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Before the
Federal Communications Commission
Washington, D.C. 20554

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In the Matter of	)	
	)	
Deployment of Wireline Services Offering Advanced Telecommunications Capability	)	CC Docket No. 98-147
	)	
And	)	
	)	
Implementation of the Local Competition Provisions of the Telecommunications Act of 1996	)	CC Docket No. 96-98

RECEIVED

THIRD REPORT AND ORDER ON RECONSIDERATION IN CC DOCKET NO. 98-147
FOURTH REPORT AND ORDER ON RECONSIDERATION IN CC DOCKET NO. 96-98
THIRD FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 98-147
SIXTH FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 96-98

Adopted: January 19, 2001 **Released: January 19, 2001**

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By the Commission:

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I. INTRODUCTION

1. This reconsideration Order addresses five petitions for reconsideration and/or clarification of our *Line Sharing Order,* in which we required incumbent local exchange carriers (LECs) to make a portion of their voice customer's local loop available to competing providers of advanced services.[1] For the reasons set forth below, we deny two of these petitions, and grant, to the extent described herein, three of these petitions. We also clarify our rules with regard to an incumbent LEC's obligation to provide line sharing in those instances in which the loop is served by a remote terminal, and we seek comment in a Further Notice of Proposed Rulemaking on the technical and economic issues associated with implementing this requirement.

II. EXECUTIVE SUMMARY

2. We take several actions in this Reconsideration Order with respect to line sharing, including:

- Definition of High Frequency Portion of the Loop. We clarify that the requirement to provide line sharing applies to the entire loop, even where the incumbent LEC has deployed fiber in the loop, (*e.g.,* where the loop is served by a remote terminal).

- Line Splitting. To the extent described herein, we grant AT&T and WorldCom's request for clarification that incumbent LECs must permit competing carriers providing voice service using the UNE-platform to self-provision or partner with a data carrier in order to provide voice and data service on the same line.

- Access to the Loop Facility for Testing Purposes. We deny Bell Atlantic's request for clarification that data carriers participating in line sharing arrangements are not required to have access to the loop's entire frequency range for testing purposes.

- Conditioning Loops Over 18,000 Feet. We deny Bell Atlantic's request that we reconsider the requirement that incumbent LECs refusing to condition a loop demonstrate to the relevant state commission that conditioning the specific loop in question will significantly degrade voiceband services.

- Rural Telephone Companies. We grant the petition of NTCA and NRTA for clarification regarding the line sharing obligations of rural incumbent LECs.

- Line Sharing Deployment Schedule. We reject Bell Atlantic's contention that the

[1] *Deployment of Wireline Services Offering Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996,* Third Report and Order in CC Docket No. 98-147, Fourth Report and Order in CC Docket No. 96-98, 14 FCC Rcd 20912 (1999) (*Line Sharing Order*). The *Line Sharing Order* was released December 9, 1999. The petitions were filed by AT&T Corp. (AT&T), Bell Atlantic, BellSouth Corp. (BellSouth), MCI WorldCom, Inc. (WorldCom), and the National Telephone Cooperative Association/National Rural Telephone Association (NTCA and NRTA) on February 9, 2000. Bell Atlantic is now known as Verizon, but filed as Bell Atlantic at the time reconsideration petitions were due.

industry is permitted to adopt a line sharing deployment schedule other than the one developed in the *Line Sharing Order*.

3. We also take several actions concerning spectrum management, including:

- Presumption that a Technology is Acceptable for Deployment Anywhere. We deny BellSouth's request that the Commission reconsider its finding that new technologies are presumed deployable anywhere when successfully deployed in one state without significantly degrading the performance of other services.

- Disposition of Interfering Technologies. We deny Bell Atlantic's request to reconsider our conclusion that state commissions are in the best position to determine the disposition of known disturbers in the network.

4. In addition, we adopt a *Third Further Notice of Proposed Rulemaking* in the Advanced Services docket[2] and *Sixth Further Notice of Proposed Rulemaking* in the Local Competition docket,[3] in which we request comment on issues that have been raised with respect to line sharing where an incumbent LEC has deployed fiber in the loop.

III. BACKGROUND

5. The term "line sharing" refers to the provision of xDSL-based service by a competitive LEC and voiceband service by an incumbent LEC on the same loop.[4] In our *Line Sharing Order,* we facilitated the availability of line sharing by requiring incumbent LECs to provide unbundled access to the "high frequency portion of the loop."[5] We found that this new unbundling obligation would facilitate competition in the provision of advanced services, particularly to residential and small business consumers, by enabling competitive LECs to provide xDSL-based services to consumers through telephone lines that the competitive LECs share with incumbents.[6] We concluded in the *Line Sharing Order* that lack of access to the high frequency portion of the local loop materially diminishes the ability of competitive LECs to provide certain types of advanced services to residential and small business users, delays broad

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[2] CC Docket No. 98-147.

[3] CC Docket No. 96-98.

[4] *Line Sharing Order*, 14 FCC Rcd at 20915, para. 4.

[5] *See* 47 C.F.R. § 51.319(h).

[6] *Line Sharing Order,* 14 FCC Rcd at 20915, para. 4. The term "advanced services" is defined as "high speed, switched, broadband, wireline telecommunications capability that enables users to originate and receive high-quality voice, data, graphics or video telecommunications using any technology." 47 C.F.R. § 51.5. "x-DSL" service refers to advanced services that use digital subscriber line technology to send signals over copper wires to packet switches. xDSL services include ADSL (asymmetric digital subscriber line), HDSL (high-speed digital subscriber line), UDSL (universal digital subscriber line), VDSL (very-high speed digital subscriber line), and RADSL (rate-adaptive digital subscriber line). The small "x" before the letters "DSL" signifies that we are referring to DSL as a generic transmission technology, as opposed to a specific DSL "flavor."

facilities-based market entry, and materially limits the scope and quality of competitor service offerings. We also determined, based upon the record before us, that there were no technical, economic, operational, or practical barriers to incumbent LEC line sharing with competitors.[7] The *Line Sharing Order* addressed a number of operational issues associated with the implementation of line sharing, including effective dates, loop conditioning and testing, and the presence of digital loop carrier systems.

6. We also adopted spectrum management policies and rules in the *Line Sharing Order* to facilitate the competitive deployment of advanced services. Specifically, we took steps to encourage the voluntary deployment of industry standards while limiting the ability of any class of carriers to impose unilateral and potentially anti-competitive spectrum management or compatibility rules on other xDSL providers. The *Line Sharing Order* addressed standards-setting, spectrum compatibility, binder group management, and the disposition of interfering technologies.[8]

IV. DISCUSSION

A. Line Sharing Issues

1. Definition of High Frequency Portion of the Loop

a. Background

7. Section 51.319(h)(1) of our rules defines the high frequency portion of the loop as "the frequency range above the voiceband on a copper loop facility that is being used to carry analog circuit-switched voiceband transmissions."[9] Where an incumbent LEC chooses to migrate its customers to fiber loop facilities, the xDSL provider may be required to forego access to the high frequency portion of the loop serving that customer, and may have to obtain access to an entire unbundled copper loop or find another alternative to maintain service.[10] In the *Line Sharing Order,* we stated our expectation that incumbents and competitive LECs would be able to resolve such issues in the course of good faith negotiations and arbitration proceedings conducted pursuant to section 252.[11] Moreover, we expressed our belief that the requirement to unbundle the high frequency spectrum would not infringe incumbents' ability to rearrange or

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[7] *Line Sharing Order,* 14 FCC Rcd at 20916, para. 5.

[8] *Line Sharing Order,* 14 FCC Rcd at 20991-21014, paras. 183-220.

[9] 47 C.F.R. § 51.319(h)(1). The local loop is defined as a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end user customer premises, including inside wire owned by the incumbent LEC. *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Third Report and Order, 15 FCC Rcd 3696, 3936-37, App. C (1999) (*UNE Remand Order*); 47 C.F.R. § 51.319(a)(1).

[10] *See Line Sharing Order,* 14 FCC Rcd at 20951, para. 80.

[11] *Line Sharing Order,* 14 FCC Rcd at 20951, n.182 (citing 47 C.F.R. § 51.301 and noting our intent to ensure that line sharing negotiations proceed "in good faith and for mutual advantage").

replace their loop plant because the retail xDSL service being offered by the incumbents themselves requires the same loop plant that competitive LECs require to offer shared-line xDSL.[12]

8. The *Line Sharing Order* also addressed the implications of a digital loop carrier (DLC) network architecture, in which the portion of the loop running from the central office to a remote terminal is on fiber facilities and the portion of the loop running from the remote terminal to the customer is on a copper loop facility. We concluded that incumbent LECs are required to unbundle the high frequency portion of the local loop even where the incumbent LEC's voice customer is served by DLC facilities. We also concluded that incumbents must provide unbundled access to the high frequency portion of the loop at the remote terminal as well as the central office.[13]

9. Rhythms requests clarification that use of the word "copper" in the definition of the high frequency portion of the loop does not limit an incumbent LEC's obligation to provide competitive LECs with access to the fiber portion of the loop for provision of line-shared xDSL services. Rhythms asserts that some incumbent LECs have taken the position in line sharing negotiations that they have no obligation to unbundle fiber portions of the loop when those portions are used to provide xDSL service.[14]

b. Discussion

10. We clarify that the requirement to provide line sharing applies to the entire loop, even where the incumbent has deployed fiber in the loop (*e.g.*, where the loop is served by a remote terminal). Our use of the word "copper" in section 51.319(h)(1) was not intended to limit an incumbent LEC's obligation to provide competitive LECs with access to the fiber portion of a DLC loop for the provision of line-shared xDSL services. As noted above, incumbent LECs are required to unbundle the high frequency portion of *the local loop* even where the incumbent

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[12] *Line Sharing Order,* 14 FCC Rcd at 20951, para. 80.

[13] *Line Sharing Order,* 14 FCC Rcd at 20956, paras. 88-92; 47 C.F.R. § 51.319(h)(6). We pointed out that incumbent LECs are under an independent obligation to provide unbundled access to subloops wherever technically feasible. *Line Sharing Order,* 14 FCC Rcd at 20955, para. 89; *UNE Remand Order*, 15 FCC Rcd at 3789-90, para. 206. An accessible terminal is a point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. *UNE Remand Order*, 15 FCC Rcd at 3789-90, para. 206. Such points may include, but are not limited to, the main distribution frame in the incumbent's central office, the remote terminal, and the feeder/distribution interface. *Id.;*47 C.F.R. § 51.319(a)(2).

[14] Letter from Christy C. Kunin, Counsel for Rhythms NetConnections Inc., to Magalie Roman Salas, Secretary, Federal Communications Commission, CC Docket Nos. 98-147 & 96-98 at 1-2 (filed Aug. 4, 2000) (Rhythms Aug. 4 *Ex Parte* Letter). We note that the issue Rhythms raises does not appear to relate to the technical feasibility of providing line sharing over fiber-fed facilities, but rather it appears to be limited to the obligation an incumbent LEC has to unbundle the high frequency portion of the local loop when some portion of that loop is on fiber facilities. *See* Letter from W. Scott Randolph, Director – Regulatory Matters, Verizon Communications, to Magalie R. Salas, Secretary, Federal Communications Commission, CC Docket Nos. 98-147 & 00-176 (filed Oct. 6, 2000) (addressing line sharing obligations when a line is equipped with DLC).

LEC's voice customer is served by DLC facilities.[15] The local loop is defined as a transmission facility between a distribution frame (or its equivalent) in an incumbent LEC central office and the loop demarcation point at an end user customer premises, including inside wire owned by the incumbent LEC.[16] By using the word "transmission facility" rather than "copper" or "fiber," we specifically intended to ensure that this definition was technology-neutral. The "high frequency portion of the loop" is defined as the frequency range above the voiceband on a copper loop facility that is being used to carry analog circuit-switched voiceband transmissions. Thus, although the high frequency portion of the loop network element is limited by technology, *i.e.,* is only available on a copper loop facility, *access to* that network element is not limited to the copper loop facility itself. When we concluded in the *Line Sharing Order* that incumbents must provide unbundled access to the high frequency portion of the loop at the remote terminal as well as the central office, we did not intend to limit competitive LECs' access to fiber feeder subloops for line sharing.

11. In the absence of this clarification, a competitive LEC might undertake to collocate a DSLAM in an incumbent's central office to provide line-shared xDSL services to customers, only to be told by the incumbent that it was migrating those customers to fiber-fed facilities and the competitor would now have to collocate another DSLAM at a remote terminal in order to continue providing line-shared services to those same customers. If our conclusion in the *Line Sharing Order* that incumbents must provide access to the high frequency portion of the loop at the remote terminal as well as the central office is to have any meaning, then competitive LECs must have the option to access the loop at either location, not the one that the incumbent chooses as a result of network upgrades entirely under its own control.[17] This approach is consistent with the dual goals expressed in the *Line Sharing Order* of allowing incumbents to deploy whatever network architecture they deem to be most efficient, while also requiring them to engage in good faith negotiations regarding their unbundling obligations.[18]

12. We clarify that where a competitive LEC has collocated a DSLAM at the remote terminal, an incumbent LEC must enable the competitive LEC to transmit its data traffic from the remote terminal to the central office. The incumbent LEC can do this, at a minimum, by leasing access to the dark fiber element or by leasing access to the subloop element.[19] We also

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[15] *See Line Sharing Order,* 14 FCC Rcd at 20956, para. 91.

[16] *UNE Remand Order,* 15 FCC Rcd at 3936-37, App. C; 47 C.F.R. § 51.319(a)(1).

[17] *See Line Sharing Order,* 14 FCC Rcd at 20956, para. 91; 47 C.F.R. § 51.319(h)(6).

[18] *See Line Sharing Order,* 14 FCC Rcd at 20950-51, 20956; paras. 80, 91. In cases where the technical feasibility of subloop unbundling on a DLC loop is actually contested, the incumbent carrier bears the burden of demonstrating to the relevant state commission, in the course of a section 252 proceeding, that it is not technically feasible to unbundle the subloop to provide access to the high frequency portion of the loop. *See Line Sharing Order,* 14 FCC Rcd at 20956, para. 92.

[19] In the *UNE Remand Order,* the Commission found that incumbent LECs were obligated to provide unbundled access to subloops wherever technically feasible. *UNE Remand Order*, 15 FCC Rcd at 3789-90, para. 206. An accessible terminal is a point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. Such points may include, but are not limited to, the main (continued....)

recognize that there are other ways in which line sharing may be implemented where there is fiber in the loop and we do not mandate any particular means in this Order. Solutions largely turn on the inherent capabilities of equipment that incumbent LECs have deployed, and are planning to deploy, in remote terminals. A competitive LEC's choice of various line-sharing arrangements may also be influenced by whether it has already collocated, or is capable of collocating at a remote terminal. For these reasons, we are initiating a *Third Further Notice of Proposed Rulemaking* today in the Advanced Services docket[20] and a *Sixth Further Notice of Proposed Rulemaking* in the Local Competition docket[21] that requests comment on the feasibility of different methods of providing line sharing where an incumbent LEC has deployed fiber in the loop.

13. All indications are that fiber deployment by incumbent LECs is increasing,[22] and that collocation by competitive LECs at remote terminals is likely to be costly, time consuming, and often unavailable.[23] We provide this clarification because we find that it would be

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distribution frame in the incumbent's central office, the remote terminal, and the feeder/distribution interface. *Id.*;47 C.F.R. § 51.319(a)(2). Thus, as we described in our *Fifth Further Notice of Proposed Rulemaking* in the Local Competition docket (CC Docket No. 96-98), the subloop element includes, among other possible portions, the portion of the loop between the remote terminal (or feeder/distribution interface) and the customer's premises (distribution), as well as the portion of the loop between the central office and the remote terminal (feeder), as distinct unbundled network elements. *See Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996,* Order on Reconsideration and Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147 and Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, FCC 00-297 at para. 123 (rel. Aug. 10, 2000) (*Fifth Further NPRM*) (inviting comment generally on whether the deployment of new network architectures necessitates any modification to or clarification of the Commission's rules concerning subloops, as well as those pertaining to line sharing). Subloop elements include attached electronics (*e.g.*, multiplexing equipment used to derive the loop transmission capacity). *See id.* at paras. 119, 123.

[20] CC Docket No. 98-147.

[21] CC Docket No. 96-98.

[22] *See, e.g., Proceeding on Motion of the Commission to Examine Issues Concerning the Provision of Digital Subscriber Line Services,* New York Public Service Commission, Case 00-C-0127, AT&T Comments at 48 (Aug. 22, 2000) (Percentage of Bell Atlantic-New York assigned loops served using some form of DLC will grow from 14.4 percent at the end of 1999, to 16.4 percent by year-end 2000, and to 18.3 percent by year-end 2001). SBC's three-year Project Pronto initiative, which relies in large part upon increased use of DLC systems to reduce overall costs, entails laying some 12,000 miles of fiber transmission facilities and creating 25,000 neighborhood gateways. *Ameritech Corp., Transferor, and SBC Communications, Inc., Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95, and 101 of the Commission's Rules,* CC Docket No. 98-141, ASD File No. 99-49, Second Memorandum Opinion and Order, FCC 00-336, at para. 3 (rel. Sept. 8, 2000). Approximately 25 percent of SBC's customer lines are served by DLC systems today. *Id.* at 23 & n.65.

[23] *See, e.g., Deployment of Wireline Services Offering Advanced Telecommunications Capability,* CC Docket No. 98-147, Order on Reconsideration and Second Further Notice of Proposed Rulemaking, FCC 00-297 at para. 105 & n.228 (rel. Aug. 10, 2000); *Petition of Covad Communications Company for an Arbitration Award Against Bell Atlantic-Pennsylvania, Inc., Implementing the Line Sharing Unbundling Network Element,* Docket No. A-310696F0002; *Petition of Rhythms Links, Inc. for an Expedited Arbitration Award Implementing Line Sharing,* Docket No. A-310698F0002, Pennsylvania Public Utility Commission, Opinion and Order at 36-37 & n.22 (Aug.
(continued....)

inconsistent with the intent of the *Line Sharing Order* and the statutory goals behind sections 706 and 251 of the 1996 Act to permit the increased deployment of fiber-based networks by incumbent LECs to unduly inhibit the competitive provision of xDSL services.[24] This clarification promotes the 1996 Act's goal of rapid deployment of advanced services because it makes clear that competitive LECs have the flexibility to engage in line sharing using DSLAM facilities that they have already deployed in central offices rather than having to duplicate those facilities at remote terminals. In addition, our ruling in the instant Order ensures that in situations where there is no room in the remote terminal for the placement of competitive LEC facilities, competitors nevertheless are able to obtain line sharing from the incumbents.

2. Line Splitting

a. Background

14. In the *Line Sharing Order*, the Commission established that an incumbent LEC's obligation to make the high frequency portion of the loop separately available as an unbundled network element is limited to where the incumbent LEC is providing, and continues to provide, voice service over the particular loop to which the competing carrier seeks access.[25]

15. AT&T and WorldCom request clarification that incumbent LECs must permit competing carriers who provide voice service via the end-to-end combination of unbundled network elements, known as the UNE-platform, to self-provision or partner with a data carrier to provide voice and data service on the same line.[26] In addition, AT&T requests that the Commission clarify that nothing in the *Line Sharing Order* permits incumbent LECs to deny their xDSL services to customers who obtain voice service from a competing carrier, as long as the competing carrier agrees to the use of its loop for that purpose.[27]

b. Discussion

16. We grant the petitions of AT&T and WorldCom with respect to their request for clarification that an incumbent LEC must permit competing carriers providing voice service using the UNE-platform to either self-provision necessary equipment or partner with a competitive data carrier to provide xDSL service on the same line. By doing so, we clarify that existing Commission rules support the availability of line splitting. We deny, however, AT&T's request that the Commission clarify that incumbent LECs must continue to provide xDSL

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17, 2000) (noting assertions by Covad and Rhythms that, in many instances, it may be cost prohibitive to collocate a traditional DSLAM at a remote terminal, there may not be space for requesting carriers to do so, and the means to connect the DSLAM to the unbundled fiber feeder network element may not be commercially viable).

[24] 47 U.S.C. §§ 157, 251; Sec. 706, Pub. L. 104-104, Title VII, Feb. 8, 1996, 110 Stat. 153, reproduced in the notes under 47 U.S.C. § 157.

[25] *Line Sharing Order*, 14 FCC Rcd at 20941, para. 13; 47 C.F.R. § 51.319(h)(3).

[26] AT&T Petition at 2; WorldCom Petition at 3-4.

[27] AT&T Petition at 13.

services in the event customers choose to obtain voice service from a competing carrier on the same line because we find that the *Line Sharing Order* contained no such requirement.

17. Line Splitting. As described above, in the *Line Sharing Order*, the Commission limited line sharing "to those instances in which the incumbent LEC is providing, and continues to provide, voice service on the particular loop to which the [competing] carrier seeks access."[28] In other words, a competing carrier seeking to provide xDSL service using the unbundled high frequency portion of the loop can do so only if the same loop is used by the incumbent LEC to provide voice service to an end user. Thus, the situation that AT&T and WorldCom describe is not technically line sharing, because both the voice and data service would be provided by competing carrier(s) over a single loop. To avoid confusion, in the *Texas 271 Order*, we characterized this type of arrangement as "line splitting," rather than line sharing.[29]

18. We find that incumbent LECs have a current obligation to provide competing carriers with the ability to engage in line splitting arrangements. The Commission's existing rules require incumbent LECs to provide competing carriers with access to unbundled loops in a manner that allows the competing carrier "to provide any telecommunications service that can be offered by means of that network element."[30] Our rules also state that "[a]n incumbent LEC shall not impose limitations, restrictions, or requirements on . . . the use of unbundled network elements that would impair the ability of" a competing carrier "to offer a telecommunications service in the manner" that the competing carrier "intends."[31] We further note that the definition of "network element" in the Act does not restrict the services that may be offered by a competing carrier, and expressly includes "features, functions, and capabilities that are provided by means of such facility or equipment."[32] As a result, independent of the unbundling obligations associated with the high frequency portion of the loop that are described in the *Line Sharing Order*, incumbent LECs must allow competing carriers to offer both voice and data service over a single unbundled loop. This obligation extends to situations where a competing carrier seeks to provide combined voice and data services on the same loop, or where two competing carriers join to provide voice and data services through line splitting.

19. Thus, as AT&T and WorldCom contend, incumbent LECs have an obligation to permit competing carriers to engage in line splitting using the UNE-platform where the

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[28] *Line Sharing Order*, 14 FCC Rcd at 20941, para. 13; *Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas*, CC Docket No. 00-65, Memorandum Opinion and Order, 15 FCC Rcd 18354, 18515, para. 324 (2000) (*Texas 271 Order*).

[29] *Texas 271 Order*, 15 FCC Rcd at 18515, para. 324.

[30] 47 C.F.R. § 51.307(c); *Texas 271 Order*, 15 FCC Rcd at 18515-16, para. 325.

[31] 47 C.F.R. § 51.309(a).

[32] 47 U.S.C. § 153(29).

competing carrier purchases the entire loop and provides its own splitter.[33] For instance, if a competing carrier is providing voice service using the UNE-platform, it can order an unbundled xDSL-capable loop terminated to a collocated splitter and DSLAM equipment and unbundled switching combined with shared transport, to replace its existing UNE-platform arrangement with a configuration that allows provisioning of both data and voice services.[34] As we described in the *Texas 271 Order*, in this situation, the incumbent must provide the loop that was part of the existing UNE-platform as the unbundled xDSL-capable loop, unless the loop that was used for the UNE-platform is not capable of providing xDSL service.[35]

20. More generally, incumbent LECs are required to make all necessary network modifications to facilitate line splitting, including providing nondiscriminatory access to OSS necessary for pre-ordering, ordering, provisioning, maintenance and repair, and billing for loops used in line splitting arrangements.[36] Thus, an incumbent LEC must perform central office work necessary to deliver unbundled loops and switching to a competing carrier's physically or virtually collocated splitter that is part of a line splitting arrangement.[37]

21. We strongly urge incumbent LECs and competing carriers to work together to develop processes and systems to support competing carrier ordering and provisioning of unbundled loops and switching necessary for line splitting. In particular, we encourage incumbent LECs and competing carriers to use existing state collaboratives and change

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[33] *See Texas 271 Order*, 15 FCC Rcd at 18515-16, para. 325; *see also Line Sharing Order*, 14 FCC Rcd at 20948, n.163 (contemplating arrangements with two competing carriers providing voice and data service on a single line).

[34] *Texas 271 Order*, 15 FCC Rcd at 18515-16, para. 325. Similarly, a competing carrier could use unbundled loop and switching elements to provide voice and data service to an end user not already served via the UNE-platform.

[35] *Texas 271 Order*, 15 FCC Rcd at 18515-16, para. 325.

[36] Our rules require incumbent LECs to make network modifications to the extent necessary to accommodate interconnection or access to network elements. *Implementation of the Local Competition Provisions in the Telecommunications Act of* 1996, First Report and Order, CC Docket No. 96-98, 11 FCC Rcd 15499, 15602 (1996) (*Local Competition Order*), *aff'd in part and vacated in part sub nom. Competitive Telecommunications Ass'n v. FCC*, 117 F.3d 1068 (8th Cir. 1997) & *Iowa Util. Bd. v. FCC*, 120 F.3d 753 (8th Cir. 1997), *aff'd in part, reversed in part, and remanded sub nom. AT&T v. Iowa Util. Bd.*, 525 U.S. 366 (1999), *aff'd in part and vacated in part on remand*, 2000 WL 979117 (2000), *Order on Reconsideration*, 11 FCC Rcd 13042 (1996), *Second Order on Reconsideration*, 11 FCC Rcd 19738 (1996), *Third Order on Reconsideration and Further Proposed Rulemaking*, 12 FCC Rcd 12460 (1997), *further recon. pending*. Because line splitting is an existing legal obligation, incumbent LECs must allow competitors to order line splitting immediately, whether or not a fully electronic interface is in place. *See, e.g.*, Opinion and Order Concerning Verizon's Wholesale Provision of DSL Capabilities, Opinion No. 00-12, Case 00-C-0127 (Oct. 31, 2000 New York Public Service Commission) (*New York xDSL Order*) at 17 (requiring Verizon to implement, by March 2001, a "new" OSS that will include fields that will accommodate two competing carriers, one providing voice and the other providing data). Moreover, we expect Bell Operating Companies to demonstrate, in the context of section 271 applications, that they permit line splitting, by providing access to network elements necessary for competing carriers to provide line-split services.

[37] *See generally Local Competition Order*, 11 FCC Rcd at 15602.

management processes[38] to address, among other issues: developing a single-order process for competing carriers to add xDSL service to UNE-platform voice customers; allowing competing carriers to forego loop qualification if they choose to do so (*i.e.*, because xDSL service is already provided on the line); enabling competing carriers to order loops for use in line splitting as a "non-designed" service; and using the same number of cross connections, and the same length of tie pairs for line splitting and line sharing arrangements.[39]

22. We acknowledge that in the *Line Sharing Order* the Commission indicated that in the event that a customer terminates incumbent LEC provided voice service on a line-shared line, the competitive data carrier is required to purchase the full stand-alone loop network element if it wishes to continue providing xDSL service.[40] We note, however, that the formerly line sharing data carrier also could enter into a voluntary line splitting arrangement with a new voice carrier. We expect competing carriers to cooperate in such an arrangement in order to avoid service disruption for their shared end user customer. Furthermore, because no central office wiring changes are necessary in a conversion from line sharing to line splitting, we expect incumbent LECs to work with competing carriers to develop streamlined ordering processes for migrations between line sharing and line splitting that avoid voice and data service disruption and make use of the existing xDSL-capable loop.[41]

23. We find that the availability of line splitting will further speed the deployment of competition in the advanced services market by making it possible for competing carriers to provide voice and data service offerings on the same line. As we found in the *Line Sharing Order*, these offerings are especially attractive to residential and small business customers.[42] At present, end users receiving voice service from competing carriers via the UNE-platform may be unable to get xDSL service from a competing carrier without migrating their voice service back to the incumbent LEC. Line splitting, however, increases consumer choices by making it possible for carriers to compete effectively with the combined voice and data services that are already available from incumbent LECs and through line sharing arrangements. In addition, line splitting provides voice carriers who do not wish to provide xDSL service at this time to develop partnerships with data carriers and thereby offer end users voice and data services on the same

[38] Alternatively, we encourage state commissions to convene special collaboratives if incumbent LECs and competing carriers are unable to make progress on their own through existing collaboratives and change management fora.

[39] *See generally* Letter from Frank S. Simone, Government Affairs Director, AT&T to Magalie Roman Salas, Secretary, Federal Communications Commission at Attach. 8 (filed Aug. 4, 2000).

[40] *Line Sharing Order*, 14 FCC Rcd at 20947, para. 72.

[41] *See generally* WorldCom Petition at Appendix A. We also encourage participants in state collaboratives and change management processes to develop specific ordering procedures associated with a variety of other scenarios, including, for instance, when an incumbent LEC voice customer is converted to a competitive voice provider for line splitting with a data carrier, and when a competing carrier UNE-platform voice customer wishes to add xDSL service in a line splitting arrangement.

[42] *Line Sharing Order*, 14 FCC Rcd at 20930-31, para. 35.

line. Furthermore, as the New York Public Service Commission has found, the availability of line splitting may increase the likelihood that competing carriers will make investments in facilities that will help solidify competing carrier market share.[43]

24. We emphasize, however, that line splitting is only one application of an incumbent LEC's larger obligation under our rules to provide access to network elements in a manner that allows a competing carrier "to provide any telecommunications service that can be offered by means of that network element."[44] Over time, we expect carriers to develop new technologies to support new forms of telecommunications services. Consistent with our rules and our obligation to promote innovation, investment, and competition among all participants and for all services in the telecommunications marketplace, we expect incumbent LECs to provide access to the features, functionalities, and capabilities associated with the unbundled network elements necessary to provide such services.[45]

25. Finally, we note that we expect to further address issues closely associated with line splitting—including splitter ownership—in upcoming proceedings where the record better reflects these complex issues.[46] For example, in the *Fifth Further NPRM* (also known as the New Networks proceeding), we specifically sought comment on the nature and type of electronics that are or may be attached to a loop.[47] We also asked whether or not attached equipment that is used for both voice and data services (*e.g.*, the splitter) should be included in the definition of the loop.[48] Although these questions, among other complex questions that may implicate line splitting concerns, are not the subject of the instant AT&T and WorldCom petitions, we are committed to resolving them expeditiously. We acknowledge that in the *Texas 271 Order* we indicated that we would address some of these issues in our reconsideration of the *UNE Remand*

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[43] *New York xDSL Order* at 16-17.

[44] 47 C.F.R. §§ 51.307(c); 51.309(a). We acknowledge, however, that the Commission currently is considering whether it would be appropriate to impose a restriction on the ability of carriers to use combinations of unbundled network elements solely to provide exchange access service. *UNE Remand Order*, 15 FCC Rcd at 3911-15, paras. 484-89, 492-96. Because there are significant policy implications associated with this issue, we asked parties to comment, in particular, on whether there is any basis in the statute or our rules under which incumbent LECs could decline to provide combinations of unbundled network elements at cost-based prices. *UNE Remand Order*, 15 FCC Rcd 3911-12, 3914-15, paras. 484-85, 494-96 (citing 47 U.S.C. § 251(c)(3); 47 C.F.R. § 51.309(a)). Until the Commission resolves this issue, we have mandated that carriers must provide a significant amount of local exchange service to a particular customer in order to obtain unbundled loop-transport combinations. *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, Supplemental Order Clarification, 15 FCC Rcd 9587 (2000).

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

[46] *See Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Fifth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, FCC 00-297 (rel. Aug. 10, 2000) (*Fifth Further NPRM*); *see also Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Second Further Notice of Proposed Rulemaking in CC Docket No. 98-147, FCC 00-297 (rel. Aug. 10, 2000).

[47] *Fifth Further NPRM* at para. 122.

[48] *Fifth Further NPRM* at para. 122.

Order.[49] We now find, however, that we have a more extensive record on these issues elsewhere and, as a result, intend to discuss them further in more recently initiated rulemaking proceedings.

26. Incumbent LEC xDSL and Competing Carrier Voice Service Combinations. As described above, we deny AT&T's request for clarification that under the *Line Sharing Order*, incumbent LECs are not permitted to deny their xDSL services to customers who obtain voice service from a competing carrier where the competing carrier agrees to the use of its loop for that purpose. Although the *Line Sharing Order* obligates incumbent LECs to make the high frequency portion of the loop separately available to competing carriers on loops where incumbent LECs provide voice service, it does not require that they provide xDSL service when they are not longer the voice provider. We do not, however, consider in this Order whether, as AT&T alleges, this situation is a violation of sections 201 and/or 202 of the Act. To the extent that AT&T believes that specific incumbent behavior constrains competition in a manner inconsistent with the Commission's line sharing rules and/or the Act itself, we encourage AT&T to pursue enforcement action.

3. Access to the Loop Facility for Testing Purposes

a. Background

27. In the *Line Sharing Order*, the Commission found that incumbent LECs must provide competing carriers participating in line sharing arrangements with access to the loop facility for testing purposes. Specifically, section 51.319(h)(7)(i) of our rules requires that incumbent LECs must provide, on a nondiscriminatory basis, "physical loop test access points to requesting carriers at the splitter, through a cross-connection to the competitor's collocation space, or through a standardized interface, such as an intermediate distribution frame or test access server."[50] The *Line Sharing Order* reflects that this requirement was intended to provide competitive LECs participating in line sharing arrangements with the ability to engage in "certain important types of loop testing that require . . . access to the loop's whole frequency range."[51]

28. Bell Atlantic requests that the Commission "clarify that [competing] carriers are not required to have access to the entirety of the loop facility for testing purposes," or alternatively, reconsider its decision to require competing carrier access to the entire loop facility for testing purposes.[52] Bell Atlantic argues that competing carriers do not need test access to the entire loop frequency in order to facilitate a data service that uses only the high frequency portion of the loop. To the extent a competitive LEC in a line sharing arrangement tests the high frequency portion of the loop and confirms that problems with its data service are not a function of its own operations or equipment, Bell Atlantic contends that the carrier can submit a trouble

[49] *Texas 271 Order*, 15 FCC Rcd at 18517, para. 328.

[50] *Line Sharing Order*, 14 FCC Rcd at 20967, para. 118; 47 C.F.R. § 51.319(h)(7)(i).

[51] *Line Sharing Order*, 14 FCC Rcd at 20965, para. 113.

[52] Bell Atlantic Petition at 1, 2-5 & n.4.

report to the incumbent LEC, who can test and make any necessary repairs on the physical loop facility.[53] Bell Atlantic also argues that unnecessary access to the entire loop frequency increases the risk of interruption or impairment of incumbent LEC voice services.[54]

b. Discussion

29. We deny Bell Atlantic's request and find that competing carriers participating in line sharing arrangements are entitled to test the entire frequency range of the loop facility—both the high frequency portion and the low frequency portion (including DC). We disagree with Bell Atlantic's argument that competing carriers in a line sharing arrangement do not need the ability to test the entire loop facility because they are only responsible for providing service over the high frequency portion of the loop.[55] The record indicates that the ability to conduct mechanized (metallic) loop testing, including tests requiring access to both low and high frequency signals (including DC), is one of the most effective methods of providing information about the underlying loop facility and that this information is useful for both voice and data carriers in a line sharing arrangement.[56] Moreover, permitting a competitive LEC to perform the same types of tests that the incumbent LEC performs allows the competitor to either detect in the first instance or later verify any problems that may occur.[57] This, in turn, allows the competitor to have more control over the provision of service to its own customers. Thus, our conclusion to deny Bell Atlantic's request is fully consistent with section 51.319(h)(7)(i) of our rules and our finding in the *Line Sharing Order* that an incumbent LEC should not preclude a competitive LEC from engaging in certain types of important loop testing that require the competitive LEC to access the loop's entire frequency range.[58]

30. Similarly, we disagree with Bell Atlantic's argument that we should require competitive LECs to submit a trouble report to the incumbent LEC, which would then test the physical loop facility to determine the cause of the problem.[59] We expressly rejected this proposal in the *Line Sharing Order* because we found it less efficient and noted that it creates an opportunity for discriminatory incumbent LEC behavior, including the imposition of artificial delays.[60] Bell Atlantic has not presented any new evidence on this issue and simply alleges that

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[53] Bell Atlantic Petition at 4-5.

[54] Bell Atlantic Petition at 5.

[55] Bell Atlantic Petition at 4.

[56] For example, metallic loop tests can provide critical information about the length of the loop, and whether or not bridge taps and load coils are present. *See generally* Broadspan Comments at 5; WorldCom Comments at 4.

[57] *See Line Sharing Order*, 14 FCC Rcd at 20964 n.258.

[58] *See Line Sharing Order*, 14 FCC Rcd at 20965, para. 113; *see also id.* at para. 114 (acknowledging a record that reflects the need for competitive LEC testing access to the voiceband frequency in order to facilitate access to the high frequency portion of the loop).

[59] Bell Atlantic Petition at 4-5.

[60] *Line Sharing Order*, 14 FCC Rcd at 20965-66, para. 117.

allowing competitors to access the entire loop for testing purposes increases the risk of disruption of the incumbent LEC's voice service.[61] We disagree that this is an unmanageable risk. As we acknowledged in the *Line Sharing Order*, carriers can work with their customer service operations to avoid customer confusion when testing on one service on a customer's line disrupts the other service sharing that line.[62]

31. We recognize that in the *Line Sharing Order* we did not dictate the exact means by which this test access would be accomplished. Rather, we broadly determined that, "at a minimum, incumbents must provide requesting carriers with loop access either through a cross-connection at the competitor's collocation space, or through a standardized interface designed to provide physical access for testing purposes."[63] There is no evidence in the record on reconsideration that there are specific operational or technical difficulties that would prohibit competitive LEC access to the entire loop for testing purposes.

32. We note also that in the *Line Sharing Order*, we charged a Federal Advisory Committee, the fifth Network Reliability and Interoperability Council (NRIC V) with the responsibility to advise the Commission on spectrum compatibility standards and spectrum management practices.[64] Focus Group 3 of NRIC V is presently preparing recommendations on the operational issues associated with access to the loop facility for testing purposes for carriers participating in line sharing arrangements.[65] We encourage interested parties to monitor the work of this focus group. Furthermore, we acknowledge that when we receive recommendations on these issues from NRIC V, we may wish to consider whether or not the findings of NRIC V should be incorporated into our existing rules.

4. Conditioning Loops Over 18,000 Feet

a. Background

33. One of the operational issues associated with the implementation of line sharing is loop conditioning, which is the removal from a loop of devices such as load coils and repeaters that may diminish the capability of the loop to deliver xDSL services. In the *Line Sharing Order,* the Commission concluded that incumbent LECs must condition loops to enable requesting carriers to provide xDSL-based services on the same loops over which the incumbent is providing analog voice service. In particular, incumbent LECs are required to condition any loop requested by a competitor, regardless of length, unless such conditioning would

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[61] Bell Atlantic Petition at 5.

[62] *Line Sharing Order*, 14 FCC Rcd at 20964-65, para. 112.

[63] *Line Sharing Order*, 14 FCC Rcd at 20966, para. 118.

[64] *Line Sharing Order*, 14 FCC Rcd at 20992-97, paras. 184-191.

[65] *See, e.g.*, NRIC V Focus Group 3 Wireline Network Spectral Integrity, Status Report and Initial Recommendations (Aug. 23, 2000) (listing metallic test access issues as a subject for contribution).

significantly degrade the customer's analog voice service provided by the incumbent.[66] We further required that an incumbent LEC that refuses a competitive carrier's request to condition a loop make an affirmative showing to the relevant state commission that conditioning the specific loop in question would significantly degrade voiceband services.[67] We stated our belief that an incumbent LEC will rarely, if ever, be able to demonstrate a valid basis for refusing to condition a loop under 18,000 feet.[68]

34. Bell Atlantic asserts that requiring an incumbent LEC to make an affirmative showing that conditioning a loop over 18,000 feet would significantly degrade the existing voice service is unnecessary and should be eliminated.[69] It states that it is a "well-established engineering principle" that removing load coils or repeaters from loops exceeding 18,000 feet will significantly degrade voice service,[70] and notes that given the general loss of voice quality on loops exceeding 18,000 feet, incumbent carriers have placed load coils or repeaters on such long loops for decades to obtain minimally acceptable levels of voice quality.[71] Bell Atlantic urges the Commission to make a categorical finding on reconsideration that loops over 18,000 feet that require removal of load coils, repeaters or other such devices are ineligible for line sharing because conditioning them will significantly degrade the voice service.[72] In the alternative, Bell Atlantic urges the Commission to shift the burden of proof on this issue to the competitors.[73]

b. Discussion

35. We reject Bell Atlantic's request that we make a categorical finding that loops

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[66] *Line Sharing Order,* 14 FCC Rcd at 20953-54, paras. 83-85. For example, we have recognized that if load coils or repeaters are needed to amplify the voice signal over a long loop, removing them to allow for the transmission of high frequency signals would hamper the quality of the voice service. *Advanced Services Further NPRM,* 14 FCC Rcd 4761, 4811 (1999), para. 104.

[67] *Line Sharing Order,* 14 FCC Rcd at 20954, para. 86. The incumbent LEC must also show that there is no adjacent or alternative loop available that can be conditioned or to which the customer's service can be moved to enable line sharing. *Id.*

[68] *Line Sharing Order,* 14 FCC Rcd at 20954, para. 86.

[69] Bell Atlantic Petition at 6-7; *see also* GTE Comments at 4 ("Degradation of voice services should be presumed to result from conditioning loops greater than 18,000 feet."); SBC Comments at 2.

[70] Bell Atlantic Petition at 6. Bell Atlantic bases its argument on engineering design criteria adopted by AT&T prior to divestiture to ensure voice quality. Those engineering design criteria included gauge specifications on copper facilities and the use of load coils on loops over 18,000 feet. *See* Bell Atlantic Reply at n.7 (citing AT&T and Bell Laboratories practice manuals from the 1970s).

[71] Bell Atlantic Petition at 6. *See also* GTE Comments at n.10 (noting that GTE and the other large incumbent LECs all have engineering practices, based on industry standard IEEE 820, that require loops to be engineered for no more than 8 dB loss to ensure voice quality); GTE Reply at 5.

[72] Bell Atlantic Petition at 7.

[73] Bell Atlantic Reply at 10.

over 18,000 feet that require removal of load coils, repeaters or other such devices are ineligible for line sharing because conditioning them will significantly degrade the voice service. Bell Atlantic has not provided persuasive evidence that its "well-established engineering principle" – removing load coils or repeaters from loops exceeding 18,000 feet will significantly degrade voice service – is not without exception. In fact, GTE (of which Bell Atlantic is a successor in interest) does not dispute that, in some cases, unloaded loops longer than 18,000 feet may be able to support quality voice service.[74] We also agree with AT&T that the simple loop length standard urged by Bell Atlantic is inappropriate because it does not focus on the quality of the voice service that can be provisioned over the line. AT&T suggests that the loss characteristics of a loop are a more relevant determination when considering voice degradation, with loss being a function *both* of the loop's length and the gauge of the loop wire. It states that incumbent LECs often use larger gauge wire on longer loops because larger gauge wire experiences less loss (*e.g.*, 26-gauge feeder wire for 0-3 miles and larger 22-24 gauge feeder wire on longer loops).[75] It asserts that an 18,000-foot loop of 26-gauge wire may exceed a particular loss standard, but 20,000 feet of 22-gauge wire should not exceed the same loss standard.[76] WorldCom also asserts that voice service can be provided without significant degradation on loops of up to 20,000 feet in length.[77] Bell Atlantic does not refute these comments, and in fact, the differing positions on this point further support our finding in the *Line Sharing Order* that it is appropriate for state commissions to consider such various loop conditioning scenarios on a case-by-case basis.[78]

36. Moreover, we reject Bell Atlantic's efforts to shift the burden to the competitive LEC to demonstrate that conditioning the specific loop in question would not significantly degrade voiceband services. It would be inappropriate to do so where information as to the characteristics of particular loops is in the possession of incumbent LECs. Our intent in requiring loops in excess of 18,000 feet to be conditioned, unless the incumbent LEC demonstrates that conditioning will significantly degrade voice service, was to prevent the incumbent LECs from refusing to condition the loop merely because the loop is over 18,000 feet. By reversing our earlier holding, we would enable incumbent LECs to further delay the implementation of new technologies that may permit xDSL service over longer distances without degradation of existing voice service.[79] Our requirement that an incumbent LEC make an

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[74] GTE Reply at 5. GTE asserts, however, that in the vast majority of cases, conditioning loops longer than 18,000 feet for DSL would materially degrade voice transmission quality. *Id.*

[75] AT&T Comments at 12-13.

[76] AT&T Comments at 13. AT&T also notes that the length of "uninterrupted copper wire" is the relevant portion of the loop to measure when considering voice degradation – not the length of the entire loop – because new digital loop carrier systems replace a portion of the copper loop with fiber backhaul. *Id.* at n.18.

[77] WorldCom Comments at 6.

[78] *Line Sharing Order*, 14 FCC Rcd at 20954, para. 86.

[79] *See* CompTel Comments at 5 ("Under Bell Atlantic's proposal, consumers served by long loops would . . . be foreclosed from access to advanced services on an economical shared line basis, and immune to technological innovations that may facilitate such service in the future."); WorldCom Comments at 6 (encouraging state involvement to prevent incumbent LECs from engaging in anticompetitive practices).

affirmative showing that conditioning will result in a significant degradation of voice service was based on the fact that incumbent LECs have sometimes deployed differing network architectures in different states.[80]

37. We agree with NorthPoint that Bell Atlantic has not made a sufficient technical demonstration to justify shifting the burden to competitive LECs to demonstrate that conditioning would not significantly degrade voiceband service on a specific loop that exceeds 18,000 feet.[81] Specifically, we agree with NorthPoint's suggestion that relevant information to consider before shifting the burden of proof to a competitive LEC would be a technical demonstration regarding resistance design criteria applicable to long loops, empirical data regarding the distribution of long loops in an incumbent LEC's plant, and data concerning the incidence of repeaters, load coils or other interferers on long and short loops in its territory.[82] Such analysis could show whether voice service on most long loops (*i.e.*, loops over 18,000 feet) would or would not be significantly degraded by conditioning to support advanced services, and whether it would be appropriate to shift the burden of proof to the competitive LEC. Without such a demonstration, it is appropriate for state commissions to consider such disputes on a case-by-case basis with the burden of proof on the incumbent LEC.

5. Rural Telephone Companies and Line Sharing Requirements

a. Background

38. In the *Line Sharing Order*, we declined "to exempt rural incumbent LECs from our line sharing unbundling obligation," but noted that "states retain the authority under section 251(f) [of the Act] to exempt certain rural LECs from all section 251 obligations."[83] We concluded that this approach would promote consistency in federal and state regulations.[84]

39. The NTCA and NRTA request that we clarify and/or reconsider this approach and urge the Commission to find that section 251(f) exempts "rural telephone companies from section 251(c) until a state commission terminates the exemption."[85] Thus, the NTCA and NRTA request that the Commission recognize that no state action is necessary to create this exemption from the unbundling and interconnection obligations in the Act, because it is granted

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[80] *See* ALTS Comments at 8-9 (stating that incumbent LECs have argued that local networks are not "one size fits all," and each state's network architecture has unique limits and capabilities); Broadspan Comments at 6 (arguing that state commissions should be allowed to determine the extent to which conditioning is appropriate on loops longer than 18,000 feet based on a particular incumbent's network architecture and evolving technology, which is continuously extending the distance by which xDSL services can be provided over a local loop).

[81] NorthPoint Comments at 13.

[82] NorthPoint Comments at 13.

[83] *Line Sharing Order*, 14 FCC Rcd at 21015, para. 224.

[84] *Line Sharing Order*, 14 FCC Rcd at 21015, para. 225

[85] NTCA and NRTA Petition at 2-3.

expressly in section 251(f)(1)(A).[86] No commenter objects to the NTCA and NRTA request.[87]

b. Discussion

40. We grant the petition of the NTCA and NTRA. We acknowledge that our statement in the *Line Sharing Order* regarding "rural incumbent LECs" is inconsistent with the Commission's prior interpretation of the rural telephone company section 251(c) exemption and may confuse the distinction between rural telephone companies described in section 251(f)(1) and rural carriers described in section 251(f)(2).[88]

41. We clarify that no state commission can terminate a rural telephone company's section 251(f)(1) exemption from the obligations of section 251(c), including the Commission's line sharing obligation, absent a bona fide request for interconnection, services, or other network elements that the state commission determines is not unduly economically burdensome, is technically feasible, and is consistent with section 254. We note that this is consistent with the Commission's finding in the *Local Competition First Report and Order* that "[s]ection 251(f)(1) grants rural telephone companies an exemption from section 251(c) until a rural telephone company has received a bona fide request for interconnection services, or network elements, and the state commission determines that the exemption should be terminated."[89]

6. Line Sharing Deployment Schedule

a. Background

42. In the *Line Sharing Order*, we stated that we "firmly believe that any delay in the provision of the high frequency portion of the loop will have a significant adverse impact on competition in the provision of advanced services to customers that want both voice and data services in a single line, especially in the residential and small business markets."[90] We acknowledged, however, that operations support systems (OSS) and loop facility modifications were necessary for incumbent LECs to accommodate requests for access to this new network element.[91] As a result, we concluded that parties should be able to negotiate appropriate amendments to their interconnection agreements to include line sharing no later than 180 days after release of the *Line Sharing Order*.[92] This 180 day period ended June 6, 2000.

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[86] NTCA and NRTA Petition at 2-3.

[87] *But see* AT&T Comments at 15; *see also* NTCA and NTRA Reply at 2.

[88] *See generally* 47 U.S.C. §§ 153(37), 251(f)(1) & 251(f)(2).

[89] *Local Competition First Report and Order*, 11 FCC Rcd at 16111, para. 1249.

[90] *Line Sharing Order*, 14 FCC Rcd at 20982-83, para. 161.

[91] *Line Sharing Order*, 14 FCC Rcd at 20921, para. 13 n.19 & 20983, para. 161.

[92] *Line Sharing Order*, 14 FCC Rcd at 20983, para. 162 ("Because we have addressed with specificity the relevant issues necessary to enable the provision of line sharing, parties should be able to negotiate amendments to their (continued....)

43. Bell Atlantic requests clarification that, notwithstanding this 180 day period, nothing in the *Line Sharing Order* precludes industry members, working together in a collaborative process, from adopting an alternative deployment schedule.[93] Bell Atlantic contends that a phased-in industry agreed upon deployment schedule is appropriate if the industry determines that sufficient operational capabilities for wide-scale line sharing will not be completed by the Commission's 180 day period.[94]

b. Discussion

44. We deny Bell Atlantic's request for the Commission to permit an alternative line sharing deployment schedule based on the work of an industry collaborative process. We note that on June 20, 2000, Bell Atlantic submitted a letter to the Common Carrier Bureau acknowledging that as of June 6, 2000, it has made line sharing available to competing carriers throughout its region.[95] Accordingly, Bell Atlantic's request now appears moot. Even if this request were not moot, we find that Bell Atlantic fails to provide this Commission with any information regarding specific difficulties associated with the 180 day deployment period developed in the *Line Sharing Order*. Moreover, were we to agree with Bell Atlantic, such an extension would only further delay the provisioning of the high frequency portion of the loop to competing carriers that seek to offer customers data services combined with incumbent voice services on a single line.[96]

(Continued from previous page)
interconnection agreements to include line sharing no later than 180 days of release of this order. Although we recognize the right to pursue arbitration under section 252, we are hopeful that parties will not need to do so to obtain interconnection agreements providing for line sharing.").

[93] Bell Atlantic Petition at 7.

[94] Bell Atlantic Petition at 8.

[95] Letter from Edward D. Young III, Senior Vice President, Bell Atlantic, to Lawrence E. Strickling, Chief, Common Carrier Bureau (filed Jun. 20, 2000). BellSouth, SBC, US WEST, and GTE submitted similar letters. *See* Letter from Kathleen B. Levitz, Vice President-Federal Regulatory, BellSouth, to Lawrence E. Strickling, Chief Common Carrier Bureau (filed Jun. 20, 2000); Letter from Priscilla Hill-Ardoin, Senior Vice President, SBC, to Lawrence E. Strickling, Chief, Common Carrier Bureau (filed Jun. 20, 2000); Letter from Melissa E. Newman, Vice President-Federal Regulatory, US WEST, to Lawrence E. Strickling, Chief, Common Carrier Bureau (filed Jun. 20, 2000); Letter from Alan Ciamporcero, Vice President-Federal Regulatory, GTE, to Lawrence E. Strickling, Chief, Common Carrier Bureau (filed Jun. 20, 2000).

[96] *See generally* ALTS Comments at 5-6; AT&T Comments at 7-10; Broadspan Comments at 6-7; CompTel Comments at 5; Covad Comments at 5-6; WorldCom Comments at 5; *but see* NorthPoint Comments at 14-15; Sprint Comments at 3.

B. Spectrum Management Issues

1. Presumption that a Technology is Acceptable for Deployment Anywhere

a. Background

45. Section 51.230(a)(3) of the Commission's rules, as adopted in the *Line Sharing Order*, provides that an advanced services loop technology is presumed acceptable for deployment where the technology "has been successfully deployed by any carrier without significantly degrading the performance of other services."[97] In addition, section 51.230(b) of our rules provides that

> [a]n incumbent LEC may not deny a carrier's request to deploy a technology that is presumed acceptable for deployment unless the incumbent LEC demonstrates to the relevant state commission that deployment of the particular technology will significantly degrade the performance of other advanced services or traditional voiceband services.[98]

Furthermore, section 51.230(c) of our rules requires carriers seeking to establish that deployment of a technology falls within the presumption of acceptability described in section 51.230(a)(3) "to demonstrate to the state commission that its proposed deployment meets the threshold for a presumption of acceptability and will not, in fact, significantly degrade the performance of other advanced services or traditional voiceband services."[99] Section 51.230(c), however, also provides that "[u]pon a successful demonstration by the requesting carrier before a particular state commission, the deployed technology shall be presumed acceptable for deployment in other areas."[100]

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[97] 47 C.F.R § 51.230(a)(3).

[98] 47 C.F.R. § 51.230(b).

[99] 47 C.F.R. § 51.230(c).

[100] 47 C.F.R. § 51.230(c).

46. BellSouth requests that the Commission reconsider its finding "that new technologies are presumed deployable anywhere when successfully deployed in one state without significantly degrading other services."[101] It contends that because network architectures are configured differently between various locations and local exchange carriers, it is improper to assume that each new incumbent LEC's network is engineered on a "one size fits all basis." Thus, BellSouth asserts that short of requiring new technology to be approved by an industry standards body, the technology should at least be approved by the state commission in the state in which the carrier wishes to deploy the technology.[102] GTE and SBC support BellSouth's petition.[103]

b. Discussion

47. We deny BellSouth's request for reconsideration, because we find, as several commenters suggest, that BellSouth misinterprets our rule in its petition, fails to acknowledge the remedies our rule provides for incumbent LECs concerned about network reliability, and offers no new facts or arguments to support its request for reconsideration.[104]

48. First, and contrary to BellSouth's assertions, an incumbent LEC is not obligated to wait until "significant damage [has] occurred to [its] customers' services" before seeking relief from a state commission if a technology proposed for deployment poses a real interference threat.[105] Under section 51.230(b) of our rules, if an incumbent LEC demonstrates to the relevant state commission that deployment of a particular technology will significantly degrade the performance of other advanced services or traditional voiceband services, it may deny a carrier's request to deploy a technology that is otherwise presumed acceptable for deployment pursuant to section 51.230(a). By requiring incumbent LECs to make a demonstration before denying a competing carrier's deployment—incumbent LECs are protected from significant degradation of their voice services before any problems may occur.

49. Second, BellSouth minimizes the initial burden our rule places on competing carriers. Under section 51.230(c) of our rules, any carrier seeking to rely on successful past deployment must first affirmatively demonstrate the safety of the proposed technology to the satisfaction of a state commission. Only then is the requesting carrier entitled, in subsequent states, to transfer the burden of proof to the incumbent LEC. Finally, we note that BellSouth has not offered any facts or arguments not previously considered by the Commission in the *Line Sharing Order*.

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101 BellSouth Petition at 1-2.

102 BellSouth Petition at 3.

103 GTE Comments at 6-7; SBC Comments at 2.

104 *See generally* ALTS Comments at 3; AT&T Comments at 6-7; Broadspan Comments at 3; CompTel Comments at 2-3; Covad Comments at 11-13; NorthPoint Comments at 9-10; Rhythms Comments at 4-5; Sprint Comments at 4-5; TRA Comments at 9-10; AT&T Reply at 7.

105 BellSouth Petition at 2-3.

2. Disposition of Interfering Technologies

a. Background

50. We noted in the *Line Sharing Order* that some technologies are "known disturbers," which are technologies that are prone to cause significant interference with other services deployed in the network. We stated that because known disturbers, such as analog T1, are likely to cause interference in a multi-service environment, incumbent LECs are permitted to segregate such disturbers to protect against interference.[106] Besides segregating known disturbers, incumbent LECs have other options with respect to the disposition of known disturbers, such as replacing them with new technologies.

51. We concluded that the state commissions, rather than this Commission, were best suited to determine the disposition of known disturbers in the network, (*e.g.*, by establishing a sunset period for deployment of a particular technology).[107] In the *Advanced Services First Report and Order and FNPRM,* we sought comment on whether carriers should be required to replace analog T1 with new and less interfering technologies, and, if so, what time frame would be reasonable.[108] After receiving comments, we declined in the *Line Sharing Order* to establish a nationwide sunset period for known disturbers because we were concerned that such a blanket sunset might lead to unnecessary replacement of analog T1 or other known disturbers. Such replacement could lead to network disruption and force carriers to undertake exorbitant replacement expenditures. We also found the states better equipped than incumbent LECs to take an objective view of the disposition of known disturbers because incumbent LECs have a vested interest in their own substantial base of known disturbers. We urged carriers to discontinue deployment of known disturbers, and we emphasized that carriers should, to the greatest extent possible, replace known disturbers, including analog T1, with new and less interfering technologies.[109]

52. Bell Atlantic argues that "market forces," rather than state regulators, should determine how and when incumbent LECs should upgrade their network by removing, relocating, or rehabilitating older technologies like alternate mark inversion (AMI) T1.[110] Bell Atlantic also argues that the Commission's decision to permit newly deployed technologies to prevail against "known disturbers" in interference disputes is inconsistent with its "first-in-time"

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[106] We note that analog T1 (also referred to as AMI T1) is the only technology that we identified as a known disturber. *Line Sharing Order,* 14 FCC Rcd at 21010, paras. 213-214.

[107] *Line Sharing Order,* 14 FCC Rcd at 21012, para. 218.

[108] *Line Sharing Order,* 14 FCC Rcd at 21012, para. 217.

[109] *Line Sharing Order,* 14 FCC Rcd at 21013-14, paras. 219-20.

[110] Bell Atlantic Petition at 9; *see* GTE Comments at 5 ("[R]eplacing [AMI T1] technology imposes significant cost burdens on carriers and customers alike, since it involves both the deployment of new cable and the change-out of customer premise equipment."); SBC Comments at 2. AMI T1, also referred to as analog T1, is a loop that transmits at T1 rate (1.544 Mbps) using alternate mark inversion (AMI) line code.

precedent.[111] Bell Atlantic requests that the Commission instead require carriers deploying new technologies to protect existing AMI T1 technology from interference.[112]

b. Discussion

53. We reject Bell Atlantic's request. As NorthPoint points out, incumbent LECs typically control the facility that can cause interference with services provided by new entrants into its market.[113] Accordingly, permitting the incumbent, rather than an objective entity like the state commission to make determinations regarding known disturbers could have anti-competitive effects.[114] As we found in the *Line Sharing Order,* incumbent LECs have a vested interest in their own substantial base of known disturbers.[115] Were we to agree with Bell Atlantic's sole reliance on market forces, then incumbents would only replace disturbers such as analog T1s in areas where they face competition for high-speed services. This could have a detrimental effect on the future availability of innovative technologies, which is contrary to the intent of section 706 of the 1996 Act and the Commission's goals with respect to advanced services.[116] Furthermore, as Broadspan points out, the Commission's approach maintains a "delicate balance" between proscribing obsolete equipment that causes interference and allowing the market to determine when such equipment should be removed from the network.[117] Incumbent carriers were already removing analog T1s from their operations prior to issuance of the *Line Sharing Order*,[118] and according to Broadspan, market forces will continue to be the

[111] *See Line Sharing Order,* 14 FCC Rcd at 21008-09, para. 211 & n.498 (outlining general principle in interference disputes among spectrum users, such as wireless cable and broadcast licensees, that "newcomers" deploying facilities protect existing licensees (*i.e.,* "first-in-time" spectrum users) from interference created by newly deployed facilities).

[112] Bell Atlantic Petition at 10.

[113] NorthPoint Comments at 15-16; *see also* AT&T Reply at 8.

[114] *See* AT&T Comments at 11 ("[T]he ILEC's interest lies in perpetuating existing, high-profit services for as long as possible, giving it a powerful economic incentive to delay competitive xDSL deployment in selected areas."); *see also* Broadspan Comments at 8; Covad Comments at 11 ("Maintaining AMI T1 and other interfering technologies is a classic exercise of . . . anticompetitive behavior."); Network Access Comments at 2 (arguing that there is no market-based incentive for an incumbent LEC to replace bottleneck AMI T1 service with competitive advanced services for which the profit margins are much smaller).

[115] *See Line Sharing Order,* 14 FCC Rcd at 21013, para. 219.

[116] *See Line Sharing Order,* 14 FCC Rcd at 20914, 20916; paras. 1, 6.

[117] Broadspan Comments at 8; *see also* CompTel Comments at 7 ("[B]y allowing states to flexibly resolve disputes guided by a national policy favoring multi-carrier, multi-service deployment, the Commission attempted to accommodate the widest range of deployment options with the least impact on existing technologies."); WorldCom Comments at 10 (arguing that a national schedule may harm deployment in certain states that have networks more adaptable to newer technology but are forced to wait for those networks in other states that would be unduly burdened by an early sunset requirement).

[118] *See Line Sharing Order,* 14 FCC Rcd at 21014, n.530 (describing incumbent LECs' gradual replacement of analog T1s with HDSL). GTE states that it has been replacing AMI T1 with HDSL over time, and that it has a very strong incentive to continue doing so as rapidly as is economically practicable, given the competitive imperative to (continued....)

principal determinant in the deployment and retirement of interfering technologies.[119] For these reasons, and the reasons set forth in the *Line Sharing Order,* we affirm our decision that the state commissions are in the best position to resolve disputes or other issues concerning "known disturbers."

54. We also reject Bell Atlantic's argument that the Commission's decision to permit newly deployed technologies to prevail against "known disturbers" in interference disputes is inconsistent with its "first-in-time" precedent.[120] We find that the *Line Sharing Order* provides a limited exception to our "first-in-time" interference precedent that is reasonable based on the intent of section 706 of the Act and our policy goal, supported by the record, that deployment of innovative technologies that will result in less interference should not be disadvantaged by favoring known disturbers like AMI T1.[121] As we stated in the *Line Sharing Order,* any approach to resolving interference disputes that favors incumbent LEC services in a manner that automatically trumps, without further consideration, innovative services offered by new entrants is neither consistent with section 706 nor with the Commission's goals as set out in the *Advanced Services First Report and Order.*[122] With respect to known disturbers, we sought to ensure that "noisier" technologies that are at or near the end of their useful life cycles do not perpetually preclude deployment of newer, more efficient and spectrally compatible technologies.[123]

(Continued from previous page)
deploy its own xDSL services to compete against cable modem service and competitive data LECs. GTE Comments at 5. Similarly, Bell Atlantic states that, since July 1998, its policy has been not to design new AMI T1 carrier spans. Bell Atlantic Reply at n.12.

[119] Broadspan Comments at 8. *But see* Covad Comments at 11 ("Market forces . . . would fail completely to support competition, and only regulation can ensure that Bell Atlantic does not maintain its network in such a way as to actively bar competition."). Broadspan maintains that state commissions should be allowed "to take remedial action in cases where the deployment of or failure to remove known disturbers has anti-competitive effects." Broadspan Comments at 8.

[120] "First-in time" is a general principle in interference disputes among spectrum users, such as wireless cable and broadcast licensees, where the deployment of new facilities must protect existing licensees (*i.e.*, "first-in-time" spectrum users). *See generally Line Sharing Order*, 14 FCC Rcd at 21008-09, para. 211 & n.498.

[121] *Line Sharing Order,* 14 FCC Rcd at 21012-14, paras. 217-220. *See* AT&T Reply at 8; CompTel Comments at 7-8 ("[T]he Commission may allow its policies to evolve with changes in technology."); Network Access Comments at 3; NorthPoint Comments at 16 ("Commission's decision to permit state commissions to order the sunsetting of certain technologies represents a narrow and necessary exception to the general `first-in-time' principle.").

[122] *Line Sharing Order,* 14 FCC Rcd at 21008, para. 210.

[123] *Line Sharing Order,* 14 FCC Rcd at 21008, para. 210; *see* AT&T Comments at 10-11 (Commission's "decision to permit states to determine disposition of disturbers will, if properly enforced, minimize the risk that ILECs will be able to control the use of interfering technologies to preclude deployment of new and less interfering technologies."). As an example, WorldCom points out that HDSL has existed as an alternative to AMI T1 for over ten years, and it does not have the spectrum incompatibility issues associated with AMI T1. WorldCom Comments at 9. WorldCom states that AMI T1 is one of the worst disturbers of newer technologies used to provide customers with advanced services, and that sunset of AMI T1 and deployment of HDSL or a similar technology allows for more rapid deployment of advanced services, especially in the residential markets. *Id.* at 9-10.

V. THIRD FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 98-147 AND SIXTH FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 96-98

A. Background

55. In our Report and Order addressing petitions for reconsideration of the *Line Sharing Order,* also adopted today, we clarify that an incumbent LEC's obligation to provide access to the unbundled high frequency portion of the loop extends to situations where it has deployed fiber in the loop (*e.g.,* where the loop is served through a fiber-fed DLC at a remote terminal). This Further Notice focuses on the various methods by which competitors can access this element in this circumstance.[124]

B. Discussion

56. As an initial matter, we note that particular methods of access may depend upon the network architecture and capabilities of the equipment the incumbent LEC has deployed, and also upon whether a competitor is able to and has collocated facilities at the remote terminal. Further, a competitor may already be collocated in a central office and therefore would seek access to the loop rather than the subloop. As stated above, where, for example, a competitor collocates its DSLAM equipment at the remote terminal it could carry its data traffic from the remote terminal to the central office through purchasing the dark fiber or feeder subloop unbundled network element offerings.[125] We recognize, however, the such options will be affected by the extent to which there is adequate space at the remote terminal for the collocation of competitor DSLAMs or other DSLAM-like equipment. Accordingly, in the event the incumbent is using a DLC architecture and assuming it is otherwise lawful under section 251(c)(6), we seek comment on whether a requesting carrier may physically or virtually collocate its line card at the remote terminal by installing it in the incumbent's DLC for the purposes of line sharing.

57. In order for collocation at the remote terminal to be a viable option for obtaining access to the line-shared loop, an incumbent must make the transmission between the remote terminal and the central office available. We seek comment on the extent to which subloops and dark fiber are readily available where incumbents have deployed fiber in the loop. To the extent dark fiber is present, will there typically be enough space, power, and other prerequisites (*e.g.*, heating, ventilating and air-conditioning capability) in the remote terminal for the installation of the electronics necessary to light the fiber? Is dark fiber an adequate alternative where subloop offerings are unavailable? To the extent that subloop offerings are available, we seek comment

[124] *See supra* paras. 10-13.

[125] *See supra* para. 12 (describing various means of transmitting a competitive LEC's data traffic between the remote terminal and the central office).

on the costs and technical issues involved in accessing such offerings.[126]

58. We note that where a competitor is unable to collocate its equipment in the remote terminal its ability to transmit its data traffic from the end user customer to the central office, where it is likely to be collocated, is constrained. One option in this circumstance would be for the incumbent LEC to migrate the customer served by the DLC onto an all-copper loop, if available.[127] We seek comment on the viability of this method of access. For example, to the extent that an all-cooper loop is available, does the service disruption that would ensue as the voice customer was migrated from the DLC to cooper loop make this a less desirable option?

59. Alternatively, where a competitive LEC is not collocated at the remote terminal, it is also possible for an incumbent LEC, whose remote terminal equipment provides DSLAM functionality through the use of a line card, to split the high and low frequency portions of the loop at the remote terminal and route the data traffic from the high frequency portion to the incumbent LEC's central office. Under this arrangement, the voice and data traffic are routed on separate fiber paths back to the central office. In the central office, the incumbent can separate data traffic of its customers from the data traffic of the customers of competitive LECs, and route the data traffic of the customers of a competitive LEC to that LEC's collocation area. We note that SBC is currently offering competitors such an arrangement, as described in the Commission's *Project Pronto Order*.[128] We seek comment on this method of access. In addition, we seek comment on whether the Commission can require such an arrangement under its current unbundling rules. If not, we seek comment on whether our unbundling rules should be modified to permit this type of arrangement. Specifically, we ask parties to address whether this type of arrangement should only be made available when there is no room for collocation at the remote terminal or whether incumbent LECs should be required to make such an offering in all circumstances when they deploy fiber in the loop?

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[126] *See* Comments of Rhythms, CC Docket Nos. 98-147 & 96-98 at 80 (filed Oct. 12, 2000) (maintaining that dark fiber is not a practical option for competitive LECs seeking to transmit traffic between the remote terminal and the central office). Rhythms posits three reasons for its assertion: (1) incumbents redefine a single loop UNE as a copper subloop UNE plus dark fiber, which increases the price by "several orders of magnitude;" (2) incumbents' dark fiber tariffs do not provide for access at every technically feasible point, or every remote terminal; and (3) competitive LECs would need to collocate even more equipment in space-constrained remote terminals in order to "light" the fiber. *See id.*

[127] This assumes, of course, that the existing copper loop is DSL-capable and there would be no resulting interference issues associated with using that loop to provide high-speed services. *See, e.g., UNE Remand Order*, 15 FCC Rcd at 3838, para. 313 (noting that spare copper loops should offer the same level of quality for advanced services as the incumbent's facilities).

[128] *See Ameritech Corp., Transferor, and SBC Communications, Inc., Transferee, for Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act,* Second Memorandum Opinion and Order, FCC 00-336 at para. 14 & n.34 (rel. Sept. 8, 2000) (*Project Pronto Order*) (noting that an advanced services line card in a remote terminal provides functionality similar to a DSLAM: it splits the voice and data signal and generates an asynchronous transfer mode (ATM) packet signal for the data path). Separate channel bank control cards provide multiplexing and other capabilities at the remote terminal. *See id.* at n.34.

60. As yet another alternative, we also seek comment on whether it is technically feasible for competitors and incumbents to share the fiber feeder between the remote terminal and the central office. For example, in comments submitted in response to our Fifth Further NPRM in the Local Competition proceeding, Rhythms asserts that the bit stream carrying ADSL from an end user to the remote terminal over copper can be combined with other traffic in the incumbent's SONET equipment at the remote terminal, which then can be carried on the same fiber(s) back to the central office.[129] Separation of traffic transported over the fiber feeder can then be accomplished using an ATM switch (or its equivalent) in the central office.[130]

61. To the extent such fiber sharing is technically feasible, should the Commission require such shared access in order to permit competitors to obtain access to the line-sharing element? Does such sharing fall within the Commission's definition of the loop, which requires that the incumbents make the entire transmission path from the end user customer to the central office available? What are the implications of defining such transmission paths as part of the loop?

62. Is such shared access to the fiber feeder more similar to the Commission's definition of shared transport rather than the loop? For example, shared transport is defined as the transmission facilities shared by more than one carrier between the incumbent LEC's end office switches, between end office switches and tandem switches, and between tandem switches in the incumbent's network.[131] Should the remote terminal and the equipment therein be considered an end office switch for purposes of our unbundling rules? Or, should our rules be modified to specify that shared transport also includes shared transmission facilities between remote terminal equipment and end office switches? What is the legal and practical significance, if any, of the fiber feeder being considered shared transport?

63. Further still, we seek comment on whether this type of shared access can be achieved through purchasing the unbundled packet switching capability. In the *UNE Remand Order* the Commission found that, in certain circumstances, competitors are effectively precluded from offering xDSL service if they do not have access to unbundled packet switching.[132] Specifically, our current rules require an incumbent to unbundle packet switching

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[129] *See* Comments of Rhythms, CC Docket Nos. 98-147 & 96-98, Joint Declaration of Martin Garrity, David Reilly, Tom Stumbaugh and Rob Williams at para. 92 (filed Oct. 12, 2000) (Rhythms Joint Declaration). Rhythms states that a requesting carrier can take a handoff of the ATM-based bit stream carrying ADSL at an ATM switch in the serving central office or at an ATM edge switch located outside the serving central office. *See id.*

[130] *See, e.g., Project Pronto Order* at paras. 4, 18 & n.12 (describing use of an incumbent LEC's ATM switch in the central office to route packet signals from several remote terminal sites to a carrier's packet switched network, aggregating traffic from multiple remote terminal sites to a smaller number of outbound transport facilities); Rhythms Joint Declaration at para. 96 (noting that competitive LECs would interconnect via an ATM user-network interface on the central office switch). This architecture uses a single path for voice and data from the remote terminal back to the central office as compared to the SBC architecture that separates voice and data into different paths.

[131] 47 C.F.R. 51.317(d)(1)(C).

[132] *See UNE Remand Order*, 15 FCC Rcd at 3838, para. 313.

where it has deployed a DLC, there are no spare copper loops capable of supporting the xDSL services that the requesting carrier seeks to offer, it has not permitted the requesting carrier to collocate its DSLAM at the remote terminal, and it has deployed packet switching capability for its own use.[133] In addition, under our current rules, when a requesting carrier purchases unbundled circuit switching, it also receives shared transport. Thus, when a competitor purchases the unbundled packet switching capability, isn't the competitor also receiving the shared transport functionality? Additionally, by purchasing the unbundled packet switching capability, isn't the competitor gaining access to the ATM (or equivalent) switch at the central office as well as the line-card (or DSLAM equivalent) at the remote terminal?[134] To the extent our current packet switching rules are not adequate to enable competitors to line share when there is fiber deployed in the loop, we seek comment on how they should be modified.

64. Regardless of whether such shared access is defined as part of the loop, packet-switching capability, or shared transport, should such shared access be made available only in instances where a competitor is unable to collocate at the remote terminal? Or, should this type of access be required in all circumstances in which an incumbent has deployed fiber in the loop? We note that, under our current unbundling rules, requesting carriers are entitled to purchase a combination of network elements, called the UNE-platform, in order to provide voice services irrespective of whether they are able to collocate in the incumbent's central office or remote terminal. Should a similar type of platform be made available to competitors to provide line-shared data services? What changes, if any, in our unbundling rules are necessary to effectuate such an offering? How would such a UNE-data platform be defined?[135] How would the Commission's impairment analysis be applied to such a situation? What are the legal and policy reasons that favor and disfavor requiring the incumbents to make a UNE data-platform available, irrespective of the ability of the collocate, for the purpose of enabling competitors to provide competing high-speed data services when fiber has been deployed in the loop?

VI. PROCEDURAL MATTERS

A. Ex Parte Presentations

65. The Third Further Notice of Proposed Rulemaking in CC Docket No. 98-147 and Sixth Further Notice of Proposed Rulemaking in CC Docket No. 96-98 (Third Further Notice) shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's ex parte rules.[136] Persons making oral ex parte presentations are reminded that memoranda

[133] 47 C.F. R. 51.317(c)(3).

[134] *See, e.g.*, Comments of Rhythms, CC Docket Nos. 98-147 & 96-98 at 19 (filed Oct. 12, 2000) (citing use of line cards with DSLAM functionality as "[t]he most efficient and effective means" for a competitive LEC to interconnect at the remote terminal).

[135] For example, this UNE data-platform could be defined to include the loop (both feeder and distribution portions, whether copper or fiber), attached electronics, line-card/DSLAM functionality, ATM switching or its equivalent, and transport.

[136] 47 C.F.R. §§ 1.1200 *et seq.*

summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.[137] Other rules pertaining to oral and written presentations are set forth in section 1.1206(b) as well.

B. Initial Regulatory Flexibility Act Analysis

66. Appendix C sets forth the Commission's IRFA regarding the policies and rules proposed in the *Third Further Notice*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the . The Commission will send a copy of the *Third Further Notice,* including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.[138] In addition, the *Third Further Notice* and IRFA (or summaries thereof) will be published in the Federal Register.[139]

C. Initial Paperwork Reduction Act Analysis

67. The rule changes proposed in the *Third Further Notice* may cause modifications to the collections of information approved by OMB in connection with the *Advanced Services First Report and Order* and the *Local Competition Second Report and Order*.[140] As part of our continuing effort to reduce paperwork burdens, we invite the general public and OMB to comment on the information collections contained in this *Third Further Notice,* as required by the Paperwork Reduction Act of 1995. Public and agency comments are due at the same time as other comments on the *Third Further Notice*; OMB comments are due 60 days from the date of publication of notice of the *Third Further Notice* in the Federal Register. Comments should address: (a) whether the proposed information collections are 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 the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology.

D. Comment Filing Procedures

68. Pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission's rules,[141] interested parties may file comments on or before **21 days after Federal**

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[137] *See* 47 C.F.R. § 1.1206(b)(2).

[138] *See* 5 U.S.C. § 603(a).

[139] *See id.*

[140] *See* OMB control number 3060-0848.

[141] 47 C.F.R. §§ 1.415, 1.419.

Register publication of this Further Notice, and reply comments on or before **35 days after Federal Register publication of this Further Notice.** All filings should refer to CC Docket Nos. 98-147 and 96-98. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.[142] Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Generally, only one copy of an electronic submission must be filed. In completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket numbers, which in this instance are CC Docket Nos. 98-147 and 96-98. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address." A sample form and directions will be sent in reply.

69. Parties who choose to file by paper must file an original and four copies of each filing. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, Room TW-B204, 445 12th St. S.W., Washington, D.C. 20554.

70. Parties who choose to file by paper should also submit their comments on diskette. These diskettes should be submitted to Janice Myles, Common Carrier Bureau, Policy & Program Planning Division, 445 12th Street, S.W., Washington, D.C. 20554. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible format using WordPerfect 5.1 for Windows or compatible software. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's name, proceeding (including the docket numbers, in this case, CC Docket Nos. 98-147 and 96-98), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file. In addition, commenters must send diskette copies to the Commission's copy contractor, International Transcription Service, Inc., 1231 20th Street, N.W., Washington, D.C. 20036.

71. Regardless of whether parties choose to file electronically or by paper, parties should also file one copy of any documents filed in this docket with the Commission's copy contractor, International Transcription Services, Inc., 1231 20th Street, N.W., Washington, D.C. 20036. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, Room CY-A257, 445 12th Street, S.W., Washington, D.C. 20554.

72. 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 Commission's rules.[143] We also direct

[142] *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 Fed. Reg. 24,121 (1998).

[143] *See* 47 C.F.R. § 1.49.

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. All parties are encouraged to utilize a table of contents, regardless of the length of their submission. We also strongly encourage that parties track the organization set forth in the *Third Further Notice* in order to facilitate our internal review process.

73. Written comments by the public on the proposed and/or modified information collections are due on or before **21 days after Federal Register publication of this Further Notice,** and reply comments on or before **35 days after Federal Register publication of this Further Notice.** Written comments must be submitted by the OMB on the proposed and/or modified information collections on or before 60 days after date of publication of notice of this *Third Further Notice* 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 Judy Boley, Federal Communications Commission, 1-C804, 445 12th Street, S.W., Washington, D.C. 20554 or via the Internet to jboley@fcc.gov and to Virginia Huth, OMB Desk Officer, 10236 NEOB, 725 17th Street, N.W., Washington, D.C. 20503, or via the Internet to vhuth@omb.eop.gov.

VII. ORDERING CLAUSES

74. Accordingly, IT IS ORDERED, pursuant to the authority contained in sections 1-4, 201, 202, 251-254, 256, 271, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201, 202, 251-254, 256, 271, and 303(r), that the *Third Report and Order on Reconsideration and Third Further Notice of Proposed Rulemaking* in CC Docket No. 98-147, and *the Fourth Report and Order on Reconsideration* and *Sixth Further Notice of Proposed Rulemaking* in CC Docket No. 96-98 ARE ADOPTED.

75. IT IS FURTHER ORDERED, pursuant to sections 1-4, 201, 202, 251-254, 256, 271, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201, 202, 251-254, 256, 271, and 303(r) that the petitions for reconsideration filed by Bell Atlantic and BellSouth on February 9, 2000, ARE DENIED.

76. IT IS FURTHER ORDERED, pursuant to sections 1-4, 201, 202, 251-254, 256, 271, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201, 202, 251,-254, 256, 271, and 303(r), that the petitions for reconsideration filed by AT&T Corp., MCI WorldCom, Inc., and the National Telephone Cooperative Association and the National Rural Telephone Association on February 9, 2000, ARE GRANTED to the extent indicated herein and otherwise ARE DENIED.

77. IT IS FURTHER ORDERED, that the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this *Third Report and Order on Reconsideration and Third Further Notice of Proposed Rulemaking* in CC Docket No. 98-147, and this *Fourth Report and Order on Reconsideration* and *Sixth Further Notice of Proposed Rulemaking* in CC Docket No. 96-98, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

78. IT IS FURTHER ORDERED, pursuant to sections 1-4, 201, 202, 251-254, 256, 271, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201, 202, 251-254, 256, 271, and 303(r), that the *Third Report and Order on Reconsideration and Third Further Notice of Proposed Rulemaking* in CC Docket No. 98-147, and *the Fourth Report and Order on Reconsideration* and *Sixth Further Notice of Proposed Rulemaking* in CC Docket No. 96-98 SHALL BECOME EFFECTIVE upon publication of the text or summary thereof in the Federal Register.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas

Magalie Roman Salas
Secretary

APPENDIX A

LIST OF PARTIES SUBMITTING COMMENTS AND REPLIES REGARDING PETITIONS FOR RECONSIDERATION

Comments

1. Association for Local Telecommunications Services (ALTS)
2. AT&T Corp.
3. Bell Atlantic
4. BellSouth Corp.
5. Broadspan Communications, Inc. d/b/a Primary Network Communications, Inc.
6. Competitive Telecommunications Association (CompTel)
7. Covad Communications Co.
8. Cox Communications, Inc.
9. GTE Service Corp.
10. IP Communications Corp.
11. MCI WorldCom, Inc. (WorldCom)
12. Network Access Solutions Corp.
13. NorthPoint Communications, Inc.
14. Rhythms NetConnections, Inc.
15. SBC Communications Inc.
16. Sprint Corp.

Replies

1. AT&T Corp.
2. Bell Atlantic
3. CompTel
4. GTE Service Corp.
5. WorldCom
6. National Telephone Cooperative Association and National Rural Telecom Association (NTCA/NRTA)
7. SBC Communications Inc.
8. Telecommunications Resellers Association

APPENDIX B – REGULATORY FLEXIBILITY ACT

THIRD FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 98-147 AND SIXTH FURTHER NOTICE OF PROPOSED RULEMAKING IN CC DOCKET NO. 96-98 – INITIAL REGULATORY FLEXIBILITY ACT ANALYSIS

1. As required by the Regulatory Flexibility Act (RFA),[144] the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities by the policies and rules proposed in the *Third Further Notice of Proposed Rulemaking* in CC Docket No. 98-147 and *Sixth Further Notice of Proposed Rulemaking* in CC Docket No. 96-98 (*Third Further Notice*). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *Third Further Notice*, as described in paragraph 67. The Commission will send a copy of the *Third Further Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.[145] In addition, the *Third Further Notice* and IRFA (or summaries thereof) will be published in the Federal Register.[146]

A. Need for and Objectives of the Proposed Rules

2. This *Third Further Notice* continues our efforts to promote innovation, investment, and competition in the market for advanced services. We invite comment on whether we should amend our line sharing or unbundled network element rules to ensure that competitive local exchange carriers (LECs) are able to gain access to the high frequency portion of the loop for the provision of advanced services where an incumbent LEC has deployed fiber in the loop on which it is providing voice service. Specifically, the Commission seeks comment on the technical and economic feasibility of different types of line sharing arrangements where an incumbent LEC has deployed fiber in the loop.

B. Legal Basis

3. The *Third Further Notice* is adopted pursuant to sections 1-4, 201, 202, 251-254, 256, 271, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151-154, 201, 202, 251-254, 256, 271, and 303(r).

C. Description and Estimate of the Number of Small Entities Affected by this Third Further Notice

4. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposals in this *Third Further*

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[144] *See* 5 U.S.C. § 603.

[145] *See* 5 U.S.C. § 603(a).

[146] *See id.*

NPRM, if adopted.[147] In the IRFA to the *Advanced Services Order and NPRM*, we adopted the analysis and definitions set forth in determining the small entities affected by this *Third Further Notice* for purposes of this IRFA. The RFA generally defines "small entity" as having the same meaning as the term "small business," "small organization," and "small governmental jurisdiction."[148] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act, unless the Commission has developed one or more definitions that are appropriate to its activities.[149] Under the Small Business Act, a "small business concern" is one that: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) meets any additional criteria established by the Small Business Administration (SBA).[150] The SBA has defined a small business for Standard Industrial Classification (SIC) categories 4812 (Radiotelephone) to be small entities when they have no more than 1,500 employees.[151]

5. We further describe and estimate below the number of small telephone companies that may be affected by the proposals in the *Third Further Notice*, if adopted.

6. The most reliable source of information regarding the total numbers of common carrier and related providers nationwide, as well as the numbers of commercial wireless entities, appears to be data the Commission publishes annually in its Carrier Locator report, derived from filings made in connection with the Telecommunications Relay Service (TRS).[152] According to data in the most recent report, there are 4,144 interstate carriers.[153] These carriers include, *inter alia*, LECs, wireline carriers and service providers, interexchange carriers, competitive access providers, operators services providers, pay telephone operators, providers of telephone toll service, providers of telephone exchange service, and resellers.

7. The SBA has defined establishments engaged in providing "Telephone Communications, Except Radiotelephone" to be small businesses when they have no more than 1,500 employees.[154] We discuss below the total estimated number of telephone companies and small businesses in this category and then attempt to refine further those estimates.

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[147] *See* 5 U.S.C. § 603(b)(3).

[148] 5 U.S.C. § 601(6).

[149] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 5 U.S.C. § 632).

[150] 15 U.S.C. § 632; *see, e.g., Brown Transport Truckload, Inc. v. Southern Wipers, Inc.*, 176 B.R. 82 (N.D. Ga. 1994).

[151] 13 C.F.R. § 121.201.

[152] FCC, Carrier Locator: Interstate Service Providers, Figure 1 (Jan. 2000) (*Carrier Locator*).

[153] *Id.*

[154] 13 C.F.R. § 121.201, SIC Codes 4812 and 4813. *See* Executive Office of the President, Office of Management and Budget, *Standard Industrial Classification Manual* (1987).

8. We have included small incumbent LECs in this present RFA analysis. As noted above, a "small business" under the RFA is one that, *inter alia*, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."[155] The SBA's Office of Advocacy contends that, for RFA purposes, small incumbent LECs are not dominant in their field of operation because any such dominance is not "national" in scope.[156] We have therefore included small incumbent LECs in this RFA analysis, although we emphasize that this RFA action has no effect on FCC analyses and determinations in other, non-RFA contexts.

9. *Total Number of Telephone Companies Affected.* The Census Bureau reports that, at the end of 1992, there were 3,497 firms engaged in providing telephone services, as defined therein, for at least one year.[157] These firms include a variety of different categories of carriers, including LECs, interexchange carriers, competitive access providers, cellular carriers, mobile service carriers, operator service providers, pay telephone operators, PCS providers, covered SMR providers, and resellers. It seems certain that some of those 4,144 telephone service firms may not qualify as small entities or small incumbent LECs because they are not" independently owned and operated."[158] For example, a PCS provider that is affiliated with an interexchange carrier having more the 1,500 employees would not meet the definition of a small business. It seems reasonable to conclude, therefore, that fewer than 4,144 telephone service firms are small entity telephone service firms or small incumbent LECs that may be affected by the decisions and rules proposed in this *Third Further Notice*.

10. *Wireline Carriers and Service Providers.* SBA has developed a definition of small entities for telephone communications companies other than radiotelephone companies. The Census Bureau reports that, there were 2,321 such telephone companies in operation for at least one year at the end of 1992.[159] According to SBA's definition, a small business telephone company other than a radiotelephone company is one employing no more than 1,500 persons.[160] All but 26 of the 2,231 non-radiotelephone companies listed by the Census Bureau were reported to have fewer that 1,000 employees. Thus, even if all 26 of those companies had more than 1,500 employees, there would still be 2,295 non-radiotelephone companies that might qualify as small entities or small incumbent LECs. Although it seems certain that some of these carriers are not independently owned and operated, we are unable at this time to estimate with greater precision the number of wireline carriers and service providers that would qualify as small

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[155] 5 U.S.C. §601(3)

[156] Letter from Jere W. Glover, Chief Counsel for Advocacy, SBA, to William E. Kennard, Chairman, FCC (filed May 27, 1999) (*SBA May 27, 1999 Letter*).

[157] United States Department of Commerce, Bureau of the Census, *1992 Census of Transportation, Communications, and Utilities:* Establishment and Firm Size 1-123 (1995) (*1992 Census*).

[158] 15 U.S.C. § 632(a)(1).

[159] *1992 Census* at Firm Size 1-123.

[160] 13 C.F.R. § 121.201, SIC Code 4813

business concerns under SBA's definition. Consequently, we estimate that there are fewer than 2,295 small entity telephone communications companies other than radiotelephone companies that may be affected by the decisions and rules proposed in the *Third Further Notice*.

11. *Local Exchange Carriers*. The Commission has not developed a special size definition of small LECs or competitive LECs. The closet applicable definition for these types of carriers under SBA rules is, again, that used for telephone communications companies other than radiotelephone (wireless) companies.[161] The most reliable source of information regarding the number of these carriers nationwide of which we are aware appears to be the data that we collect annually in connection with the Telecommunications Relay Service (TRS).[162] According to our most recent data, there are 1,348 incumbent LECs, 212 competitive LECs,[163] and 442 resellers.[164]

12. Although it seems certain that some of these carriers are not independently owned and operated, or have more than 1,500 employees, we are unable at this time to estimate with greater precision the number of these carriers that would qualify as small business concerns under SBA's definition. Consequently, we estimate that there are no more than 1,348 small entity incumbent LECs, 212 competitive LECs, and 442 resellers that may be affected by the proposals in this *Third Further Notice*.[165]

D. Description of Projected Reporting, Record Keeping, and other Compliance Requirements

13. In the *Third Further Notice* in CC Docket No. 98-147 and *Sixth Further Notice of Proposed Rulemaking* in CC Docket No. 96-98, we invite comment on whether we should amend our line sharing or unbundled network element rules to ensure that competitive LECs are able to gain access to the high frequency portion of the loop for the provision of advanced services where an incumbent LEC has deployed fiber in the loop on which it is providing voice service. Specifically, we seek comment on the ways in which competitive LECs can access the high frequency portion of the loop for line sharing where an incumbent LEC has deployed fiber in the loop. We also seek comment on the technical feasibility and practical considerations associated with different methods of providing such access. At a minimum, these methods include collocation of a competitor's digital subscriber line access multiplexer (DSLAM) at the remote terminal, or alternatively, the use of "plug in" line cards in remote terminal equipment that perform a function similar to that of a traditional DSLAM. With regard to the feeder segment of the loop, there are alternatives for transmitting a competitor's data traffic between the remote terminal and the central office, such as the use of dark fiber or other feeder subloop

[161] *Id.* at SIC Code 4813.

[162] *See* 47 C.F.R. § 64.601 *et seq.; Carrier Locator* at Fig. 1.

[163] The total for competitive LECs includes both competitive LECs and competitive access providers.

[164] *Carrier Locator* at Fig. 1. The total for resellers includes both toll resellers and local resellers.

[165] This TRS category also includes competitive access providers.

offerings. Therefore, we also seek comment on all possible alternatives and technical feasibility issues associated with transmission of a competitive LEC's bit stream between the remote terminal and the central office.

14. If the Commission does not amend its rules, no additional compliance requirements are anticipated from further consideration of these issues. However, the Commission may amend or clarify its line sharing or unbundled network element rules to impose further obligations upon incumbent LECs to ensure competitive LEC access to the high frequency portion of the loop for the provision of advanced services. Depending upon the specific nature of any new obligations, small entities, including small incumbent LECs, may be subject to additional reporting, recordkeeping, and other compliance requirements. If further requirements are imposed, compliance with further requests for unbundled network elements may require the use of engineering, technical, operational, accounting, billing, and legal skills.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered

15. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.[166]

16. In the *Third Further Notice*, we seek to develop a record sufficient to adequately address issues related to developing long-term policies for ensuring that competitive carriers have access to unbundled network elements as changes are made to traditional telephone networks. In addressing these issues, we seek to ensure that competing providers, including small entity carriers, obtain access to inputs necessary to the provision voice and advanced telecommunications services. We believe that the issues on which we invite comment could impose minimal burdens on small entities, including both telecommunications carriers that request unbundled network elements and the incumbent LECs that, under section 251 of the Communications Act, must provide unbundled network elements to requesting carriers. As indicated above, both groups of carriers include entities that, for purposes of this IRFA, are classified as small entities. In framing the issues in this *Third Further Notice*, we have sought to develop a record on the potential impact our proposed rules could have upon small entities. We thus ask that commenters propose measures to avoid significant economic impact on small business entities.

[166] 5 U.S.C. § 603(c).

F. Federal Rules that May Duplicate, Overlap, or Conflict With the Proposed Rules

17. None.