at 116.

element in terms of the *capacity* of a local switch to switch traffic from line to line, line to trunk, trunk to line, or trunk to trunk.[138] This is both the most essential and rudimentary capacity of a local switch. Today's modern switches, however, are capable of significantly more advanced functions, such as call waiting, conference calling, signaling, and centrex. Under the 1996 Act's definition of network element, these functions could constitute individual network elements separate from the basic switching functionality, or could be grouped in part or whole with the basic functionality, which would allow requesting carriers, in turn, to offer the functions they desire.

100. Illinois, for example, is investigating a "local switching platform" approach to unbundling the local switch. The platform is described in terms of "virtual" switch capacity, including all the services and functions performed by the switch on a per line basis, such as dialtone, telephone number provision, all CLASS and CCF features, originating and terminating usage, and 911 services.[139] According to its advocates, unlike merely reselling a single switching service, under the platform structure requesting carriers incur added risk because the cost of the platform includes the cost of all functionalities provided by the switch on a per line basis, regardless of the functionalities ultimately purchased by an end user. This added risk translates into added profits if the requesting carrier is able to sell a combination of these switching functionalities at a higher profit than would have been possible under a simple resale arrangement. Moreover, because requesting carriers are not tied to the incumbent LEC's retail price structure, concerns about possible price squeezes are reduced.

101. Other states have defined a switching "port," which usually includes all the capabilities of the local network provided at the main distribution frame of a LEC central office. For example, New York treats a port essentially as an interconnection point into the rest of the NYNEX network. Thus a port defined in this way is not in the nature of an unbundled element that a competing carrier could combine with its own transport and other loop facilities to provide a competing telecommunications service. Rather, such a port is effectively equivalent to the LEC's bundled retail local service offering minus the loop. We seek comment on whether such a definition of "port" is consistent with the requirements of section 251(c)(3), especially the requirement that incumbent LECs provide elements in a manner that allows carriers to combine them to provide telecommunications services. Further, we seek comment on alternative definitions of "port,"[140] and on whether the port should be a separate unbundled element from the switch.

102. We also request comment on these and alternative approaches to unbundling the local switch, and on the technical feasibility of such approaches. Under the switching platform approach, for example, what control, if any, can and should requesting carriers have over the operations of a LEC local switch, and is access to proprietary functions or equipment necessary? Further, should the Commission identify several permissible approaches to switch unbundling, and what minimum requirements, if any, should apply? What requirements of switch unbundling would help the Commission in evaluating applications under section 271(b), and the states and the courts in arbitrating and evaluating agreements between carriers?

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[138] Such a definition could include functions of dialtone, digit reception, number translations, etc.

[139] *See* Ill. Comm. Comm'n Docket Nos. 95-0458, 95-0531.

[140] For example, MCI defines a port as the link from the LEC main distribution frame to the switch. MCI Presentation to Chairman Reed Hundt (Mar. 29, 1996).

103. Finally, in conjunction with the next section addressing transport facilities, we request comment on whether requirements governing a local switching element could be tailored to apply to a tandem switching element. Parties should address the issues discussed above in the context of tandem switches.

(c) Local Transport and Special Access

104. We also propose to require incumbent LECs to provide access to unbundled transport facilities as network elements. We note that the competitive checklist of section 271(c)(2)(B) requires the provision of local transport from the trunk side of a LEC switch unbundled from switching or other services as a precondition to BOC provision of in-region interLATA services. We tentatively conclude that the unbundling of local transport and special access facilities is technically feasible. We note that the Commission's action in the *Expanded Interconnection* proceeding effectively required substantial unbundling of these facilities.

105. We propose to require unbundling of LEC facilities that correspond to the current interstate transport and special access rate elements. For direct-trunked transport networks, transport trunks would be unbundled from local switches, and the link from the serving wire center (SWC) to the IXC point of presence (POP) would be unbundled from the link between the central office and the SWC. For tandem-switched transport networks, the elements could include, among other options, unbundled trunks from the end office to the tandem office, trunks from the tandem office to the SWC, trunks from the SWC to the IXC POP, and the tandem switch itself. Finally, for special access we propose to require the unbundling of channel termination facilities from interoffice facilities.

106. We seek comment on the technical feasibility of unbundling direct-trunked and tandem-switched transport and special access facilities in this or in any alternative manner,[141] and on how LECs should unbundle any other network facilities used to transport traffic from LEC central offices to IXC POPs or to other LEC central offices.

(d) Databases and Signaling Systems

107. The 1996 Act contemplates the unbundling of incumbent LECs' signaling systems and databases. Congress specifically included "databases" and "signaling systems" in the definition of network elements.[142] The 1996 Act also requires BOCs to provide access to "databases and associated signaling necessary for call routing and completion" as a precondition for entry into in-region interLATA services.[143] Therefore, we tentatively conclude that requiring incumbent LECs to unbundle their signaling systems and databases is consistent with the intent of the 1996 Act.

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[141] As discussed above, we ask parties to address the unbundling of tandem switches in accordance with the issues raised in the local switching section, and comment on any issues pertaining exclusively to tandem switching.

[142] 1996 Act, sec. 3, § 3(29). *See also* statement of Sen. Pressler, noting that "access to signaling and databases [is] important if you are going to compete and get into the market." 141 Cong. Rec. S8163 (June 12, 1995).

[143] 1996 Act, sec. 151, § 271(c)(2)(B)(x).

108. Many incumbent LECs have Signaling System 7 (SS7) networks that are separate from, but interconnected with, the telecommunications networks that carry voice and data communications between end users. SS7 networks perform three primary functions: (1) call set up, which establishes transmission paths for calls; (2) access to remote databases, which provides specialized call routing information to switches; and (3) custom local area signaling service (CLASS) features, such as caller ID, which require the transmission of certain information between the calling and called parties. We request that commenters identify the points at which carriers interconnect with LEC SS7 networks today and the signaling and database functions currently provided by incumbent LECs on an unbundled basis. Commenters should also discuss the technical feasibility of establishing other points of interconnection and other unbundled signaling and database functions not currently offered by incumbent LECs.

109. An example of unbundling particular signaling and database elements is Colorado's requirement that incumbent LECs provide unbundled access to signaling links, signal transfer points, and service control points as well as access to non-proprietary signaling protocols used in the routing of local and interexchange traffic, 800 service, alternative billing service, and line information database (LIDB) service.[144] Colorado has not specified whether access to signaling and databases is limited to those particular services. Hawaii has taken a similar approach by requiring incumbent LECs to unbundle signaling links, signal transfer points, and service control points, and has not specified which services provided by these network elements must be made available to competitors.[145] By contrast, Louisiana has ordered unbundled access to incumbent LEC databases for all services that the incumbent LEC provides itself, including 800 service, LIDB, and advanced intelligent network (AIN) services.[146] Does the variation among the Colorado, Hawaii, and Louisiana regulations governing unbundled signaling and databases reflect differing circumstances that should be accommodated in our rules? Would such variation among states be consistent with the goals of the 1996 Act? Would new entrants be better served by uniform federal rules concerning unbundled access to signaling systems and databases? If so, would any of the regulations adopted by the states be useful to incorporate into national rules?

110. We also seek comment on the relative importance to potential entrants of the various functions performed by incumbent LECs' signaling systems and databases. For example, call set up plays an important role in the transmission of calls that are routed through more than one switch. Thus, it would appear that such functionality will be needed by entrants to provide competing local exchange service. However, we are aware that there are alternative suppliers of call set up services other than incumbent LECs. What bearing, if any, should this have on our adoption of unbundling rules for call set up? Are there existing suppliers for other functions performed by incumbent LECs' signaling systems and databases?

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[144] *Proposed Rules Regarding Implementation of §§ 40-15-101 Et. Seq. -- Requirements Relating To Interconnection and Unbundling*, Commission Decision Adopting Rules, Docket No. 95R-556T (Co. Pub. Util. Comm'n Apr. 1, 1996).

[145] *Instituting a Proceeding on Communications, Including an Investigation of the Communications Infrastructure of the State of Hawaii*, Order, Docket No. 7702 (Haw. Pub. Util. Comm'n Aug. 14, 1995) at 3.

[146] *Regulations For Competition in the Local Telecommunications Market*, General Order (La. Pub. Serv. Comm'n Mar. 15, 1996) (Louisiana PSC Order). AIN is an evolving network architecture that uses centralized databases to provide certain call processing services.

111. In addition, a competitor may seek to provide certain call processing features to its customers by reselling the incumbent LEC's call processing services. We seek comment on the importance of unbundled access to the incumbent LEC's advanced call processing features, such as single number service,[147] in the market entry decisions of potential competitors. We also seek comment on whether the software "building blocks" used by incumbent LECs to create call processing services are network elements to be unbundled. Given the array of existing and potential call processing services that could be provided by incumbent LECs' signaling systems and databases, we seek comment on whether the establishment of uniform national guidelines governing all call processing services provided via remote databases would facilitate the state arbitration process, judicial review, and/or Commission activities under section 253. We also seek comment on whether it would be consistent with the 1996 Act to permit variation among states with regard to unbundling call processing services provided via remote databases.

112. Under another scenario, a competitor that is providing resold local exchange service might seek to distinguish its offerings by connecting its own call processing database to the incumbent LEC's network, which would allow the competitor to provide call processing features not offered by the incumbent LEC. Enabling new entrants to offer their own call processing services in this way would likely stimulate local exchange competition. We seek comment on whether this type of interconnection is technically feasible without jeopardizing network reliability.

113. We also note that in our *Intelligent Networks* (IN) proceeding,[148] we are considering unbundling advanced intelligent network (AIN) elements, which include signaling systems and databases. In the IN NPRM, we tentatively proposed ordering Tier 1 LECs[149] to provide access to several specific AIN elements in order to promote competition in the provision of AIN services. Subsequently, a group of Tier 1 LECs filed a joint proposal calling for a two-year testing plan to explore methods of third-party interconnection to LEC AINs.[150] We seek comment on what role, if any, the LEC proposal for a testing program should play with regard to access to signaling and database elements that we address in this proceeding.[151]

114. We further note that our IN proceeding has focused on providing all interested third parties with access to Tier 1 LECs' AIN elements, primarily for the purpose of providing competing AIN services. Section 251 of the 1996 Act provides any requesting telecommunications carrier unbundled access to incumbent LECs' network elements "for the

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[147] With single number service, a subscriber is assigned a telephone number which, when dialed, causes the network to call a series of numbers until the subscriber is located or determined to be unreachable. Such numbers might include the subscriber's home, office, and mobile phone.

[148] *Intelligent Networks*, Notice of Inquiry, 6 FCC Rcd 7256 (1991); *Intelligent Networks*, Notice of Proposed Rulemaking, 8 FCC Rcd 6813 (1993).

[149] Tier 1 LECs are those exchange carriers having annual revenues from regulated telecommunications operations of $100 million or more. *Commission Requirements for Cost Support Material to be Filed with 1990 Annual Access Tariffs*, 5 FCC Rcd 1364 (1990).

[150] Letter from Sandra Wagner, Director, Federal Regulatory, SBC Communications, Inc., to William F. Caton, Acting Secretary, FCC (June 23, 1995).

[151] We incorporate the record compiled in the IN proceeding into this proceeding by reference.

provision of a telecommunications service."[152] We seek comment on whether mandating the unbundling of signaling systems and databases pursuant to section 251 would be sufficient to meet the objectives of the IN proceeding. To the extent that section 251 does not require incumbent LECs to provide certain third parties with access to unbundled AIN elements, we seek comment on whether we should use our section 201 authority to require such access. We also seek comment on how the unbundling of signaling systems and databases in this proceeding should affect our actions in the IN proceeding.

115. Requiring incumbent LECs to provide unbundled access to their signaling and database networks could also potentially permit competing carriers to gain access to competitively sensitive data. Louisiana has addressed this potential problem by specifically prohibiting incumbent providers from accessing the customer proprietary network information (CPNI) of an interconnecting carrier in order to market services to the interconnecting carrier's customers.[153] We seek comment on whether such a restriction should be implemented in federal standards.[154] Are there other state regulations concerning access to competitors' CPNI that would prevent this type of anticompetitive conduct while allowing us to establish interconnection and unbundling rules for signaling and database facilities?

116. Finally, we request comment on other network elements to which the Commission should require access on an unbundled basis, and specific standards that should govern their unbundling. For example, the statutory definition of network element includes "subscriber numbers" and "information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service."[155] We tentatively conclude that these elements should be unbundled and we request comment on the standards we should set for such unbundling. In addition, section 271 of the 1996 Act requires incumbent LECs to unbundle "operator call completion services" as a precondition for providing in-region, interLATA services.[156] In light of this, we tentatively conclude that incumbent LECs should be required to unbundle operator call completion services as a network element pursuant to section 251(c) of the Act. We seek comment on this tentative conclusion.

d. Pricing of Interconnection, Collocation, and Unbundled Network Elements

(1) Commission's Authority to Set Pricing Principles

117. Section 251, in some instances, explicitly sets forth requirements regarding rates for service, interconnection, and unbundled elements. For example, sections 251(c)(2), (c)(3), and (c)(6) require that incumbent LECs' "*rates*, terms and conditions" for interconnection,

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[152] 1996 Act, sec. 101, § 251(c)(3).

[153] *Louisiana PSC Order.*

[154] We plan to initiate a proceeding in the near future to implement the provisions of the 1996 Act that address CPNI.

[155] 1996 Act, sec. 3, § 3(29).

[156] 1996 Act, sec. 151, § 271(c)(2)(B)(vii)(III).

unbundled network elements, and collocation be "just, reasonable, and nondiscriminatory,"[157] and, with respect to interconnection and unbundled elements, in accordance with section 252. Section 251(c)(4) requires that incumbent LECs offer "for resale at wholesale *rates* any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers," without unreasonable conditions or limitations.[158] Section 251(b)(5) requires that all LECs "establish reciprocal *compensation* arrangements for the transport and termination of telecommunications."[159] We tentatively conclude that this statutory language establishes our authority under section 251(d) to adopt pricing rules to ensure that rates for interconnection, unbundled network elements, and collocation are just, reasonable, and nondiscriminatory. We also tentatively conclude that we have statutory authority to define what are "wholesale rates" for purposes of resale, and what is meant by "reciprocal compensation arrangements" for transport and termination of telecommunications. We seek comment on this tentative conclusion.

118. We note that, under the statutory framework established by Congress, states have the critical role under section 252 of establishing rates pursuant to arbitration and of reviewing rates under BOC statements of generally available terms.[160] Rates for both arbitrated agreements and BOC statements of generally available terms must be in accordance with section 252(d), which sets forth specific "pricing standards" for interconnection and unbundled elements, wholesale services, and transport and termination of traffic under reciprocal compensation arrangements. The 1996 Act appears to give a role to both the states and the Commission regarding rates for interconnection, unbundled network elements, wholesale services, and reciprocal compensation arrangements. We believe that the statute, and in particular our statutory duty to implement the pricing requirements of section 251, as elaborated in section 252, is reasonably read to require that we establish pricing principles interpreting and further explaining the provisions of section 252(d) for the states to apply in establishing rates in arbitrations and in reviewing BOC statements of generally available terms and conditions. Such an approach appears to be consistent with both the language and the goals of the statute.

119. Establishing national pricing principles would be likely to improve opportunities for local competition by reducing or eliminating inconsistent state regulatory requirements, thereby easing recordkeeping and other administrative burdens. In addition, national pricing principles would be likely to increase the predictability of rates, and facilitate negotiation, arbitration, and review of agreements between incumbent LECs and competitive providers. We seek comment on these tentative conclusions. We also seek comment on the potential consequences if the Commission does not set specific pricing principles. For example, would the lack of consistent rates, even in contiguous geographic areas, create a barrier to entry or to deployment of facilities throughout a multistate market? In addition, if the Commission is required to assume the responsibility of a state commission, pursuant to section 252(e)(5), would an absence of federal pricing principles impede the Commission's ability to arbitrate or review an agreement in a timely fashion?

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[157] 1996 Act, sec. 101, §§ 251(c)(2), (c)(3), (c)(6) (emphasis added).

[158] 1996 Act, sec. 101, § 251(c)(4) (emphasis added).

[159] 1996 Act, sec. 101, § 251(b)(5) (emphasis added).

[160] 1996 Act, sec. 101, §§ 252(c)(2) and (f)(2).

120. Finally, consistent with our earlier discussion that sections 251 and 252 do not make jurisdictional distinctions between interstate and intrastate services and facilities, we tentatively conclude that the pricing principles we establish pursuant to section 251(d) would not recognize any jurisdictional distinctions, but would be based on some measure of unseparated costs. We do not believe section 2(b) requires a different conclusion. We seek comment on this tentative conclusion. We also seek comment on whether we need to revise our cost allocation rules in Part 64, or whether we need to adopt a similar set of cost allocation rules to remove the costs and revenues of services provided pursuant to sections 251 and 252 before the separations process is applied.

(2) Statutory Language

121. Section 251(c)(2)(D) requires that incumbent LECs provide interconnection "on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, in accordance with . . . the requirements of this section and section 252." Section 251(c)(3) similarly requires incumbent LECs to provide "nondiscriminatory access to network elements on an unbundled basis . . . on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with . . . the requirements of this section and section 252." Likewise, section 251(c)(6) requires incumbent LECs to provide "on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment." Section 252(d)(1) provides that state determinations of

> the just and reasonable rate for the interconnection of facilities and equipment for purposes of subsection (c)(2) of section 251, and the just and reasonable rate for network elements for purposes of subsection (c)(3) of such section --
>
> > (A) shall be (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the interconnection or network element . . . , and (ii) nondiscriminatory, and
> > (B) may include a reasonable profit.[161]

We seek comment on the proper interpretation of each of these statutory provisions. We also seek comment on any specific principles that parties believe the Commission should promulgate to ensure that the rates established or approved by states are just, reasonable, and nondiscriminatory. We seek comment below on the national pricing principles that states might apply in setting and reviewing rates for interconnection, collocation, and access to unbundled network elements. We also seek comment on what enforcement or monitoring mechanism, if any, the Commission or the industry should adopt to ensure that all carriers comply with any pricing principles that the Commission establishes.

122. Further, we believe that any pricing principles we adopt should be the same for interconnection and unbundled network elements, because sections 251(c)(2) and (c)(3) and 252(d)(1) use the same standard for both types of services. We invite parties to comment on whether there are any reasons to make a distinction. In addition, we believe that the same pricing rules that apply to interconnection and unbundled network elements should apply to collocation as required under section 251(c)(6). We seek comment on this issue. In particular, we seek comment on whether the absence of any pricing rule for collocation in section 252 has any legal significance with regard to our authority to specify rules for pricing

[161] 1996 Act, sec. 101, § 252(d)(1).

of collocation services. Alternatively, should collocation be considered a subset of interconnection services, pursuant to sections 251(c)(2) and 252(d)(1) for purposes of the statutory pricing principle?

(3) Rate Levels

123. As previously set forth, section 252(d)(1) provides that state determinations of just and reasonable rates for interconnection and providing network elements shall be "based on the cost (determined without reference to a rate-of-return or other rate-based proceeding)," "nondiscriminatory," and "may include a reasonable profit."[162] We tentatively conclude that this language precludes states from setting rates by use of traditional cost-of-service regulation, with its detailed examination of historical carrier costs and rate bases. Instead, the statute appears to contemplate the use of other forms of cost-based price regulation, such as price cap regulation that is indirectly based on costs, or the setting of prices based on a forward-looking cost methodology that does not involve the use of an embedded rate base, such as long-run incremental cost (LRIC).[163] We seek comment on this view of the meaning of section 252(d)(1).

124. Economists generally agree that rates based on LRIC give appropriate signals to producers and consumers and ensure efficient entry and utilization of the telecommunications infrastructure. They further agree that competitive markets, over the long run, tend to force prices toward LRIC.[164] A broad range of parties appears to agree that rates for interconnection and unbundled elements should be based on some type of LRIC methodology, such as, for example, using what some parties refer to as a "total service long-run incremental cost" (TSLRIC) approach.[165] In the following section, we consider whether we should adopt a LRIC-based pricing methodology for states to use to set interconnection and unbundled element rates under the 1996 Act. Under such an approach, if voluntary negotiations between parties were unsuccessful, the state commissions would conduct arbitration proceedings under section 252 in order to develop the specific factual information required to specify the actual rates in accordance with the national policy. As discussed at greater length below, however, there appear to be considerable differences of opinion as to the precise form of the LRIC methodology that should be used.[166] Further, while pricing

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[162] 1996 Act, sec. 101, § 252(d)(1).

[163] For possible definitions of LRIC, *see infra* paras. 126-33.

[164] *See generally* Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions* 69 (1988). *See also* Stephen Breyer, *Regulation and Its Reform* 52 (1982); Harold Hotelling, "The General Welfare in Relation to Problems of Taxation and of Railway and Utility Rates, 6 *Econometrica* 242 (1938). *See also Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers*, CC Docket No. 95-185, Notice of Proposed Rulemaking, FCC No. 95-505 at para. 47 (rel. Jan. 11, 1996) (*CMRS Notice*).

[165] *See* Ameritech's March 25, 1996 submission at 1, 9-10; ALTS Handbook at 16; CompTel's March 29, 1996 submission at 22; NCTA submission at 2; AT&T submission at 39, 45-52.

[166] *See, e.g.*, Ameritech's March 25, 1996 submission at 9-10 (TSLRIC, joint and common costs, and residual costs to the extent they reflect forward-looking costs should be used to determine the pricing standard for interconnection and unbundled network elements); AT&T Submission at 47 (TSLRIC of a network element includes both the fixed equipment costs associated with the element and the normal competitive return to the capital that must be invested in order to supply that element). For a discussion of the precise definitions of the terms LRIC and TSLRIC, *see infra* paras. 126-33. The term "long-run service incremental cost" (LRSIC), used

based on LRIC may be the theoretical ideal, significant practical and administrative problems are likely to arise in determining the LRIC of specific services and facilities for particular incumbent LECs, especially in the short term, given the contentious and often time-consuming proceedings that may be necessary to resolve the complex issues raised by incremental cost studies. We explore these and other issues concerning the use of a LRIC-based pricing methodology in the following section.

125. As an alternative to our specifying a methodology for states to follow in setting prices under section 252(d)(1), we could establish outer boundaries for rates for interconnection and unbundled network elements, within which states would have a range of flexibility to select a cost-based method of determining interconnection and unbundled element rates. In particular, we could establish an administratively simple methodology that is relatively easy to apply, potentially using proxies for cost-based rates, to set rate ceilings or upper bounds on the range of state ratemaking flexibility. The use of a proxy to set the ceiling would reduce the administrative burden that is inherent in the application of a LRIC-based methodology, and thus may be especially attractive in the near term. We discuss this proxy-based ceiling approach in detail below. We also discuss below the extent to which embedded (or historical) costs are relevant to the pricing rule for interconnection and unbundled network elements in the 1996 Act, the relationships between this pricing rule and policies on universal service and access charge reform, and whether certain methodologies are so fundamentally inconsistent with the 1996 Act that the statute precludes states from using such methodologies.

(a) LRIC-Based Pricing Methodology

126. As noted above, most economists -- and a broad range of parties that have submitted materials related to this proceeding -- appear to agree that rates for interconnection and unbundled elements ideally should be based on a LRIC-type methodology. The economists and parties, however, do not appear to agree on the specifics of a LRIC or TSLRIC methodology. Parties sometimes assign different meanings to the same terms. We therefore ask commenters advocating this approach to define with specificity the costing methodology that they support. In particular, we seek comment on precise definitions for the following terms: LRIC, TSLRIC, forward-looking costs, joint costs, common costs, shared costs, and stand-alone costs.[167] We also seek comment on the definition of the following related terms: embedded costs, fully distributed costs (FDC), overheads, contribution, and residual costs. For example, many years ago the Commission defined LRIC as including "the full amount of incremental investment and expenses which would be incurred by reason of furnishing additional quantities of service, whether in a new or an existing service category," and added that, in estimating LRIC, one "determine[s] prospectively the effect on total costs, including the effect on common costs, . . . of adding units of service."[168] Does this continue to be an appropriate definition of LRIC? In what respects, if at all, does a TSLRIC analysis differ from a LRIC analysis? Commenters should explain how any methodology they support should be calculated, and how such an approach differs from other possible

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by some states and parties, appears to be synonymous with the term TSLRIC.

[167] *See, e.g.*, AT&T submission at 46 (defining TSLRIC); ALTS Handbook at 15 (defining LRIC); Ameritech's March 25, 1996 submission at 3-6 (defining TSLRIC and other types of costs).

[168] *American Telephone & Telegraph Co.*, 55 FCC 2d 224, 231 n.18 (1975) (citing *American Telephone & Telegraph Co.*, 18 FCC 2d 761, 766 (1969)).

costing methodologies.

127. We note that some states already have adopted LRIC-based pricing methodologies to set rates for interconnection services and unbundled network elements that new entrants purchase from incumbent LECs. For example, the Illinois Commerce Commission has promulgated detailed rules regarding the use of TSLRIC studies to derive the rates for specified services offered by incumbent LECs.[169] Michigan law provides that incumbent LECs' rates for interconnection will be set at TSLRIC levels until January 1, 1997.[170] The California Public Utilities Commission has set prices for unbundled elements based on a forward-looking calculation of TSLRIC, which excludes shared and common costs.[171] The New York Public Service Commission has allowed incumbent LECs to establish tariffed rates for interconnection offerings with rates based on incremental cost plus, where appropriate, offsets to account for contribution loss and the impacts of "stranded plant."[172] Finally, the Local Competition Work Group of the NARUC Staff Subcommittee on Communications has recommended that network component prices should recover at least TSLRIC and, subject to state commission oversight and review, may include "a markup over TSLRIC to reflect a reasonable allocation of joint and common costs."[173]

128. We invite parties to comment on the costing methodologies used by these and other states, and on the extent to which these approaches are consistent with the pricing principles and goals of the 1996 Act. We also seek comment on whether the approach taken by any state regarding pricing interconnection, collocation, and unbundled network elements can be used as a model for a federal policy for these services and facilities. Are the existing state standards substantially the same or materially different? If there are significant differences, what are the costs and benefits of such variation to economic efficiency and a national, pro-competitive communications policy? We note that, while several states have identified specific costing methodologies and have ordered incumbent LECs to offer unbundled network elements at rates based on LRIC, most states have not yet acted in this area.

129. We can consider a number of different approaches if we were to require a LRIC-based methodology for states to follow. For example, we could require that prices be set based on a narrowly defined LRIC of interconnection service and unbundled network elements, with no allowance for joint or common costs, overheads, or any other added increment. There may, however, be a problem with basing rates on LRIC alone if there are significant joint and common costs among network elements, even if such costs are determined on a forward-looking basis. As a second option, we could require prices to be based on the LRIC of the applicable service or unbundled element plus a reasonable

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[169] Ill. Admin. Code, tit. 83, § 791.

[170] 1995 Mich. Pub. Acts 216, Sec. 352(1).

[171] "Competition - The State Experience," Responses to FCC 3/1/96 Questions, NARUC (March 8, 1996) at 3 (NARUC Handbook).

[172] NARUC Handbook at 80.

[173] NARUC Staff Subcommittee on Communications, Local Competition Work Group Summary Report, February 1996 at 35 (NARUC Subcommittee Report) .

allocation of forward-looking joint and common costs.[174] Even then, however, under some LRIC methodologies, the sum of all LRIC-based service and element pricing may not cover all of the firm's forward-looking costs. Finally, Ameritech has suggested a LRIC-based methodology that includes, in addition to TSLRIC, an allocation of joint (or shared) costs, common costs (or overhead), and residual costs.[175] We seek comment on these alternative approaches, or variations, in terms of their compliance with the statute, including the statutory provision that rates "may include a reasonable profit," and their respective advantages and disadvantages.

130. We also seek comment on how, if rates are to be set above LRIC, to deal with the problems inherent in allocating common costs and any other overheads. First, it may be possible to minimize the costs to be allocated as joint and common by identifying a substantial portion of costs as incremental to a particular service or element.[176] The feasibility of minimizing the costs to be allocated as joint and common may depend, in part, on the degree to which unbundled elements are disaggregated.[177] Alternatively, joint and common costs could be minimized by establishing a pricing standard at a higher level of aggregation than individually unbundled subelements.[178] A second approach would be to allocate common costs and overhead among services in an inverse relationship to the sensitivity of demand for each of the services. This "Ramsey" approach, in theory, minimizes reductions in consumer welfare due to prices above LRIC.[179] On the other hand, Ramsey pricing principles were developed in the context of regulated monopolies, and may not be desirable for markets in which competition is developing.[180] A third approach would be to allocate common costs and overheads among all services based on some specified allocator.

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[174] *See, e.g.*, AT&T submission at 39; NARUC Subcommittee Report at 35 (recommending that, subject to state commission oversight and review, network component prices should be permitted to include "a markup over TSLRIC to reflect a reasonable allocation of joint and common costs").

[175] *See* Ameritech's March 25, 1996 submission at 1.

[176] *See, e.g., Telephone Company-Cable Television Cross-Ownership Rules, Sections 63.54-63.58*, CC Docket No. 87-266, Memorandum Opinion and Order on Reconsideration and Third Further Notice of Proposed Rulemaking, 10 FCC Rcd 244, 343-346 (1994) (*Video Dialtone Reconsideration Order*), *appeal pending sub nom. Mankato Citizens Tel. Co. v. FCC*, No. 92-1404 (D.C. Cir. Sept. 9, 1992).

[177] *See* discussion in Section II.B.2.c.

[178] For instance, the pricing standard could apply to loops, even though there may be sub-loop unbundling. *See supra* Section II.B.2.c.(3)(a).

[179] *See* Frank P. Ramsey, *A Contribution to the Theory of Taxation*, 37 Econ. J. 47 (1927); *see generally* Kenneth E. Train, *Optimal Regulation: The Economic Theory of Natural Monopoly* 115-40 (1992) (discussing efficiency properties of Ramsey prices); Bridger M. Mitchell & Ingo Vogelsang, *Telecommunications Pricing: Theory and Practice* 43-61 (1991) (same). The sensitivity of demand is measured by the elasticity of demand, which is defined as the percentage change in the quantity of a service demanded for a given percentage change in price.

[180] Alfred E. Kahn & William B. Shew, *Current Issues in Telecommunications Regulation: Pricing*, 4 Yale J. on Reg. 191, 248 (1987) ("The standard formula for Ramsey pricing assumes a monopoly supplier. The competition in telecommunications markets is likely to alter the prices that satisfy the Ramsey principle. How it alters them will depend on whether regulation is confined to the incumbent firm or extended to competitive entrants as well."); *see also CMRS Notice* at para. 51.

For example, shared costs and overheads could be allocated among services in proportion to each service's LRIC or direct costs, or could be apportioned based on some measure of usage.[181] We seek comment on these approaches, and on the expected magnitude of forward-looking costs under each approach that cannot be attributed to specific services or elements. We also seek comment on whether, regardless of the method of allocating common costs, we should limit rates to levels that do not exceed stand-alone costs.[182]

131. Parties should specify their reasons for supporting or objecting to a particular costing model, and on what types of LRIC-based pricing methodology would be consistent with the 1996 Act. Parties that favor a particular methodology should explain how their proposals satisfy the statutory requirement that cost-based rates be determined "without reference to a rate-of-return or other rate-based proceeding."[183] They should also address how their methodologies would comply with the statutory requirement that rates for inter-connection and unbundled elements "may include a reasonable profit."[184] We also seek comment on whether the "reasonable profit" provision should be interpreted to mean that rates should yield reasonable levels of return on capital (including assessment of risk). Parties are encouraged to provide examples of states that have used the particular methodology that they support, or other illustrative evidence to indicate how such a standard would be applied. Should the LRIC-based methodology that any particular state has used be adopted as a national policy for interconnection and unbundled elements, or should a number of existing state approaches be identified as acceptable options? We invite parties to propose other approaches, and to delineate with particularity how their proposal differs from the approaches described above. Parties should also address the practicality of such approaches in a state arbitration setting, including the extent to which they would be clear and relatively easy to derive with a minimum of controversy and delay, and the administrative burdens associated with such approaches.

132. We also seek comment on a transitional pricing mechanism during an interim time period. Should we adopt an easily implementable interim approach that would address concerns about unequal bargaining power in negotiations, followed by some sort of transition mechanism to a more permanent set of pricing principles? One possible approach would be to require that during an interim period, rates be set at short-run marginal cost. Such an approach might give incumbent LECs an incentive to reach a rapid agreement.

133. We seek comment on whether interconnection and unbundled element rates should be set on a geographically- and class-of-service-averaged basis for each incumbent

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[181] *See* United Kingdom Office of Telecommunications, *A Framework for Effective Competition: A Consultative Document on the Future of Interconnection and Related Issues*, para. 4.32 (Dec. 1994).

[182] A stand-alone cost test would require that the consumer of a service be charged a price no higher than that at which it could be offered by a specialized competitive supplier. William J. Baumol and Robert D. Willig, Verified Statement before the Interstate Commerce Commission, *Ex Parte* no. 347 (sub-No. 1), *Coal Rate Guidelines: Nationwide* at 7 (July 28, 1983); see also William J. Baumol, John C. Panzar, and Robert D. Willig, *Contestable Markets and the Theory of Industry Structure* (352-352) (Harcourt Bruce Jovanovich, Inc. 1982).

[183] 1996 Act, sec. 101, § 252(d)(1)(A)(i).

[184] 1996 Act, sec. 101, § 252(d)(1)(B).

LEC, or whether some form of disaggregation would be desirable.[185] On the one hand, averaged rates would be simpler to derive and administer, and would minimize the possibility of unreasonable or unlawfully discriminatory rate differences. On the other hand, averaged rates might be above the cost of service in relatively dense areas, and below cost in less dense areas. This could create uneconomic incentives for competitive entrants to use incumbent LECs' unbundled network elements rather than deploying their own facilities in high cost areas, even if their costs are lower than those of the incumbent LEC. Conversely, it might create incentives for competitive entrants to deploy their own more costly facilities, rather than using unbundled network elements provided by incumbent LECs, in low cost areas. This problem may be exacerbated if the incumbent LECs' local exchange or exchange access services are priced on a geographically averaged basis. If interconnection and unbundled element rates should be disaggregated, what level of disaggregation would be appropriate -- by density pricing zone,[186] LATA, exchange, or some other unit? What types of class-of-service disaggregation are appropriate? For example, should incumbent LECs be permitted to charge different rates for unbundled business and residential loops, or for unbundled loops using different technologies? What rate differentials would be reasonable? We further seek comment on whether some cost index or price cap system would be appropriate to ensure that rates reflect expected changes in unit costs over time.

(b) Proxy-Based Outer Bounds for Reasonable Rates

134. We also seek comment on the benefits, if any, of adopting a national policy of outer boundaries for reasonable rates instead of specifying a particular pricing methodology. For example, rate ceilings could define the maximum end of the reasonable range within which state commissions could establish rates for interconnection and unbundled elements in the arbitration process pursuant to sections 252(b)-(e). Properly set rate ceilings would prevent incumbent LECs from setting rates at levels so high as to prevent efficient competitive entry or to allow them to extract monopoly rents, and would ensure that rate levels bear some relationship to costs. If rates are too high, use of unbundled elements will be deterred and therefore competitive entry will take place only if competitors either resell incumbent LECs' existing offerings (using few or none of their own facilities) or use their own facilities to bypass the incumbent LEC network completely. Consequently, setting rates too high would contravene Congress's desire to allow new entrants to compete by purchasing, at cost-based rates, unbundled elements or services of the incumbent LEC network. We therefore seek comment on whether a ceiling to protect against excessive rates for unbundled elements and services would be the best means of furthering the pro-competitive goals of the 1996 Act.

135. We believe that, to be consistent with the pricing principles of the 1996 Act, any

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[185] Unlike with respect to interexchange telephone services, Congress did not address the question of whether interconnection and unbundled element rates should be geographically averaged. With respect to interexchange services, section 254(g) of 1996 Act directs the Commission to adopt rules to require that "rates charged by providers of interexchange telecommunications services to subscribers in rural and high cost areas shall be no higher than the rates charged by each such provider to subscribers in urban areas." *See Policy and Rules Concerning the Interstate, Interexchange Marketplace; Implementation of Section 254(g) of the Communications Act of 1934, as amended*, CC Docket No. 96-61, Notice of Proposed Rulemaking, FCC 96-123 (rel. March 25, 1996).

[186] *See Expanded Interconnection with Local Telephone Company Facilities*, Report and Order and NPRM 7 FCC Rcd 7369, 7451-57, paras. 172-84 (1992).

mechanism used to set rate ceilings for interconnection services and unbundled elements should: (1) make it possible for competitors efficiently to enter the local exchange market, even if all elements are priced at the rate ceiling; (2) constrain incumbent LECs' ability to preclude efficient entry, for example, by manipulating overheads and the allocation of common costs between services; and (3) be as simple to administer as possible. We seek comment on this approach, and request parties that favor a particular approach to explain how that approach is consistent with these principles.

136. Rate ceilings could be derived using a proxy or surrogate for cost-based rates that does not require use of a cost study. Such a proxy could approximate a rate derived through a detailed cost study, and could establish a level above which rates set by states would be too high to allow efficient entry by competitors. Such an approach might well be simpler and speedier to implement than a LRIC-based methodology. A proxy also might reduce or eliminate the need for recordkeeping and examinations of carrier rate bases, consistent with the deregulatory thrust of the 1996 Act. A proxy also would address the concern that incumbents, which have the best information about their own costs, might withhold or otherwise restrict access to those data. Finally, carriers may have an incentive to manipulate their costs and thus their rates. Using a methodology not directly related to costs could remove this incentive. We seek comment on the use of a proxy for a cost-based rate ceiling. Would setting a ceiling based on a proxy fulfill the statutory mandate of section 252(d)(1) and the obligation under section 251 to ensure that rates are just and reasonable? We also seek comment on other possible approaches that would satisfy the requirements of the statute.

137. One method for establishing proxies as a ceiling would be to use generic or averaged cost data. For example, some measure of nationally-averaged costs could be used in lieu of the actual costs of each incumbent LEC. Alternatively, a generic cost study could be used. For example, we could use the Benchmark Cost Model submitted by MCI, Sprint, NYNEX, and US WEST in the record of CC Docket No. 80-286, or the Hatfield study submitted by MCI.[187] We seek comment on whether this or other cost studies would serve as an appropriate proxy for constraining rates that states may set for interconnection and unbundled network elements. We also seek comment on the extent to which any study we rely on in establishing proxies should reflect geographically divergent factors such as population density.

138. A second method for establishing proxies would be to use rates in existing interconnection and unbundling arrangements between incumbent LECs and other providers of local service, such as neighboring incumbent LECs, CMRS providers, or other new entrants in the same service area. Possible disadvantages of using existing interconnection arrangements, however, are that they may reflect various historical public policy influences that resulted in prices that do not reflect underlying costs, and that they may reflect arrangements between parties with unequal bargaining power. In addition, these arrangements may not include rates for interconnection services or network elements that are comparable with the services and elements to be used by competitive entrants.

139. A third possible method for establishing a ceiling for the pricing of certain unbundled network elements could be a subset of the incumbent LECs' existing interstate

[187] Benchmark Cost Model: A Joint Submission by MCI Communications, Inc., NYNEX Corporation, Sprint Corporation, US WEST, Inc., CC Docket No. 80-286 (1995); Hatfield Associates, Inc., *The Cost of Basic Network Elements: Theory, Modeling and Policy Implications* (March 1996).

access rates, charged for interconnection with IXCs and other access customers, or an intrastate equivalent. This method would have the advantage of setting ceilings that could be relatively easier to derive than ceilings based on cost studies. We would, however, want to be sure that any such ceilings would not effectively become the price targets for interconnection. These tariffs (and intrastate tariffs in many states), first, include flat rates for special access and dedicated transport that we have concluded, in general, are reasonably cost based.[188] These rates could serve as the upper limit for rates for unbundled network elements consisting of transmission facilities between networks or between central offices in the incumbent LEC's network. Second, for the unbundled network elements corresponding to local switching, a ceiling could be the lower of interstate or intrastate local switching access charges -- excluding part or all of the transport interconnection charge (TIC) and the carrier common line charge (CCLC), or their intrastate equivalents. Exclusion of the TIC and CCLC would reduce the effective per-minute local switching charges substantially, and intrastate charges could be lower.[189] The use of access charges as a proxy for cost-based rates to derive price ceilings may be reasonable, because interstate access charges were initially derived based on the accounting costs of incumbent LEC networks after various regulatory allocations, and, for the larger incumbent LECs, these charges have been subject to price cap regulation for five years. Thus, although access charges were not derived based on forward-looking costs, a subset of these charges might provide an appropriate and easily-implemented ceiling. We seek comment on this analysis. We also seek comment on whether this subset of access charges, or some other proxy, could be used on an interim basis, with some transition mechanism to move towards rate ceilings based on economic costs.

140. We seek comment on whether all or part of the CCLC and TIC should be excluded from any ceilings applicable to unbundled local switching or transport elements. The TIC was originally set at a residual level to recover costs not accounted for in our interim restructuring of local transport rates. To the extent that the costs in the TIC may be unrelated to the provision of local switching, a ceiling that included the entire TIC would exceed the incremental cost of those network elements.[190] The CCLC arguably should be excluded from the ceiling because it recovers local loop costs, rather than switching and transport costs.[191] In the *ONA* proceeding,[192] certain interstate prices were established for

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[188] *See Transport Rate Structure and Pricing*, CC Docket No. 91-213, 7 FCC Rcd 7006 (1992); *first recon.*, 8 FCC Rcd 5370 (1993), *second recon.*, 8 FCC Rcd 6233 (1993), *third recon.*, 10 FCC Rcd 3030 (1994), *fourth recon.*, 10 FCC Rcd 12979 (1995), *pets. for review pending*. *See also Local Exchange Carrier Switched Local Transport Restructure Tariffs*, 9 FCC Rcd 400 (Com. Car. Bur. 1993).

[189] *See CMRS Notice* at n.83.

[190] *See, e.g., Ameritech Operating Companies Petition for a Declaratory Ruling and Related Waivers to Establish a New Regulatory Model for the Ameritech Region*, Order, FCC 96-58 (rel. Feb. 15, 1996) (*Ameritech Customers First Order*); *The NYNEX Tel. Cos. Petition for Waiver, Transition Plan to Preserve Universal Service in a Competitive Environment*, Memorandum Opinion and Order, 10 FCC Rcd 7445 (1995), *reconsideration pending* (*NYNEX USPP Order*).

[191] *See Universal Service NPRM* at paras. 112-115 (seeking comment on reducing or eliminating implicit universal service support flows in CCLC).

[192] *Amendments of Section 64.702 of the Commission's Rules and Regulations*, Report and Order, CC Docket No. 85-229, 104 FCC 2d 958, 1063-64 (1986); *recon*., 2 FCC Rcd 3035 (1987), *further recon*., 3 FCC Rcd 1135 (1988), *second further recon*., 4 FCC Rcd 5927 (1989), *Amendments of Sections 64.702 of the Commission's Rules and Regulations*, Report and Order, CC Docket No. 85-229, 2 FCC Rcd 3072 (1988), *recon*., 3 FCC Rcd

unbundled features and functions of the local switch. We seek comment on the possible use of these prices as ceilings for the same unbundled elements under section 251.

141. Deriving an appropriate ceiling for unbundled local loops using a method not requiring cost studies clearly raises its own set of difficulties. Using existing interstate access charges is problematic because interstate access charges were designed to recover only 25% of incumbent LECs' unseparated local loop costs, because the interstate access charge regime currently includes two different types of rate elements to recover loop costs -- the CCLC and the subscriber line charge (SLC) -- that are assessed in different ways to different categories of customers, and because the CCLC is a per-minute charge recovering costs that do not vary with usage.[193] To address the first issue, we seek comment on whether a ceiling for unbundled loop rates could be based on the sum of the following: (1) the existing SLC, (2) an imputed flat-rate charge based on the CCLC paid by a customer with average usage, such as that we permitted Rochester Telephone to implement last year,[194] and (3) some subset of intrastate local exchange rates. We solicit comment on how such a ceiling could be implemented. We recognize that, while using some subset of existing prices as a ceiling may be administratively simple, that ceiling may not tightly correlate with a TSLRIC definition of costs, and thus we seek comment more broadly on other possible administratively simple methods for setting a ceiling for the price of an unbundled loop to be applied by the states in an arbitration under sections 251 and 252. We note that we have referred to a Federal-State Joint Board established under section 254 the question of whether and how the existing subsidy to reduce the level of the SLC should be changed,[195] and we seek comment on how the current system for separating and recovering common line costs, as well as various pending proposals before the Joint Board, should affect our analysis.

142. Using any of the above proxy methodologies, the proxy rate may be usage-sensitive, while a service or element is sold on a flat-rated basis, or vice versa. In those situations the applicable ceiling could be derived through a conversion factor, such as average usage.[196] We seek comment on whether such an average usage factor, a geographically disaggregated usage factor, or some alternative methodology, would be appropriate for converting per-minute rates to flat rates, or vice versa. We also seek comment on how such a proxy-based ceiling could be applied on a service-by-service or element-by-element basis if services are unbundled in different configurations from the methods set forth in the proxy.

1150, *vacated sub nom. California v. FCC*, 905 F.2d 1217 (9th Cir. 1990) (*Computer III Inquiry*); *Amendments to Part 69 of the Commission's Rules Relating to the Creation of Access Charge Subelements for Open Network Architecture*, CC Docket No. 89-79, Report and Order, Order on Reconsideration, and Supplemental Notice of Proposed Rulemaking, 6 FCC Rcd 4524 (1991), *modified on recon.* 7 FCC Rcd 5235 (1992), *further modified on recon.* 8 FCC Rcd 3114 (1993) (*ONA Proceeding*).

[193] *See Ameritech Customers First Order* at paras. 5-10 for a discussion of the current system for recovery of interstate separated common line costs.

[194] *See Rochester Telephone Corporation Petition for Waivers to Implement Its Open Market Plan*, Order, 10 FCC Rcd 6776 (1995).

[195] *See Universal Service NPRM* at paras. 112-115.

[196] By usage sensitive, we mean that costs vary by some measure of usage, such as the number of messages or minutes of use. By flat-rated, we mean costs that vary by capacity rather than usage. To convert a per-minute interstate local switching rate to a ceiling for a flat-rate "switch platform" charge, the rate could be multiplied by the average total number of minutes through a local switch per month.

143. As the counterpart to ceilings, we seek comment on whether it is necessary or appropriate for us to establish floors for interconnection and unbundled element prices, *i.e.*, the lower end of a reasonable range within which state commissions could establish rate levels. What would be the potential competitive benefits or detriments of setting a floor for interconnection, collocation, and unbundled element rates? Are they needed to protect incumbent LECs from confiscatory regulatory action? If they are needed, how should they be calculated? Below, we discuss a possible pricing rule under which the sum of the prices of unbundled services cannot exceed the retail price for those services if sold on a bundled basis.[197] Under such a rule, if retail rates are below cost-based levels due to universal service or other implicit subsidies, it may be necessary to price some or all of the unbundled services below LRIC in order for their sum not to exceed the subsidized retail rate.[198] How would this affect the implementation of price floors, or the desirability of such floors?

(c) Other Issues

144. We seek comment on the extent to which embedded or historical costs should be relevant, if at all, to the determination of cost-based rates under section 252(d)(1). Setting rates based on a detailed rate base examination of the incumbent LEC's book costs, with an allocation of residual costs among elements and services, would violate the requirement of section 252(d)(1)(A)(i) that rates for interconnection and network elements be "based on cost (determined without reference to a rate-of-return or other rate-based proceeding.)."[199] In economic terms, prices in competitive markets are based on firms' forward-looking costs rather than historic (sunk) costs.[200] We note however, since the statutory language precludes only use of costs determined on the basis of a "rate-based proceeding," it may be permissible to take some account of an incumbent LEC's embedded costs. Given that incumbent LECs provide services over shared facilities and that technological developments are consistently reducing the costs of providing service, setting the price of discrete services and elements equal to the forward-looking LRIC of each service or element is not likely to recover the historical costs of incumbent LECs' networks. We seek comment on the empirical magnitude of the differences between the historical costs incurred by incumbent LECs (or historical revenue streams) and the forward-looking LRIC of the services and facilities they will be providing pursuant to section 251. How much of this differential can be attributed to universal service support flows? To what extent can incumbent LECs reasonably claim an entitlement to recover a portion of such cost differences? According to the Local Competition Work Group of the NARUC Staff Subcommittee on Communications, a competitive local market would make the issue of recovery of "stranded" embedded costs

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[197] The Illinois Commerce Commission refers to this as the "imputation rule." *See Illinois Bell Telephone Company Proposed Introduction of a Trial of Ameritech's Customer First Plan in Illinois*, nos. 94-0096, 94-0117, 94-0146, 94-0301 consolidated, (Ill. Comm. Comm'n. Apr. 7, 1995). *See infra* Section II.B.3.c.(3).

[198] *See infra* Section II.B.3.c.(3).

[199] *See Southwestern Bell Telephone Company's Tariff Sheets Designed to Structure Local Transport Rates*, Case No. TR-85-342, Report and Order at 8 (Mo. Pub. Serv. Comm. Mar. 6, 1996) (rejecting residual local transport interconnection charge tariff as not "cost-based" and therefore violative of the 1996 Act); Memorandum In Support of Motion to Dismiss on Behalf of the Louisiana Public Service Commission, Docket No. U-21474 at 6 (Louisiana Public Service Commission staff brief arguing that local residual interconnection charge is not based on cost and therefore violative of the 1996 Act).

[200] *See* Alfred E. Kahn, *The Economics of Regulation Principle and Institutions* 70 (1988).

moot, at least from a purely economic perspective. It notes that, in limited circumstances, other considerations could result in a regulatory decision that some recovery of past investment decisions by incumbents is appropriate.[201] Should we establish LRIC as a long-run standard, but permit some interim recognition of embedded costs in the short run? We seek specific comment on mechanisms for any such transition, including how to determine what costs should be recovered during the transition and, most importantly, how and when any such transition would end.

145. We also solicit comment on whether it would be consistent with sections 251(d)(1) and 254 for states to include any universal service costs or subsidies in the rates they set for interconnection, collocation, and unbundled network elements. For instance, New York has adopted a "play or pay" model in which interconnectors who agree to serve all customers in their self-defined service areas ("players") potentially pay a substantially lower interconnection rate than those who serve only selected customers ("payers"), who are liable to pay additional contribution charges.[202] In the long term, section 254 requires the Commission and the Joint Board established under section 254 to take actions to implement the following statutory principles: "All providers of telecommunications service should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service. . . . There should be specific, predictable, and sufficient Federal and State mechanisms to preserve and advance universal service."[203] Arguably, these principles can be interpreted as requiring competitively-neutral mechanisms for recovering universal service support, rather than recovering such support through rates for interconnection or unbundled network elements.[204] On the other hand, the statutory schedule for completion of the universal service reform proceeding (15 months from enactment of the 1996 Act) is different from that for this proceeding (6 months from the date of enactment of the 1996 Act). Also, intrastate universal service mechanisms will not be affected directly by the section 254 Joint Board proceeding. We also seek comment on whether the ability of states to take universal service support into account differs pending completion of the section 254 Joint Board proceeding or state universal service proceedings pursuant to section 254(f),[205] during any transition period that may be established in the Joint Board proceeding, or thereafter.

146. We recognize that even though, as noted below,[206] the provision of inter-connection and unbundled elements pursuant to sections 251 and 252 may not legally displace our interstate access charge regime, the two types of services have clear similarities. Radically different pricing rules for interconnection and unbundled elements, on the one hand, and levels of interstate access charges, on the other, may create economic inefficiencies and other anomalies. Indeed, under a long-term competitive paradigm, it is not clear that there

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[201] NARUC Subcommittee Report at 52-53.

[202] NARUC Handbook at 80.

[203] 1996 Act, sec. 101, §§ 254(b)(4), (b)(5).

[204] Any such universal service support payment should be, to the extent possible, "explicit, rather than implicit as many support mechanisms are today." Joint Explanatory Statement at 130-31. "In keeping with the conferees' intent that universal service support should be clearly identified, [section 254(e)] states that such support should be made explicit . . ." *Id.* at 131.

[205] 1996 Act, sec. 101, § 254(f).

[206] *See* para. 164.

can be a sustainable distinction between access for the provision of local service and access for the provision of long distance service. Thus, we are cognizant of the need to consider these issues in a coordinated manner, and believe it is critically important to reform our interstate access charge rules in the near future.

147. Finally, we note that certain incumbent LECs have advocated that interconnection rates be set based on the "efficient component pricing rule" (ECPR) proposed by economist William Baumol and others.[207] Under this approach, an incumbent carrier that sells an essential input service, such as interconnection, to a competing network would set the price of that input service equal to "the input's direct per-unit incremental costs plus the opportunity cost to the input supplier of the sale of a unit of input."[208] Under the ECPR, competitive entry will not place at greater risk the incumbent's recovery of its overhead costs or any profits that it otherwise would forego due to the entry of the competitor. In other words, the incumbent's profitability would not be diminished by providing interconnection or unbundled elements or both. Proponents of ECPR argue that the ECPR creates an incentive for services to be provided by the lowest-cost provider and that it makes the incumbent indifferent to whether it sells an input service to a competitor or a final service to an end user. Critics, however, have argued that these properties only hold in special circumstances.[209] The ECPR presupposes that the incumbent is the sole provider of a bottleneck service, and seeks to define efficient incentives for incremental entry based on that assumption. Under the ECPR, competitive entry does not drive prices toward competitive levels, because it permits the incumbent carrier to recover its full opportunity costs, including any monopoly profits. In general, the ECPR framework precludes the opportunity to obtain the advantages of a dynamically competitive marketplace. These arguments cast significant doubts on the claims that the rule will yield efficient outcomes over time. Finally, as an administrative matter, it would be difficult for a regulatory agency to determine a carrier's actual opportunity cost.

148. We tentatively conclude that use of the ECPR or equivalent methodologies to set prices for interconnection and unbundled network elements would be inconsistent with the section 252(d)(1) requirement that be based on "cost." We propose that states be precluded from using this methodology to set prices for interconnection and access to unbundled elements. Moreover, we seek comment on whether such a pricing methodology, if used by a state, would constitute a barrier to entry as under section 253 of the 1996 Act.[210]

(4) Rate Structure

149. The structure of incumbent LEC rates for interconnection and unbundled network elements will influence the incentives for interconnectors to purchase and use these

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[207] *See* William J. Baumol, *Some Subtle Issues in Railroad Deregulation*, 10 Int'l J. Trans. Econ. 341 (1983); William J. Baumol & Gregory Sidak, *Toward Competition in Local Telephony* (1994); William Baumol & Gregory Sidak, *The Pricing of Inputs Sold to Competitors*, 11 Yale J. on Reg. at 171 (1994).

[208] William Baumol & Gregory Sidak, *The Pricing of Inputs Sold to Competitors*, 11 Yale J. on Reg. at 178.

[209] *See*, *e.g.*, Jean-Jacques Laffont & Jean Tirole, *Access Pricing and Competition*, 38 Eur. Econ. Rev. 1673 (1994).

[210] 1996 Act, sec. 101, § 253.

services, independent of the level at which rates are set.[211] For example, a usage-sensitive rate will create incentives for the purchaser to minimize usage, or to seek out end users with low usage, while a flat rate for an element will create incentives to utilize the maximum capacity available. Some possible rate structures for interconnection and access to unbundled network elements under the 1996 Act might produce rates that are not just, reasonable, and nondiscriminatory (as required under section 251), might conflict with the pricing standard in section 252(d)(1), or might be at odds with the pro-competitive goals of the 1996 Act. Establishing clear federal rules and principles concerning rate structures may assist states and the parties in arbitrating rates for interconnection and unbundled network elements. We therefore seek comment on some possible principles for analyzing rate structure questions, and some possible principles to guide state (and ultimately judicial) decisions in structuring rates for interconnection and unbundled network elements.

150. In general, we believe that costs should be recovered in a manner that reflects the way they are incurred. This approach is consistent with the 1996 Act's pricing standard for interconnection and unbundled network elements, which indicates that prices should be based on cost. Network providers incur costs in providing two broad categories of facilities, dedicated and shared. Dedicated facilities are those that are used by a single party -- either an end user or an interconnecting network. Shared facilities are those that are used by multiple parties. The cost of a dedicated facility can be attributed directly to the party ordering the service that uses that facility, and it is therefore efficient for that party to pay charges that recover the full cost of the facility. A non-traffic sensitive (NTS) or "flat-rated" charge is most efficient for dedicated facilities, because it ensures that a customer will pay the full cost of the facility, and no more.[212] It ensures that the customer will, for example, add additional lines only if the customer believes that the benefits of the additional lines will exceed their cost. It also ensures that the customer will not face an additional (and non-cost-based) usage charge.

151. We believe the costs of shared facilities should be recovered in a manner that efficiently apportions costs among users that share the facility. We seek comment on whether a capacity-based NTS rate or a traffic-sensitive (TS) rate may be efficient for recovering the cost of shared facilities in any given circumstance. For shared facilities whose cost varies with capacity, such as network switching, it may be efficient to set prices using any of the following: a usage-sensitive charge; a usage-sensitive charge for peak-time usage and a lower charge for off-peak usage; or a flat charge for the peak capacity that an interconnector wishes to pay for and use as though that portion of the facility were dedicated to the interconnector.

152. We seek comment on whether, pursuant to section 251(c)(2), (c)(3), (c)(6), and 251(d)(1), we should adopt rate structure principles for states to apply in meeting the pricing responsibilities under section 252(d)(1). We also seek comment on how such requirements might further our goal of having clear and administratively simple rules.[213] More specifically, we seek comment on whether we should require states to adopt rate structures that are cost-causative and, in particular, whether we should require states to provide for recovery of dedicated facility costs on a flat-rated basis or, at a minimum, make LECs offer a

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[211] *See* AT&T submission at 52.

[212] *See CMRS Notice* at paras. 42-44.

[213] *See* AT&T submission at 52 (advocating a principle of cost causation as an element of defining "just and reasonable" rates).

flat-rate option. In the absence of such a standard, could usage sensitive rates for dedicated facilities cause serious inefficiencies, harm competition, or be contrary to the requirements of the 1996 Act? For example, a usage-based charge could cause parties with high traffic volumes to overpay (*i.e.*, pay more than the fixed cost of the facility), and parties with low traffic volumes to underpay (*i.e.*, pay less than the fixed cost of the facility). In addition, a usage-based charge could give all parties an uneconomic incentive to reduce their traffic volumes or to avoid connecting with networks that impose such charges. It also could give parties with low volumes of traffic, who face below-cost prices, an incentive to add lines that they valued less than their cost. The Washington Utilities Commission, for example, has concluded that measured use interconnection rates are not cost-based and could harm local consumers, and therefore rejected a measured use compensation structure as an exclusive compensation mechanism.[214]

153. We also seek comment on whether we should adopt any rules for pricing of shared facilities. Parties should address the circumstances under which TS rates or flat capacity-based rates would produce efficient results for shared facilities. Several parties have argued that, in the context of interconnection and access to unbundled incumbent LEC networks, interconnectors should have the option of paying for and using a portion of the capacity of incumbent LEC switches.[215] As proposed by some, interconnectors would pay a flat rate for the use of a certain amount of incumbent LEC's switching capacity, and this rate would be discounted based on volume and term commitments. The interconnector would be able to use this platform to provide both basic local switching service as well as vertical switching features -- such as caller ID and call forwarding -- to its end users without paying the incumbent LEC a separate charge for these services. The interconnector would assume the risk of generating sufficient traffic to justify the capacity it purchased from the incumbent LEC. We seek comment on the "switch platform" concept, on whether the 1996 Act requires that switching capacity be made available to new entrants on this basis, and on the competitive implications of such a rate structure. We also seek comment on whether, in the context of these bottleneck facilities offered by incumbent LECs to their competitors, any measures are necessary to prevent incumbent LECs from recovering more than the total cost of a shared facility from users of that facility. Finally, we seek comment on whether concerns about pricing of shared facilities could be alleviated if, as discussed below, sellers of facilities are not allowed to preclude purchasers from further reselling such facilities on a shared basis, which would create alternative sources of shared capacity.[216]

154. Additionally, we seek comment on whether under the 1996 Act we should require or permit volume and term discounts for unbundled elements or services. Commenters are also invited to suggest alternative rate structure principles. Parties should explain how their proposals are consistent with economic cost-causation principles, and with the language and intent of the 1996 Act.

(5) Discrimination

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[214] *See Washington Utilities and Transportation Commission*, Fourth Supplemental Order, Docket No. UT-941464, et al. (Oct. 1995).

[215] The concept is often referred to as the "switch platform." *See, e.g.*, AT&T submission at 53 (arguing that "the vast majority of unbundled network elements costs are not usage sensitive").

[216] *See infra* Section II.B.3.b.

155. Sections 251 and 252 require that interconnection and unbundled element rates be "nondiscriminatory."[217] In addition, section 251(c)(4) requires that, in making resale available, carriers not impose "discriminatory conditions or limitations on resale".[218] Finally, section 252(e) provides that states may reject a negotiated agreement or a portion of the agreement if it "discriminates" against a carrier not a party to the agreement and section 252(i) requires incumbent LECs to "make available any interconnection, service, or network element provided under an agreement . . . to which it is a party to any requesting telecommunications carrier upon the same terms and conditions."[219] By comparison, section 202(a) of the 1934 Act provides that "(i)t shall be unlawful for any common carrier to make any unjust or unreasonable discrimination in charges . . . for . . . like communication service."

156. We seek comment on the meaning of the term "nondiscriminatory" in the 1996 Act compared with the phrase "unreasonable discrimination" in the 1934 Act. More specifically, in choosing the word "nondiscriminatory," did Congress intend to prohibit all price discrimination, including measures (such as density zone pricing or volume and term discounts) that are considered lawful under section 202(a)? We note that the legislative history of the new provisions prohibiting discrimination offers no explicit guidance on this question.[220] We seek comment on whether sections 251 and 252 can be interpreted to prohibit only unjust or unreasonable discrimination. For example, may carriers charge different rates to parties that are not similarly situated, such as when a carrier incurs different costs to provide service to such parties? We also seek comment as to whether we should allow such pricing as a policy matter.

(6) Relationship to Existing State Regulation and Agreements

157. Section 251(d)(3) of the 1996 Act expressly bars the Commission, when prescribing and enforcing regulations to implement section 251, from precluding enforcement of certain existing state regulations. Specifically, section 251(d)(3) prohibits us from

> "[precluding] the enforcement of any regulation, order, or policy of a State commission that--
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> (A) establishes access and interconnection obligations of local exchange carriers;
> (B) is consistent with the requirements of this section; and
> (C) does not substantially prevent implementation of the requirements of this section and the purposes of [the portion of the 1996 Act dealing with development of competitive markets] ."[221]

We ask parties to address the meaning of the specific terms of section 251(d)(3). What types of state policies would, or would not, be consistent with the requirements of section 251 and the purposes of Part II or Title II of the Act? We also seek comment on how the particular

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[217] 1996 Act, sec. 101, §§ 251(c)(2), (3), (6), and 252(d)(1).

[218] 1996 Act, sec. 101, § 251(c)(4)(B). *See infra* Section II.B.3.b. for a discussion of this issue.

[219] 1996 Act, sec. 101, §§ 252(e), (i).

[220] *See, e.g.,* Joint Explanatory Statement at 121-22, 125-26.

[221] 1996 Act, sec. 101, § 251(d)(3).

principles discussed above would affect existing state rules and policies, as well as existing negotiated agreements between carriers.

e. Interexchange Services, Commercial Mobile Radio Services, and Non-Competing Neighboring LECs

158. In this section, we address whether the terms of section 251(c) cover interconnection arrangements between incumbent LECs and providers of interexchange services, CMRS providers, and non-competing neighboring LECs.

(1) Interexchange Services

159. Sections 251(c)(2) and 251(c)(3) impose duties upon incumbent LECs to provide interconnection and nondiscriminatory access to unbundled network elements, respectively, to "any requesting telecommunications carrier." In relevant part, "telecommunications carrier" is defined in section 3(44) of the 1934 Act, as amended, as "any provider of telecommunications services." Because interexchange services are a type of "telecommunications services," which are defined in section 3(46) as "the offering of telecommunications for a fee directly to the public . . . regardless of the facilities used," we conclude that carriers providing interexchange services are "telecommunications carriers." Thus, we believe that interexchange carriers may seek interconnection and unbundled elements under subsections (c)(2) and (c)(3), respectively.

160. With respect to section 251(c)(2), however, we believe the statute imposes limits on the purposes for which any telecommunications carrier, including interexchange carriers, may request interconnection pursuant to that section. Section 251(c)(2) imposes an obligation upon incumbent LECs to provide requesting carriers with interconnection where the request is for the "transmission and routing of telephone exchange service and exchange access." "Telephone exchange service" is defined in section 3(47) of the 1934 Act, as amended, as "service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange," or "comparable service[s]."[222] According to this definition, interexchange service does not appear to constitute a "telephone exchange service." We seek comment on this interpretation.

161. Interexchange service would not appear to qualify as "exchange access" either. "Exchange access" is defined in section 3(16) of the 1934 Act, as amended, as "the *offering* of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll services."[223] This definition would appear to require a telecommunications carrier to request interconnection for purposes of "offering" access to exchange services. An interexchange carrier that requests interconnection to originate or terminate an interexchange toll call would not appear to be "offering" access services, but rather to be "receiving" access services. Thus, it would appear that the obligation to provide interconnection pursuant to section 251(c)(2) does not apply to telecommunications carriers requesting such interconnection for the purpose of originating or terminating interexchange traffic. This tentative conclusion seems consistent with section 251(i), which provides that "[n]othing in this section shall be construed to limit or otherwise affect the Commission's

[222] 1996 Act, sec. 3(a)(1), § 3(47).

[223] 1996 Act, sec. 3(a), § 3(16) (emphasis added).

authority under section 201." Section 201 is the statutory basis on which interexchange carriers have long been entitled to interconnect for the purposes of originating and terminating interexchange traffic. Some have argued that our interpretation is also consistent with other provisions of section 251, such as section 251(g), and with Congress's focus on the local exchange market.[224] We seek comment on our tentative conclusion.

162. It follows from the above definition of "exchange access" that a telecommunications carrier may request cost-based interconnection under section 251(c)(2) for the purpose of *offering* access services in competition with the incumbent LEC. We seek comment, however, on whether a carrier may request cost-based interconnection under section 251(c)(2) *solely* for this purpose. The language in section 251(c)(2) indicating that interconnecting carriers must offer "telephone exchange service and exchange access" may mean that carriers must offer *both* "telephone exchange service and exchange access," or it may mean that telecommunications carriers may obtain interconnection from an incumbent LEC to provide one or the other service, or both. We believe that if we were to interpret this section to require requesting parties to offer both telephone exchange and exchange access services, such a requirement would exclude competitive access providers that currently interconnect with incumbent LECs in order to offer competing exchange access transport services, not telephone exchange service. On the other hand, if we interpret section 251(c)(2) to permit cost-based interconnection for the purpose of offering either telephone exchange or exchange access, that interpretation might permit an interexchange carrier to form an affiliate to obtain interconnection from an incumbent LEC for the purpose of offering a competing exchange access service. The affiliate then might offer its competing service exclusively to its interexchange affiliate, thereby enabling the latter to accomplish indirectly -- obtaining interconnection for the purpose of receiving exchange access service -- what the statute appears to prohibit it from doing directly under section 251(c)(2). This concern is real, of course, only if an exclusive relationship of this sort is otherwise lawful under the 1934 Act, as amended, which it may not be. We seek comment on this analysis. We also seek comment on the impact that any conclusion here would have on the Commission's *Expanded Interconnection* rules, which address the competitive provision of interstate access.

163. Section 251(c)(3) appears to limit the purposes for which telecommunications carriers may request access to unbundled network elements only in the sense that such carriers must seek to provide a "telecommunications service" by means of such elements. As discussed above, interexchange service is a "telecommunications service." Thus, we tentatively conclude that carriers may request unbundled elements for purposes of originating and terminating interexchange toll traffic, in addition to whatever other services the carrier wishes to provide over those facilities.

164. Some interested persons have suggested that this interpretation of section 251(c)(3) would allow interexchange carriers, in effect, to obtain network elements in order to avoid the Commission's Part 69 access charges, but would not require such carriers to use such elements to compete with the incumbent LEC to provide telephone exchange service to subscribers.[225] In opposition, others may argue that incumbent LECs are not obliged under section 251(c)(3) to provide access to unbundled elements, such as a local loop, *solely* for the

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[224] *See, e.g.*, Letter from Bell Atlantic to William Kennard, General Counsel, FCC 6 (April 15, 1996); Southwestern Bell's February 29, 1996 Submission at 3-4; Ameritech's February 28, 1996 Submission at 3.

[225] *See, e.g.*, Letter on Behalf of AT&T, MCI, LDDS WorldCom, and CompTel to William Kennard, General Counsel, FCC 4 (March 20, 1996).

purpose of originating and terminating interexchange toll traffic. Rather, the argument might go, the incumbent LEC's statutory obligation to provide network elements extends only to providing exclusive access to an entire loop, in which case an interexchange carrier could not, as a practical matter, purchase such access without having won over the local customer associated with the loop and providing that telephone exchange service to that customer (or arranging for others to provide it). This latter reading of the statute is consistent with our earlier discussion concerning the meaning of the term "network element."[226] There we noted that a network element appears to refer to a facility or function, rather than a jurisdictionally distinct service, such as switching for intrastate exchange access. We also note that viewing a network element as a jurisdictionally distinct service might be inconsistent with the pricing standards set forth in section 252(d)(1), which suggest that prices for these elements should be set on the basis of some measure of economic costs, not jurisdictionally separated costs. Moreover, as with section 251(c)(2), allowing interexchange carriers to circumvent Part 69 access charges by subscribing under section 251(c)(3) to network elements solely for the purpose of obtaining exchange access may be viewed as inconsistent with other provisions in section 251, such as sections 251(i) and 251(g), and contrary to Congress' focus in these sections on promoting local competition. Lastly, such a reading of the statute may effect a fundamental jurisdictional shift by placing interstate access charges under the administration of state commissions. We seek comment on these issues.

165. If a carrier that provides interexchange toll services purchases access to unbundled network elements in order to provide such toll services -- either alone if the statute permits it, or in conjunction with local exchange services -- we tentatively conclude that the incumbent LEC may not assess Part 69 access charges in addition to the charges assessed for the network elements determined under sections 251 and 252. Section 252, we note, requires that charges for elements shall be based on cost.[227] Thus, the additional imposition of Part 69 access charges would result in total charges not based on cost and thus would seem inconsistent with the statutory scheme. We seek comment on this conclusion. In commenting, parties may want to discuss the relevance of section 272(e)(3). That section requires BOCs, after entering the in-region interexchange business, to impose on their affiliates -- or impute to themselves -- access charges no lower than what they charge to unaffiliated interexchange carriers. In light of the above discussion and its possible implications for our Part 69 access charge regime, we repeat here our intention of taking up access charge reform in the very near future.

(2) Commercial Mobile Radio Services

166. We next seek comment on whether interconnection arrangements between incumbent LECs and commercial mobile radio service (CMRS) providers fall within the scope of section 251(c)(2). As indicated below in the discussion of section 251(b)(5), we also seek comment on the separate but related question of whether LEC-CMRS transport and termination arrangements fall within the scope of section 251(b)(5).

167. With respect to section 251(c)(2), because the obligations of that section, and of section 251(c) generally, apply only to incumbent LECs, we tentatively conclude that CMRS providers are not obliged to provide interconnection to requesting telecommunications carriers under the provision of section 251(c)(2). CMRS providers are not encompassed by the 1996

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[226] See discussion, *supra*, II.B.2.c regarding the definition of "network element."

[227] 1996 Act, sec. 101, § 252(d)(1).

Act's definition of "incumbent local exchange carrier" discussed above.

168. LEC-CMRS interconnection arrangements may nonetheless fall within the scope of section 251(c)(2) if CMRS providers are "requesting telecommunications carrier[s]" that seek interconnection for the purpose of providing "telephone exchange service and exchange access." CMRS are within the definition of "telecommunications services" in section 3(46) of the 1934 Act, as amended, because they are offered "for a fee directly to the public." Similarly, CMRS providers are within the definition of "telecommunications carrier[s]" in section 3(44) because they are "provider[s] of telecommunications services." The phrase "telephone exchange service" is arguably broad enough to encompass at least some CMRS. "[T]elephone exchange service" is defined as either "(A) service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommunicating service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge, or (B) comparable service[s]."[228] We seek comment on which if any CMRS, including voice-grade services, such as cellular, PCS, and SMR, and non-voice-grade services, such as paging, fit this definition. In commenting, parties should address any past Commission statements that bear on the matter.[229]

169. If CMRS providers seeking interconnection from incumbent LECs fall within the purview of section 251(c)(2), or of section 251(b)(5), there arises the question of the relationship between section 251 and another recent addition to the 1934 Act that also addresses interconnection between CMRS providers and other common carriers, section 332(c). Although we seek comment on the relationship of the two provisions in this proceeding, we note that LEC-CMRS interconnection pursuant to section 332(c) is the subject of its own ongoing proceeding in CC Docket No. 95-185, which the Commission initiated prior to the enactment of the 1996 Act. We also note that we sought comment in that proceeding generally on the issue of the interplay of section 251 and section 332(c) and have received extensive comments. We intend that CC Docket No. 95-185 remain open and we do not want to ask interested parties to repeat their arguments on issues they have already addressed in that docket. Therefore, in this proceeding, we ask parties to address any specific issues presented in this *Notice* that are not already addressed in CC Docket No. 95-185. In submitting additional comments, parties may want to address the possibility that, if both sections 251 and 332(c) apply, the requesting carrier would have to choose the provision under which to proceed. Parties may also want to address whether it would be sound policy for the Commission to distinguish between telecommunications carriers on the basis of the technology they use. The Commission retains the prerogative of incorporating by reference comments filed in the section 332(c) proceeding into the record of this proceeding, and of acting on these pending rulemakings in a manner that best serves the interests of reasoned decisionmaking.

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[228] 47 U.S.C. § 3(47). Section 3(a)(1) of the 1996 Act amended the definition in the 1934 Act by adding part (B) above.

[229] *See, e.g., In re Equal Access and Interconnection Obligations Pertaining to Commercial Mobile Radio Services*, 9 FCC Rcd 5408, 5453 (1994) (quoting *The Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services*, Policy Statement on Interconnection of Cellular Systems, 59 Rad. Reg. 2d 1275, Appendix B at 1283-85 (1986)); *Amendment of the Commission's Rules To Permit Flexible Service Offerings in the Commercial Mobile Radio Service*, Notice of Proposed Rulemaking, WT Docket No. 96-6, FCC 96-17, 11 FCC Rcd 2445 (Jan. 25, 1996) at para. 20.

(3) Non-Competing Neighboring LECs

170. We turn next to whether interconnection agreements between incumbent LECs and non-competing neighboring LECs are subject to section 251(c)(2).[230] If they are, section 252 would appear to require that such arrangements be made public and the terms and conditions of the agreements made available to other carriers. Whether this is true of *existing* arrangements between incumbent LECs and non-competing neighboring LECs depends on the resolution of the issue, discussed above, of existing agreements generally.

171. The language of section 251(c)(2), which encompasses interconnection requested for the purposes of providing "telephone exchange service and exchange access," appears to encompass the services provided by non-competing neighboring LECs. By definition, such LECs provide "telephone exchange service and exchange access." Nevertheless, a reading of section 251(c)(2) in context shows that it is part of a provision designed to promote competition against the incumbent LEC, and on this basis, the requirements set forth therein could arguably be understood to apply only to arrangements between *competing* carriers. We note, however, that in deciding this issue, we do not seek to create any disincentives that might hamper competition between neighboring carriers. We seek comment on which of the above interpretations is correct. To the extent a party advocates the latter interpretation, we also seek comment on the implications, if any, for the CMRS discussion.

3. Resale Obligations of Incumbent LECs

a. Statutory Language

172. Section 251(c)(4) imposes a duty upon incumbent LECs to offer certain services for resale at wholesale rates.[231] Specifically, section 251(c)(4) requires incumbent LECs:

> (A) to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers; and (B) not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of such telecommunications service, except that a State commission may, consistent with regulations prescribed by the Commission under this section, prohibit a reseller that obtains at wholesale rates a telecommunications service that is available at retail only to a category of subscribers from offering such service to a different category of subscribers.

173. We seek comment generally on the application of this section, as set forth in some detail below. We will first discuss the services subject to resale and conditions on such resale and then turn to the pricing issues concerning resale. We also seek comment generally on the relationship of this section to section 251(b)(1), which imposes certain resale duties on all LECs.

b. Resale Services and Conditions

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[230] As in the LEC-CMRS context, the separate but related question of whether neighboring LEC transport and termination arrangements fall within the scope of section 251(b)(5) is noted below, in the section dealing with that provision.

[231] 1996 Act, sec. 101, § 251(c)(4).

174. Section 251(c)(4)(A) provides that incumbent LECs must offer for resale at wholesale rates "any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers." Section 251(b)(1) imposes on all LECs "the duty not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of its telecommunications services."[232] One view of the relationship between section 251(b)(1) and section 251(c)(4) is that all LECs are prohibited from imposing unreasonable restrictions on resale, but that only incumbent LECs that provide retail services to subscribers that are not telecommunications carriers are required to make such services available at wholesale rates to requesting telecommunications carriers. We seek comment on this view.

175. We also seek comment on what limitations, if any, incumbent LECs should be allowed to impose with respect to services offered for resale under section 251(c)(4). Should the incumbent LEC have the burden of proving that a restriction it imposes is reasonable and nondiscriminatory? Given the pro-competitive thrust of the 1996 Act and the belief that restrictions and conditions are likely to be evidence of an exercise of market power, we believe that the range of permissible restrictions should be quite narrow.[233] We seek comment on this view. We also seek comment on whether, and if so how, the resale obligation under section 251(c)(4) extends to an incumbent LEC's discounted and promotional offerings. Did Congress intend for such offerings to be provided at wholesale rates, based on the promotional rate minus avoided costs, or does the obligation to provide for resale at wholesale rates only apply to the incumbent LEC's standard retail offerings? If the obligation extends only to the standard offering, what effect would that have on the use of resale as a means of entering the local market? If the obligation applies to promotional and discounted offerings, must the entrant's customer take service pursuant to the same restrictions that apply to the incumbent LEC's retail customers? Moreover, how would such restrictions be enforced without impeding competition (e.g., through disclosure of competitively sensitive information)? We also seek comment on whether a LEC can avoid making a service available at wholesale rates by withdrawing the service from its retail offerings, or whether it should be required to make a showing that withdrawing the offering is in the public interest or that competitors will continue to have an alternative way of providing service. We also seek comment on whether access to unbundled elements addresses this concern.

176. We seek comment on the meaning of the language that "a State commission may, consistent with regulations prescribed by the Commission under this section, prohibit a reseller that obtains at wholesale rates a telecommunications service that is available at retail only to a category of subscribers from offering such service to a different category of subscribers."[234] The provision suggests that Congress did not intend to allow competing telecommunications carriers to purchase a service that, pursuant to state or federal policy, is offered at subsidized prices to a specified category of subscribers (e.g., residential subscribers), and then resell such service to customers that are not eligible for such subsidized service (e.g., business subscribers). For example, it might be reasonable for a state to restrict the resale of a residential exchange service that is limited to low-income consumers, such as the existing Lifeline program. At the same time, we have generally not allowed carriers to

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[232] 1996 Act, sec. 101, § 251(b)(1).

[233] ALTS asserts that there should be no prohibitions or restrictions on the resale of the services of dominant carriers, such as the incumbent LECs. ALTS Handbook at 17.

[234] 1996 Act, sec. 101, § 251(c)(4)(B).

prevent other carriers from purchasing high volume, low price offerings to resell to a broad pool of lower volume customers.[235] We seek comment on this analysis.

177. We note that states have adopted various policies regarding resale of telecommunications services. For example, some states prohibit the resale of flat-rated services and residential service.[236] Other states require or permit the resale of residential services, but place restrictions, or permit the LECs to place restrictions, on the resale of such service. For example, Illinois prohibits the resale of residential services to customers other than residential users, while Washington and Ohio permit carriers to prohibit or to place reasonable restrictions on the resale of residential services to business customers.[237] Finally, some states have imposed nondiscrimination requirements similar to those contained in section 251(c)(4). Colorado has enacted rules governing the authorization of local exchange service providers, and has prohibited facilities-based telecommunications providers from imposing unreasonable or discriminatory limitations on the resale of the regulated telecommunications service.[238] Pennsylvania also prohibits a LEC from maintaining or imposing resale or sharing restrictions on any service that the state commission finds to be competitive.[239] We seek comment on whether it would be consistent with the 1996 Act to use any state policies concerning restrictions on resale in our federal policies. We also seek comment on state policies that are inconsistent with the goals of the 1996 Act or that are inadvisable from a policy perspective. Parties are also invited to comment on whether requiring new entrants to cope with resale policies that are inconsistent from one state to another would disadvantage them competitively in a manner inconsistent with the 1996 Act.

c. Pricing of Wholesale Services

(1) Statutory Language

178. The requirement in section 251(c)(4) that incumbent LECs offer services at "wholesale rates" is elaborated in section 252(d)(3), which sets forth the standards that states must use in arbitrating agreements and reviewing rates under BOC statements of generally available terms and conditions. Section 252(d)(3) provides that wholesale rates shall be set "on the basis of retail rates charged to subscribers for the telecommunications service requested, excluding the portion thereof attributable to any marketing, billing, collection, and other costs that will be avoided by the local exchange carrier." As previously discussed in Section II.B.2.d.(1), we believe that the Commission is authorized to promulgate rules for the states in applying section 252(d).

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[235] *See Regulatory Policies Concerning Resale and Shared Use of Common Carrier Services and Facilities*, Docket No. 20097, Report and Order, 60 FCC 2d 261, 308-316 (1976) (divisions of full time private line circuits will enable smaller users to make efficient, discrete use of private line offerings, and such advantages will be in terms of cost savings and selectivity rather than technical advantages).

[236] Massachusetts prohibits the resale of flat-rate and residential services. NARUC Handbook at 72. Oregon prohibits the resale of residential service. NARUC Handbook at 107.

[237] NARUC Handbook at 65-66, 139.

[238] *Id.* at 27.

[239] *Id.* at 113.

(2) Discussion

179. We seek comment generally about the meaning of the term "wholesale rates" in section 251(c)(4). To ensure that incumbent LECs fulfill their duty under section 251(c)(4) regarding resale services, can and should we establish principles for the states to apply in order to determine wholesale prices in an expeditious and consistent manner?

180. We also seek comment on whether we should issue rules for states to apply in determining avoided costs. We could, for example, determine that states are permitted, under the Act, to direct incumbent LECs to quantify their costs for any marketing, billing, collection, and similar activities that are associated with offering retail, but not wholesale services. We seek comment on whether avoided costs should also include a share of general overhead or "mark-up" assigned to such costs.[240] LECs would then reduce retail rates by this amount, offset by any portion of those expenses that they incur in the provision of wholesale services. This approach appears to be consistent with the statute, but would create certain administrative difficulties because all of the information regarding such costs is under the control of the incumbent LECs. We seek comment on how this approach could be adopted without creating unnecessary burdens on the LECs.

181. Alternatively, we could establish a uniform set of presumptions that states could adopt and that would apply in the absence of quantifications of such costs by incumbent LECs. For example, the Commission could identify a significant number of expenses that the states would presume to be retail expenses, absent a contrary showing by the incumbent LEC. Such presumptions recognize that it may be difficult to obtain cost data from incumbent LECs. They also appear to be consistent with section 252(b)(4)(B), which provides that, "[i]f any party refuses or fails unreasonably to respond on a timely basis to any reasonable request from the state commission, then the State commission may proceed on the basis of the best information available to it from whatever source derived."[241] In addition, we could identify specific accounts or portions of accounts in the Commission's Uniform System of Accounts (USOA)[242] that the states should include as "avoided costs." Another issue on which we seek comment is whether states should be permitted or required to allocate some common costs to "avoided cost" activities. We seek comment on these options, and invite parties to propose other options. We also seek comment on how any approach would further our goals of clarity and administrative simplicity.

182. We also seek comment on whether we should establish rules that allocate avoided costs across services. Should incumbent LECs be allowed, or required, to vary the percentage wholesale discounts across different services based on the degree the avoided costs relate to those services?[243] The benefit of any such approach is that it is likely to result in wholesale rates which are more cost-based than a uniform allocation across services, and that

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[240] *See* Rebuttal Testimony of Jake Jennings before Telecommunications Program Office of Policy and Planning Illinois Commerce Commission, Docket No. 95-0458 (December 21, 1995) at 16-17.

[241] 1996 Act, sec. 101, § 252(b)(4)(B).

[242] 47 C.F.R. Part 32.

[243] For example, if incumbent LECs spend more money marketing vertical features than they spend marketing basic local exchange service, the wholesale rate for vertical features could be reduced by a proportionally greater amount from the retail rate than would be the case for basic local exchange service.

should facilitate efficient entry. However, the administrative complexity of this approach may outweigh the benefits. We seek comment on this approach and on other options, such as requiring that avoided costs be allocated proportionately across all services so that there would be a uniform discount percentage off of the retail rate of each service.

183. While most states have taken no action in this area, a few states have considered these issues. California recently established interim wholesale rates based on identified costs attributable to retailing functions. Based on the costs, California required Pacific Bell to offer a 17 percent discount below retail business rates and a 10 percent discount below its retail residential rates. It also required GTE to set wholesale rates 12 percent below its retail business rates and 7 percent below its residential rates.[244] In Illinois, Ameritech has filed wholesale tariffs with rates that are approximately 6 percent below undiscounted residential retail rates and 10 percent below undiscounted business retail rates. These tariffs are in effect, but are subject to revision in a tariff proceeding pending before the Illinois Commerce Commission. Illinois commission staff have recommended that wholesale prices be set on the basis of retail rates less a measure of net avoided costs. The measure of avoided costs would include the net total assigned costs (TSLRIC plus an allocation of joint costs) of the avoided functions and a pro rata share of the contribution in existing retail rates.[245] We seek comment on whether any of these approaches by the states are consistent with the fundamental objectives of the 1996 Act, and which, if any, might be useful in setting a national policy. We also invite comments discussing the effect of any regulations we adopt on agreements that have already been negotiated or decisions that have already been made by the states.

(3) Relationship to Other Pricing Standards

184. We seek comment on the relationship between rates for unbundled network elements and rates for wholesale or retail service offerings. Some states have adopted rules requiring that the sum of the rates for unbundled network elements be no greater than the retail service rate. The Illinois Commerce Commission calls this the "imputation rule."[246] Proponents of an imputation rule argue that it prevents anticompetitive price squeezes by incumbent LECs,[247] which may set unbundled element prices too high in order to discourage new entrants from purchasing unbundled elements instead of purchasing and reselling the bundled service.

185. It may be difficult to comply with an imputation rule, however, if rates for

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[244] *Order Instituting Rulemaking on the Commission's Own Motion Into Competition for Local Exchange Service*, R.95-040043, *Order Instituting Investigation on the Commission's Own Motion into Competition for Local Exchange Service*, I.95-04-044, Decision (Cal. Pub. Util. Comm'n. Mar. 13, 1996).

[245] NARUC Handbook at 65-66.

[246] *Illinois Bell Telephone Company Proposed Introduction of a Trial of Ameritech's Customer First Plan in Illinois*, nos. 94-0096, 94-0117, 94-0146, 94-0301 consolidated, Illinois Commerce Commission (Apr. 7, 1995).

[247] A price squeeze occurs when a vertically-integrated service provider increases the price of the inputs it sells to its non-integrated competitors and/or decreases the price of the products in which it competes with the non-integrated competitors. *See, e.g.*, Jean Tirole, *The Theory of Industrial Reorganization* 193-94 (1988); Janusz A. Ordover & Garth Saloner, *Predation, Monopolization, and Antitrust*, in Richard Schmalensee & Robert Willig (eds.), I *Handbook of Industrial Organization* 565-66 (1989).

retail services are below cost, due to implicit, non-competitively neutral, intrastate subsidy flows.[248] For example, assume the cost of basic residential local exchange service is $25, including a $20 cost for the loop element and a $5 cost for the "port" element, and the retail rate for such service (including the federal SLC) is $10. In such a case, application of the imputation rule would require either that the incumbent LEC offer unbundled network elements to its competitors at prices less than cost, or that the retail rate be increased to at least $25.

186. Certain states, including the New York Public Service Commission, have not found it necessary to adopt an imputation rule. When the incumbent LEC sells retail services at prices that are less than cost, it may be that it recovers the difference in other state retail service rates and in interexchange access charges. For example, in the example cited above, the customer may pay 12 cents per minute for intrastate toll traffic that costs only 2 cents per minute to provide, and may generate long-distance traffic for which the incumbent LEC receives access charges of 3 cents per minute even though it costs only 1 cent per minute to provide such access. Under these circumstances, it could be argued that no imputation rule is needed to protect new entrants because, as a matter of market economics or legal obligations, new entrants purchasing unbundled elements priced at cost would be providing all of these services, and thus could collect the same relatively overpriced revenues for toll service, interstate access, vertical features, and other offerings to make up for the underpricing of basic residential local exchange service.[249] By contrast, an entrant that merely resells a bundled retail service purchased at wholesale rates, would not receive the access revenues. There are at least two possible additional objections to an imputation rule when it requires that unbundled elements be priced below cost. First, the unbundled elements could be used to provide services that compete with LEC retail services that are the source of the subsidy. Second, if unbundled elements were priced at less than cost, then efficient facility-based entry would be deterred, as new entrants purchase unbundled network elements at below cost rather than constructing their own facilities. We seek comment on whether it would advance the pro-competitive goals of the 1996 Act for all states to follow an imputation rule, and on the potential pitfalls of such a rule.

187. One action a state could take to address any problems created by adopting an imputation rule when retail rates are below cost would be to restructure its retail rates to eliminate non-competitively neutral, implicit subsidy flows. This restructure could involve either making subsidy flows explicit and competitively neutral, reducing the level of such flows, or a combination. For example, the Illinois Commerce Commission, before enacting an imputation rule, divided the state into three access areas with separate rates in each area. It then restructured rates, so that retail rates in each access area are, on average, above TSLRIC. Are such changes required pursuant to section 254(f)?[250] We seek comment on the relative advantages and detriments of this and other alternatives as either federal policies or policies that individual states could adopt.

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[248] Interstate subsidy flows are to be addressed by the Joint Board pursuant to section 254(a)-(e).

[249] *See* discussion *supra* in sections II.B.2.c.(1) and II.B.2.e.

[250] Section 254(f) provides that a state "may adopt regulations not inconsistent with the Commission's rules to preserve and advance universal service" and "may adopt regulations to provide for additional definitions and standards to preserve and advance universal service within that State only to the extent that such regulations adopt additional specific, predictable, and sufficient mechanisms to support such definitions or standards that do not rely on or burden Federal universal service support mechanisms."

188. We note that, to the extent federal implicit universal service subsidies contribute to any problems created by adopting an imputation rule when retail rates are below cost, they will be addressed in the federal-state joint board review of universal service requirements being conducted pursuant to section 254. We further note that at least one incumbent LEC has suggested in another proceeding that the Commission consider commencing a proceeding to determine whether it would be appropriate to enter a preemption order requiring that rates for local service exceed the cost of providing that service.[251] We seek comment on these issues. We also invite comment on whether some interim rules might be appropriate to address this problem before the federal-state joint board established pursuant to section 254 acts, which could be up to nine months after we issue an order in this proceeding.[252] We also solicit comment on any other rules that should be adopted concerning the relationship between services or elements that are necessary to promote the goals of the Act.

4. Duty to Provide Public Notice of Technical Changes

189. Section 251(c)(5) of the 1996 Act requires incumbent LECs to "provide reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks."[253] We tentatively conclude that (1) "information necessary for transmission and routing" should be defined as any information in the LEC's possession that affects interconnectors' performance or ability to provide services; (2) "services" should include both telecommunications services and information services as defined in sections 3(46) and 3(20), respectively, of the 1934 Act, as amended; and (3) "interoperability" should be defined as the ability of two or more facilities, or networks, to be connected, to exchange information, and to use the information that has been exchanged.[254] We request comment on what changes should trigger the public notice requirement and on the above tentative conclusions.

190. We note that public notice is critical to the uniform implementation of network disclosure, particularly for entities operating networks in numerous locations across a variety of states. We tentatively conclude that incumbent LECs should be required to disclose all information relating to network design and technical standards, and information concerning changes to the network that affect interconnection.[255] We further tentatively conclude that the incumbent LEC, at a minimum, must provide the following specific information: (1) date changes are to occur; (2) location at which changes are to occur; (3) type of changes; and (4) potential impact of changes. We believe that these proposed categories represent the minimum information that a potential competitor would need in order to achieve and maintain

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[251] Reply Comments of US West, Inc., *In the Matter of Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers,* CC Docket No. 95-185, March 25, 1996, p.5. *But cf.* Washington Utilities and Transportation Commission, Fifteenth Supplemental Order, Docket UT-950200 pp. 96-97 (April 1996) (average residential rate of $10.50 per month covers incremental cost of service and provides a reasonable contribution to US West's overhead).

[252] *See* 1996 Act, sec. 101, §§ 251(d)(1) and 254(a)(2).

[253] 1996 Act, sec. 101, § 251(c)(5).

[254] *See IEEE Standard Dictionary of Electrical and Electronics Terms* 461 (J. Frank ed. 1984).

[255] 1996 Act, sec. 101, § 251(c)(5); *see, e.g.,* 47 C.F.R. § 64.702.

efficient interconnection.

191. In addition, we request comment on how public notice should be provided. We tentatively conclude that full disclosure of the required technical information should be provided through industry forums (*e.g.*, the Network Operations Forum (NOF) or Interconnection Carrier Compatibility Forum (ICCF)) or in industry publications. This approach would build on a voluntary practice that now exists in the industry and would result in broad availability of the information. We seek comment on this tentative conclusion. We further seek comment as to whether incumbent LECs should be required to file with the Commission a reference to this technical information and where it can be located (*e.g.*, an Internet address).

192. We also tentatively conclude that incumbent LECs should be required to: (1) publicly disclose the information within a "reasonable" time in advance of implementation; and (2) make the information available within a "reasonable" time if responding to an individual request. We seek comment on what constitutes a reasonable time in each of these situations, and on whether the Commission should adopt a timetable for disclosing technical information comparable to the disclosure timetable that we adopted in the *Computer III* proceeding.[256] In Phase II of that proceeding, the Commission required AT&T and the BOCs to disclose information about network changes or new network services that affect the interconnection of enhanced services with the network at two points in time.[257] First, carriers were required to disclose such information at the "make/buy" point -- that is, when the carrier decides to make itself, or to procure from an unaffiliated entity, any product the design of which affects or relies on the network interface.[258] Second, carriers were required to release publicly all technical information at least twelve months prior to the introduction of a new service or network change that would affect enhanced service interconnection with the network.[259] If a carrier is able to introduce a new service between six and twelve months of the make/buy point, public disclosure was permitted at the make/buy point, but in no event could the carrier introduce the service earlier than six months after the public disclosure.[260] We seek comment as to whether the Commission should adopt a comparable timetable for the section 251(c)(5) network disclosure requirements and how the timetable should be

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[256] *Amendment of Section 64.702 of the Commission's Rules and Regulations* (*Computer III*), *Phase I*, 104 FCC 2d 958 (1986) (*Phase I Order*), *recon.*, 2 FCC Rcd 3035 (1987) (*Phase I Recon. Order*), *further recon.*, 3 FCC Rcd 1135 (1988) (*Phase I Further Recon. Order*), *second further recon.*, 4 FCC Rcd 5927 (1989) (*Phase I Second Further Recon.*), *Phase I Order and Phase I Recon. Order vacated, California v. FCC*, 905 F.2d 1217 (9th Cir. 1990) (California I); *Phase II*, 2 FCC Rcd 3072 (1987) (*Phase II Order*), *recon.*, 3 FCC Rcd 1150 (1988) (*Phase II Recon. Order*), *further recon.*, 4 FCC Rcd 5927 (1989) (*Phase II Further Recon. Order*), *Phase II Order, vacated, California I*, 905 F.2d 1217 (9th Cir. 1990); *Computer III Remand Proceedings*, 5 FCC Rcd 7719 (1990) (*ONA Remand Order*), *recon.*, 7 FCC Rcd 909 (1992), *pets. for review denied, California v. FCC*, 4 F.3d 1505 (9th Cir. 1993) (*California II*); *Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards*, 6 FCC Rcd 7571 (1991) (*BOC Safeguards Order*); *BOC Safeguards Order, vacated in part and remanded, California v. FCC*, 39 F.3d 919 (9th Cir. 1994) (*California III*), *cert. denied*, 115 S.Ct. 1427 (1995).

[257] *Phase II Recon. Order*, 3 FCC Rcd 1150, 1164, ¶ 116.

[258] *Id.*

[259] *Id.*

[260] *Id.*

implemented in this context.

193. We seek comment on the relationship between sections 273(c)(1) and (c)(4), which detail BOCs' disclosure requirements "to interconnecting carriers . . . on the planned deployment of telecommunications equipment," and section 251(c)(5), which addresses disclosure requirements for all incumbent LECs. In addition, we seek comment on what enforcement mechanism, if any, should be employed to ensure compliance with the section 251(c)(5) public notice requirement and how we might reconcile the related obligations under sections 251(a), 251(c)(5) and 256 to make them simple to administer.

194. We seek comment on the extent to which safeguards may be necessary to ensure that information regarding network security, national security and proprietary interests of LECs, manufacturers and others are not compromised, and what those safeguards should be.

C. Obligations Imposed on "Local Exchange Carriers" by Section 251(b)

195. Section 251(b) imposes certain specified obligations on all "local exchange carriers." "Local exchange carrier" is defined in section 3(26) as "any person that is engaged in the provision of telephone exchange service or exchange access."[261] Section 3(26) excludes from the definition persons "engaged in the provision of a commercial mobile service under section 332(c), except to the extent that the Commission finds that such service should be included in the definition of such term."[262] We seek comment on whether, and to what extent, CMRS providers should be classified as LECs and the criteria, such as wireless local loop competition in the LEC's service area by the CMRS provider, that we should use to make such a determination.[263] We seek comment on whether and how a Commission determination that CMRS providers be granted flexibility to provide fixed wireless local loop service should affect the determination of whether CMRS providers should be included in the definition of local exchange carrier. We also seek comment on whether we may classify a CMRS provider as a LEC for certain purposes but not for others. For example, could we treat a CMRS provider as a LEC for purposes of providing resale but not for providing number portability? We also request that commenters discuss whether we may classify some classes of CMRS providers as LECs, but not others, such as those that are not competing with LECs. For example, in considering whether to classify certain CMRS providers as LECs, should we distinguish between CMRS providers that offer cellular service from those that offer only paging services?

1. Resale

196. Section 251(b)(1) imposes a duty on all LECs "not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of its telecommunications services."[264] New carriers can use resale of other LECs' services to provide service in a geographic area and such resale opportunities facilitate beneficial forms

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[261] 1996 Act. sec. 3, § 153(a)(44).

[262] 1996 Act, sec. 3, § 153(26).

[263] We note that we might have authority under section 332 or other provisions of the Act to impose on CMRS providers obligations comparable to the ones set forth in section 251(b).

[264] 1996 Act, sec. 101, § 252(b)(1).

of competition.

197. We seek comment on what types of restrictions on resale of telecommunications services would be "unreasonable" under this provision. We believe that few, if any, conditions or limitations should be permitted because such restrictions generally are inconsistent with the pro-competitive thrust of the Act and would likely be evidence of the exercise of market power. We seek comment on this position. We also seek comment on what standards we should adopt, if any, to determine whether a resale restriction should be permitted. Further, we seek comment on whether any restriction on resale should be presumed to be unreasonable absent an affirmative showing that the restriction is reasonable, and if so, how could such a showing be made. Finally, commenters should address whether any of the issues discussed above with respect to resale by incumbent LECs as required under section 251(c)(4) should be applied to other LECs pursuant to section 251(b)(1).

2. Number Portability

198. Section 251(b)(2) imposes a duty on all LECs "to provide, to the extent technically feasible, number portability in accordance with the requirements prescribed by the Commission."[265] This provision reflects Congress's recognition that pro-competitive policies must necessarily address the consumer's preferences and circumstances in the new competitive environment. By requiring that customers be able to switch local service providers without changing their telephone number, Congress seeks to lower barriers to entry and promote competition in the local exchange market.[266] Section 3(30) of the 1996 Act defines number portability as "the ability of users of telecommunications services to retain, at the same location, existing telecommunications numbers without impairment of quality, reliability, or convenience when switching from one telecommunications carrier to another."[267] Section 251(e)(2) of the 1996 Act mandates that the cost of number portability "be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission."[268] This requirement helps to ensure that no single category of telecommunications carriers will be disadvantaged competitively by bearing all or substantially all of the costs of number portability, and will help enhance fair and efficient local exchange competition.

199. On July 13, 1995, the Commission adopted a Notice of Proposed Rulemaking in CC Docket No. 95-116 seeking comment on a wide variety of technical and policy issues concerning number portability.[269] On March 14, 1996, the Common Carrier Bureau issued a Public Notice in that docket seeking comment on how passage of the 1996 Act may affect

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[265] 1996 Act, sec. 101, § 251(b)(2).

[266] *See, e.g.*, statement of Sen. Robert Kerrey ("Quite simply, telephone customers -- both business and residential -- are not as willing to switch phone companies if they also have to switch phone numbers.") 141 Cong. Rec. S8313 (June 14, 1995).

[267] 1996 Act, sec. 3, § 153(30).

[268] 1996 Act, sec. 101, § 251(e)(2).

[269] *Telephone Number Portability*, CC Docket No. 95-116, 10 FCC Rcd 12350 (1995)(*Number Portability NPRM*).

the issues raised in the *Number Portability NPRM*.[270] Accordingly, in an effort to adopt number portability rules expeditiously, we will address number portability issues raised by the 1996 Act in our ongoing proceeding on number portability. That proceeding will specifically address, *inter alia*, the deployment schedule that incumbent LECs must follow for providing number portability, the manner in which it can be provided, and the recovery of number portability costs.

200. Since our July NPRM, a number of states have taken significant steps to implement service provider number portability. Washington state completed a number portability trial using the Local Area Number Portability (LANP) method in December, 1995,[271] and New York is currently conducting a number portability trial in Manhattan using the Carrier Portability Code (CPC) method.[272] Several states have established task forces with industry participants to investigate the development and implementation of long-term number portability methods.[273] In addition, the State commissions of Illinois, Colorado, New York, and Georgia have adopted the recommendations of their staffs and task forces to implement AT&T's Location Routing Number (LRN).[274] Other states, such as Indiana, Michigan, Ohio, and Wisconsin, have selected, or are about to select, LRN without first establishing task forces. Switch vendors have indicated that the software required to support LRN generally will be available in the second quarter of 1997. Consequently, Illinois plans to deploy LRN in the Chicago LATA in the third quarter of 1997, and Georgia has ordered implementation of LRN as soon as it becomes fully available. Ohio plans to have implemented a database number portability method by October, 1997.

201. We note that while several states have taken action toward implementation of service provider portability, no long-term number portability solutions are in use today, and approximately 27 states have yet to address issues related to long-term number portability. By enacting section 251(b)(2) of the 1996 Act, Congress has stated that consumers should be able to change local telephone companies without changing their phone numbers, and that this capability is critical to the development of local exchange competition. Although there are methods of providing number portability today, these mechanisms generally are considered less efficient and less pro-competitive than the long-term solutions now being developed. For example, existing methods rely on the incumbent LEC network, generally do not support all current vertical services, and are wasteful of numbering resources. Accordingly, we intend to take expeditious action on number portability issues.

3. Dialing Parity

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[270] *Further Comments, Telephone Number Portability*, Public Notice, DA 96-358 (Mar. 14, 1996).

[271] LANP is a database solution whereby each customer is assigned a unique ten-digit customer number address (the dialed number) and a unique ten-digit network node address (the number that identifies the location of the switch to which the customer has forwarded his or her number).

[272] CPC is a database solution in which a three-digit code is assigned to each carrier in a given area.

[273] Those states include Alabama, Arizona, California, Connecticut, Florida, Georgia, Illinois, Kansas, Maryland, New York, Oregon, Texas, and Washington.

[274] LRN is a database solution in which a ten-digit location routing number is used to identify the switch that serves a particular customer or customers.

202. Section 251(b)(3) of the 1996 Act requires LECs "to provide dialing parity to competing providers of telephone exchange service and telephone toll service." Under section 3(15) of the 1934 Act, as amended, "dialing parity" means:

> that a person that is not an affiliate of a local exchange carrier is able to provide telecommunications services in such a manner that customers have the ability to route automatically, without the use of any access code, their telecommunications to the telecommunications services provider of the customer's designation from among 2 or more telecommunications services providers (including such local exchange carrier).[275]

This dialing parity requirement will foster local exchange, long distance, and international competition by ensuring that each customer has the freedom to choose among different carriers for different services without the burden of dialing additional access codes or personal identification numbers.

203. It is our understanding that some form of intraLATA toll dialing parity is available or has been ordered in eighteen states.[276] In the thirty-two states where dialing parity has not been required, competition in the intraLATA toll market generally has been permitted only with the use of access codes, which require customers to dial a five- or seven-digit prefix before dialing the called party's telephone number.[277] Under the 1996 Act, LECs are precluded from relying upon access codes as a means of providing dialing parity to competitive telecommunications providers. Thus, when the 1996 Act became law, "dialing parity" did not exist in most states and, where some form of dialing parity had been required, implementation requirements and methodologies varied across the states.

204. On April 4, 1994, the Commission adopted a Notice of Proposed Rulemaking that sought comment on a variety of issues related to the administration of the North American Numbering Plan (NANP),[278] including whether to impose dialing parity requirements on LECs for interstate, intraLATA toll traffic.[279] In a subsequent Order,

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[275] 1996 Act, sec. 3, § 3(15).

[276] Those states are Alaska, Arizona, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Michigan, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Virginia, West Virginia, and Wyoming.

[277] Sometimes referred to as "10XXX" or "101XXXX" dialing, callers may reach a long distance carrier in states where such dialing arrangements are authorized, by dialing a five-digit carrier access code ("10XXX," with "XXX" representing a three-digit carrier identification code) or a seven-digit carrier access code ("101XXXX," with "XXXX" representing a carrier identification code).

[278] Administration of the North American Numbering Plan, *Notice of Proposed Rulemaking*, CC Docket No. 92-237, 9 FCC Rcd 2068 (1994) (*NANP NPRM*). The NANP is the basic numbering scheme that permits calls to be placed within the United States, Canada, Bermuda and most of the Caribbean with, at most, 11-digit dialing.

[279] Specifically, that Notice asked whether the Commission should "require local exchange carriers to . . . deliver those [interstate, intraLATA toll] calls to the carrier preselected by the end user unless the preliminary routing numbers indicate otherwise." *NANP NPRM*, para. 58.

adopted July 13, 1995, the Commission deferred consideration of the dialing parity issue.[280]

205. Comments in response to the *NANP NPRM* as to *whether* LECs should be required to implement dialing parity have become moot in light of the mandatory dialing parity provisions in section 251(b)(3) of the 1996 Act. In addition, because the *NANP NPRM* proposed requiring dialing parity solely for interstate, intraLATA toll traffic,[281] comments received in response to that notice do not address all of the section 251(b)(3) dialing parity requirements that apply to all interstate and intrastate telephone exchange local calling, and telephone toll services. We address the dialing parity issue anew in this Notice in light of the broader dialing parity directives contained in the 1996 Act. We ask parties to file in this docket those portions of any comments filed in response to the *NANP NPRM* that address particular methodologies for implementing intraLATA toll dialing parity and that are relevant to our consideration of the dialing parity requirements in the 1996 Act.

206. Section 251(b)(3) makes no distinction among international, interstate and intrastate traffic for purposes of the dialing parity provisions. Based on the absence of any such distinctions in defining the scope of the dialing parity requirements, we tentatively conclude that section 251(b)(3) creates a duty to provide dialing parity with respect to all telecommunications services that require dialing to route a call, and encompasses international as well as interstate and intrastate, local and toll services. We believe that this interpretation is consistent with the statutory definition of dialing parity and would open the local and long distance markets to the greatest number of competitive telecommunications services providers. We seek comment on this tentative conclusion.

207. The statutory definition of dialing parity provides that the customer must have the ability to choose "from among 2 or more telecommunications services providers (including such local exchange carrier)."[282] LECs are precluded from relying on access codes as a means of providing dialing parity to competitive service providers.[283] The Act, however, does not specify what methods should be used to implement dialing parity. We believe that presubscription represents the most feasible method of achieving dialing parity in long distance markets consistent with the definition of dialing parity in section 3(15) of the 1996 Act.[284] In this context, "presubscription" refers to the process by which a customer

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[280] Administration of the North American Numbering Plan, *Report and Order*, CC Docket No. 92-237, FCC 95-283 (1995), para. 7 (*recon. pending*) (*NANP Order*).

[281] An "interstate, intraLATA toll call" is a call that (1) crosses a state boundary but does not cross a LATA boundary and (2) is subject to a charge. For this purpose, the term "state" includes the District of Columbia and the territories of the United States. 47 U.S.C. § 153(v). A call from Silver Spring, Maryland to Manassas, Virginia (currently handled by Bell Atlantic) is an example of such a call.

[282] 1996 Act, sec. 3, § 3(15).

[283] 1996 Act, sec. 3, § 3(15).

[284] Although we anticipate that presubscription represents the most feasible method for achieving long distance dialing parity (*see*, discussion of PIC presubscription methodology below), we note that presubscription does not represent the method by which carriers would accomplish local dialing parity. Rather, the customer's ability to select a telephone exchange service provider and make local telephone calls without dialing extra digits will be accomplished through the unbundling, number portability and interconnection requirements of Section 251.

preselects a carrier, to which all of a particular category or categories of calls on the customer's line will be routed automatically.

208. Presubscription to a carrier other than the customer's local exchange carrier has not been available for *interstate*, intraLATA toll calls nor has it been available in most states for *intrastate*, intraLATA toll calls. Instead, BOCs automatically carry these calls rather than routing them to a presubscribed carrier of the customer's choice. If the state from which the customer is calling has authorized competition, but has not ordered presubscription in the intraLATA toll market, a customer wishing to route an intraLATA call to an alternative carrier typically must dial the carrier access code of the alternative carrier.

209. We seek comment on specific alternative methods for implementing local and toll dialing parity, including various forms of presubscription, in the interstate and intrastate long distance and international markets, that are consistent with the statutory requirements set forth in the 1996 Act. Specifically, we seek information and comment on the standards, if any, that have been developed to address or define local or toll dialing parity, the consistency of those standards with the statutory definition of dialing parity set forth in the 1996 Act, and the extent to which there is a need for the development of further standards.

210. We note that there is substantial variation in the intraLATA toll dialing parity requirements and implementation methodologies that individual states have adopted. For example, some states have adopted a presubscription methodology that allows a customer to choose between the incumbent LEC and any interexchange carrier that is authorized in that state to carry the customer's intrastate, intraLATA toll calls.[285] Other states have adopted a presubscription methodology that allows the customer a choice only between the incumbent LEC and the same interexchange carrier that the customer is currently presubscribed to for interLATA long-distance calling.[286] A "multi-PIC" or "smart-PIC" presubscription methodology, which would enable customers to presubscribe to multiple carriers for various categories of long-distance calling, also is being considered in some states.[287] We seek comment on whether any of the presubscription methods adopted by the states could be implemented in national dialing parity standards consistent with the requirements of the 1996 Act. We also seek comment as to the categories of long distance traffic (*e.g.*, intrastate, interstate, and international traffic) for which a customer should be entitled to choose presubscribed carriers, and whether a uniform, nationwide methodology is necessary. In the absence of uniform, federal rules, we ask commenters, and state commissions in particular, to address the difficulties state commissions might experience in implementing the dialing parity

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[285] *See, e.g., Intra-Market Service Area Presubscription and Changes in Dialing Arrangements Related to the Implementation of Such Presubscription*, Interim Order (Ill. Comm. Comm'n Apr. 7, 1995) (adopting "2-PIC" presubscription method based on belief that "2-PIC" method affords customers additional choice and opens market to more participants); *Opinion and Order Concerning Intra-LATA Presubscription, Case 28425*, Opinion No. 94-11 (N.Y. Pub. Serv. Comm'n April 4, 1994) (adopting intraLATA toll presubscription using "2-PIC" method).

[286] *See, e.g.*, In re Cincinnati Bell Telephone Company, Case No. 93-432-TP-ALT Office of Consumers' Counsel v. Cincinnati Bell Telephone Company Case No. 93-551-TP-CSS, 151 P.U.R.4th 487 (Ohio Pub. Util. Comm'n May 5, 1994) (adopting "modified 2-PIC" presubscription methodology).

[287] *See, e.g.*, In re Local Exchange Competition and Other Competitive Issues Case No. 95-845-TP-COI, 164 P.U.R.4th 214 (Ohio Pub. Util. Comm'n Sept. 27, 1995) (staff recommendation to require Smart- or Multi-PIC methodology if it is determined that technology is available, or "Full 2-PIC" methodology if it is determined that Smart-PIC technology is not available).

requirements of the 1996 Act. Finally, we seek comment on what Commission action, if any, is necessary to implement dialing parity for international calls.

211. We tentatively conclude that, pursuant to section 251(b)(3), a LEC is required to permit telephone exchange service customers within a defined local calling area to dial the same number of digits to make a local telephone call, notwithstanding the identity of a customer's or the called party's local telephone service provider. We believe that this interpretation of the dialing parity requirement as applied to the provision of telephone exchange service would best facilitate the introduction of competition in local markets by ensuring that customers of competitive service providers are not required to dial additional access codes or personal identification numbers in order to make local telephone calls. We seek comment on this tentative conclusion and seek information as to how this local dialing parity requirement should be implemented.

212. For most LECs, the 1996 Act provides no timetable for implementing dialing parity. Section 271(e)(2)(A) requires BOCs, however, to provide intraLATA toll dialing parity in a state "coincident with" its exercise of authority to provide interLATA services in that state, or three years from the date of enactment of the 1996 Act, whichever is earlier.[288] Section 271(e)(2)(B) limits the ability of states to impose dialing parity requirements on a BOC prior to the earlier of those two dates.[289] We seek comment on what implementation schedule should be adopted for dialing parity obligations for all LECs.

213. The 1996 Act does not require that procedures be established to permit consumers to choose among competitive telecommunications providers (*e.g.*, through balloting). We seek comment as to whether the Commission should require LECs to notify consumers about carrier selection procedures or impose any additional consumer education requirements. Finally, we seek comment on an alternative proposal that would make competitive telecommunications providers responsible for notifying customers about carrier choices and selection procedures through their own marketing efforts.

214. In addition to the duty to provide dialing parity, Section 251(b)(3) also imposes the duty on all LECs to provide competing telecommunications services providers with "nondiscriminatory access to telephone numbers, operator services, directory assistance, and directory listing, with no unreasonable dialing delays."[290] As a general matter, we tentatively conclude that "nondiscriminatory access" means the same access that the LEC receives with respect to such services. We seek comment on this tentative conclusion. We also seek comment as to how the Commission should implement the nondiscriminatory access provisions that are contained in section 251(b)(3) as is discussed in more detail below.

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[288] 1996 Act, sec. 151, § 271(e)(2)(A), § 271(e)(2)(B). Exceptions from this requirement are made for single-LATA states and states that issued an order by December 19, 1995 requiring intraLATA toll dialing parity. The 1996 Act also requires a BOC seeking to provide in-region interLATA services to demonstrate, *inter alia*, that it has implemented intraLATA toll dialing parity. Section 271(c)(2)(B)(xii) states that: "[a]ccess or interconnection provided or generally offered to other telecommunications carriers . . . [must include] . . . [n]ondiscriminatory access to such services or information as are necessary to allow the requesting carrier to implement local dialing parity in accordance with the requirements of section 251(b)(3)."

[289] 1996 Act, sec. 151, § 271(e)(2)(B).

[290] 1996 Act, sec. 101, § 251(b)(3).

215. More specifically, we interpret "nondiscriminatory access to telephone numbers" to mean that competing telecommunications providers must be provided access to telephone numbers in the same manner that such numbers are provided to incumbent LECs. Currently, the largest local exchange carrier in each area code serves as the central office (CO) code administrator, the entity that is responsible for the assignment and administration of telephone numbers.[291] In 1995, the Commission ordered that the functions associated with the assignment and administration of local telephone numbers be centralized and transferred from the largest LECs to a newly created NANP Administrator.[292] New section 251(e)(1) directs the Commission to create or designate one or more impartial entities to administer telecommunications numbering and to make such numbers available on an equitable basis.[293] In light of the directives contained in the *NANP Order* and section 251(e)(1), we seek comment as to what, if any, additional Commission action is necessary or desirable to ensure nondiscriminatory access to telephone numbers consistent with the requirements of section 251(b)(3).

216. We interpret "nondiscriminatory access to . . . operator services" by LECs to mean, at least in part, that a telephone service customer, regardless of the identity of his local telephone service provider, must be able to connect to a local operator by dialing "0" or "0" plus the desired telephone number. For purposes of this provision, we tentatively define "operator services" as any automatic or live assistance to a consumer to arrange for billing or completion or both of a telephone call through a method other than: (1) automatic completion with billing to the telephone from which the call originated, or (2) completion through an access code by the consumer, with billing of an account previously established with the telecommunications service provider by the consumer.[294] We seek comment on this proposed definition and on what, if any, Commission action is necessary to implement the nondiscriminatory access requirements for operator services under section 251(b)(3). We ask commenters to address whether the duty imposed on LECs to provide nondiscriminatory access to operator services includes the duty to resell operator services to non-facilities-based competing providers or facilities-based competing providers.

217. We further interpret "nondiscriminatory access to . . . directory assistance and directory listing" by LECs to mean that all telecommunications services providers' customers must be able to access each LEC's directory assistance service and obtain a directory listing in the same manner, notwithstanding (1) the identity of a requesting customer's local telephone service provider, or (2) the identity of the telephone service provider for a customer whose directory listing is requested through directory assistance. We seek comment on this interpretation and on what, if any, Commission action is necessary or desirable to implement nondiscriminatory access to directory assistance and directory listing as required by section 251(b)(3). We also seek comment on whether customers of competing telecommunications

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[291] In the United States, current CO code administrators include Alascom, Ameritech, Bell Atlantic, BellSouth, Cincinnati Bell, GTE, NYNEX, Pacific Bell, Southern New England Telephone, SBC Communications, and US West.

[292] *See NANP Order* at para. 73.

[293] *See* discussion of "Number Administration" below.

[294] This proposed definition is based on the definition of "operator services" that is set forth at 47 U.S.C. § 226(a)(7) and, for purposes of this proceeding, has been modified to address the 1996 Act.

providers can access directory assistance by dialing 411 or 555-1212,[295] or whether an alternative dialing arrangement is needed in order to make directory assistance databases accessible to all providers. We ask commenters to address whether the duty imposed on LECs to provide nondiscriminatory access to directory assistance includes the duty to resell 411 or local 555-1212 directory assistance services to non-facilities-based competing providers or to facilities-based competing providers.

218. Section 251(b)(3) prohibits "unreasonable dialing delays." We seek comment on the appropriate definition of the term "dialing delay" and on appropriate methods for measuring and recording that delay. For example, the term "dialing delay" might refer to the period that begins when the caller completes dialing a call and ends when a ringing tone or busy signal is heard on the line. Alternatively, "dialing delay" might refer to the period beginning when the caller completes dialing a call and ending when the call is delivered by the incumbent LEC to a competing service provider. Another relevant measure might include the period beginning when a customer goes off hook and ending when a dialtone is heard on the line. We recognize the confusion that has centered around the context-specific use of the terms post-dial delay, access time, call set-up time, and dialtone delay.[296] Accordingly, we ask interested parties to define clearly the time being measured rather than rely upon a definition of a term that may have been used in particular proceedings. Finally, we ask commenters to identify a specific period that would constitute an "unreasonable" dialing delay.

219. The 1996 Act does not specify how LECs would recover costs associated with providing dialing parity to competing providers. We seek comment on what, if any, standard should be used for arbitration to determine the dialing parity implementation costs that LECs should be permitted to recover, and how those costs should be recovered.

4. Access to Rights-of-Way

220. Section 251(b)(4) imposes upon LECs the "duty to afford access to the poles, ducts, conduits, and rights-of-way of such carrier to competing providers of telecommunications services on rates, terms, and conditions that are consistent with section 224."[297] Section 224, which predates the enactment of the 1996 Act, states that the Commission "shall regulate the rates, terms, and conditions for pole attachments to provide that such rates, terms, and conditions are just and reasonable, and shall adopt procedures necessary and appropriate to hear and resolve complaints concerning such rates, terms, and conditions."[298] Thus, under section 224, if an entity provided access to poles, ducts, conduits, and rights-of-way, it had to do so on rates, terms, and conditions that were just and reasonable, but there was no specific requirement to provide access to poles, ducts, conduits and rights-of-way. Section 251(b)(4) establishes an additional requirement for LECs to provide access to poles, ducts, conduits, and rights-of-way, consistent with the requirements in

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[295] As used here, 555-1212 refers only to the local directory assistance listing.

[296] *See, e.g., Southwestern Bell Telephone Company Revisions to Tariff F.C.C. No. 6*, Memorandum Opinion and Order, FCC 91-173, 6 FCC Rcd 3760, n.5 (1991); *Policy and Rules Concerning Rates for Dominant Carriers*, Memorandum Opinion and Order, CC Docket No. 87-313, 6 FCC Rcd 2974 (Com. Car. Bur. 1991).

[297] 1996 Act, sec. 101, § 251(b)(4).

[298] 47 U.S.C. § 224(b)(1).

section 224. Moreover, amendments to section 224(a)(1) state expressly that LECs are subject to the requirements of section 224.[299] Thus, section 251(a)(4), in conjunction with section 224, requires LECs to provide access to poles, ducts, conduits, and rights-of-way on just and reasonable rates, terms, and conditions. This requirement is vital to the development of local competition, because it ensures that competitive providers can obtain access to facilities necessary to offer service.

221. Section 703 of the 1996 Act, added and amended several provisions of section 224 of the 1934 Act. Specifically, section 703 amended sections 224(a)(1), (a)(4), (c)(1) and (c)(2)(B), and added sections 224(a)(5), (d)(3), (e), (f), (g), (h) and (i).[300] We will adopt rules implementing several of these provisions in one or more separate proceedings.[301] In this proceeding, however, we believe that we should address issues raised by new sections 224 (f) and (h), to ensure that we have an opportunity to seek comment and establish any rules necessary to implement section 251(b)(4) within the six month period established by the statute.

222. Section 224(f) provides:

> (1) A utility shall provide a cable television system or any telecommunications carrier with nondiscriminatory access to any pole, duct, conduit, or right-of-way owned or controlled by it.
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> (2) Notwithstanding paragraph (1), a utility providing electric service may deny a cable television system or any telecommunications carrier access to its poles, ducts, conduits, or rights-of-way, on a non-discriminatory basis where there is insufficient capacity and for reasons of safety, reliability and generally applicable engineering purposes.[302]

We seek comment as to the meaning of "nondiscriminatory access" with respect to this provision. For example, to what extent must a LEC provide access to poles, ducts, conduits, and rights-of-way on similar terms to all requesting telecommunications carriers? Must those terms be the same as the carrier applies to itself or an affiliate for similar uses? Are there any legitimate bases for distinguishing conditions of access? We seek comment on specific reasons of safety, reliability, and engineering purposes, if any, upon which access could be denied consistent with sections 224(f)(1) and 251(b)(4).

223. We seek comment on specific standards under section 224(f)(2) for determining when a utility has "insufficient capacity" to permit access. Likewise, we seek comment as to the conditions under which access may be denied for "reasons of safety, reliability and

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[299] 1996 Act, sec. 703, § 224(a)(1).

[300] 1996 Act, sec. 703, § 224.

[301] For example, in a separate proceeding within the two-year period specified by section 224(e), we will "prescribe regulations . . . to govern the charges for pole attachments used by telecommunications carriers to provide telecommunications services, when the parties fail to resolve a dispute over such charges." 1996 Act, sec. 703(7), § 224(e)(1).

[302] 1996 Act, sec. 703(7), § 224(f).

generally applicable engineering purposes." For example, should we establish regulations that require a certain minimum or quantifiable threat to reliability before a utility may deny access under section 224(f)(2)? Should we establish regulations that expressly impose on utilities the burden of proving that they are justified in denying access pursuant to section 224(f)(2)? May we, and should we, establish regulations to ensure that a utility fairly and reasonably allocates capacity?

224. Section 224(h) provides that whenever "the owner of a pole, duct, conduit, or right-of-way intends to modify or alter such pole, duct, conduit, or right-of-way," the owner must provide written notification of such action "to any entity that has obtained an attachment to such conduit or right-of-way so that such entity may have a reasonable opportunity to add to or modify its existing attachment. An entity that adds to or modifies its existing attachment after receiving such notification shall bear a proportionate share of the costs incurred by the owner in making such pole, duct, conduit, or right-of-way accessible."[303]

225. We seek comment on whether we should establish requirements regarding the manner and timing of the notice that must be given under this provision to ensure that the recipient has a "reasonable opportunity" to add to or modify its attachment. In addition, we seek comment on whether to establish rules to determine the "proportionate share" of the costs to be borne by each entity, and if so, how such a determination should be made. We also seek comment on whether any payment of costs should be offset by the potential increase in revenues to the owner. For example, if the owner of a pole modifies the pole so as to permit additional attachments, for which it can collect additional revenues, should such potential revenues offset the costs borne by the entities that already have access to the pole? We also seek comment on whether we should impose any limitations on an owner's right to modify a facility and then collect a proportionate share of the costs of such modification. For example, should we establish rules that limit owners from making unnecessary or unduly burdensome modifications or specifications?

5. Reciprocal Compensation for Transport and Termination of Traffic

a. Statutory Language

226. Section 251(b)(5) provides that each LEC has the duty to "establish reciprocal compensation arrangements for the transport and termination of telecommunications." Section 252(d)(2) states that, for the purpose of an incumbent LEC's compliance with section 251(b)(5), a state commission shall not consider the terms and conditions for reciprocal compensation to be just and reasonable unless such terms and conditions both: (1) provide for the "mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier," and (2) "determine such costs on the basis of a reasonable approximation of the additional costs of terminating such calls." That subsection further provides that the foregoing language shall not be construed "to preclude arrangements that afford the mutual recovery of costs through the offsetting of reciprocal obligations, including arrangements that waive mutual recovery (such as bill-and-keep arrangements)," or to authorize the Commission or any state to "engage in any rate regulation proceeding to establish with particularity the additional costs of transporting or terminating calls, or to require carriers to maintain records with respect to the additional costs of such calls." The legislative history notes that "mutual and reciprocal recovery of costs . . . may include a range

[303] 1996 Act, sec. 703(7), § 224(h).

of compensation schemes, such as in-kind exchange of traffic without cash payment (known as bill-and-keep arrangements)."[304] The statutory duty to establish reciprocal compensation arrangements for transport and termination furthers the pro-competitive goals of the 1996 Act by ensuring that all LECs receive reasonable compensation for transporting and terminating the traffic of competing local networks with which they are interconnected. It also furthers competition by ensuring that incumbent LECs, in particular, do not charge excessive rates for such transport and termination. As previously discussed in Section II.B.2.d.(1), we believe that the Commission is authorized to promulgate rules to guide the states in applying section 252(d).

b. State Activity

227. While most states have not addressed pricing for transport and termination of traffic among local competitors, a number of states have taken such actions to foster reciprocal compensation arrangements between incumbent LECs and wireline and wireless competitors. In the states that allow competition for local exchange services, there are at least three different systems in place to allow for reciprocal compensation between competing local networks, although many of these arrangements are interim pending the establishment of permanent rules. Some states have adopted mutual compensation policies with rates for termination of traffic subject to tariff regulation by the state commission.[305] Other states have required bill and keep arrangements, at least on an interim basis, such as, the Washington Utilities and Transportation Commission.[306] We discuss bill and keep arrangements in more detail below, at section II.C.5.f. Third, a number of states have directed incumbent LECs and prospective competing carriers to negotiate arrangements, but have not imposed detailed regulatory requirements with respect to those arrangements.

228. The Pennsylvania Public Utilities Commission has created an interim escrow arrangement to govern mutual compensation for termination of local calls to allow for the start-up of local exchange competition until a permanent rate can be developed. Each party makes an initial payment and then continuing monthly payments into an escrow account. After the Pennsylvania commission determines the appropriate rates for termination of local traffic, the parties will calculate the amounts owed to each party and the escrow funds will be distributed accordingly. This mechanism allows local competition to commence immediately, and gives all parties incentives to conclude the development of a permanent rate, either through negotiation or by the Pennsylvania commission.[307]

229. Illinois, Maryland and New York have established different rates for termination

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[304] Joint Explanatory Statement at 120.

[305] For specific examples, *see CMRS Notice* at para. 71.

[306] *See Washington Utilities and Transportation Commission v. U S West*, Docket Nos. UT-941464-65, UT-950146, UT-950265, Fourth Supplemental Order Rejecting Tariff Filings and Ordering Refiling; Granting Complaints, In Part (Wash. Util. & Transp. Comm., Oct. 31, 1995) (adopting the bill and keep method for reciprocal compensation arrangements between incumbent LECs and new entrants as an interim measure, to be replaced later by a capacity-based charge). California (for one year), Connecticut (for eighteen months), and Oregon (for two years) are other states that have adopted a bill and keep arrangement on an interim basis. After these initial periods, the interconnecting firms will be expected to pay incumbent LECs for call termination and vice versa at a cost-based rate.

[307] NARUC Handbook at 109.

of a competitor's traffic, depending upon whether the traffic is terminated at the incumbent LEC's end office or at a tandem switch.[308] California and Michigan, however, have established only one rate that applies to termination of a competitor's traffic without regard to whether the call is terminated at an end office or at a tandem switch.[309]

c. Definition of Transport and Termination of Telecommunications

230. We seek comment on whether "transport and termination of telecommunications" under section 251(b)(5) is limited to certain types of traffic. The statutory provision appears at least to encompass telecommunications traffic that originates on the network of one LEC and terminates on the network of a competing LEC in the same local service area as well as traffic passing between LECs and CMRS providers. We seek comment on whether it also encompasses telecommunications traffic passing between neighboring LECs that do not compete with one another. While the issues here overlap with those in our discussion, *supra*, of section 251(c)(2), the text of the two sections are different and thus commenters should note that the issues are not necessarily identical.[310]

231. Because section 252(d)(2) is entitled "Charges for Transport and Termination of Traffic," it could be interpreted to permit separate charges for these two components of reciprocal compensation. As discussed in the section on pricing of interconnection and unbundled network elements, economic theory dictates that dedicated facilities should be priced on a flat-rated basis.[311] We seek comment on whether we should require that states price facilities dedicated to an interconnecting carrier, such as the transport links from one carrier's switch to the meet point with an interconnecting carrier, on a flat-rated basis. We invite comment on other possible interpretations of the statutory distinction between "transport" and "termination" of traffic.

d. Rate Levels

232. In considering the pricing policies for transport and termination of traffic, we seek comment on whether the pricing provisions in Section 252(d) should be viewed independently, or whether they should be considered together. This question arises particularly with respect to section 252(d)(1), relating to interconnection and unbundled elements, and section 252(d)(2), relating to the transport and termination of traffic.[312] Because the statute uses different language for interconnection and unbundled elements and transport and termination of traffic, each standard could be interpreted in a different way based on the different language used in each section. This would require that each incumbent

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[308] *Id*. at 65, 74, and 81.

[309] *Id*. at 4, 77.

[310] As noted in Section II.B.2.e., we ask parties not to repeat arguments on issues they have already addressed in CC Docket No. 95-185. Instead, they should address in this docket any specific issue that is not already addressed in CC Docket No. 95-185.

[311] *See supra* Section II.B.2.d.4. We also raised the question of flat-rate charges for dedicated transport associated with exchange of traffic between carriers in the *CMRS Notice* at paras. 42-48.

[312] *See* discussion, *supra*, of section 251(c)(2) concerning the general relationship between interconnection and transport and termination of traffic.

LEC offering be identified as falling within one particular category. For example, if a carrier terminates a call to one of its customers using unbundled facilities purchased from an incumbent LEC, the unbundled standard would apply. If a carrier delivers a call to the incumbent LEC for termination to a customer on the incumbent LEC's network, then the termination standard would apply.

233. In certain instances, however, transport and termination under reciprocal compensation may be difficult or impossible to distinguish from unbundled elements. For example, transport between an incumbent LEC's central office and an interconnector's network could be considered either of the foregoing. In such a case, the use of different pricing rules for the different categories may create inconsistencies in the pricing of similar services. This could create economic inefficiencies. We seek comment on whether the statute permits states to use identical pricing rules for each category and, if different rules are used for each, whether it will be possible to distinguish transport and termination from the other categories of service. We also seek comment on whether, if two different pricing rules could apply to a particular situation, we should require that the new entrant be able to choose between them.

234. We seek comment on whether we should establish a generic pricing methodology or impose a ceiling to guide the states in setting the charge for the transport and termination of traffic, and whether any such generic pricing methodology or ceiling should be established using the same principles that might be used to establish any ceiling for interconnection and unbundled elements. We invite parties to suggest any other rules we might establish to assist states. We also seek comment on whether we should mandate a floor for state pricing of reciprocal compensation. The question of whether any floors should be imposed on the charge for transport and termination of traffic is complicated by the additional questions, discussed below, of whether competing LECs should be required to charge symmetrical rates, and to what extent bill and keep arrangements may or should be used. We seek comment on these issues. We also seek comment on the meaning of section 252(d)(2)(B)(ii), which prohibits "any rate regulation proceeding to establish with particularity the additional costs of transporting or terminating calls" and any requirement that carriers "maintain records with respect to the additional costs of such calls."[313] We seek comment on whether one or more of the state policies for mutual compensation for transport and termination of traffic could serve as a model for national policies. We also seek comment on state policies that the commenter believes are inconsistent with the goals of the 1996 Act or that are inadvisable from a policy perspective. Parties are also invited to comment on the possible consequences of requiring new entrants to negotiate reciprocal compensation arrangements with incumbents under ground rules that may vary widely from state to state. We also seek comment on whether provisions to maintain existing arrangements are necessary under section 251(d)(3).

e. Symmetry

235. Symmetrical compensation arrangements are those in which the rate paid by an incumbent LEC to a competitor for transport and termination of traffic is the same as the rate the incumbent LEC charges the competitor for the same service. We note that incumbent LECs are not likely to need to purchase significant amounts of interconnection or unbundled elements from competitors, except for transport and termination of traffic. We therefore consider symmetrical compensation arrangements as a possible additional requirement only

[313] 1996 Act, sec. 101, § 252(d)(2)(B)(ii).

for transport and termination of traffic. We seek comment on whether a rate symmetry requirement is consistent with the statutory requirement that rates set by states for transport and termination of traffic be based on "costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other carrier," and "a reasonable approximation of the additional costs of terminating such calls."[314]

236. Symmetrical compensation rates based on the incumbent LEC's rate are administratively easier to derive and manage than asymmetrical rates based on the costs of each of the respective networks. Setting asymmetric, cost-based rates might require evaluating the cost structure of nondominant carriers, which would be complex and intrusive. Symmetrical rates also could satisfy the requirement of section 252(d)(2) that costs be determined "on the basis of a reasonable approximation of the additional costs of terminating such calls," by using the incumbent LEC's costs and rates for transport and termination of traffic as a proxy for the costs incurred by new entrants. Moreover, symmetrical rates could reduce an incumbent LEC's ability to use its bargaining strength to negotiate an excessively high termination charge that competitors would pay the incumbent and an excessively low termination rate that the incumbent would pay competitors. Further complicating this issue is that a competitor may possess a degree of market power over the incumbent LEC that needs to terminate a call on the competitor's network because the decision to place the call lies with the incumbent's customer (who may or may not be aware that the call's intended recipient is on a different network). The competitor, therefore, may have an incentive and the ability to charge high rates to the incumbent for transport and termination of traffic on its network. Finally, symmetrical rates may give carriers a greater incentive to reduce their costs, because the rates they can charge for transport and termination of traffic may not be based directly on their own costs.

237. On the other hand, symmetrical interconnection rates have certain disadvantages. Different networks, even those that use similar technologies, may have different cost characteristics. If interconnection rates were fully cost-based, then instead of setting symmetric rates, one LEC might pay a competitor different interconnection rates for transport and termination than it receives from its competitor. Further, rate symmetry in some circumstances may not resolve existing bargaining power imbalances. For instance, a LEC might be able to use its bargaining power to extract a symmetrical rate higher than relevant costs, or to require that new entrants incur a disproportionate share of the costs of transporting traffic between the two carriers' central offices.

238. In establishing principles to govern state arbitration of rates for transport and termination of traffic, as well as state review of BOC statements of generally available terms and conditions, there are a number of possible options we could follow with regard to rate symmetry. First, we could allow the states to decide whether to require rate symmetry. Second, we could require the states to impose symmetrical rates. Third, we could permit states to allow new entrants to charge termination rates higher than the incumbent LEC in particular circumstances. For example, it might be appropriate to permit a new entrant that offers a premium service with higher costs to charge a higher rate to the LEC of the customer originating the call if the originating LEC can pass on the additional cost to the caller, who could be informed that the call carries an additional charge.[315] We seek comment on these

[314] 1996 Act, sec. 101, § 252(d)(2).

[315] See *CMRS Notice* at para. 59 n.76.

options.

f. Bill and Keep Arrangements

239. Under bill and keep arrangements, broadly construed, neither of the interconnecting networks charges the other network for terminating the traffic that originated on the other network, and hence the terminating marginal compensation rate on a usage basis is zero. Instead, each network recovers from its own end-users the cost of both originating traffic delivered to the other network and terminating traffic received from the other network. A bill and keep approach does not, however, preclude a positive flat-rated charge for transport of traffic between carriers' networks.

240. As noted earlier, many states have established bill and keep arrangements on an interim basis until a tariffed rate can be established.[316] In other states, such as Maryland, Michigan and New York, bill and keep has not been employed and tariffed rates for the transport and termination of traffic are already in effect.[317] Michigan, however, allows carriers to waive mutual recovery and use bill and keep if traffic from one network to the other is not more than five percent greater than traffic flowing in the opposite direction.[318] In Florida, after negotiations between the incumbent and two new entrants failed, the Florida Public Service Commission determined that, for the termination of local traffic, competing LECs will compensate each other by mutual traffic exchange. Any party that believes that traffic is imbalanced to the point that it is not receiving benefits equivalent to those it is providing through this form of bill and keep arrangement may request that the compensation mechanism be changed.[319] Other states are considering approaches similar to that of Florida.[320] The Texas Public Utilities Commission has proposed a rule that would require competitive LECs to negotiate mutual compensation rates. If negotiations fail, there would be a nine-month bill and keep period to allow the Texas commission time to establish interconnection rates, terms, and conditions.[321] The Public Utilities Commission of Ohio staff has proposed using bill and keep on an interim basis for one year. While that proposal is under consideration, Ameritech and Time Warner are using bill and keep in their interim interconnection arrangement until the end of December 1997.[322]

241. Proponents of bill and keep arrangements argue that such arrangements are advantageous in many circumstances. Because no calculation of costs, nor any metering of usage, is necessary under a bill and keep regime, such arrangements may be more quickly established and easily administered. Further, some networks may lack the ability to measure the volume of exchange traffic, and adding that ability would be very costly if done outside

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[316] *See* Section II.C.5.b.

[317] NARUC Handbook at 74, 77, 80-81.

[318] *See* City Signal, Inc., 159 P.U.R.4th 532 (Mich. P.S.C. 1995).

[319] NARUC Handbook at 58.

[320] *See, e.g.,* NARUC Handbook at 69.

[321] NARUC Handbook at 118.

[322] *Id.* at 85-86.

of normal network upgrades.[323] Bill and keep arrangements are efficient if the incremental cost to each network of terminating traffic originated on the other network is zero. When the incremental costs of termination for each carrier are near zero (as may be the case for off-peak usage), bill and keep arrangements yield results similar to those of arrangements in which mutual compensation rates are set based on the incremental costs of shared network facilities. Finally, even if incremental termination costs are not zero, bill and keep may impose a small loss in economic efficiency if the demand for calls is inelastic with respect to termination charges. Demand might be inelastic either because termination charges are not passed through to customers, or, as is the case with CMRS, the termination charges are a small part of the cost of service. Bill and keep may be efficient when the efficiency loss is small and the administrative cost of termination charges is large.

242. If at least one carrier has a non-zero incremental termination cost and the elasticity of demand is significant, then bill and keep may create significant efficiency losses by not giving carriers (and their customers) the correct price signals to use network resources efficiently. If there is a positive cost to terminating a call on a competitor's network, but the originating carrier is not charged for sending the call, the originating carrier will have inefficient incentives to compete for customers that initiate large volumes of traffic but receive few calls. Similarly, if there is no charge to the consumer for placing a call that imposes a positive cost on the network of the party called, consumers are likely to initiate an excessive number of calls.

243. As noted earlier, section 252(d)(2)(B)(i) provides that the standards in section 252(d)(2)(A) restricting what may be considered "just and reasonable" terms and conditions for reciprocal compensation "shall not be construed to preclude arrangements that afford the mutual recovery of costs through the offsetting of reciprocal obligations, including arrangements that waive mutual recovery (such as bill and keep arrangements)." Some parties contend that this section merely authorizes bill and keep arrangements in voluntary negotiated arrangements, but that the Commission and the states are prohibited from imposing bill and keep.[324] The grounds on which a state may reject a negotiated arrangement, however, are limited in Section 252(e)(2) to those that discriminate against a non-party telecommunications carrier or are inconsistent with the public interest, convenience, and necessity. Therefore, the language in 252(d)(2)(B)(i) arguably is not necessary to authorize the states to approve bill and keep in negotiated arrangements, and may be intended to authorize the states to impose bill and keep arrangements in arbitration. We seek comment on whether section 252(d)(2)(B)(i) authorizes states or the Commission to impose bill and keep arrangements. If it does, we also seek comment on whether we must or should limit the circumstances in which states may adopt bill and keep arrangements. For example, one approach would find that section 252(d)(2)(B)(i) allows states to establish bill and keep arrangements only when either of two conditions are met: (1) the transport and termination costs of both carriers are roughly symmetrical and traffic is roughly balanced in each direction during peak periods; or (2) actual transport and termination costs are so low that there is little difference between a cost-based rate and a zero rate (for example, during off-peak periods). When neither of these conditions are met, bill and keep arrangements arguably would not provide for "the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier's network facilities of calls that originate on the network facilities of the other

[323] ALTS Handbook at 20.

[324] *See* Letter from Michael K. Kellogg to William F. Caton, February 26, 1996 at 5-6.

carrier," which would violate the requirement of section 252(d)(2)(A)(i).[325] Another possible approach would be to permit or require states to adopt a variant of bill and keep, such as that used by Michigan.[326] In addition, we seek comment on the meaning of the statutory description of bill and keep arrangements as "arrangements that waive mutual recovery."[327] We seek comment on the policies that the states have adopted with respect to bill and keep arrangements. We also seek comment on the historical interconnection arrangements between neighboring incumbent LECs, which, in many cases, used a bill and keep approach with respect to compensation for transport and termination of telecommunications traffic. We also seek comment on whether one or more of these state policies could be incorporated as models for federal policy. We also seek comment on state policies that the commenter believes are inconsistent with the goals of the 1996 Act or that are inadvisable from a policy perspective.

g. Other Possible Standards

244. There are other ways to establish rate levels or ceilings for reciprocal compensation for transport and termination of traffic, including, *inter alia*, basing them on existing arrangements between neighboring incumbent LECs or measured local service rates (which provides a quick method for determining an appropriate ceiling), or establishing a presumptive uniform per-minute interconnection rate. We solicit comment on whether any of these or other alternatives should be used as the principle for pricing transport and termination of traffic between LECs, and how they would be applied.[328] We also seek comment on whether it might be desirable to establish an interim rule (such as bill and keep) to apply during a limited initial period while negotiations or arbitration proceedings are ongoing, and a different rule for states to use if called upon to establish long-term arbitrated rates. This could permit new competitors to enter the market more quickly, equalize bargaining power between new entrants and incumbent LECs, and reduce the incumbent's incentive to stall negotiations.

D. Duties Imposed on "Telecommunications Carriers" by Section 251(a)

245. We first need to identify the entities that qualify as "telecommunications carriers" under section 251. A "telecommunications carrier" is defined in section 3(44) as "any provider of telecommunications services, except that such term does not include aggregators of telecommunications services (as defined in section 226)."[329] Section 3(44) further provides that "[a] telecommunications carrier shall be treated as a common carrier under this Act only to the extent that it is engaged in providing telecommunications services, except that the Commission shall determine whether the provision of fixed and mobile

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[325] 1996 Act, sec. 101, § 252(d)(2)(A)(i).

[326] Michigan allows carriers to waive mutual recovery and use bill and keep if traffic from one network to the other is not more than five percent greater than traffic flowing in the opposite direction.

[327] 1996 Act, sec. 101, § 252(d)(2)(B)(i).

[328] *See CMRS Notice* at paras. 58-80.

[329] 1996 Act, sec. 3, § 3(44). The term "telecommunications service" is defined as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." 1996 Act, sec. 3, § 3(46).

satellite service shall be treated as common carriage."[330]

246. We believe this definition, by itself, generally includes local, interexchange, and international services. We therefore tentatively conclude that, to the extent that a carrier is engaged in providing for a fee local, interexchange, or international basic services, directly to the public or to such classes of users as to be effectively available directly to the public, that carrier falls within the definition of "telecommunications carrier." We seek comment on which carriers are included under this definition, and on whether a provider may qualify as a telecommunications carrier for some purposes but not others.[331] For example, how does the provision of an information service, as defined by section 3(a)(41),[332] in addition to an unrelated telecommunications service, affect the status of a carrier as a "telecommunications carrier" for purposes of section 251?[333]

247. With respect to the regulatory classification of the provision of fixed or mobile satellite service, we already have determined that earth station and space station licensees providing domestic and international fixed-satellite telecommunications services may offer service on a non-common carrier basis, if they choose. We have determined that earth station operators could elect whether to operate as common carriers or private carriers.[334] More recently, we extended this policy to domestic fixed-satellite (domsat) space station licensees. Previously, we required domsat licensees to operate as common carriers unless the licensee applied for, and was granted, authority to sell transponders on a non-common carrier basis.[335] In amending this policy, we noted that no transponder sales request has been opposed in the last decade. We also noted that despite the routine approval of these sales

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[330] 1996 Act, sec. 3, § 3(44).

[331] We note that our decision regarding which service providers are deemed "telecommunications carriers" may determine whether that provider is obligated to contribute to universal service support mechanisms, in accordance with section 254. *See Universal Service Notice of Proposed Rulemaking*, para. 119 (seeking comment on which service providers are "telecommunications carriers").

[332] The statute defines information service as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, [which] includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service." 1996 Act, sec. 3, § 3(20).

[333] We note that under the *Computer III* and *Open Network Architecture* proceedings, the Commission imposed a regulatory structure on the BOCs, GTE, and AT&T for their provision of enhanced services that requires unbundling of basic service features, comparably efficient interconnection, and other nonstructural safeguards. *See, e.g., Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards*, 6 FCC Rcd 7571 (1991), *BOC Safeguards Order vacated in part and remanded, California v. FCC*, 39 F.3d 919 (9th Cir. 1994), *cert. denied*, 115 S. Ct. 1427 (1995), *Filing and Review of Open Network Architecture Plans*, 4 FCC Rcd 1 (1988), *recon.*, 5 FCC Rcd 3084 (1990); 5 FCC Rcd 3103 (1990), *erratum*, 5 FCC Rcd 4045, *pets. for review denied, California v. FCC*, 4 F.3d 1505 (9th Cir. 1993), *recon.*, 8 FCC Rcd 97 (1993); 6 FCC Rcd 7646 (1991); 8 FCC Rcd 2606 (1993), *pet. for review denied, California v. FCC*, 4 F.3d 1505 (9th Cir. 1993).

[334] *See* FCC Form 493 (Application for Earth Station Authorization).

[335] *Domestic Fixed-Satellite Transponder Sales*, 90 F.C.C.2d 1238 (1982), *aff'd sub nom. World Communications, Inc. v. FCC*, 735 F.2d 1465 (D.C. Cir. 1984).

requests, several operators have chosen to continue to offer space segment capacity on a common carrier basis. This suggests that market forces are sufficient to provide enough common carrier capacity for domestic satellite telecommunications services. We also stated that separate satellite systems providing international fixed-satellite services were established to operate on a non-common carrier basis, and, thus, were never regulated as common carriers.[336] This policy gives fixed-satellite service operators flexibility to meet their customers' changing needs without unnecessary regulatory delay and allows them to remain competitive in the marketplace. With respect to fixed-satellite capacity offered to CMRS providers, we stated that we will examine an array of public interest factors in deciding whether such an offering should be treated as common carriage consistent with section 332(c)(5).[337] With respect to the mobile-satellite service, we already have determined that we would allow space station licensees operating in certain services to choose whether to offer space segment capacity on a common carrier or non-common carrier basis.[338] We tentatively conclude that we should continue to determine whether the provision of mobile satellite services is CMRS (and therefore common carriage) or Private Mobile Radio Service based on the factors set forth in the *CMRS Second Report and Order*.[339] We also seek comment on whether, and in what respects, this definition of "telecommunications carrier" differs from the definition of "common carrier."[340]

248. Section 251(a)(1) imposes a duty to "interconnect directly or indirectly with the facilities and equipment of other telecommunications carriers."[341] We seek comment on the meaning of "directly or indirectly" in the context of section 251(a)(1), as well as any other issues raised by this subsection. In this context, we ask commenters to address whether section 251(a) is correctly interpreted to allow non-incumbent LECs receiving an interconnection request from another carrier to connect directly or indirectly at its discretion. Section 251(a)(2) of the 1996 Act imposes a duty on each telecommunications carrier "not to install network features, functions or capabilities that do not comply with the guidelines or standards established pursuant to section 255 or 256."[342] We ask commenters to address

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[336] *Separate Satellite Systems*, 101 F.C.C.2d 1046, 1103 (1985).

[337] *CMRS Second Report and Order*, paras. 106-108.

[338] *See Amendment of the Commission's Rules to Establish Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands*, Report and Order, 9 FCC Rcd 5936 (1994) (*Big LEO Order*).

[339] *CMRS Second Report and Order*, para. 108

[340] 1996 Act, sec. 3, § 3(10).

[341] 1996 Act, sec. 101, § 251(a)(1).

[342] 1996 Act, sec. 101, § 251(a)(2). Subsections 255(b) and (c) require all manufacturers of telecommunications equipment and customer premises equipment (CPE), and all providers of telecommunications services, to ensure that their "equipment, CPE and services are accessible to and usable by individuals with disabilities, if readily achievable." Section 255(d) provides that, if the requirements of subsections (b) or (c) are not readily achievable, the manufacturer or provider must "ensure that the equipment or service is compatible with existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access, if readily achievable." Section 255(e) provides that, within eighteen months after the date of enactment, the Architectural and Transportation Barriers Compliance Board shall develop guidelines for accessibility of telecommunications equipment and CPE, in conjunction with the Commission, and that the

how this provision should be applied to incumbent and non-incumbent LECs.

249. Section 255 requires the development of guidelines to ensure that telecommunications equipment and customer premises equipment is accessible by persons with disabilities. Section 256 requires the Commission to coordinate "network planning among telecommunications carriers and other providers of telecommunications services for the efficient interconnection of public telecommunications networks."[343] While the specific guidelines or standards to be adopted pursuant to section 255 and 256 will be addressed in one or more separate proceedings, we request comment here on what action, if any, the Commission should take to ensure compliance with the obligations established in section 251(a)(2), which directs telecommunications carriers "not to install network features, functions, or capabilities that do not comply with the guidelines or standards established pursuant to section 255 or 256." What steps, if any, should the Commission take to make carriers aware of the standards adopted pursuant to sections 255 and 256, and of the periodic revisions to these standards?[344] How should the phrase "network features, functions or capabilities" be defined, and what is meant by "installing" such network features?

E. Number Administration

1. Selection of a neutral number administrator

250. Section 251(e)(1) of the Act requires the Commission to "create or designate one or more impartial entities to administer telecommunications numbering and to make such numbers available on an equitable basis."[345] It further gives the Commission "exclusive jurisdiction over those portions of the North American Numbering Plan that pertain to the United States," but states that "[n]othing in this paragraph shall preclude the Commission from delegating to state commissions or other entities all or any portion of such jurisdiction."[346]

251. Additionally, pursuant to the competitive checklist contained in section 271(c)(2)(B), BOCs desiring to provide in-region interLATA telecommunications services must afford, "[u]ntil the date by which telecommunications numbering administration guidelines, plans or rules are established, non-discriminatory access to telephone numbers for assignment to the other carrier's telephone exchange service customers . . . [and] [a]fter that date, [must] compl[y] with such guidelines, plan or rules."[347] These measures foster

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Board shall review and update the guidelines periodically. Finally, Section 256 requires "coordinated network planning" to ensure "public telecommunications network interconnectivity, and interconnectivity of devices with such networks used to provide telecommunications service." 1996 Act, sec. 101, § 256(a)(1)(A)-(B). Section 256 also authorizes the Commission to participate in the development of network interconnectivity standards "that promote access to . . . network capabilities and services by individuals with disabilities." 1996 Act, sec. 101, § 256(b)(2)(B).

[343] 1996 Act, sec. 101, § 256(b)(1).

[344] 1996 Act, sec. 101, § 255(e).

[345] 1996 Act, sec. 101, § 251(e)(1).

[346] 1996 Act, sec. 101, § 251(e)(1).

[347] 1996 Act, sec. 151, § 271(c)(2)(B)(ix).

competition by ensuring telecommunications numbering resources are administered in a fair, efficient, and orderly manner.

252. The Commission has already taken action to designate an impartial number administrator in its North American Numbering Plan (NANP) decision.[348] In the *NANP Order*, the Commission concluded that the functions associated with NANP administration would be transferred to a new administrator of the NANP, unaligned with any particular segment of the telecommunications industry.[349] We tentatively conclude that the *NANP Order* satisfies the requirement of section 251(e)(1) that the Commission designate an impartial number administrator. We seek comment on this tentative conclusion.

253. Toll free telephone numbers are not administered by the North American Numbering Plan administrator. Database Service Management, Inc. (DSMI), which is a subsidiary of Bellcore, administers toll free numbers.[350] In its proceeding addressing toll free telephone numbers, the Commission sought comment on whether DSMI should continue to administer toll free numbers, or whether the NANP administrator or another neutral entity should administer toll free numbers.[351] We will address the issue of toll free number administration in the Commission's *Toll Free* proceeding.

2. State role in numbering administration

254. Section 251(e)(1) allows the Commission to delegate any portion of its jurisdiction over numbering administration to the states. We tentatively conclude that the Commission should retain its authority to set policy with respect to all facets of numbering administration, including area code relief issues in order to ensure the creation of a nationwide, uniform system of numbering that is essential to the efficient delivery of interstate and international telecommunications services and to the development of the robustly competitive telecommunications services market. Prior to the enactment of the Act, state commissions implemented new area codes by adopting area code relief plans, subject to the guidelines enumerated by the Commission in its *Ameritech Order*.[352]

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[348] *See Administration of the North American Numbering Plan*, CC Docket No. 92-237, Report and Order, FCC 95-283 (rel. July 13, 1995) (*NANP Order*) (*recon. pending*). The *NANP Order* was initiated in response to Bellcore's stated desire to relinquish its role as NANP administrator. *See* Letter from G. Heilmeier, President and CEO, Bellcore to the Commission (Aug. 19. 1993). Bellcore, however, will continue performing its NANP Administration functions until those functions are transferred to a new NANP administrator pursuant to the *NANP Order*.

[349] *Id*., para. 57.

[350] DSMI subcontracts functions requiring access to proprietary information to a neutral third party, Lockheed IMS.

[351] *See Toll Free Service Access Codes*, CC Docket 95-155, Notice of Proposed Rulemaking, FCC 95-419 (rel. Oct. 5, 1995) (*Toll-Free NPRM*), para. 49.

[352] *See Proposed 708 Relief Plan and 630 Numbering Plan Area Code by Ameritech - Illinois*, Declaratory Ruling and Order, 10 FCC Rcd 4596 (1995) (*Ameritech Order*) (*recon. pending*).

255. Area code relief traditionally has come in the form of an area code split,[353] but can also take the form of an area code overlay.[354] In the *Ameritech Order*, the Commission concluded that Ameritech's proposed wireless-only overlay plan would be unreasonably discriminatory and anticompetitive and that administration of numbers: (1) must seek to facilitate entry into the communications marketplace by making numbering resources available on an efficient, timely basis to communications services providers; (2) should not unduly favor or disadvantage any particular industry segment or group of consumers; and (3) should not unduly favor one technology over another.[355]

256. In that decision, the Commission also sought to clarify the authority of the Commission and the states respectively with respect to numbering administration. While the Commission held that it had broad authority over telephone numbering issues, the Commission overturned as *dicta* prior statements it had made suggesting that we retained plenary jurisdiction over numbering issues.[356] The Commission acknowledged that state commissions have legitimate interests in the administration of numbering; it also noted that the state commissions are uniquely positioned to understand, judge and determine how new area codes can best be implemented in view of local circumstances.[357] We believe this continues to be the case. We thus tentatively conclude that the Commission should delegate matters involving the implementation of new area codes, such as the determination of area code boundaries, to the state commissions so long as they act consistently with our numbering administration guidelines. We also tentatively conclude that the *Ameritech Order* should continue to provide guidance to the states regarding how new area codes can be lawfully implemented. We seek comment on these tentative conclusions.

257. Nevertheless, we emphasize that any uncertainty about the Commission's and the states' jurisdiction over numbering administration that may have existed prior to the enactment of the 1996 Act has now been eliminated. Section 251(e)(1) of the Act vests in the Commission exclusive jurisdiction over numbering matters in the United States and authorizes the Commission to delegate some or all of that power to state commissions. As indicated above, we propose leaving to the states decisions related to the implementation of new area codes subject to the guidelines enumerated in the *Ameritech Order*. We are concerned, however, that situations may arise where a state commission, in implementing area code relief, appears to be acting in violation of those guidelines.[358] We therefore seek

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[353] An area code split occurs when an existing geographic area code is split into two parts and roughly half of the telephone customers continue to be served through the existing area code and half receive a new area code.

[354] An overlay area code covers the same geographic area as an existing area code or area codes, and allows telephone customers in that area to be served through either code.

[355] *Ameritech Order* at 4604.

[356] *Id.* at 4600, fn. 18.

[357] *Id.* at 4601.

[358] *See, e.g.* Letter from Geraldine A. Matise, Chief, Network Services Division, Common Carrier Bureau, FCC to Ronald R. Conners, Director, North American Numbering Plan Administration (April 11, 1996). The Texas Public Utilities Commission had directed Southwestern Bell Telephone to request area code assignments from the North American Numbering Plan Administration (NANPA) for use as wireless-only area code overlays in Dallas and Houston. In its letter to NANPA, the Commission agreed with NANPA's decision not to make

comment on whether the Commission should, in light of this concern and the enactment of section 251(e)(1), reassess the jurisdictional balance between the Commission and the states that was crafted in the *Ameritech Order*. We also seek comment on what action this Commission should take when a state appears to be acting inconsistently with our numbering administration guidelines. In this regard, we note that issues related to area code relief plans often require prompt resolution due to the imminent exhaustion of central office codes in the area code at issue.

258. Prior to enactment of the 1996 Act, Bellcore, as the NANP Administrator, the LECs, as central office code administrators, and the states performed the majority of functions related to the administration of numbers.[359] We tentatively conclude that the Commission should delegate to Bellcore, the LECs, and the states the authority to continue performing each of their functions related to the administration of numbers as they existed prior to enactment of the 1996 Act until such functions are transferred to the new NANP administrator pursuant to the *NANP Order*. We seek comment on this tentative conclusion. We also seek comment on whether the Commission should delegate any additional number administration functions to the states or to other entities.

3. Cost related to number administration

259. In section 251(e)(2) of the 1996 Act, Congress mandates that "[t]he cost of establishing telecommunications numbering administration arrangements and number portability shall be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission."[360] In the *NANP Order*, the Commission: (1) directed that the costs of the new impartial numbering administrator be recovered through contributions by all communications providers; (2) concluded that the gross revenues of each communications provider will be used to compute each provider's contribution to the new numbering administrator; and (3) concluded that the NANC will address the details concerning recovery of the NANP administrator costs.[361] We find that we need take no further action in this NPRM because the Commission has already determined that cost recovery for numbering administration arrangements must be borne by all telecommunications carriers on a competitively neutral basis.

F. Exemptions, Suspensions, and Modifications

260. Section 251(f)(1)(A) provides that the obligations imposed on incumbent LECs pursuant to section 251(c) "shall not apply to a rural telephone company until (i) such company has received a bona fide request for interconnection, services, or network elements, and (ii) the State commission determines (under subparagraph (B)) that such request is not unduly economically burdensome, is technically feasible, and is consistent with section 254

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these area code assignments.

[359] For a discussion of NANP administration functions, see *NANP Order* at paras. 11-12.

[360] 1996 Act, sec. 101, § 251(e)(2).

[361] *NANP Order*, paras. 94 & 99.

(other than subsections (b)(7) and (c)(1)(D) thereof)."[362] Section 251(f)(1)(B) sets forth procedures for the state commission to terminate the rural telephone company exemption.[363] Section 251(f)(2) provides that a LEC "with fewer than 2 percent of the Nation's subscriber lines installed in the aggregate nationwide may petition a State commission for a suspension or modification of the application of a requirement or requirements of subsection (b) or (c) to telephone exchange service facilities specified in such petition."[364] The state must grant the petition to the extent that, and for such duration as, the state commission determines that such suspension or modification is necessary and is consistent with the public interest, convenience and necessity.[365] Section 251(f)(2) provides for relief from the requirements of both Section 251(b) and (c), whereas section 251(f)(1)(A) provides for relief only from the requirements of section 251(c).[366]

261. We seek comment on whether the Commission can and should establish some standards that would assist the states in satisfying their obligations under this section. For example, should the Commission establish standards regarding what would constitute a "bona fide" request? We tentatively conclude that the states alone have authority to make determinations under section 271(f).

G. Continued Enforcement of Exchange Access and Interconnection Regulations

262. Section 251(g) provides that each LEC, "to the extent that it provides wireline services, shall provide exchange access, information access, and exchange services for such access . . . in accordance with the same equal access and nondiscriminatory interconnection restrictions and obligations (including receipt of compensation)" that applied to such carrier immediately preceding the date of enactment of the 1996 Act, "until such restrictions and obligations are explicitly superseded by regulations prescribed by the Commission . . . ."[367] Those obligations and restrictions are enforceable until they are superseded. Section 251(i) states that nothing in section 251 "shall be construed to limit or otherwise affect the Commission's authority under section 201."[368] We seek comment on any issues that these provisions may create. In particular, we seek comment on any aspect of this Notice that may affect existing "equal access and nondiscriminatory interconnection restrictions and

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[362] 1996 Act, sec. 101, § 251(f)(1)(A). This exemption does not apply with respect to a request under Section 252(c) from a cable company seeking to provide telephone service in an area in which the rural telephone company provides video service, unless the rural telephone company was providing video service as of the date of enactment of the 1996 Act. 1996 Act, sec. 101, § 251(f)(1)(C).

[363] 1996 Act, sec. 101, § 251(f)(1)(B).

[364] 1996 Act, sec. 101, §251(f)(2).

[365] 1996 Act, sec. 101, § 251(f)(2). The state must determine that such modification or suspension is necessary to avoid (1) a significant adverse economic impact on users of telecommunications services generally; (2) imposing a burden that is unduly economically burdensome; or (3) imposing a requirement that is technically infeasible.

[366] As discussed above, section 251(b) sets forth obligations for all LECs, and section 251(c) sets forth obligations for incumbent LECs.

[367] 1996 Act, sec. 101, § 251(g).

[368] 1996 Act, sec. 101, § 251(i).

obligations (including receipt of compensation)."[369]

H. Advanced Telecommunications Capabilities

263. Finally, we note that pursuant to subsection 706(a) of the 1996 Act the Commission "shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures to promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment." We sought comment on subsection 706(a) in our section 254 Universal Service NPRM, in our Open Video Systems NPRM, and in our Cable Reform NPRM. Because section 251 and this NPRM comprehensively address "measures to promote competition in the local telecommunications market," we believe it relevant to also seek comment herein on how we can advance Congress's subsection 706(a) goal within the context of our implementation of sections 251 and 252 of the 1996 Act.

III. PROVISIONS OF SECTION 252

A. Arbitration Process

264. Section 252(a) states that, "[u]pon receiving a request for interconnection, services, or network elements pursuant to section 251, an incumbent local exchange carrier may negotiate and enter into a binding agreement with the requesting telecommunications carrier or carriers without regard to the standards set forth in subsections (b) and (c) of section 251."[370] Any party negotiating an agreement under section 252(a) "may, at any point in the negotiation, ask a State commission to participate in the negotiation and to mediate any differences arising in the course of the negotiation."[371] Section 252(b) states that, "[d]uring the period from the 135th to the 160th day (inclusive) after the date on which an incumbent local exchange carrier receives a request for negotiation under this section, the carrier or any other party to the negotiation may petition the State commission to arbitrate any open issues."[372] In addition, under section 252(e), the parties must submit for approval any negotiated or arbitrated agreement to the state commission.[373]

265. Section 252(e)(5) directs the Commission to assume responsibility for any proceeding or matter in which the state commission "fails to act to carry out its responsibility" under that section.[374] We note that, unlike section 251(d)(1), there is no specified time within which the Commission must establish regulations pursuant to section

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[369] 1996 Act, sec. 101, § 251(g).

[370] 1996 Act, sec. 101, § 252(a).

[371] 1996 Act, sec. 101, § 252(a)(2).

[372] 1996 Act, sec. 101, § 252(b).

[373] 1996 Act, sec. 101, § 252(e)(1).

[374] 1996 Act, sec. 101, § 252(e)(5). Before doing so, section 252(e)(5) requires the Commission to issue an order preempting the state's jurisdiction of that proceeding or matter.

252(e)(5). Thus, we seek comment on whether in this proceeding we should establish regulations necessary and appropriate to carry out our obligations under section 252(e)(5). We also seek comment on what constitutes notice of failure to act, and what procedures, if any, we should establish for interested parties to notify the FCC that a state commission has failed to act.

266. We seek comment on the circumstances under which a state commission should be deemed to have "fail[ed] to act" under section 252(e)(5). We note that section 252(e)(4) states that if the state commission does not approve or reject (1) a negotiated agreement within 90 days, or (2) an arbitrated agreement within 30 days, from the time the agreement is submitted by the parties, the agreement shall be "deemed approved."[375] We seek comment on the relationship between this provision and our obligation to assume responsibility under section 252(e)(5). Other questions raised by section 252(e)(5) include: (1) if the Commission assumes the responsibility of the state commission, is the Commission bound by all of the laws and standards that would have applied to the state commission; and (2) is the Commission authorized to determine whether an agreement is consistent with applicable state law as the state commission would have been under section 252(e)(3)? One possible interpretation is that, if an agreement is deemed approved pursuant to section 252(e)(4), it will be deemed to comply with state law, and the Commission will have no authority to review that determination.

267. Once the Commission assumes such responsibility under section 252(e)(5), there is no specific provision by which authority reverts back to the state commission. For example, if the Commission arbitrates an agreement pursuant to section 252(e)(5), the 1996 Act does not provide that the arbitrated agreement is referred back to the state commission for any further purpose. We seek comment on whether, once the Commission assumes responsibility under section 252(e)(5), it retains jurisdiction over that matter or proceeding.

268. We also seek comment on whether we should adopt in this proceeding some standards or methods for arbitrating disputes in the event we must conduct an arbitration under section 252(e)(5). One method we could adopt is "final offer" arbitration, whereby each party to the negotiation proposes its best and final offer, and the arbitrator determines which of the two proposals becomes binding. Under final offer arbitration, each party has incentives to propose an arrangement that the arbitrator could determine to be fair and equitable. In addition, parties are more likely to present terms and conditions that approximate the economically efficient outcome, because proposing extreme terms and conditions may result in an unfavorable finding by the arbitrator. While final offer arbitration is a simple and speedy option, it is possible that the proposals submitted by the parties may not be consistent with the public interest and policies of sections 251 and 252. Alternatively, we could adopt an open-ended arbitration method, which would culminate in a final decision that would be consistent with the public interest and policies of sections 251 and 252. Open-ended arbitration, however, is more administratively difficult and likely to be slower than final offer arbitration.

B. Section 252(i)

269. Section 251 requires that interconnection, unbundled element, and collocation rates be "nondiscriminatory" and prohibits the imposition of "discriminatory conditions" on

[375] 1996 Act, sec. 101, § 252(e)(4).

the resale of telecommunications services.[376] Section 252(i) appears to be a primary tool of the 1996 Act for preventing discrimination under section 251. Section 252(i) of the 1996 Act provides that a "local exchange carrier shall make available any interconnection, service, or network element provided under an agreement approved under [section 252] to which it is a party to any other requesting telecommunications carrier upon the same terms and conditions as those provided in the agreement."[377] We note that in its March 23, 1995 Report on S.652, the Senate Committee on Commerce, Science and Transportation discusses an earlier version of section 252(i) and states that the Committee "intends this requirement to help prevent discrimination among carriers."[378]

270. We seek comment on whether in this proceeding we should adopt standards for resolving disputes under section 252(i) in the event that we must assume the state's responsibilities pursuant to section 252(e)(5). Because the Commission may need to interpret section 252(i) if it assumes the state commission's responsibilities, we seek comment on the meaning of that provision. Must interconnection, services, or network elements provided under a state-approved section 252 agreement be made available to any requesting telecommunications carrier, or would it be consistent with the language and intent of the law to limit this requirement to similarly situated carriers? If the obligation were construed to extend only to similarly situated carriers, how should similarly situated carriers be defined? For example, does the section require that the same rates for interconnection must be offered to all requesting carriers regardless of the cost of serving that carrier, or would it be consistent with the statute to permit different rates if the costs of serving carriers are different? In addition, can section 252(i) be interpreted to allow LECs to make available interconnection, services, or network elements only to requesting carriers serving a comparable class of subscribers or providing the same service (*i.e.*, local, access, or interexchange) as the original party to the agreement? We tentatively conclude that the language of the statute appears to preclude such differential treatment among carriers. We seek comment on this tentative conclusion.

271. We note that negotiated agreements under section 252(a) are the product of compromise between incumbent LECs and requesting carriers, and may therefore contain provisions to which a party agreed as specific consideration for some other provision. We seek comment on whether section 252(i) requires requesting carriers to take service subject to all of the same terms and conditions contained in the entire state-approved agreement.[379]

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[376] 1996 Act, sec. 101, § 251(c)(2)(D) (interconnection rates, terms, and conditions); 251(c)(3) (unbundled network elements rates, terms, and conditions); 251(c)(6) (collocation rates, terms, and conditions); and 251(c)(4)(B) (resale). Section 252(d)(1) also requires nondiscriminatory interconnection and network element charges. 1996 Act, sec. 101, § 252(d)(1).

[377] 1996 Act, sec. 101, § 252(i).

[378] *See* S. Rep. No. 104-23, 104th Cong., 1st Sess. 21-22 (1995) (1995 Senate Report). The Senate originally drafted the section entitled "Availability to Other Telecommunications Carriers," which was to become section 252(i), to read: "A local exchange carrier shall make available any service, facility, or function provided under an interconnection agreement to which it is a party to any other telecommunications carrier that requests such interconnection upon the same terms and conditions as those provided in the agreement." *See* S. 652, 104th Cong., 1st Sess. § 251(g) (1995).

[379] Ameritech suggests that LECs should only be obligated to make available such interconnection, service, or network element provided under a state-approved agreement subject to all applicable terms and conditions contained in the entire agreement. Ameritech "Proposed Interpretation of Section 252 Pricing Standards"

Alternatively, does section 252(i) permit the separation of section 251(b) and (c) agreements down to the level of the individual provisions of subsections (b) and (c) and the individual paragraphs of section 251?[380] We recognize that allowing requesting carriers to unbundle too extensively the provisions of a voluntarily negotiated agreement might affect the negotiation process by intensifying the importance each individual term of the agreement. We note that in its March 23, 1995 Report on S. 652, the Senate Committee on Commerce, Science, and Transportation stated that it intended the requirement codified in section 252(i) to "make interconnection more efficient by making available to other carriers the individual elements of agreements that have been previously negotiated,"[381] and seek comment on its meaning.

272. Section 252(i) requires that incumbent LECs must make available the interconnection, service, or network element provided under the agreement after state approval of the agreement. The statute is silent, however, as to how long such an agreement must be made available. We seek comment on whether the agreement should be made available for an unlimited period, or whether the statute would permit the terms of the agreement to be available for a limited period of time. In particular, we ask commenters to cite any statutory language that would require the resubmission of these pre-existing interconnection agreements to state agencies.

IV. PROCEDURAL ISSUES

A. *Ex Parte* Presentations

273. This is a non-restricted notice-and-comment rulemaking proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided that they are disclosed as provided in the Commission's rules. *See generally* 47 C.F.R. §§ 1.1202, 1.1203, 1.1206. Written submissions, however, will be limited as discussed below.[382]

B. Regulatory Flexibility Analysis

274. Section 251 of the Communications Act establishes a variety of interconnection obligations. Some of these requirements apply to all telecommunications carriers (which include incumbent LECs, new LEC entrants, and interexchange carriers).[383] Other requirements apply to LECs -- both incumbents and new entrants.[384] Section 252 also places certain obligations on state regulatory commissions.

(submitted with its March 25, 1996 letter to Regina M. Keeney, Chief, Common Carrier Bureau, Federal Communications Commission) at 13-14.

[380] This view has been proposed by the Association for Local Telecommunications Services. *See* ALTS Handbook at 23-24.

[381] 1995 Senate Report at 21-22.

[382] *See infra* ¶ 291.

[383] 1996 Act, sec. 101, § 251(a); 1996 Act, sec. 3, § 3(44).

[384] 1996 Act, sec. 101, § 251(b); 1996 Act, sec. 3, § 3(26).

275. We believe that the Regulatory Flexibility Act applies differently to these groups. In particular, we believe that the Regulatory Flexibility Act is inapplicable to this proceeding insofar as it pertains to incumbent LECs. The proposal in this proceeding, however, may have a significant economic impact on a substantial number of small businesses as defined by section 601(3) of the Regulatory Flexibility Act insofar as they apply to telecommunications carriers other than incumbent LECs.

276. Accordingly, we certify that the Regulatory Flexibility Act of 1980 does not apply to this rulemaking proceeding insofar as it pertains to incumbent LECs and state utility commissions because the relevant proposals, if promulgated, would not have a significant economic impact on a substantial number of small entities, as defined by section 601(3) of the Regulatory Flexibility Act. Incumbent LECs directly subject to the proposed rule amendments do not qualify as small businesses since they are dominant in their field of operation. The Commission will, however, take appropriate steps to ensure that the special circumstances of the smaller incumbent LECs are carefully considered in resolving those issues. To the extent that this Notice may apply to state utility commissions, they do not qualify as small entities under section 601 of the Regulatory Flexibility Act.

277. Insofar as the proposals in this Notice apply to telecommunications carriers other than incumbent LECs (generally interexchange carriers and new LEC entrants), they may have a significant economic effect on a substantial number of small entities. Accordingly, we are preparing an Initial Regulatory Flexibility analysis with respect to the provisions applicable to telecommunications carriers other than incumbent LECs. Pursuant to the Regulatory Flexibility Act of 1980, 5 U.S.C. §§ 601-612, the Commission's Initial Regulatory Flexibility Analysis with respect to the Notice of Proposed Rulemaking is as follows:

278. *Reason for Action*: The Commission is issuing this Notice of Proposed Rulemaking to implement the local exchange competition provisions of the 1996 Act discussed above, most importantly section 251.

279. *Objectives*: The objective of the Notice of Proposed Rulemaking is to provide an opportunity for public comment and to provide a record for a Commission decision on the issues addressed in the Notice.

280. *Legal basis*: The Notice of Proposed Rulemaking is adopted pursuant to Sections
1, 4, 201-205, 222, 224, 225, 251, 252, 253, 254, 255, 256, 271, and 273 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 153, 154, 201-205, 222, 224, 251, 252, 253, 254, 255, 256, 271, and 273.

281. *Description of small entities affected*: Certain of the proposals in this Notice would apply to telecommunications carriers, other than incumbent LECs. These carriers would include small interexchange carriers and small, new LEC entrants. Some of these carriers clearly qualify as small business entities.

282. *Potential Impact*: Some of the proposals in this Notice may impose requirements that will have a significant economic effect on certain small business entities. After evaluating the comments in this proceeding, the Commission will further examine the impact of any rule changes on small entities and set forth findings in the Final Regulatory Flexibility Analysis.

283. *Reporting, recordkeeping and other compliance requirement:* The proposed

rules, adopted pursuant to the Telecommunications Act of 1996, would require dominant incumbent local exchange carriers, in certain cases, to submit documentation requested by state commissions for arbitration concerning the rates, terms, and conditions for interconnection and network element unbundling.

284. *Federal rules that may overlap, duplicate or conflict with the Commission's proposal:* Our existing Expanded Interconnection rules may overlap with the requirements of section 251 addressed in this Notice. We have also sought comment on the relationship between our Part 69 Access Charge rules and the requirements of sections 251 and 252 of the 1996 Act.[385]

285. *Any significant alternatives minimizing impact on small entities and consistent with stated objectives*: The Notice of Proposed Rulemaking solicits comments on alternatives.

286. *Comments are solicited*: Written comments are requested on this Initial Regulatory Flexibility Analysis. These comments must be filed in accordance with the same filing deadlines set for comments on the other issues in this Notice of Proposed Rulemaking but they must have a separate and distinct heading designating them as responses to the Regulatory Flexibility Analysis.

287. The Secretary shall send a copy of this *Notice of Proposed Rulemaking*, including the certification set out above, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with Section 603(a) of the Regulatory Flexibility Act, Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. § 601, *et. seq.* (1981).

C. Initial Paperwork Reduction Act of 1995 Analysis

288. This NPRM contains either a proposed or modified information collection. As part of its continuing effort to reduce paperwork burdens, we invite the general public and the Office of Management and Budget (OMB) to take this opportunity to comment on the information collections contained in this NPRM, as required by the Paperwork Reduction Act of 1995, Pub. L. No. 104-13. Public and agency comments are due at the same time as other comments on this NPRM; OMB comments are due 60 days from the date of publication of this NPRM in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

D. Comment Filing Procedures

289. *General*. Pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments on or before 25 days after public release of the item, and reply comments on or before 14 days after the comment due date. To file formally in this proceeding, you must file an original and twelve copies of all comments, reply comments, and supporting comments. If you want each Commissioner to receive a personal copy of your comments, you must file an

[385] See paras. 159-165.

original and 16 copies. Comments and reply comments should be sent to Office of the Secretary, Federal Communications Commission, 1919 M Street, N.W., Room 222, Washington, D.C. 20554, with a copy to Janice Myles of the Common Carrier Bureau, 1919 M Street, N.W., Room 544, Washington, D.C. 20554. Parties should also file one copy of any documents filed in this docket with the Commission's copy contractor, International Transcription Services, Inc., 2100 M Street, N.W., Suite 140, Washington, D.C. 20037. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, 1919 M Street, N.W., Room 239, Washington, D.C. 20554.

290. *Separate Comment Filing Procedures for Dialing Parity, Number Administration, Public Notice of Technical Changes, and Access to Rights of Way*. Interested parties are instructed to file separate comments with respect to (1) dialing parity, (2) access to rights-of-way, (3) number administration, and (4) public notice of technical changes requirements and regulatory changes proposed or discussed above. Comments on these issues are to be filed on or before 27 days after public release of the item; and reply comments on, or before, 14 days after the comment due date for these four sections. These filings will not be considered in applying the page limits for filings in this proceeding. To file formal comments addressing these issues, parties are required to comply with all of the remaining comment filing procedures contained in part VI(D) of this Notice. Comments and reply comments should be sent to the Office of the Secretary, Federal Communications Commission, 1919 M Street, N.W., Room 222, Washington, D.C. 20554, with 3 copies to Gloria Shambley of the Network Services Division, Common Carrier Bureau, 2000 M Street, N.W., Suite 210, Washington, D.C. 20554.

291. *Other requirements.* In order to facilitate review of comments and reply comments, both by parties and by Commission staff, we require that comments be no longer than seventy-five (75) pages and reply comments be no longer than thirty-five (35) pages, including exhibits, appendices, and affidavits of expert witnesses. Empirical economic studies and copies of relevant state orders will not be counted against these page limits. These page limits will not be waived and will be strictly enforced. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. Comments and reply comments must also comply with Section 1.49 and all other applicable sections of the Commissions rules.[386] We also direct all interested parties to include the name of the filing party and the date of the filing on each page of their comments and reply comments. Comments and reply comments also must clearly identify the specific portion of this Notice of Proposed Rulemaking to which a particular comment or set of comments is responsive. If a portion of a party's comments does not fall under a particular topic listed in the outline of this Notice, such comments must be included in a clearly labelled section at the beginning or end of the filing. Parties may not file more than a total of ten (10) pages of *ex parte* submissions, excluding cover letters. This 10 page limit does not include: (1) written *ex parte* filings made solely to disclose an oral *ex parte* contact; (2) written material submitted at the time of an oral presentation to Commission staff that provides a brief outline of the presentation; or (3) written material filed in response to direct requests from Commission staff. *Ex parte* filings in excess of this limit will not be considered as part of the record in this proceeding.

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[386] *See* 47 C.F.R. § 1.49. However, we require here that a summary be included with all comments and reply comments, although a summary that does not exceed three pages will not count towards the 75 page limit for comments or the 35 page limit for reply comments. The summary may be paginated separately from the rest of the pleading (*e.g.*, as "i, ii"). *See* 47 C.F.R. § 1.49.

292. Parties are also asked to submit comments and reply comments on diskette. Such diskette submissions would be in addition to and not a substitute for the formal filing requirements addressed above. Parties submitting diskettes should submit them to Janice Myles of the Common Carrier Bureau, 1919 M Street, N.W., Room 544, Washington, D.C. 20554. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible form using MS DOS 5.0 and WordPerfect 5.1 software. The diskette should be submitted in "read only" mode. The diskette should be clearly labelled with the party's name, proceeding, type of pleading (comment or reply comments) and date of submission. The diskette should be accompanied by a cover letter.

293. Written comments by the public on the proposed and/or modified information collections are due 25 days after public release of this NPRM, and reply comments must be submitted not later than 14 days after the comments. Written comments must be submitted by the Office of Management and Budget (OMB) on the proposed and/or modified information collections on or before 60 days after date of publication in the Federal Register. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Dorothy Conway, Federal Communications Commission, Room 234, 1919 M Street, N.W., Washington, D.C. 20554, or via the Internet to dconway@fcc.gov and to Timothy Fain, OMB Desk Officer, 10236 NEOB, 725 - 17th Street, N.W., Washington, D.C. 20503 or via the Internet to fain_t@al.eop.gov.

E. Ordering Clauses

294. Accordingly, IT IS ORDERED that pursuant to Sections 1, 4, 201-205, 222, 224, 225, 251, 252, 254, 255, 256, 271 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 153, 154, 201-205, 222, 224, 251, 252, 254, 255, 256, and 271, a NOTICE OF PROPOSED RULEMAKING is hereby ADOPTED.

295. IT IS FURTHER ORDERED that, the Secretary shall send a copy of this NOTICE OF PROPOSED RULEMAKING, including the regulatory flexibility certification, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with paragraph 603(a) of the Regulatory Flexibility Act, 5 U.S.C. §§ 601 *et seq.* (1981).

296. The *Administration of the North American Numbering Plan*, Notice of Proposed Rulemaking, CC Docket No. 92-237, 9 FCC Rcd 2068 (1994), to the extent that it addressed the issue of dialing parity, is hereby dismissed as moot solely with respect to that issue.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary