BellSouth Corporation

ORIGINAL

July 22, 1999

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

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In the Matter of	)	
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Deployment of Wireline Services Offering Advanced Telecommunications Capability	)	CC Docket No. 98-147
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REPLY COMMENTS OF BELLSOUTH CORPORATION

BELLSOUTH CORPORATION AND
BELLSOUTH TELECOMMUNICATIONS, INC.

M. Robert Sutherland
Stephen L. Earnest

Their Attorneys

BellSouth Corporation
Suite 1700
1155 Peachtree Street, N.E.
Atlanta, GA 30309-3610

(404) 249-2608

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REPLY COMMENTS OF BELLSOUTH CORPORATION

BellSouth Corporation, for itself and its affiliated companies (collectively "BellSouth"), submits the following reply comments in response to the comments filed relating to the *Further Notice of Proposed Rulemaking* ("*Notice*") released in the above-captioned proceeding.[1]

I. Introduction and Summary

In its comments BellSouth explained that the concept of line sharing proposed by the Commission in the *Notice* broadly included the issue of spectrum unbundling. BellSouth demonstrated in its comments that spectrum unbundling not only is a change in the Commission's position that an entity that controls the loop maintains exclusive control of that loop, but that the Commission should refrain from adopting spectrum unbundling for three basic reasons. First, the only authority, if any, that the Commission has for requiring spectrum unbundling is pursuant to the network element unbundling requirements of section 251 of the Telecommunications Act of 1996 ("1996 Act"). Under this approach, the Commission must first determine whether spectrum is a network element, and if it is whether it must be unbundled. These determinations, however, cannot currently be made because the Commission has yet to

[1] *In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Dkt. No. 98-147, *First Report and Order and Further Notice of Proposed Rulemaking*, FCC 99-48 (rel. Mar. 31, 1999).

complete the *UNE Remand Proceeding*,[2] which will define the standard to determine when a network element must be unbundled. Once defined, the record will show that unbundling spectrum will not meet such standard.

Second, spectrum unbundling is not needed for the stated purpose in the *Notice* – to increase the speed of deployment of advanced services. Advanced services are being deployed in a timely manner[3] and spectrum unbundling, which the Commission proposes to mandate in the *Notice* to provide asymmetric digital subscriber line services ("ADSL"), is potentially short lived considering current evolving technologies. Third, spectrum unbundling is extremely complex and will require significant resources to implement.

Nothing in the comments filed by other entities undermined these points made by BellSouth. Indeed, most of those entities filing comments in support of the Commission's proposal to requiring spectrum unbundling were competitive local exchange carriers ("CLEC") whose clear motive is to obtain a free ride on the incumbent LECs' networks. They want the use of the loop without paying anything for it. While some of the CLECs offered comments aimed at the issues illustrated by BellSouth, none articulated arguments to overcome them.

For example, several CLECs stated that the Commission had the authority to mandate spectrum unbundling as a network element, but none explained how this could be performed prior to the standard for unbundling being defined. Also, many talked about how spectrum unbundling was needed for them to compete in the advanced services market, but ignored the

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[2] *See In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, *Second Further Notice of Proposed Rulemaking*, FCC 99-70, released April 16, 1999 ("*UNE Remand Proceeding*").

[3] *See In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996*, CC Dkt. No. 98-146, *Report*, FCC 99-5, released February 2,

fact that they are currently competing effectively without it. Finally, the CLECs that acknowledged the technical and operational problems associated with spectrum unbundling summarily dismissed the problems as incumbent LEC hysterics. The most telling point to expose the fallacy of this position, however, is not found in the incumbent LECs' comments, but in comments filed by AT&T. AT&T, who cannot be labeled an incumbent LEC supporter, discussed numerous operational problems associated with spectrum unbundling.[4] The Commission should see by AT&T's comments that the incumbent LECs' concerns are legitimate.

In addition to comments on line sharing and spectrum unbundling, many offered comments regarding tentative conclusions made by the Commission on spectrum management and compatibility. BellSouth contends that some of these comments expressed inconsistencies in their positions and supported ideas that could harm network management. BellSouth exposes these inconsistencies and potentially harmful positions made by some commenters on these issues.

In summary, BellSouth's reply comments reinforce its original positions and exposes the CLEC arguments for what they are – an attempt to capitalize on self-serving positions. The record in this proceeding will make abundantly clear that the CLECs' push for spectrum unbundling boils down to the age old adage of trying to get something for nothing. As BellSouth has demonstrated in its comments and in these replies, even if the Commission felt inclined to help them achieve such a goal, spectrum unbundling is a bad idea and should be rejected.[5]

1999, ¶ 6 ("we are encouraged that the deployment of advanced telecommunications generally appears, at present, reasonable and timely").

[4] AT&T Comments at 17 – 19.

[5] At the request of NorthPoint Communications, Inc. ("NorthPoint"), the Commission extended the reply comment cycle in this proceeding for seven days to allow commenters

II. THE RECORD IS CLEAR THAT ANY AUTHORITY TO MANDATE LINE SHARING, AS PROPOSED IN THE *NOTICE*, MUST BE BASED ON TREATING SPECTRUM AS A NETWORK ELEMENT

Most of the entities that filed comments in support of line sharing seek to provide services that will really require spectrum to be unbundled.[6] Those commenters suggested two legal theories in support of the Commission's authority to mandate spectrum unbundling. One is to treat access to the high frequency spectrum on the loop as an access service and require incumbent LECs to provide this service pursuant to an interstate access tariff.[7] The second is to treat spectrum as a network element and require that portions be unbundled pursuant to section 251 of the 1996 Act.[8] Neither of these theories, however, is legally sufficient to support the requirement for spectrum unbundling.

A. The Commission Has Not Defined the "Impairment Standard" and Therefore Cannot Determine that Spectrum Should be Unbundled

The majority of the commenters that supported the Commission's tentative conclusion regarding line sharing argued that one basis for Commission authority to require spectrum

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additional time in which to analyze the conditions proposed by SBC and Ameritech in connection with their pending merger. Those conditions relate only to issues conceded by SBC and Ameritech to address concerns raised by the Commission in its public interest analysis of the merger. Those conditions cannot be binding on all incumbent LECs and should have no impact in this proceeding. In particular, the provisions regarding line sharing and the Surrogate Line Sharing Charges clearly demonstrate the limitations on the Commission's authority to impose such conditions in this rulemaking. First, the line sharing condition itself is predicated *both* on technical feasibility and standards-based equipment available in "commercial volumes." ¶ 33. The Commission cannot mandate that any ILEC provide line sharing before it is technically feasible. Moreover, under no circumstances may the Commission require ILECs to provide unbundled loops at an arbitrary discount or at a price that does not cover costs and provide a reasonable profit. 47 USC § 252 (a)(1). Consequently, the proposed SBC-Ameritech merger conditions are irrelevant to this rulemaking. *See also, In the Matter of Applications for the Consent to the Transfer of Control of Licenses and Section 214 Authorizations from AMERITECH CORPORATION, Transferor to SBC COMMUNICATIONS, INC., Transferee*, CC Docket No. 98-141, BellSouth's Comments, filed on July 19, 1999.

[6] *See* Attachment 1of Covad Communications, Inc. ("Covad") Comments; NorthPoint Comments at 16.

[7] Covad Comments at 14 – 18; NorthPoint Comments at 23 – 28.

[8] Covad Comments at 18 – 22.

unbundling is to find spectrum to be an element that must be unbundled.[9] Of course, pursuant to the United States Supreme Court's decision in *Iowa Utilities Board v. AT&T*,[10] before the Commission can determine whether an element must be unbundled, the Commission must define the "impairment standard", *i.e.*, the standard promulgated by Congress in section 251 of the 1996 Act which governs the necessity to unbundle network elements. Many of those filing comments in support of unbundling spectrum as a network element, however, failed to acknowledged that the impairment standard has yet to be defined. Instead those commenters merely expressed their arguments for what the impairment standard should be.[11] Such arguments hardly provide the Commission with the proper standard for determining if spectrum should be unbundled. The Commission must define this standard in the *UNE Remand Proceeding*.

Plainly the Commission cannot determine whether spectrum must be unbundled as a network element until the impairment standard has been defined. To do so would violate the 1996 Act's mandate requiring that before it orders an element to be unbundled the Commission must evaluate such element under the impairment standard. Such evaluation cannot take place prior to the impairment standard being defined. Accordingly, the Commission must postpone

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9 Interestingly, none of the commenters acknowledged spectrum as the network element that would have to be unbundled in order to offer line sharing that they request. (See e.g., Covad Comments at 18 stating that the Commission should find "line sharing ... to be a 'feature, function, or capability' of the ILEC network that must be offered to requesting carriers on an unbundled basis.") The reason is obvious. Once spectrum is required to be unbundled, the high frequency portion is not the only portion that now must be addressed by the Commission. The low frequency or voice portion will also be argued to be an element that should be unbundled. Several commenters made this point. *See* Prism Comments at 14 ("...Prism believes that carriers should be allowed to request just the voice channel or any unused portion of a line ..."); Sprint Comments at 11 ("... if the requesting carrier only wants to provide analog voice service on the loop, it should be permitted to purchase only the analog frequency portion of the loop, leaving it to the ILEC or another requesting carrier to purchase the data capabilities.").

10 *AT&T Corporation, et al. v. Iowa Utilities Board, et al.*, 119 S. Ct. 721 (1999) ("*Iowa Utilities Board*").

11 Covad Comments at 19 – 22; Association for Local Telecommunications Services ("ALTS") Comments at 11 – 14.

this proceeding until it has completed the *UNE Remand Proceeding* and must provide an opportunity to file comments in the light of the impairment standard as defined in that proceeding. Moreover, once the impairment standard is defined in accordance with the *Iowa Utilities Board* decision, it will be apparent that spectrum should not be required to be unbundled.[12]

B. CLECs' Requests to Mandate Line Sharing as an Access Service are Misplaced

As an alternative to support the Commission's authority to unbundle spectrum as a network element pursuant to section 251, several CLECs propose that the Commission has authority to mandate line sharing as an interstate access service. This argument fails for two reasons. First, line sharing, as proposed in the *Notice*, is not a telecommunications service as defined in the 1996 Act, and therefore, cannot be an access service. Second, even if the Commission found line sharing, as proposed in the *Notice*, to be a telecommunications service, it is not a service that BellSouth, or any other incumbent LEC, has provided on a common carrier basis.

1. Line Sharing as Proposed in the *Notice* is Not a Telecommunications Service

The use of a portion of the spectrum on a loop is not a telecommunications service. Indeed, the 1996 Act defined a "telecommunications service" as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available to the public, regardless of the facilities used."[13] "Telecommunications" is then defined as "the transmission, between or among points specified by the user, of information of

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12 *See* BellSouth's Comments in the *UNE Remand Proceeding* at 45 - 47.

13 47 U.S.C. § 3(46).

the user's choosing, without change in the form or content of the information as sent and received."[14] Accordingly, pursuant to the clear definitions set forth in the 1996 Act a telecommunications service requires the *transmission* of information for a fee.

Clearly, line sharing as proposed in the *Notice* is the unbundling of spectrum on the loop so that various carriers may use segments of the spectrum. Thus, line sharing does not involve the transmission of information, but is merely the provisioning of a facility over which CLECs transmit information for their customers. With spectrum unbundling, once the carrier connects to the loop, it provides all transmission through its network. The incumbent LEC would provide absolutely none of the transmission. The spectrum is merely a facility over which the CLEC provides transmission. Consequently, a CLEC connecting to the loop in a way that allows it to use only the high frequency spectrum in order to provide advanced services is not a telecommunications service, and therefore cannot be mandated by the Commission as an access service.

The carriers who filed comments supporting the idea of the Commission authorizing line sharing, which as proposed is spectrum unbundling, as an access service try to equate it with the current ADSL offering made by many incumbent LECs.[15] They argue that their request to "line share" is no different from incumbent LECs' ADSL offerings, where the incumbent LEC offers a wholesale ADSL service via a shared line with the incumbent LECs' voice service, except that instead of splitting the data portion off the loop and routing it to the incumbent LECs' data network service, it will be split off and routed to the CLECs' data network. Pursuant to this logic these CLECs believe that because incumbent LECs offer ADSL as a service in this fashion, then

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[14] 47 U.S.C. § 3(43).

[15] Covad Comments at 2; NorthPoint Comments at 3; Rhythms Netconnections, Inc. ("Rhythms") Comments at 6.

they should be able to supply their own electronics and network facilities and make it an access service.

This argument misunderstands the ADSL offering by BellSouth. Under BellSouth's offering, the Internet service provider ("ISP") purchases, and obtains, from BellSouth an ATM permanent virtual connection ("PVC") across the end user's copper loop enabled thereon by ADSL. It is this PVC, a defined connection to an end user, and not the spectrum that is purchased by the ISP through the ADSL offer. Comparatively, what the CLECs request, and what line sharing as proposed in the *Notice* will grant, is the spectrum to provide the facility to the end user themselves. Through the use of this facility, and other facilities, the CLEC will provide transmission and the use of the loop is no longer a service but a network element and must be analyzed pursuant to Section II.A. above.[16] Accordingly, the Commission must reject any notion that use of a network facility is an access service.

2. The Access Service Requested by the CLECs is Not a Service Offered by BellSouth on a Common Carrier Basis

The CLECs' request that the Commission require "line sharing" as an access service is legally prohibited.[17] The Commission cannot exercise Title II regulation over a service unless a carrier is acting as a common carrier regarding that service.[18] A carrier may be deemed to be

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[16] Some CLECs argue that what they seek is also analogous to IXC access service for long distance. This analogy is likewise fallacious. For IXC access service, the incumbent LECs provide the transmission of the information from the customer premises to the IXC's point of presence ("POP"). Thus, making it a service as opposed to the provisioning of a network element.

[17] BellSouth contends that line sharing is not a telecommunications service, but is the provision of a network element. Even if the Commission found it to be an access service, however, as set forth in this argument the Commission cannot require incumbent LECs offer it as a service based on the record in this proceeding.

[18] An entity may be subject to common carrier regulation in providing some services but not others. *See National Ass'n of Regulatory Util. Comm'rs v. FCC* 525 F.2d 630 (D.C. Cir) (hereinafter "*NARUC I*"), *cert. denied*, 425 U.S. 992 (1976); *Southwestern Bell Telephone Co. v. FCC*, 19 F.3d 1475 (D.C. Cir. 1994) (local exchange carriers found to not be offering dark fiber

acting as a common carrier for a service if it (1) holds out the service indiscriminately to the public or (2) is required to hold itself out because the public interest requires it.[19] Obviously incumbent LECs do not hold out allowing CLECs access to the high frequency spectrum of a loop as an access service. Indeed, this is the request made by the CLECs in their comments. Therefore neither the CLECs nor the Commission can suggest that the access service the CLECs request is being provided on a common carrier basis.

Because the incumbent LECs do not hold out this service on a common carrier basis, the Commission cannot require that it be offered on a common carrier basis unless it determines that such a request for the service is reasonable and in the public interest. The Commission cannot make a determination on whether such an access service is reasonable and in the public interest until it has a developed a full record on the matter. The Commission, however, did not seek comment on this matter in the *Notice*. Indeed, the *Notice's* only comment regarding authority to require "line sharing" related to the Commission's tentative conclusion that it could require line sharing based on "jurisdiction to implement the local competition provisions of the Act and that [its] rulemaking authority extends to sections 251 and 252."[20]

This vague statement did not provide clear understanding of what authority the Commission relied on to reach its tentative conclusion, much less identify the provision of "line

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services on a common carrier basis). *See also*, Peter K. Pitch & Arthur W. Bresnahan, *Common Carrier Regulation of Telecommunications Contracts and the Private Carrier Alternative*, 48 Fed. Comm. L.J. 447, 452 (1996) (hereinafter "*Common Carrier Regulation*").

19 *NARUC I*, 525 F.2d at 646. *See also*, *Common Carrier Regulation* at 457.

20 *Notice* ¶ 98.

sharing" as an access service.[21] The *Notice* did not even explain whether line sharing is a network element or a service, much less explain why, or seek comment on, whether line sharing, if a service, is reasonable and in the public interest. Accordingly, even if the Commission does find line sharing to be an access service, it would have to determine, based on an adequate public record that has not been sought in this proceeding, whether it is reasonable and in the public interest. BellSouth contends that such a public record will show that neither of these obligations will be met.

C. Exclusive Use of the Loop Does Not Violate Antitrust Laws

Although most of the comments focused on the Commission's legal authority to mandate line sharing as proposed in the *Notice*, a small subset of comments alleged that the incumbent LECs' exclusive use of the loop to provide both voice and data services violates antitrust laws. As demonstrated below, such an argument is far fetched and should not enter into the Commission's decision making process.

1. The ILECs' Conduct Does Not Constitute Illegal Tying

Network Access Solutions ("NAS") argues that the incumbent LECs' failure to permit line sharing amounts to an illegal tying arrangement.[22] This argument is incorrect. Illegal tying involves a seller with market power over a particular product conditioning the sale of that product on the requirement that the buyer *also* buy a second product from the seller, where the buyer would otherwise buy the second product from a different seller.[23]

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21 The uncertainty of the statement is evidenced by the multitude of comments expressing various legal theories on why the Commission has, or does not have, authority to require line sharing. *See* Covad Comments at 14 - 23; NorthPoint Comments at 23 - 28.

22 NAS Comments at 13-14.

23 *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2, 13-16 (1984).

Although their argument is not entirely clear, NAS appears to be arguing that incumbent LECs have market power over local exchange telephone service, which, NAS implies, the incumbent LECs tie to the purchase of their DSL service. This is completely untrue. The incumbent LECs do not condition the sale of local exchange telephone service to end users on the end user also buying DSL service from the incumbent LEC. Consumers are completely free to buy local exchange service from an incumbent LEC without also buying DSL service from the incumbent LEC.

2. The Incumbent LECs are Not Forcing Data CLECs to Enter Two Lines of Business

Covad argues that line sharing should be ordered because "requiring CLECs to enter voice and data markets simultaneously will not advance competitive residential DSL deployment in a commercially timely manner."[24] This argument fails too. First, it misstates what is happening in the marketplace. CLECs are not being forced to enter voice and data markets simultaneously. While it may be more efficient for them to enter both markets simultaneously (just as it is more efficient for incumbents to operate in both markets), they are completely free to operate strictly as data CLECs if they wish. Indeed, that is what they are doing, apparently quite successfully, today.[25]

In this proceeding the CLECs' argument is really about wanting the use of incumbent LEC facilities on more favorable terms. Because loops are pairs of copper wires that can be used to provide both data and voice service, these CLECs would like to pay only for that theoretical portion of a loop that they would use to provide data service. Providing a CLEC with this favorable option of paying only a portion of the cost of the loop, however, would unfairly

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24 Covad Comments at 34.

25 *See infra* Section III.A.

advantage them and be at odds with the general notion in antitrust law that access to an essential facility be provided to a competitor only when the competitor cannot feasibly duplicate or build that facility.[26] CLECs have the ability to duplicate any essential facility to provide data services by purchasing a loop from an incumbent LEC pursuant to section 251 of the 1996 Act. The irony of their discontent is that they are not claiming they cannot obtain the essential facility, but that by purchasing a loop they receive more of the essential facility than they want.

Providing a CLEC a loop pursuant to section 251 necessarily means providing access to a loop with the ability to carry voice and data. Indeed, incumbent LECs do not have, nor can a CLEC build, a copper loop that has only the ability to transport data. By providing CLECs with access to incumbent LECs' loops pursuant to section 251, the CLEC is getting exactly what it would have if it were able to construct the loop on its own, and it is provided all the opportunity that the antitrust laws would afford it.

III. THE RECORD AMPLY DEMONSTRATES THAT CLECs ARE AGGRESSIVELY DEPLOYING DSL WITHOUT SPECTRUM UNBUNDLING

BellSouth finds it ironic that many CLECs tout the deployment of their DSL service in one section of their comments but claim that spectrum unbundling is an indispensable piece of that deployment in other sections of their comments. Indeed, NorthPoint declares spectrum unbundling the *sine qua non* of DSL competition.[27] Actions speak louder than words, however, and these CLECs' actions – deployment in major markets, acquisition of customers, and obtaining capital – clearly demonstrate that the market is expanding in a timely fashion even without spectrum unbundling. Accordingly, just as BellSouth indicated in its comments, the

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[26] Section 251 of the 1996 Act provides CLECs access to any essential facilities, subject to § 251(d), to provide services.

[27] NorthPoint Comments at 3.

desire to obtain a portion of the spectrum is merely a ploy to receive higher profits based on reduced loop costs. Such profit will, if spectrum unbundling is allowed, only increase when the CLECs begin offering voice and data over the spectrum they seek to obtain for data only today. Moreover, by positioning themselves to offer both voice and data over a portion of the spectrum, they will in turn strand the voice spectrum on the loop.[28]

A. In Spite of CLECs' Claims, They are Deploying DSL Services and Have Future Plans to Deploy More

The sum and substance of many of the CLECs' claims for spectrum unbundling is that it is the only viable means for them to compete in the advanced services market.[29] This is clearly not the case. As evidenced by their comments and recent press releases, CLECs are deploying xDSL services in numerous markets and continue to do so even though spectrum unbundling is not available. For example, Rhythms states that it "began providing service in San Diego on April 1, 1998 and is currently operating in 15 major urban and suburban markets throughout the United States."[30] NorthPoint states that "it has deployed service in more than 19 major markets comprising more than 40 cities nationally and is serving thousands of previously unserved consumers and small businesses with advanced telecommunications services."[31] It goes on to state that "Today thousands of users enjoy services from NorthPoint and other DSL competitive LECs … . More importantly, NorthPoint and other data competitive LECs are, as a result of

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28 *See* Salvatore Salamone, *DSL Days* (visted on July 9, 1999) ("'Being able to deliver voice in addition to high–speed data over DSL will enable us to expand our service offerings into the lucrative small business market,' says Andrew Weitzberg, vice president of Metcom Access Inc. (plainview, N.Y.), a CLEC that is installing a CopperCom system delivering up to 16 analog voice lines and high-speed data over a single DSL link.") ("'We're interested in providing as many services as we can over our DSL infrastructure,' says Covad chairman Charles McMinn. 'Voice is certainly something we're interested in; in the long run, it's a big market.'") <http://www.teledotcom.com/412/news/tdc412na_dsl.htmi>

29 NorthPoint Comments at 3; Covad Comments at 21 – 22.

30 Rhythms Comments at 1.

31 NorthPoint Comments at 4.

their collocation in thousands of incumbent LEC central offices, substantial investment in new technologies, and strategic partnerships with Internet service providers with millions of end-user customers, ready to deliver millions of lines of broadband DSL to underserved residential customers."[32] These comments are illustrative of CLECs' actions which fully demonstrate that their claims regarding the necessity of spectrum unbundling for DSL competition are untrue. These companies are among the fastest growing in the data services market. Moreover, investment has not been hindered in any way as substantial capital is being invested in data CLECs.[33]

Thus, the CLECs' claims that spectrum unbundling is needed to allow them to compete are untrue. Clearly they are expanding and competing in the market place today without the free ride on the loop that they seek. This expansion, deployment of facilities, and gain of customers expose the real purpose for seeking only a portion of the loop – to increase profit without taking on any risk of investment in the loop. In *Iowa Utilities Board*, however, the Supreme Court foreclosed the notion that decreased profits caused by an increase in cost imposed by denial of a

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[32] *Id. See also*, Telecommunications Reports for June 21, 1999 announcing further deployment of DSL services for NorthPoint (NorthPoint has begun offering DSL offerings in the Raleigh-Durham 'Research Triangle' area of North Carolina. It now offers DSL-based services in 20 markets.) Rhythms ("Rhythms has begun offering DSL services in the Portland, Ore. Area. Rhythms [sic] now offering services in 16 markets and plans to be in 33 areas by year-end.") and Covad ("Covad has begun offering DSL services in the Detroit metropolitan area. Covad offers service in 13 regions encompassing 33 metropolitan statistical areas.")

[33] "The 'hottest' telecom businesses for investors are competitive local services and data providers, analysts said today at the Competitive Telecom Association (CompTel) conference. 'DSL [digital subscriber line] is definitely the rage on Wall Street,' said Kevin Moore, analyst for Deutsche Bank-Alex Brown." *Wall St. Still Likes CLECs, But More Selective, Panelists Say*, Washington Telecom Newswire (Communications Daily), June 22, 1999.

network element does impair that entity in providing the service it seeks to offer.[34] Accordingly the CLECs cannot rely on the allegation of potential lower profits as a means to seek the loop for free.

B. New Technology Deployment

In addition to the rapid deployment of xDSL service by CLECs, other companies are deploying new forms of technology beyond xDSL. Since the comment period, Sprint has announced the roll out of its Integrated On-Demand Network ("ION") to the residential market.[35] Additionally, broadband wireless technology has made significant strides in providing the last mile of service typically carried by the local loop.[36] Moreover, BellSouth discussed in its comments that it was deploying fiber closer to the customers' residences (to the curb). Wireless and fiber services do not use xDSL technology. BellSouth repeats its concern about the time, energy, and cost that will be required to implement spectrum unbundling to accommodate a technology that is potentially short lived considering other currently evolving technologies.

IV. REGARDLESS OF CLECS' CLAIMS, INCUMBENT LECS' ADSL OFFERING DOES NOT PRESENT A PRICE SQUEEZE

BellSouth is literally amazed at how the commenting CLECs have turned the pricing argument completely on its head. Indeed, Covad accuses incumbent LECs of receiving a "free-ride" on their own network.[37] This is completely outrageous – how can incumbent LECs get a free ride on investment for which they have paid full price? This blatant mischaracterization is a feeble attempt at obfuscating the CLECs' position that they, not the incumbent LECs, should

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34 *Iowa Utilities Board*, 119 S.Ct. at 735.

35 Nicole Harris, *Sprint to Tackle the Broadband Market By Selling Its ION Network to Consumers*, Wall St. J., June 21, 1999.

36 Elizabeth Clark, *Pulling the Plug on the Local Loop* (visited on July 2, 1999) <http://www.networkmagazine.com/magazine/acchive/1999/06/9906sr2s1.htm>.

37 Covad Comments at 28.

have use of the loop for free. Their argument, of course, ignores that full use of the loop provides several revenue-producing services that can be used to cover the cost of the loop and other fixed costs. The CLECs are arguing that incumbent LECs should not be able to take advantage of their efficient use of the loop for multiple services. Instead, the CLECs reason that the Commission should punish the incumbent LECs' efficient use of the loop by forcing them to give a portion of the loop to the CLECs. The CLECs unashamedly make this argument in the name of competition.

The Commission, however, must look beyond the rhetoric of the CLECs. Their claims for spectrum unbundling as a matter to promote competition are really claims to obtain a competitive advantage by gaining a free ride on the incumbent LECs' investment. In essence the CLECs want a loop, which they can buy and use exclusively to obtain whatever revenue they can, carved up so that they may take only a portion of the loop at a reduced cost. And, by the way, their technology, which they have successfully tested, allows them to provide both voice and data services over the portion of the loop they ostensibly want only for data purposes.[38] Simply put, if the CLECs want to provide services over a loop, they should be in the exact competitive position as the incumbent LECs -- the exclusive provider of all services over the loop.

This is consistent with Commissioner Powell's view regarding the use of cable facilities to provide advanced services. In a speech before the Federal Communications Bar Association he stated:

> One fundamental premise of the competitive market is that if one invests, takes risks to develop superior goods and services, they should be allowed to enjoy exclusively the fruits of their efforts. *The government should not be quick to step in and redistribute those benefits to other firms that could*

[38] *See supra* note 28, and accompanying text.

> *themselves have taken the same steps.* For example, the firms seeking open access to cable systems could have bought their own such systems. Others could have made the decision to spend vast sums of money and take significant risk to build and deploy these systems. If they did not, or if they misread the market, arguably that is their problem. As we think about whether and how to decide the cable open access question, we should not dismiss lightly this fundamental tenet of free market, entrepreneurial capitalism.[39]

The same principal applies to the issues of unbundling the spectrum on the loop. The CLECs clearly have the opportunity to take the entire loop to provide an array of services just as the incumbent LECs do. If they choose not to, which in turn does not allow them additional revenue to offset their costs, "that should be their problem." The Commission should not, however, redistribute to the CLECs through spectrum unbundling the benefits incumbent LECs gain by offering all of those services to customers. As Commissioner Powell so accurately stated, "the Commission's job is normally not to protect competitors."[40]

A. Any Perceived Price Squeeze is Made by the CLEC's Own Choice and Not By Internal Cost Allocations of the Incumbent LECs

The CLECs argue that because the incumbent LECs do not assign any cost of the loop to their ADSL service, the incumbent LECs are able to effectuate a price squeeze on the CLECs. BellSouth discussed the fallacy of this price squeeze argument in its comments. Nothing in the comments filed in this docket counter this fallacy; however, BellSouth addresses specific statements on this subject.

Covad asserts a specious claim that consumer loops have been fully paid for through voice services. It specifically states that "[i]n the end, consumers have already paid the full cost of their loops. Since the ILEC has recovered the full cost of a consumer's loop, it has no right to

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39 Remarks by Commissioner Michael K. Powell before the Federal Communications Bar Association, Chicago, Ill., June 15, 1999 ("Powell Remarks") at 5 (emphasis added).

40 Powell Remarks at 7.

condition the consumers' full utilization of those loops on the purchase of ILEC data services." Even if what they claim were true, which it is not, the loop and all capabilities of the loop are the private property of the incumbent LEC and cannot be taken without just compensation.[41] Their claim, however, is unquestionably wrong for two reasons.

A blanket statement regarding the full recovery of cost for all customers' loops is absurd. As for loops that have been recently deployed and those that will be deployed in the future,[42] the absurdity of this statement is self-evident and requires no further discussion. Regarding loops placed in service in the past, depreciation, and not capital expenditures, is the mechanism to determine cost recovery of plant assets such as loops. The Commission sets the depreciation rates for incumbent LECs. Furthermore, it is depreciation expense calculated from these rates that was used to determine the price for customer services under rate of return regulation and the base rates for price cap regulation. Based on the depreciation rates established by the Commission, about half of the capital expenditures made have been recovered through depreciation expense, which means that only that portion has been recovered through the price of services.[43] Accordingly, Covad's statement has no factual merit.

Moreover, BellSouth does not condition the consumers' full utilization of the loop on the purchase of its ADSL service. The customer is free to choose whatever local exchange carrier he/she wants to provide local and advanced services. Thus, a customer can select Covad to

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41 Even the 1996 Act provides that the incumbent LECs are entitled to cost plus a reasonable profit.

42 Covad's argument for no-cost loops would extend to all loops, even those deployed in the future.

43 BellSouth's total plant asset balance (account 2001) as reported in its 1998 ARMIS reports is $49,358 (in millions) while its total accumulated depreciation balance is $26,436 (in millions).

provide those services and obtain full utilization of the loop just as he/she may choose BellSouth to do the same.

It is the concept of the revenue benefits of full utilization of the loop that NorthPoint does not seem to grasp in making its pricing argument. It states that "the DSL price advantage enjoyed by incumbent LECs has everything to do with leveraging their monopolies and nothing to do with leveraging efficiencies and providing better value."[44] It is exactly the efficiencies of providing multiple services over the loop which bring in additional revenues that the incumbent LECs are capitalizing upon. Instead of taking a loop and using it efficiently for multiple services, however, NorthPoint wants to take advantage of the incumbent LECs' efficiencies. The same loop that BellSouth uses to offer its services to a customer is available to CLECs. If they can provide the same services at lower prices or better quality they will succeed in the market. They should not, however, be able to reap the reward of the incumbent LECs' decision to operate in a manner that produces greater revenue without sharing any of the cost or risk of investment needed to operate in such a manner.

B. Nationalization of the Incumbent LECs' Network, as Suggested by Some Comments, is Not the Answer

Instead of taking a loop and using its full potential to provide multiple services, the CLECs' answer to the alleged price squeeze claim, not surprisingly, is for the Commission to force the incumbent LECs to provide the spectrum on the loop to the CLECs for the same loop costs that incumbent LECs allocate to their ADSL service. The CLECs then assert that the

[44] NorthPoint Comments at 11.

incumbent LECs do not allocate any loop cost to their ADSL service and therefore conclude that CLECs should receive use of the loop for free.[45] Thus, the CLECs argue that the Commission should nationalize the incumbent LECs' network and give it away for all to share on an equal basis.

The CLECs' attempt to justify a no-cost loop on the basis that incumbent LECs do not make some form of arbitrary loop cost allocation to their ADSL service, however, is completely misplaced. The issue is not one of cost allocation, but one of margin contribution to shared cost. Incumbent LECs use the loop for the provision of multiple services. Each of these services generates revenue that covers the incremental cost of the service and makes a contribution to covering shared costs.

It is well established that the prices for residential voice services are priced well below the cost of the loop used to provide those services.[46] Accordingly, BellSouth prices its ADSL services at a market rate in order to achieve margin to contribute toward the loop cost. Thus, the CLECs' assertions that BellSouth's ADSL service is priced such as to not contribute to the loop cost are simply untrue. Indeed, that is one reason BellSouth chose to provide ADSL over loops with voice service – to contribute margin toward that cost.

Unwilling to compete for the basic services, CLECs would have the Commission give them free access to an already subsidized facility in order to compete for a data service that would then be profitable to them. They seem to have no such difficulty with competing for business services that have, by regulatory decision, largely borne those costs not covered by residential services. Even as they are successful in these markets, eroding the contribution to

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[45] *See* Covad Comments at 39-40; NorthPoint Comments at 28-29. Both argue that the price of the shared loop should only be incremental cost with no loop costs factored in.

[46] In fact, one of the reasons CLECs have been unwilling to compete for residential business is largely because the basic services are, by regulatory decision, sold below cost.

common costs assumed by this archaic but embedded regulation, they ask for a free ride to supposedly offer advanced data services to the masses. Given this free ride, however, they will likely continue to focus on the most profitable business lines, with increased profit margins, ignoring residential service.

The CLECs' request to obtain a no-cost data loop is reminiscent of the analogy made by Commissioner Powell regarding the unbundling of cable facilities. He described a passage from Peter O'Rourke's book, *Eat the Rich*, about economics and economic systems that specifically relates to a competitor's desire to obtain the fruits of another competitor's labor for free. He explained:

> In the last chapter of *Eat the Rich*, [O'Rourke] relays that he has been thinking about the Bible, and particularly the Tenth Commandment, in socioeconomic terms. Let me read the passage to you. He begins:
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> > 'Thou shalt not covet thy neighbor's house, thou shalt not covet thy neighbors wife, nor his manservant, nor his maidservant, nor his ox, nor his ass, nor anything that is thy neighbor's.' Here are God's basic rules about how we should live, a very brief list of sacred obligations and solemn moral precepts, and right at the end of it is, 'Don't envy your buddy's cow.' What is it doing there? Why would God, with just ten things to tell Moses, choose, as one of them, jealousy about the livestock next door? And yet, think about how important to the well-being of a community this Commandment is. If you want a donkey, if you want a pot roast, if you want a cleaning lady, don't complain about what the people across the street have. *Get your own.*
>
> The moral of the story is that a fundamental premise of competition and markets is that the general rule is that you are supposed to "Get your own cow." This dynamic of individualism and pursuit of self-interest is what drives the proper functioning of a market, and we should not take the cow from its owner, chop it up into steaks and distribute them to his neighbors without a compelling case for doing so. For all we know, everyone would have been better off (except perhaps the cow) had we let the owner keep the cow alive and sell its milk to his thirsty neighbors.[47]

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[47] Powell Remarks at 5.

The same is true here; the Commission should not chop the loop into segments and give them to the CLECs simply because the CLECs choose to provide only a portion of the services available over the loop. The CLECs should "get their own loop."

V. "PARITY" IS NOT A VALID BASIS FOR THE COMMISSION TO MANDATE SPECTRUM UNBUNDLING

Several of the commenters appear to attempt to justify line sharing using a "parity" concept that cannot be found in the 1996 Act. Very different from the requirement to provide unbundled network elements in substantially the same time and manner adopted in the *Interconnection Order*, the comments suggest that incumbent LECs have a duty to assure that CLECs' business results are comparable to the incumbent LECs, even though CLECs make different business choices. The Commission wisely decided to give exclusive use of the unbundled loop to a single carrier to enable each carrier to have full ability to exploit capacity of the loop for new services.[48] Now the Commission proposes to abandon that approach because a subset of CLECs have decided that they do not want to use the loop's full capacity. This approach to parity will produce change in incumbent LECs' obligations every time CLECs change their business strategies.

A. Promoting Competition Does Not Mean Promoting Individual Competitors

Many of the entities filing comments contend that as a means of promoting competition incumbent LECs should provide line sharing so as to allow CLECs parity with the services offered by the incumbent LEC. CLECs, however, currently have the same opportunity to offer

[48] *In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, *First Report and Order*, 11 FCC Rcd 15499, 15693 ¶ 385 (1996)("*Interconnection Order*"), *modified on reconsideration*, 11 FCC Rcd 13042 (1996), *vacated in part*, *Iowa Utilities Bd v. FCC*, 120 F.2d 753 (8th Cir. 1997), *aff'd in part and rev'd in part sub nom. AT&T Corp. v. Iowa Utilities Board*, 119 S. Ct. 721 (1999).

the same services that incumbent LECs are able to offer. They can purchase a loop from the incumbent LEC and provide whatever services they wish over that loop including data only or both voice and data. Moreover, should the CLEC wish to offer advanced services only without purchasing a loop, the CLEC could purchase BellSouth's wholesale ADSL offering through BellSouth's tariff.

The CLECs appear to have confused steps that promote competition with those that promote individual competitors. The issue of competition does not equate, however, to advancing the interests of one group of competitors over that of another. The CLECs' push for line sharing has nothing to do with promoting competition—to the contrary, its focus is on the degree of success certain CLECs will have and how their success and profits would be enhanced if they were given a free ride on the incumbent LEC loops. If there has been a single certainty since the passage of the Act, it has been that the Commission has steadfastly held to the principle of competitive neutrality in implementing the Act.[49] And, that principle surely cannot change based on a misguided view of parity. Indeed, to suggest otherwise is counterintuitive.

B. CLECs Must Understand They Cannot Have it Both Ways

BellSouth finds amusing, but not surprising, the double standard the CLECs have established regarding exclusive use of the loop. That is, the CLECs want the option of exclusive use of the loop for themselves, but would deny that option to the incumbent LECs. The trade association for the CLECs, ALTS, made clear that spectrum unbundling should not be applied on a reciprocal basis. It states "[l]ine sharing should be a right exercised by a CLEC, but not an

[49] *See, e.g.,* In the Matter of Telephone Number Portability, CC Docket No. 95-116, *Third Report and Order*, 13 FCC Rcd 11701 (1998); In the Matter of Federal-State Joint Board on Universal Service and AMSC Subsidiary Corporation Request for Waiver, CC Docket No. 96-45, *Memorandum Opinion and Order*, 13 FCC Rcd 22426 (1998) (The Commission denied AMSC's petition for waiver because it did not meet the competitive neutrality standard under the Act.)

obligation of the CLEC. Line sharing cannot be a limitation of CLEC access to all the functions and capabilities of the loop."[50] Thus, an incumbent LEC should be forced to give up exclusive use of the loop, however, if the CLEC buys the loop from the incumbent LEC, the CLEC should be able to exercise exclusive control of the loop.

Thus, in the name of "fairness and competition," CLECs want exclusive use of the loop but would deny the incumbent LEC exclusive use.[51] This fundamental unfairness manifests the CLECs' true intentions. They are not concerned with competing on an equal basis but want to gain whatever regulatory fiat they can to obtain an upper hand. The simple truth is CLECs can obtain a loop and provide the same services as does an incumbent LEC. Nothing further is needed to enhance the CLECs' position.

VI. CLECS PAINT AN OVERLY SIMPLISTIC VIEW OF IMPLEMENTATION OF SPECTRUM UNBUNDLING

As expected, the CLECs contend that the technical and operational problems associated with spectrum unbundling are minor or nonexistent.[52] Moreover, they contend that any claims made by the incumbent LECs "should be met with skepticism by the Commission as an attempt to turn back the clock on the telecommunications industry."[53] Indeed, the CLECs have summarily concluded that spectrum unbundling is technically and operationally feasible without

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50 ALTS Comments at 15. *See also*, Sprint Comments at 11; Nextlink Communications, Inc. Comments at 7 – 12.

51 Exclusivity is extremely important considering that the CLECs seek to obtain all spectrum above the voice spectrum. This would rob incumbent LECs of the ability to use the loop to provide a multitude of different services, each occupying its own portion of the possible frequencies above the voice frequency. Some examples include: ISDN, HDSL, SDSL, IDSL, ADSL G.dmt, ADSL G.lite and VDSL.

52 *See e.g.*, NorthPoint Comments at 17 ("there are no substantial technical or operational issues that would prevent the prompt implementation of line sharing."); Covad Comments at 3 ("line sharing is technically feasible, [and] presents no substantial operational issues"); Rhythms Comments at 8 ("line sharing is technically feasible") and 11 ("The Commission should not decline or delay a mandate for line sharing on the basis of ILEC 'operational' concerns").

53 Rhythms Comments at 10.

even bothering to speculate on the specific challenges that must be overcome. Contrary to this view, the incumbent LECs are in a far better position to advise the Commission of the problems that they will face in implementing spectrum unbundling if it is mandated by the Commission. Accordingly, the Commission cannot mandate spectrum unbundling in the face of very real specific problems voiced by the incumbent LECs simply because the CLECs are in denial about these problems.

A. Spectrum Unbundling Presents Technical Challenges Beyond Those Present when One Carrier Uses a Loop for Multiple Services

Several CLECs conclude that spectrum unbundling is technically feasible based on the fact that incumbent LECs currently provide their ADSL service on a wholesale basis to CLECs and ISPs. These CLECs contend that the only difference between the incumbent LECs' ADSL offering and spectrum unbundling is that the CLECs' multiplexing equipment is inserted in place of the incumbent LECs' multiplexing equipment. This view once again demonstrates the superficial veneer that CLECs place on complex issues. As BellSouth explained in its comments there is a significant difference between one company, with exclusive control of the entire loop, using that loop to provide multiple services and multiple companies having control of spectral segments of the loop. Issues associated with how to split the spectrum, how to apportion bandwidth, and how to guard against spillover problems are all significant issues that cannot be glossed over. Moreover, insertion of a CLEC digital subscriber line access multiplexer ("DSLAM") in place of an incumbent LEC DSLAM without appropriate safeguards will deprive incumbent LECs the ability "to retain responsibility for the management, control, and performance of its own network."[54]

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[54] *Interconnection Order* at 15605 – 15606, ¶ 203.

Covad's comments demonstrate differences in technology that will affect any mandate of line sharing that includes spectrum unbundling. Covad's architecture for its xDSL service includes a "POTS splitter" that resides outside the DSLAM. Under BellSouth's architecture the splitting of voice and data occurs in the DSLAM. Pursuant to the discussion in BellSouth's comments, if spectrum unbundling is required, a POTS splitter as described by Covad would be required. The deployment of such a splitter outside the DSLAM, however, will increase cost, which should not be borne by BellSouth. Indeed, pursuant to the *Interconnection Order* "a requesting carrier that wishes a 'technically feasible' interconnection would ... be required to bear the cost of that interconnection including a reasonable profit."[55]

B. Turning a Blind Eye to Operational Problems Will Not Make Them Go Away

In addition to technical issues the CLECs refused to acknowledge, operational problems also offer significant challenges to implementation of spectrum unbundling. Many of the CLECs at least acknowledged these problems but dismissed them as incumbent LEC "*hobgolins*".[56] Incumbent LECs, however, are not the only entities that recognize the operational problems spectrum unbundling will cause. AT&T, who is hardly friendly toward incumbent LEC issues, also noted the operational problems associated with spectrum unbundling in arguing that the Commission should not require it.[57] Consequently, the Commission should read past the pejorative comments and address the real issues that exist if it orders spectrum unbundling.

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55 *Id.* at 15603, ¶ 199.

56 Rhythms Comments at 10 (emphasis added).

57 AT&T Comments at 17 – 19. *See also*, Sprint Comments at 12. Although Sprint argues that the Commission should adopt spectrum unbundling, it recognizes the operational problems associated with such implementation and theorizes that it would take one year to modify all of the operational systems. Given the history of challenges in modifying OSS systems, however, BellSouth believes that Sprint's estimate is overly optimistic. BellSouth contends that such modifications will take three to five years.

Specifically, NorthPoint states that "[t]here are no unique ordering, billing, or provisioning issues related to line sharing." NorthPoint further stated that "...processes for shared line access are practically indistinguishable from the ordering, billing and provisioning of stand-alone loops."[58]

The statement underscores NorthPoint's misunderstanding or denial of the facts. A stand-alone loop is a separate, copper loop, which is under the control of a single owner, for example a CLEC, and over which only that single owner will enable a service or services. On the other hand, the "physical" portion of a spectrum unbundled loop is owned by a single entity, an incumbent LEC, but serves as a pipe for individual services provided by multiple owner-providers, e.g., CLECs, incumbent LECs, etc. Accordingly the incumbent LEC will have to establish ordering, billing, provisioning, and perhaps more importantly, maintenance processes which can cleanly separate the various services on that single copper loop. Thus, as BellSouth explained in its comments, if spectrum unbundling is required, each copper loop will have to become a carrier system with a separate identification and records for each service on that loop. Moreover, it is not practical for multiple services provided by multiple carriers over a loop to be identified by the same telephone number. Indeed, such assignment of a single identity for a single end user for multiple services from different customers of record ("COR") is not even possible without significant modifications to existing incumbent LEC Operations Support Systems ("OSS").[59]

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58 NorthPoint Comments at 22.

59 In the current BellSouth deployment of ADSL, where the ISP purchases a PVC and not spectrum, there is only one COR, i.e., end user, for the loop and it is only necessary to note on that COR's line record that ADSL is present on the loop. It is not necessary, on that loop, to provide a separate identity for whatever portion of the spectrum is used to provide the ADSL PVC.

BellSouth's comments specifically identified numerous other operational problems in implementing spectrum unbundling, which do not need to be repeated here. What does need to be stated, however, is that simply ordering spectrum unbundling will not make these operational problems magically disappear. Unfortunately, this is the attitude exhibited by most of the commenting CLECs. Indeed, Rhythms asks the Commission to ignore the operational issues and take the leap-before-you-look approach. It states that "[i]f the Commission orders line sharing, the industry, including the ILECs, will make it happen."[60] Such a comment is easy for Rhythms to make considering that the work and the cost for "making it happen" will fall solely on the incumbent LECs. The Commission must consider what is at stake and not be influenced by these CLEC fantasies.

VII. SPECTRUM MANAGEMENT AND COMPATIBILITY ISSUES

In its comments BellSouth amply expressed its support of and concern for the proposals set forth in the *Notice* regarding spectrum management and compatibility. Some of the entities filing comments, however, made suggestions that BellSouth believes warrant further discussion.

A. The "Test and See" Approach for New Technology is Inadequate

In its comments NorthPoint supports that new technologies should be subject to a "test and see" approach regarding spectrum management.[61] Under this approach, a CLEC could deploy a new technology in any state, on a trial basis, for a six-month period. If the new service emerged from the trial without causing "significant and actual degradation to, or by, other services," then the service would be presumed to be an acceptable service. BellSouth believes this approach is flawed because it will fail to identify incompatibilities in at least four respects.

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60 Rhythms Comments at 11.

61 NorthPoint Comments at 36.

First, it is well established within the industry that crosstalk coupling from one pair to another (*i.e.*, the degree of coupling, independent of the signal level on the disturbing pair) is a random variable.[62] Accordingly, one weakness of the "test and see" approach is that it will give no assurance that the "test technology" has been on a sufficient number of pairs of different wire gauges, insulation types, age of cables, condition of cable, etc. All of these parameters affect, in one way or another, the crosstalk coupling.

Second, the amount of power coupled onto a disturbed pair, via crosstalk, is a function of the number of disturbers in that binder group, and to a lesser extent, in the whole cable. This leads to a second shortcoming of the "test and see" approach. The new technology to be tested might potentially interfere with only a handful of existing "victim" technologies. No viable "test and see" approach could hope to find the condition where every instance of existing, potentially "victim," technology is exposed to a significant number of disturbers in the same binder group. For example, it has been BellSouth's experience that concentrations of any DSL system eventually occur in a binder group, but such concentrations are not likely to be encountered in a short-term trial, especially in the same binder groups with the "victim" technologies.

This leads to the third fallacy of the "test and see" approach. It is unlikely that the new technology will be deployed with all potentially "victim" technologies during the test. This would be the case, for instance, if the new technology under test were deployed in a suburban area with primarily residential customers, but the "victim" technology (not known and not yet identified) turned out to be a product that is primarily used to serve large businesses. The "test and see" approach would result in the false claim of no compatibility problems.

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[62] There have been numerous papers prepared on this subject, however, one of the seminal papers is a 1985 contribution to T1D1.3 by Unger (of Bellcore) numbered T1D1.3/85-244.

Finally, the limited scope of the "test and see" approach will not uncover all problems that could occur between the new technology and victim technologies even if both are deployed during the test period. This is especially true if the victim technology is a DSL system. DSL systems require some minimum signal to noise ratio ("SNR") to operate properly. The SNR is a function of two parameters, the level of the received signal and the level of the noise, however, only the level of noise is affected by crosstalk. Therefore, if the received signal level is high enough, it is possible to have an unexpectedly high level of noise from crosstalk on a pair that will result in no undue impairment. A high received signal level will occur on a short loop. Thus, even if a sufficient number of disturbers and the victim technology were employed in the test, it is possible that the new technology could be incompatible with certain victim technologies, and fail to identify the incompatibility, if the victim technologies were not deployed on long limiting loops.

B. The CLEC's Argument That the Current Assumptions Used In Spectrum Management Are Overly Conservative Is Faulty

NorthPoint argues that the spectrum management policies employed by the current standards body are "worst-case" assumptions that are "implausibly conservative."[63] Covad agrees proposing a position of spectrum management that assumes, "in general, the level of spectral interference in the current local network (outside of T1 AMI) does not present any threat to service quality."[64] Covad's own argument against a binder group management system employed by SBC, however, contradicts these claims that the current standards are overly conservative.

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63 NorthPoint Comments at 34.

64 Covad Comments at 49.

In arguing against SBC's binder group management, Covad claims that "SBC utilizes [this] process to reserve 'clean' binder groups for its own ADSL service and to prohibit CLEC DSL loops from being placed not only in that ADSL-binder group, but in adjacent binder groups...." Covad claims that this segregates "CLEC DSL loops ... into spectrally 'dirty' binder group ghettos, resulting in a degradation of the potential bandwidth on those CLEC loops."[65]

BellSouth does not support SBC's practice of binder group management. It is, however, confused by Covad's inconsistent positions. On the one hand it states that the current level of spectral interference does not present threats to service quality, but on the other hand argues that unacceptable levels of interference can and will occur under certain circumstances. This contradiction underscores the fallacy of Covad's and NorthPoint's claims that the current assumptions are overly pessimistic. If there were no need to be worried about interference, why would Covad object to being relegated to the "ghetto"? In the utopian view put forward by these CLECs, there would be no "binder group ghetto."

In fact, experience suggests that the assumptions used in T1E1.4 do not represent "worst case" conditions, but instead represent conditions that are encountered (and exceeded) in a significant number of instances.[66] This is not necessarily because of a high number of disturbers, but for other reasons. The crosstalk measurements -- which form the basis for the assumptions used in T1E1.4 -- were made on new cables. Obviously, the cables are no longer new and have suffered the rigors of time, temperature, humidity, flexing, etc. The effects of these factors cannot be known precisely, but clearly warrant the use of conservative assumptions. Moreover, there are sources of noise, both in the loop plant and on the customer premises, which have not

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65 *Id.* at 49

66 BellSouth has been applying nearly identical rules and assumptions to itself since long before any notion of third party access to its facilities was ever proposed.

been well documented or characterized in the industry. Accordingly, the so-called "worst-case" assumptions used in T1E1.4 account for, in some sense, these other noise sources.

C. Repeatered T1 Lines

BellSouth feels it important to reemphasize its position regarding the issue of discontinuing the further placement of repeatered T1 lines and establishing some timetable for their replacement. BellSouth explained in its comments that repeatered T1 lines are the only economically viable way to provide the service in many instances.

In its comments, Covad stated that it "...sees no reason why all current T1 AMI lines cannot be migrated to one of the current DSL technologies, such as HDSL."[67] HDSL, however, even using the technological maximum number of repeaters on a loop, is limited in length to approximately 35 kilo feet (about 7 miles). BellSouth has in place tens of thousands of digital loop carrier ("DLC") systems which require DS1 transport between the central office and the DLC remote terminal. Many of these DLC systems involve fairly low numbers of subscribers, e.g., usually less than 100. Furthermore, these smaller systems tend to be in rural areas beyond the reach of repeatered HDSL. Such a small number of lines cannot economically warrant the placement of fiber. Additionally, T1 is not the only technology that can adversely impact ADSL. HDSL, which Covad recommends for replacing T1 lines, also interferes with ADSL. Adding thousands of HDSL lines to the network in non-segregated binder groups could have a more deleterious effect on ADSL than T1 lines in dedicated binder groups.

Further, Covad has shown no evidence that T1 has prevented the deployment of ADSL. The large majority of T1 lines that are used as DLC transport links are in the feeder portion of the network on cable lengths that are too long to be used for ADSL. Moreover, the worst case of

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[67] Covad Comments at 50.

interference between T1 and ADSL occurs when both are in the same binder group.[68] This type of interference does not occur very often, however, because in many cases T1 lines are in binder groups dedicated to T1 lines exclusively.

There is simply no economical alternative to repeatered T1 for DLC systems. The alternative suggested by Covad will not only be cost prohibitive but also does not guarantee that interference will be reduced. Accordingly, the Commission must not discontinue the further use repeatered T1 or require their replacement.

D. Development of an Industry Advisory Committee

NorthPoint takes issue with the development of spectrum management practices in T1E1.4 and instead favors the development of an Industry Advisory Committee.[69] BellSouth does not believe that an Industry Advisory Committee would be any more effective than T1E1.4, and, therefore, doubts its benefits. Educating such a group to the level of experience currently maintained by T1E1.4, however, would be a lengthy process. This is counter to the industry's desire to obtain expedient solutions. Indeed, it is doubtful that the group would ever build the expertise currently held by T1E1.4 unless the same people attended both groups, in which case the committee would be a redundant waste of time and money.

VIII. CONCLUSION

The Commission's proposal to require line sharing that includes spectrum unbundling is at best premature. Until it has decided the standard for unbundling network elements in the *UNE Remand Proceeding*, the Commission cannot impose the unbundling of spectrum in the loop.

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[68] The severity of the interference is relative to the position of the T1 lines in proximity to the ADSL service. For example, if the T1 lines are in a binder group adjacent to binder groups containing ADSL service, there is a much less severe interference impact on ADSL. Similarly, if the T1 lines are in the same sheath but in binder groups that are not adjacent to binder groups containing ADSL service, there is an even less severe impact on ADSL.

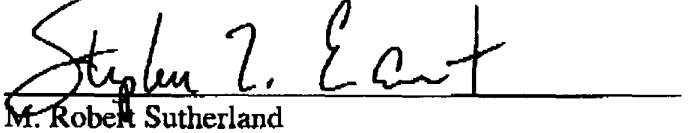
[69] NorthPoint Comments at 40 – 46. Rhythms would have the Commission participate, and intervene if necessary, in T1E1.4. Rhythms Comments at 17.

Moreover, if the Commission even considers that spectrum is a network element that must be unbundled, it must consider the cost-benefit of its implementation to accommodate technology that is potentially short-lived considering other currently evolving technology. Once these issues have been examined, in the light of the timely deployment of the advanced services market, the Commission must conclude that spectrum unbundling is a concept to be avoided. Therefore, based on the forgoing, and its comments, BellSouth contends that the Commission should reconsider the proposals set forth in the *Notice* and reject any mandate of spectrum unbundling.

Finally, while it agrees with some of the Commission's tentative conclusions affecting management and compatibility of spectrum on the loop, BellSouth has demonstrated in its comments and these reply comments that the Commission must reconsider certain of its proposals related to such management and compatibility issues in order to ensure proper spectrum standards across the industry.

Respectfully submitted,

BELLSOUTH CORPORATION AND
BELLSOUTH TELECOMMUNICATIONS, INC.
By their Attorneys



M. Robert Sutherland
Stephen L. Earnest

BellSouth Corporation
Suite 1700
1155 Peachtree Street, N.E.
Atlanta, GA 30309-3610

(404) 249-2608

Date: July 22, 1999

CERTIFICATE OF SERVICE

I do hereby certify that I have this 22nd day of July, 1999, served the following parties to this action with a copy of the foregoing ***REPLY COMMENTS OF BELLSOUTH CORPORATION***, reference CC Docket No. 98-147, by hand delivery or by placing a true and correct copy of the same in the United States Mail, postage prepaid, addressed to the parties as set forth on the attached service list.

Lenora Biera-Lewis

SERVICE LIST
CC DOCKET NO. 98-147

Magalie Roman Salas, Commission Secretary*
Portals II
445 12th Street, SW
Suite TW-B204
Washington, DC 20554

Jonathan M. Askin, Vice President – Law
The Association for Local Telecommunications Services
888 17th Street, NW, Suite 900
Washington, DC 20006

International Transcription Service*
1231 20th Street, NW
Washington, DC 20035

Glenn B. Manishin
Christy C. Kunin
Blumenfeld & Cohen – Technology Law Group
1615 M Street, NW, Suite 700
Washington, DC 20036

Attorneys for Association for Local Telecommunications Services

John T. Lenahan
Frank Michael Panek
2000 W. Ameritech Center Drive
Room 4H84
Hoffman Estates, IL 60195

Counsel for Ameritech

Susan M. Miller, Vice President and General Counsel
The Alliance for Telecommunications Industry Solutions, Inc.
1200 G Street, NW
Suite 500
Washington, DC 20005

Mark C. Rosenblum
Stephen C. Garavito
Room 3252G1
295 North Maple Avenue
Basking Ridge, NJ 07920

Attorneys for AT&T Corp.

Donna M. Epps
1320 North Court House Road
8th Floor
Arlington, VA 22201

Attorney for the Bell Atlantic Telephone Companies

Michael E. Glover
1320 North Court House Road
8th Floor
Arlington, VA 22201

Of Counsel for the Bell Atlantic Telephone Companies

Ronald L. Plesser
Stuart P. Ingis
Tashir J. Lee
Piper & Marbury L.L.P.
Seventh Floor
1200 Nineteenth Street, NW
Washington, DC 20036

Attorneys for Commercial Internet Exchange Association

Thomas M. Koutsky
Covad Communications Company
700 13th Street, NW, Suite 950
Washington, DC 20005

Bernard Chao
Brad M. Sonnenberg
Covad Communications Company
2330 Central Expressway, Building B
Santa Clara, CA 05050

George N. Barclay, Associate General Counsel
Personal Property Division
Michael J. Ettner, Senior Assistant General Counsel
Personal Property Division
General Services Administration
1800 F Street, NW, Room 4002
Washington, DC 20405

Snavely King Majoros O'Connor & Lee, Inc.
1220 L Street, NW, Suite 410
Washington, DC 20005

Economic Consultants for General Services Administration

Gail L. Polivy
GTE Service Corporation
1850 M Street, NW
12th Floor
Washington, DC 20036

Jeffrey S. Linder
Wiley, Rein, & Fielding
1776 K Street, NW
Washington, DC 20006

Attorneys for GTE

Terry G. Mahn, Esq.
Fish & Richardson P.C.
601 13th Street, NW
Washington, DC 20005

Counsel for Inline Connection Corporation

Jonathan E. Canis
Michael B. Hazzard
Kelley Drye & Warren LLP
1200 Nineteenth Street, NW, Fifth Floor
Washington, DC 20036

Counsel for Intermedia Communications Inc.

Theodore Lasser
Douglas Zolnick
@Link Networks Inc.
20825 Swenson Drive, Suite 150
Waukesha, WI 53186

Stephen R. Bell
Thomas Jones
Sophie J. Keefer
Wilkie Farr & Gallagher
Three Lafayette Centre
1155 21st Street, NW
Washington, DC 20036-3384

Attorneys for @Link Networks Inc.

MCI Worldcom, Inc.
Kecia Boney
Richard S. Whitt
Lisa B. Smith
1801 Pennsyvlania Avenue, NW
Washington, DC 20006

Dr. H. Gilbert Miller
Vice President
Mitretek Systems, Inc.
Center for Telecommunications and Advanced Technology
7525 Colshire Drive
McLean, VA 22102

Rodney L. Joyce
J. Thomas Nolan
Shook, Hardy & Bacon LLP
600 14th Street, NW, Suite 800
Washington, DC 20005-2004

Attorneys for Network Access Solutions Corporation

Steven Gorosh
Michael Olsen
Glenn Harris
NorthPoint Communications Inc.
222 Sutter Street, 7th Floor
San Francisco, CA 94108

Ruth Milkman
The Lawler Group, LLC
1909 K Street, NW
Suite 820
Washington, DC 20006

Stephen L. Goodman
Halprin, Temple, Goodman & Maher
555 12th Street, NW
Suite 950, North Tower
Washington, DC 20004

Counsel for Nortel Networks Inc.

John G. Lamb, Jr.
Nortel Networks Inc.
2100 Lakeside Boulevard
Richardson, TX 75081-1599

Counsel for Nortel Networks Inc.

Ernest G. Johnson, Director
Public Utility Division
Oklahoma Corporation Commission
P. O. Box 52000-2000
Oklahoma City, OK 73152-2000

Randall B. Lowe
Julie A. Kaminski
Renée Roland Crittendon
Piper & Marbury, L.L.P.
1200 Nineteenth Street, NW
Suite 700
Washington, DC 20036

Attorneys for Prism Communication Services, Inc.

Jeffrey Blumenfeld
Vice President and General Counsel
Rhythms NetConnections Inc.
6933 South Revere Parkway
Englewood, CO 80112

Glenn B. Manishin
Christy C. Kunin
Stephanie A. Joyce
Blumenfeld & Cohen – Technology Law Group
1615 M Street, NW, Suite 700
Washington, DC 20036

Attorneys for Rhythms NetConnections Inc.

Robert M. Lynch
Roger K. Toppins
Mark Royer
One Bell Plaza, Room 3024
Dallas, TX 75202

Attorneys for SBC Communications Inc. and its Subsidiaries

Sprint Corporation
Leon M. Kestenbaum
Jay C. Keithley
H. Richard Juhnke
Marybeth M. Banks
1850 M Street, NW, 11th Floor
Washington, DC 20036

John H. Harwood II
William R. Richardson, Jr.
Matthew A. Brill
Wilmer, Cutler & Pickering
2445 M Street, NW
Washington, DC 20037

Counsel for U S West Communications, Inc.

Robert B. McKenna
Jeffry A. Brueggerman
US West, Inc.
1020 19th Street, NW, Suite 700
Washington, DC 20036

Counsel for U S West Communications, Inc.

Dan L. Poole
U S West, Inc.
1020 19th Street, NW
Suite 700
Washington, DC 20036

Of Counsel for U S West Communications, Inc.

Peter Arth, Jr.
Lionel B. Wilson
Gretchen T. Dumas
505 Van Ness Avenue
San Francisco, CA 94102

Attorneys for the Public Utilities Commission State of California

R. Gerard Salemme
Senior Vice President, External Affairs and Industry Relations
Cathleen Massey
Public Policy & Assistant General Counsel
NEXTLINK Communications, Inc.
1730 Rhode Island Avenue, N.W.
Suite 100
Washington, DC 20036

Colleen M. Dale
Senior Counsel
Primary Network Communications
11756 Borman Drive, Suite 101
St. Louis, MO 63146

NRTA
Margot Smiley Humphrey
Koteen & Naftalin, LLP
1150 Connecticut Avenue, NW
Suite 100
Washington, DC 20036

NTCA
L. Marie Guillory
Jill Canfield
4121 Wilson Boulevard
Tenth Floor
Arlington, VA 22203

OPASTCO
Stuart Polikoff
Stephen Pastorkovich
21 Dupont Circle NW
Suite 700
Washington, DC 20036

Lawrence E. Sarjeant
Linda Kent
Keith Townsend
John W. Hunter
Julie E. Rones
1401 H Street, NW
Suite 600
Washington, DC 20005

Attorneys for USTA

* ***BY HAND DELIVERY***