ORIGINAL

BELLSOUTH TELECOMMUNICATIONS, INC.

REBUTTAL TESTIMONY OF ALPHONSO J. VARNER

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 990649-TP

JUNE 29, 2000

Q. PLEASE STATE YOUR NAME, YOUR POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. ("BELLSOUTH") AND YOUR BUSINESS ADDRESS.

A. My name is Alphonso J. Varner. I am employed by BellSouth as Senior Director for State Regulatory for the nine-state BellSouth region. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

A. Yes. I filed direct testimony in this proceeding on May 1, 2000.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to policy issues addressed in the direct testimony filed on behalf of various intervenors. Specifically, I will respond to Issues 6, 9(b), and 13 as they are addressed in the testimony of AT&T and MCIWorldCom's witness Mr. Jeff King, Florida Cable Television Association's ("FCTA's") witness Mr. William Barta, Bluestar, Covad and Rhythms Link's

witness Ms. Terry Murray, and Supra's witness Mr. David Nilson filed with the Florida Public Service Commission ("Commission") on June 8, 2000.

Issue 6: Under what circumstances, if any, is it appropriate to recover non-recurring costs through recurring rates?

Q. ON PAGE 4, MS. MURRAY CONTENDS THAT NON-RECURRING CHARGES ARE A BARRIER TO ENTRY FOR NEW ENTRANTS. PLEASE RESPOND.

A. Ms. Murray's contention that the higher the nonrecurring charges the more difficult it is for ALECs to offer competitive local exchange services is not necessarily true. Ms. Murray presumes that end users are not charged nonrecurring charges for the retail services they purchase. Also, Ms. Murray disregards the fact that properly structured nonrecurring charges reduce recurring prices charged to the ALEC. Consequently, the ALEC can offer lower prices to its end users than they would otherwise. In fact, the aggregate cost to an ALEC is probably lower with properly structured nonrecurring charges because including nonrecurring costs in recurring rates would require the addition of a cost of money component. If the nonrecurring costs are paid up front, the ALEC avoids this cost of money component.

Q. ALSO ON PAGE 4, MS. MURRAY STATES THAT THE FCC HAS REQUIRED BELL ATLANTIC, AS A CONDITION FOR ITS MERGER WITH GTE, TO IMPLEMENT AN OPTIONAL PAYMENT PLAN IN AN ATTEMPT TO MITIGATE THE EFFECT OF NONRECURRING COSTS ON NEW

ENTRANTS. DOES BELLSOUTH OFFER ALECs AN OPTIONAL PAYMENT PLAN?

A. While BellSouth does not have a standard offering for an optional payment plan, BellSouth is willing to consider any such requests through negotiations with ALECs. To the best of my knowledge, none of the ALECs on whose behalf Ms. Murray is testifying have made such a request. Furthermore, the fact that the FCC may have required Bell Atlantic to implement such a plan as part of the condition for its merger with GTE is of no relevance in this proceeding.

Q. ON PAGE 5, MS. MURRAY STATES THAT A NEW ENTRANT CANNOT OBTAIN A REFUND OR REPAYMENT FOR NONRECURRING CHARGES IF IT LOSES THE RETAIL CUSTOMER OR GOES OUT OF BUSINESS. PLEASE COMMENT.

A. Ms. Murray's comment is true but irrelevant. When BellSouth incurs nonrecurring costs necessary to provide a service or functionality to an ALEC, those costs cannot be "unincurred" and should be paid for by the ALEC that requested the service or functionality. Regardless of whether the ALEC chooses to serve its end user by purchasing unbundled network elements or using its own facilities, non-recurring costs would be incurred by the ILEC to provide service to the ALEC's end user. Since the ILEC does not realize a nonrecurring cost reduction when the ALEC's end user disconnects or the ALEC goes out of business, "refunds" of the type proposed by Ms. Murray would be inappropriate. Ms. Murray wants ALEC's business risk to be transferred to BellSouth, which makes no sense. Why should

BellSouth assume the risk of the ALEC's failure in the marketplace? If BellSouth were burdened with such risk, then it would be appropriate for BellSouth to share in the ALEC's success as well.

Q. ON PAGE 6, MS. MURRAY CONTENDS THAT "THERE ARE NO NONRECURRING COSTS OR CHARGES WHEN AN EXISTING CUSTOMER OF AN INCUMBENT LOCAL EXCHANGE CARRIER CHOOSES TO STAY WITH THAT INCUMBENT" AND THAT NEW ENTRANTS MUST "FOREGO OR MINIMIZE" UP-FRONT CHARGES TO PERSUADE CONSUMERS TO SWITCH CARRIERS. PLEASE RESPOND.

A. Ms. Murray is mistaken on both contentions. First, any BellSouth existing customer would have already paid nonrecurring charges to cover the nonrecurring costs when the service was established with BellSouth. Second, the interLATA and Internet markets demonstrate the fallacy of Ms. Murray's contention that ALECs would have difficulty recovering nonrecurring costs in the recurring rates they charge their customers. Despite the application of nonrecurring charges, the number of competitors in the interLATA and Internet markets has skyrocketed. When Internet providers and long distance carriers started to frank or "waive" nonrecurring charges, most other carriers or providers followed suit, so they were all competing with prices that incorporated nonrecurring costs in recurring rates. Furthermore, any concern regarding recovery of nonrecurring costs in recurring rates to end users due to "frequency of customer churn" is mitigated by the fact that when a customer needs new service or moves they have to incur nonrecurring

charges whether they buy from an ILEC or ALEC. The fact that the customer has already paid nonrecurring charges is, at best, a temporary concern.

Q. ON PAGE 6, MR. BARTA CONTENDS THAT THE COST TO DEVELOP OPERATIONAL SUPPORT SYSTEMS ("OSS") AND THE ELECTRONIC INTERFACES SHOULD BE RECOVERED THROUGH RECURRING RATES IN LIEU OF NONRECURRING CHARGES. DID BELLSOUTH PROPOSE RATES FOR THE RECOVERY OF ITS OSS AND ELECTRONIC INTERFACE DEVELOPMENT COSTS?

A. No. Consistent with the Stipulation of Certain Issues and Schedule of Events, filed December 7, 1999, of which the Florida Cable Telecommunications Association was a party to, the issue of recovery of the development and the ongoing maintenance associated with providing ALEC's with access to BellSouth's OSS and electronic interfaces will be addressed in a separate proceeding. As such, any discussion of cost recovery or pricing for access to OSS should not be addressed in the immediate proceeding.

Issue 9(b): Subject to the standards of the FCC's Third Report and Order, should the Commission require ILECs to unbundle any other elements or combinations of elements? If so, what are they and how should they be priced?

Q. MR. NILSON (PAGE 13) AND MS. MURRAY (PAGE 13) DISCUSS THE TOPIC OF UNBUNDLED ACCESS TO DIGITAL SUBSCRIBER LINE ACCESS MULTIPLEXERS (DSLAMs) AND IMPLY THAT BELLSOUTH SHOULD

PROVIDE SUCH UNBUNDLED ACCESS. HASN'T THE FCC ALREADY ADDRESSED THIS VERY ISSUE?

A Yes. The FCC has made clear the cases where BellSouth must unbundle DSLAMs. As I understand the FCC's requirements, BellSouth must provide unbundled DSLAMs only in specific instances where BellSouth has installed its own DSLAMs but will not or cannot accommodate a request for an ALEC such as Supra Telecom to collocate its own DSLAMs. Basically, in its Rule 51.319(c)(5), the FCC identified four conditions that, only where all four conditions are present, would an ILEC have to unbundle packet switching, which would include DSLAMs. All of these conditions do not exist in BellSouth's network, as BellSouth has taken the necessary measures to ensure that ALECs have access to necessary facilities so that BellSouth is not required to unbundle packet switching.

Q. WHAT DID THE FCC FIND IN ITS DETERMINATION OF WHETHER ACCESS TO UNBUNDLED PACKET SWITCHING MET THE FCC's "IMPAIR" STANDARD?

A. The FCC determined that competing carriers would not be impaired without unbundled access to the incumbent LEC's packet switching functionality. (Para. 306) The FCC recognized that there are numerous carriers providing service with their own packet switches, and that "competitors are actively deploying facilities used to provide advanced services to serve certain segments of the market - namely, medium and large business - and hence they cannot be said to be impaired in their ability to offer service." *Id.*

Q. DID THE FCC EMPOWER STATE COMMISSIONS TO REQUIRE INCUMBENT LECs TO UNBUNDLE SPECIFIC NETWORK ELEMENTS USED TO PROVIDE FRAME RELAY SERVICE?

A. Yes, but only to the extent that a competing carrier can demonstrate to the state commission that it is impaired without access to such unbundled network elements - a showing the FCC found that commenters failed to make. (UNE Remand Order, Para. 312) In its UNE Remand Order, the FCC established the "impair" standards by which it would determine if a network element should be unbundled. The FCC concluded that

> "the failure to provide access to a network element would 'impair' the ability of a requesting carrier to provide the services it seeks to offer if, taking into consideration the availability of alternative elements outside the incumbent's network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier, lack of access to that element materially diminishes a requesting carrier's ability to provide the services it seeks to offer." (Para. 51)

The FCC went on to say that a materiality component "requires that there be substantive differences between the alternative outside the incumbent LEC's network and the incumbent LEC's network element that, collectively, 'impair' a competitive LEC's ability to provide service within the meaning of section 251(d)(2)." *Id.*

Even assuming a state commission is authorized to alter the conditions established by the FCC for the unbundling of packet switching (which BellSouth does not believe is the case), Supra still would have the burden of proving that it is impaired by not having access to BellSouth's packet switching functionality on an unbundled basis. The very arguments Mr. Nilson makes here are the same that the FCC considered and rejected. Mr. Nilson has offered nothing new and certainly has not provided anything substantive that would meet the FCC's "necessary and impair" standards for requiring BellSouth to provide DSLAMs on an unbundled basis. For the Commission's convenience, I have attached to my testimony as Rebuttal Exhibits AJV-1 and AJV-2 the pertinent excerpts from BellSouth's Comments and Reply Comments filed with the FCC in CC Docket No. 96-98 on this subject.

Q. ON PAGE 14 OF HIS TESTIMONY, MR. NILSON STATES "THE ILEC IS THE ONE CARRIER WHO HAS DEPLOYED DSLAMs UBIQUITOUSLY THROUGHOUT ITS NETWORK IN CENTRAL OFFICES AND REMOTE TERMINALS." IS HE CORRECT?

A. Certainly not. Mr. Nilson should be fully aware that DSLAM technology is relatively new and that BellSouth has not equipped every single one of its hundreds of central offices and thousands of remote terminals in its nine-state region. Such a statement is outlandish. More to the point, BellSouth and ALECs are on equal footing regarding the provisioning of DSLAMs. BellSouth can install DSLAMs for its own use and ALECs (through collocation in BellSouth's central offices or remote terminals) can do likewise.

Q. ON PAGE 15 OF HIS TESTIMONY, MR. NILSON DISCUSSES THE TOPIC OF WAVE DIVISON MULTIPLEXING (WDM) AND ADVOCATES THAT IT BE A NEW UNBUNDLED NETWORK ELEMENT. DO YOU AGREE?

A. No. WDM is simply a new technology that allows greater transmission capacity over fiber optic cable. Similar technology evolutions in the use of fiber optic transmission systems have already occurred as Light Emitting Diode (LED) technology gave way to high-speed laser technology. I fully expect more technological advances that will allow greater and greater transmission speeds to be realized; however, whether the discussion is of fiber optic systems utilizing LEDs, lasers or even WDM, the unbundled network element involved is unbundled transport. Thus, there is simply no need to define yet another form of unbundled transport simply because WDM may be used.

Q. ON PAGE 15 OF HIS TESTIMONY, MR. NILSON SUGGESTS THAT LOOPS WITH CERTAIN CHARACTERISTICS BE CONSIDERED SEPARATE LOOPS. PLEASE COMMENT.

A. To the extent that Mr. Nilson is advocating new loop types for xDSL services, there is no need for him to do so. BellSouth has already developed and is offering a variety of unbundled loop types that BellSouth believes will meet all ALECs' needs. For example, BellSouth offers unbundled ISDN capable loops, which some ALECs use for the service sometimes referred to as IDSL (ISDN Digital Subscriber Line). BellSouth also offers HSDL capable loops (that are provisioned according to Carrier Serving Area (CSA) standards), which some ALECs use to provide HDSL

service. Additionally, BellSouth offers ADSL capable loops (that are provisioned according to Revised Resistance Design standards) and Unbundled Copper Loops (that are provisioned according to Resistance Design standards), which some ALECs use to provide ADSL service. BellSouth recently introduced a new loop type referred to as the Unbundled Copper Loop – Long, which some ALECs use to provide ADSL where the overall loop length is greater than 18,000 feet

Q. ON PAGE 17, FCTA'S WITNESS MR. BARTA STATES THAT THE COMMISSION SHOULD INITIATE PROCEEDINGS IF ACCESS TO ANY OF THE UNBUNDLED NETWORK ELEMENTS THAT HAVE BEEN REMOVED FROM THE FCC'S LIST "PROVES TO BE ONLY AVAILABLE AT NONCOMPETITIVE RATES, OR UNDER UNACCEPTABLE SERVICE QUALITY LEVELS". DOES MR. BARTA'S POSITION COMPORT WITH THE FCC'S "NECESSARY AND IMPAIR" STANDARD FOR UNBUNDLING NETWORK ELEMENTS?

A. No. Mr. Barta is attempting to establish a new standard for defining which elements should be unbundled. However, in the 319 Remand Order, the FCC determined which UNEs are "necessary" and where failure to provide such UNEs "impairs" the ability of an efficient ALEC to provide telecommunications services. The FCC defines the necessary and impair standard of Section 251 as follows:

> "A proprietary network element is considered "necessary" within the meaning of section 251(d)(2)(A) if, taking into consideration the availability of alternative elements outside the incumbent's network, including self-provisioning by a requesting carrier or acquiring an alternative from a third

party supplier, lack of access to that element would as a practical, economic, and operational matter, preclude a requesting carrier from providing the services it seeks to offer."

"The incumbent LECs failure to provide access to a non-proprietary network element "impairs" a requesting carrier within the meaning of section 251(d)(2)(B) if, taking into consideration the availability of alternative elements outside the incumbent's network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier, the lack of access to an element materially diminishes a requesting carrier's ability to provide the services it seeks to offer."

Furthermore, the FCC concluded that Section 251(d)(3) of the Act grants state commissions the authority to impose additional obligations upon incumbent LECs beyond those imposed by the national list, as long as they meet the requirements of section 251 of the Act and Section 51.317 of the FCC's Rules. As I discussed in my direct testimony, should this Commission wish to consider imposing additional unbundling obligations on BellSouth, the requirements of Rule 51.317 obligate the Commission to apply the "necessary and impair" standard in its analysis and consideration, and not the standard proposed by Mr. Barta.

Q. AT&T/MCI WITNESS, MR. KING, INCLUDES DIRECTORY ASSISTANCE ("DA") DATABASE ACCESS IN HIS LIST OF UNES. IS BELLSOUTH OBLIGATED TO PROVIDE ACCESS TO THIS DATABASE?

A. No. The FCC's 319 Remand Order states "where incumbent LECs provide customized routing, lack of access to the incumbents' OS/DA service on an unbundled basis does not materially diminish a requesting carrier's ability to offer telecommunications service." (¶441, FCC Docket CC 96-98 UNE Remand Order) Since BellSouth deploys customized routing, it is not obligated to provide operator call processing and directory assistance services. The FCC also states in paragraph 442, "incumbent LECs need not provide access to its OS/DA as an unbundled network element." In fact, since the Commission will address the appropriate rates and charges for "OS/DA (where required)" under Issue 9(a) in Phase 2 of this proceeding, any discussion regarding OS/DA should be addressed at that time.

Issue 13: When should the recurring and non-recurring rates and charges take effect?

Q. ON PAGE 18, MR. BARTA STATES THAT ILECs SHOULD BE PROVIDED TIME TO CONFORM THEIR BILLING AND ADMINISTRATIVE SYSTEMS, HOWEVER HE CONTENDS THAT IT IS REASONABLE FOR THE RATES ESTABLISHED IN THIS PROCEEDING TO "BECOME EFFECTIVE 30 TO 90 DAYS AFTER THE COMMISSION ISSUES ITS ORDER". DO YOU AGREE?

A. While I do agree that BellSouth will require some amount of time to conform its billing and administrative systems to implement the rates established in this proceeding, I do not agree that a specific amount of time (e.g. 30 to 90 days) is appropriate to govern when the rates become effective. As I discussed in my direct testimony, the rates and charges established in this proceeding should take effect

when existing interconnection agreements are properly amended to incorporate the ordered rates, whether that is 30 days, 60 days or whenever.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

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PLEASE DATE-STAMP AND RETURN

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

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

BELLSOUTH'S COMMENTS

BELLSOUTH CORPORATION
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Date: May 26, 1999

VI. ANALYSIS OF SPECIFIC NETWORK ELEMENTS

The following sections analyze whether the Commission should order that particular elements be unbundled and provided at cost-based prices. The best place to look for evidence of the possibility that an efficient CLEC's meaningful opportunity to compete may have been impaired is the market. CLECs are competing successfully across the country without using incumbent LEC network elements. Much of the existing marketplace evidence is presented below.

A key common thread that emerges is that because the competitive situation for elements varies so enormously by geographic market, the Commission must examine specific markets (or groups of markets) in order to properly apply the necessary and impair standards. A single national treatment of transport or loops, for example, could never be justified under the Commission's well-established market definition precedents because the alternatives to network elements and the overall competitive situation in major urban areas differs so greatly from rural areas.

The elements analyzed below include all of the elements the Commission subjected to unbundling under its original analysis as well as "new" elements discussed in the *Second FNPRM*.[26] Operations support systems should be provided to support network elements that must be unbundled. Where an element is not subject to unbundling, unbundling of OSS for that element is not required by the section 251(d)(2).

Consistent with the approach outlined above, and the Commission's traditional approach to competitive analysis, each of the following sections defines a product and geographic market

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[26] The Commission must approach each of these elements with a blank slate. *Iowa Utilities Board*, 119 S.Ct. 736-737.

(and, where appropriate, sets out the proper way to aggregate individual geographic markets across the country to make analysis both accurate and manageable). Each section then describes the current competitive facts. Next, the analysis compares facts to the Act's standards, and includes a specific discussion of the likely consumer effect of mandatory unbundling at cost-based prices. Finally, each section includes a conclusion as to whether a particular element can legally be unbundled.

A. Network Elements Used In The Provision Of Advanced Services

The *Second FNPRM* seeks comment on whether network elements used in the provision of advanced services should be unbundled. *Second* FNPRM, ¶ 35 (citing the *Advanced Services NPRM*). The Commission singles out the incumbent LEC digital subscriber line access multiplexer (DSLAM) and packet switch in particular for comment. *Id.* As described below, both these elements are used to provide advanced service over the networks of incumbent LECs. The Commission has previously defined advanced services by their speed, rather than their method of delivery -- transmission at speeds in excess of 200 kbps are, at least today, considered to be advanced services whether delivered over cable, wireless, satellite or traditional wireline telephony facilities.[27]

It would be extraordinary for the Commission to order unbundling in the advanced services arena. This is a market that is just being created. An unbundling requirement here would apply essentially to investment dollars, not existing networks or equipment. BellSouth has deployed fewer than 150 DSLAMs. For perspective, BellSouth has about 1,600 central

[27] *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, 1999, ¶ 20 (*Advanced Services Report*).

offices. CLECs have installed more DSLAMs than "incumbents," and there is no shortage of capital that would stop them from continuing to do so. The Commission should be encouraging investment by all parties in this market. Unbundling incumbent LEC investment dollars does not do this, as AT&T has so vigorously, and successfully argued concerning the directly analogous investment it is making in upgrading its cable networks. C. Michael Armstrong, *Telecom and Cable TV: Shared Prospects for the Communications Future*, delivered to the Washington Metropolitan Cable Club (Nov. 2, 1998) available at <<www.att.com/speeches/98/981102.maa.html.

Unbundling is doubly unnecessary because the market facts demonstrate competitive advanced services may be provided equally well, or better, over other networks. In fact, both cable and wireless providers are ahead of incumbent LECs in rolling out advanced services.[28] As discussed more fully below, competition from alternative networks "opens the possibility of intermodal competition, like that between trucks, trains, and planes in transportation." *Advanced Services Report*, ¶ 48 (footnotes omitted). Competition between networks promises a "competitive 'broadband market.'" *Id.* ¶ 48 n. 46.

Unbundling the wireline network while leaving directly competing networks free of unbundling obligations would be a short-sighted, fundamentally anti-consumer and anti-Congress act because it would substitute regulation for competition instead of the reverse. Ignoring "intermodal" competition is exactly the shortsighted regulatory mistake that led to the deterioration of the nation's railroads, which labored under regulatory burdens not imposed on competitive forms of transportation. The Commission's analysis of unbundling in the advanced

[28] *Advanced Services Report*, ¶¶ 53-58.

services area must specifically account for the competitive discipline imposed by competing methods of delivering advanced services.

1. DSLAMs and Packet Switches in the Wireline Network

As detailed in the *UNE Fact Report: Advanced Services*,[29] high-speed services can be delivered over traditional wireline networks. Doing so requires a digital modem at the subscriber's premises and a DLSAM at the end of the subscriber's copper loop, generally the nearest central office. The DSLAM separates the xDSL subscriber's voice and data traffic.[30] Voice traffic is routed to a traditional circuit switch while data traffic is routed to its destination through a packet switch.[31] The transport media used between the subscriber and the central office is the same twisted pair loop as that used for today's purely voice service.

To offer xDSL service to a particular subscriber, an incumbent LEC and a CLEC must go through exactly the same steps. First, a DSLAM must be purchased and located in the particular central office at which the subscriber's copper loop terminates. Because xDSL is a copper loop technology, the DSLAM cannot be located beyond the central office. Traffic beyond the central office is generally digitized and transported on fiber facilities. xDSL technology will not function in those circumstances. This technological fact means that enhanced extended links, for

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[29] P. Huber and E. Leo *UNE Fact Report*, Prepared for Ameritech, Bell Atlantic, BellSouth, GTE, SBC, and US West, attached to the comments of the United States Telephone Association, filed in this proceeding (May 26, 1999).

[30] *In the Matter of Deployment of Wireline Services offering Advanced Telecommunications* Capability, CC Docket No. 98-147, *First Report and Order and Further Notice of Proposed Rulemaking*, FCC 99-48, released March 31, 1999, ¶¶ 11-12 (*Advanced Services Order*).

[31] The packet switch can be a frame relay or ATM switch. Both provide the same basic functionality. The choice between them is driven by economics and quality of service needs. Both switches are also used for a broad array of other data services.

example, cannot be used by any carrier to provide xDSL service. All carriers, CLECs and incumbents alike, have to place DSLAMs at the end of the copper loop.[32]

As far as purchasing, DSLAMs are available equally to incumbents and CLECs from several vendors. *UNE Fact Report: Advanced Services* at 24-26. There are no standards or manufacturer relationships that advantage Bell companies over CLECs. *Id.* To date, CLECs have purchased more DLSAMs than Bell companies, making CLECs the larger buyers. *Id.* CLEC relationships with well funded strategic partners, including the major IXCs, show that they are very unlikely to be at any disadvantage to incumbent LECs when it comes to purchasing DSLAMs.[33] *Id.*

DSLAMs are essentially modular. Once purchased, they can be installed in racks as demand warrants. Each central office DSLAM installed by BellSouth serve 576 lines. Remote terminal DSLAMs serve 192 lines. This allows both CLECs and incumbents to tailor deployment based on demand. Large start-up investments or traffic volumes are not necessary to cost-effectively deploy DSLAMs, and service can be efficiently added in relatively small increments. No CLEC has introduced evidence in any of the Commission's proceedings suggesting that they were at any disadvantage in purchasing DSLAMs.

Once purchased, by either a CLEC or an incumbent, a DSLAM must be installed. Installation of a CLEC DSLAM in an incumbent LEC's central office hardly impairs a CLEC's ability to offer services. There are about 1,000 CLEC collocation arrangements completed or

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[32] Current xDSL technology is designed to provide advanced service over copper facilities. In order to provide service to a particular subscriber, the DSLAM must connect directly to the copper loop serving the subscriber. Where a subscriber's copper loop is connected through digital loop carrier to fiber facilities before the central office, a DSLAM must be located in the field where the digital cross connect is made. A DSLAM must be located where subscriber copper facilities end. BellSouth provides CLECs the ability to locate DSLAMs in the field.

underway in BellSouth facilities. A cost analysis of CLEC collocation under the Commission's previous rules is attached. Attachment A. This analysis supports the market reality that collocation expenses are not impairing efficient CLECs' meaningful opportunities to compete.

The Commission's recent *Advanced Services Order* provides a broad new range of advantageous collocation opportunities for CLECs, further reducing their costs. The *Advanced Services Order* provides CLECs with, among many other things, claims to shared and cageless collocation in incumbent central offices, which provide opportunities to reduce collocations expenses.[34] BellSouth provides all these options. In addition, BellSouth provides CLECs and state commissions with detailed performance data on its provision of collocation. State commissions closely monitor BellSouth's provision of collocation.

Next, subscriber loops must be individually tested to determine if the loop can support advanced service. If the loop can support service, a modem must be available at the subscriber's premises.[35] In some cases, the local loop may need to be "conditioned" for service by removing equipment that would interfere with an xDSL signal.[36] BellSouth will condition loops for CLECs in a nondiscriminatory manner for a fee. In fact, under the Commission's rules, incumbents must "take affirmative steps to condition existing loop facilities to enable" CLEC provision of xDSL service. *Advanced Services Order*, ¶ 53. However, in some cases, the loop

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[33] If any particular CLEC did not have sufficient purchase volumes to justify lower prices, it could pool its volume with other CLECs to get the lowest prices.

[34] A CLEC-to-CLEC market for shared collocation expense will quickly emerge if collocation does in fact represent a financial burden. If no market develops, that would suggest that CLECs with current collocation arrangements do not view the expense as substantial, otherwise they would seek to share the expense and the space.

[35] *Advanced Services Order* at ¶ 10.

[36] Standard equipment to provide voice service such as bridge taps and load coils may have to be removed to provide xDSL service.

simply cannot support the technology, and xDSL service cannot be provided by any carrier over the incumbent LEC network.[37]

The next task is to connect the potential xDSL subscriber's loop to the DSLAM. This process is identical, whether the DSLAM is a CLEC's or an incumbent's. If voice service is being provided by the incumbent before xDSL service is initiated, the incumbent will disconnect the subscriber's loop from the MDF and provide a cross-connect to the DSLAM. The loop must then be connected to the DSLAM.

Transport facilities to the CLEC voice and packet switches are available from numerous CLECs in urban areas as set out in the Transport section below. BellSouth transport facilities will be available under 251(d)(2) where that standard is met, or under section 271 at market rates.

Finally, any CLEC offering xDSL service must be able to route data traffic to a packet switch to provide data service. Packet switches are available from several manufacturers. CLECs have deployed many packet switches. Because BellSouth cannot provide service across LATA boundaries, BellSouth must locate packet switches within each of its LATAs. CLECs are under no such obligation, and can locate switches to maximize network efficiency. Transport costs for data traffic are very low, and packet switches can effectively serve a very broad area. The provision of data services using packet switching is a new and rapidly growing market. *UNE Fact Report: Switching at 32-34.* Incumbent local providers trail the interexchange carriers by a very substantial margin in this market, in large part because this market demands national, not local, service. *See* Frost & Sullivan, U.S. Markets for ATM, Frame Relay, SMDS and X.25 Public Data Services, at 1-5 (1998) (AT&T, MCI and Sprint account for about 75% of

[37] For example, loops over 18,000 feet long generally cannot support xDSL technology. Of course, cable, wireless or satellite networks are not restrained by xDSL limitations, and can provide advanced service.

business data services and over 90% of more advanced ATM and frame relay services); *UNE Fact Report: Switching* at 32-34.

2. Competitive Provision of Advanced Service

As set out in Commission reports and orders and the *UNE Fact Report: Advanced Services*, advanced services are provided over competing cable, wireless, satellite and telephony networks.[38] The Commission has suggested that cable providers are farthest ahead in the race to provide advanced services, followed by wireless providers and CLECs. *Advanced Services Report*, ¶¶ 53, 57, 58. Incumbent LECs and satellite providers follow. *Id.* The Commission's conclusions were informed by market and technological facts. Incumbent LECs are not incumbents in the advanced services market. Inter-network competition in this market promises to be vigorous. "Numerous companies in virtually all segments of the communications industry are starting to deploy, or plan to deploy in the near future, broadband to the consumer market." *Advanced Services Report*, ¶ 12. These plans include enormous investment in facilities to provide service over the last mile to the home. *Id.*, ¶ 34.

a. Cable Providers

Cable providers are perceived to enjoy three key advantages over incumbent LECs in the advanced service race. These advantages may translate into permanent control of the advanced services market. As detailed in the *UNE Fact Report: Advanced Services*, advanced services are now available over cable networks to over 20 million homes, roughly 20 percent of the U.S. market. *UNE Fact Report: Advanced Services* at 7. Comparing the maps of cable and

[38] Advanced services are sometimes delivered over local elements like telephone or cable company wires to houses, and sometimes delivered over elements that can serve the entire nation, like satellites. Defining a geographic market for advanced services would be complex. Given the newness of the market and the fact that consumers are expected to face the same types

incumbent LEC advanced service deployment makes cable's present lead clear. *Id.* at 4, Maps 1 and 2. Cable providers add to this present advantage aggressive deployment plans. Cable advanced service will be available to over 30 million homes by the end of this year, while xDSL service is predicted to be available over no more than 1 million lines. *Id.* at 9.

Cable's broader rollout and other advantages has allowed it to develop a commanding lead. Industry observers predict that cable's "first mover" advantage is likely to translate into a commanding long-term position. *See, e.g.* Paul Kagan Associates, Inc., Cable TV Technology, *U.S. High-Speed Access Cable & ADSL Projection Model*, 1997-2006 (Feb. 28, 1998) (predicting three quarters of U.S. households using advanced services will obtain service over cable networks); *UNE Fact Report: Advanced Services* at 11, n. 49 (collecting other citations).

Cable's perceived second advantage is the fact that its "broadband platform makes cable an optimal medium for transmitting large amounts of digital information - data, graphics, and video - at high speeds. *See*, B. Esbin, Office of Plans and Policy, FCC, *Internet Over Cable: Defining the Future in Terms of the Past* at 76, OPP Working Paper No. 30 (Aug. 1998); *see also UNE Fact Report: Advanced Services* at 11, n.49. That is, cable's last mile hybrid-coaxial cable infrastructure is generally perceived to be superior for advanced service to the twisted pair of the telephony network.[39]

Cable's perceived third key advantage is its freedom from FCC imposed restrictions that hamper incumbent LEC investment in providing advanced services. Cable providers reject even the prospect of allowing competitors access to their network, through unbundling or otherwise.

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of competitive choices in essentially every market, no particular geographic market is defined here.

[39] Of course, cable also has substantial advantages in constructing the long distance part of their networks because they are free of interLATA prohibitions.

"No company would invest billions of dollars ... if competitors which have not invested a penny of capital nor taken an ounce of risk can come along and get a free ride in the investments and risks of others." C. Michael Armstrong, *Telecom and Cable TV: Shared Prospects for the Communications Future*, delivered to the Washington Metropolitan Cable Club (Nov. 2, 1998) available at <<www.att.com/speeches/98/981102.maa.html.

b. Wireless Providers

Advanced services are also being provided over wireless networks. *UNE Fact Report: Advanced Services* at 11-15. Providers are using a variety of spectrum allocations to provide service and have aggressive rollout plans. *Id.* Wireless spectrum serves as a complete substitute for incumbent LEC last mile facilities. In fact, the Commission has ranked wireless providers ahead of incumbent LECs in the deployment of broadband facilities that serve the last mile. *Advanced Services Report* at ¶¶ 53, 57, 58. MCI WorldCom and Sprint have been investing in wireless providers to provide advanced services. *UNE Fact Report: Advanced Services* at 13. Wireless providers have forged alliances with many major firms and have access to substantial capital to fund additional service rollouts. *Id.* at 13-14 and Table 4.

c. Satellite Providers

Satellite networks are already providing advanced services nationwide. *Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Tele-Communications, Inc. to AT&T Corp.*, Memorandum Opinion and Order, CS Dkt. No. 98-178, FCC 99-245, ¶ 74 (rel. Feb. 18, 1999)(Direct TV provides nationwide Internet access at speeds up to 400 kbps). Satellite service avoids the incumbent LEC network completely. Satellite providers are rapidly deploying and upgrading facilities. *UNE Fact Report: Advanced Services*

at 15-16. AOL has recently signed with Direct TV to offer satellite access to AOL's huge subscriber base.

d. CLECs

The market facts set out in the *UNE Report: Advanced Services* at pp. 18-24 show that the process for CLECs to deliver advanced services over incumbent networks is working. CLEC business plans predict that it will continue to work. CLECs have used incumbent loops and central office collocation to provide advanced service using their own DSLAMs and packet switches to such an extent that the Commission recently ranked CLECs ahead of "incumbents" in providing xDSL service.[40] *Advanced Services Report* ¶ 53, 56, 58. ALTS claims, on behalf of facilities-based CLECs, that CLECs using incumbent loops and collocation are leading incumbents in providing advanced services. *UNE Report: Advanced Services* at 20. In fact, these CLECs offered advanced services to over five million homes as of December, 1998, and expect that number to quadruple by the end of 1999. *Id.* A CLEC study claims that CLECs have also used the current process to outstrip incumbent deployment of DSLAMs to provide advanced services in rural areas. Economics and Technology, Inc., "*Building a Broadband America: The Competitive Keys To The Future Of The Internet*," at iv. Aggressive CLEC service rollout suggests that the process is working.[41]

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[40] It is misleading to suggest that there are "incumbents" in the race to provide advanced services. Incumbent LECs do have local loop and central office assets that CLECs may not have. But these assets are available on a nondiscriminatory basis to CLECs as ordered by the Commission. Thus, no incumbency advantage remains, and, if any did, the Commission could remedy directly. In the other areas, there is no advantage. Incumbent LECs are not "incumbents" in the deployment of DSLAMs and packet switching. Instead, they are behind other providers of advanced services.

[41] To the extent collocation or other issues are raised as handicapping CLEC rollout of xDSL service, the Commission should address the issues directly, consistent with the Act and Commission rules on such concerns, rather than bootstrap an unbundling requirement.

3. Will An Efficient CLEC's Meaningful Opportunity To Compete Be Impaired Without Access to Incumbent LEC DSLAMs and Packet Switches at Cost-Based Prices?

Efficient advanced services competitors have more than meaningful opportunities to compete in the provision of advanced services without the Commission creating investment disincentives for both CLECs and incumbents by mandating cost-based access to incumbent LEC DSLAMs and packet switches. The answer to the question of whether consumers are likely to benefit from forced unbundling of incumbent LEC advanced services network elements is hardly theoretical. To-date, there has been no requirement that incumbents unbundle DSLAMs or packet switches and "there are, or likely will soon be, a large number of actual participants and potential entrants in this market." *Advanced Services Report*, ¶ 48 (footnotes omitted). As the Commission has noted, competition among cable, wireless, satellite and telephony networks mean that "the preconditions for monopoly appear absent in the 'last mile' of the advanced services market.... There is no indicat[ion] that the consumer market is inherently a natural monopoly." *Id.* If the last mile for advanced services is not subject to monopoly, DSLAMs and packet switches readily available for purchase can hardly be an impediment to competition. Competition is serving consumers today without unbundling.

Advanced services competition comes from several sources. Cable networks appear to have the lead and are predicted to translate their earlier start, network topography into a long-term commanding lead in subscribers. The Commission has also ranked wireless providers ahead of incumbent LECs in deploying service. Today's market leaders have no need for incumbent LEC elements to provide advanced services over their networks. The lack of availability of those elements has not impaired, and could not impair, their opportunity to compete.

The Supreme Court's requirement that the Commission look outside incumbent LEC networks when considering whether not making an element available would impair competition dictates that the Commission give great weight to this evidence of actual competition between networks. This competition guarantees consumer welfare. By rights, the Commission should go no further. Antitrust precedent would end the analysis once it became apparent that firms could successfully compete without the facility. Requiring access to a facility that is "essential" or important simply to benefit one set of competitors bound to a particular business plan will not create any consumer benefits when competition already exists. Unbundling in these circumstances will have only *negative* consequences -- reduced investment and administrative cost burdens.

Even should the Commission seek to turn the *impair* test into a test of whether a particular sort of competitive strategy should be favored over competition-- by substituting a test of whether a "CLEC using an incumbent LEC's loops has a meaningful opportunity to compete without the incumbents DSLAMs and packet switches" test, the evidence shows that such CLECs are competing successfully today, without unbundled DSLAMs and packet switching.

CLECs have been collocating their own DSLAMs and using their own packet switches to provide advanced services over incumbent local loops. CLECs have been so successful at doing this that the Commission has ranked them ahead of incumbents in deploying advanced services. *Advanced Services Report*, ¶¶ 53, 56, 58. CLECs themselves claim that they provide advanced services to over five million homes, that they lead the incumbents in providing advanced services, and that their services will continue to be rolled out on an aggressive schedule. *UNE Fact Report: Advanced Services* at 20 (collecting citations).

In effect, the Commission has conducted an experiment and the results are in. CLECs have very successfully competed using their own DSLAMs and packet switching. Announced CLEC plans for continued aggressive service roll out, in both urban and rural areas, show that lack of access to unbundled DSLAMs and packet switches is not impairing tomorrow's CLEC advanced service. Without competitive impairment, there is no justification for unbundling these elements.

4. What Effect On Investment In DSLAMs And Packet Switches Will An Unbundling Obligation Have?

Given advanced service competition from other networks and from CLECs using basic elements of incumbent networks, there is no competitive or consumer benefit to be entered on the positive side of the ledger from unbundling incumbent DSLAMs and packet switches. However, unbundling these particular elements would give rise to some especially substantial negatives. As set out in the *Jorde, Sidak and Teece Affidavit*, unbundling reduces investment. Given a no-risk no-cost option to use incumbent DSLAMs and packet switches at cost-based prices, CLECs will exercise that option and forego investing in their own equipment in at least some circumstances. This effect will be especially pronounced in areas where CLECs can avoid risky investments in new technology by relying on incumbent LEC investments.

In addition, as set out in the *Jorde, Sidak and Teece Affidavit*, incumbent LEC investment in advanced services technology will suffer from imposing obligations to share the technology at cost-based prices. This effect will be especially pronounced in this innovative, relatively risky technology.[42] That the reduction in investment is likely to be major is supported not just by

[42] This results from the relatively high risks of deploying facilities to offer untried advanced services. Consumers may not accept the technology or may select alternative network providers, so incumbent LEC investments may not prove profitable in the market. If the investments are successful, forced unbundling at cost-based prices limits the investor's returns to a

academic analysis. AT&T, which is engaged in similarly upgrading its cable networks warns that "no company will invest billions of dollars to become a facilities-based ... services provider if competitors who have not invested a penny of capital nor taken an ounce of risk can come along and get a free ride on the investments and risks of others." Remarks of C. Michael Armstrong, Chairman and CEO, AT&T, delivered to Washington Metropolitan Cable Club, Washington, D.C. (Nov. 2, 1998).

5. Loop Spectrum May Not Be Unbundled Under Section 251(d)(2)

The Commission has raised the prospect of requiring unbundling of spectrum on incumbent LEC loops in another proceeding.[43] *Second Advanced Services Order* at ¶ 99. The Commission appears to be interested in spectrum unbundling based on the interests of a particular subset of CLECs. These CLECs would prefer to pay for only a "part of the loop to deliver advanced services, rather than the entire loop, as incumbents and CLECs now do. Spectrum unbundling may not be ordered under section 251(d)(2).

The Commission has rejected similar proposals on their merits in the past because they were not in the interests of competition. In rejecting those proposals, the Commission concluded correctly that "[g]iving competing providers exclusive control over network facilities dedicated to particular end users provides such carriers the maximum flexibility to offer new services to such end users." *First Report and Order*, 11 FCC Rcd at 15,693 ¶ 385.

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governmentally-set cost of capital. The investment examples presented in the *Jorde, Sidak and Teece Affidavit* demonstrate how incumbent LEC investment in new technology will be reduced.

[43] Initially, loop spectrum is not likely to qualify as a network element under the Act. And, providing access to unbundled spectrum is unlikely to prove technically feasible. The operational problems alone of managing different carriers using the same loop are likely to rise to the level of technical infeasibility. BellSouth will detail the technical and operational issues with spectrum unbundling in its comments in the Commission's advanced services docket.

Loop spectrum will not pass section 251(d)(2)'s impair test because there are alternative facilities to unbundled spectrum on the local loop that are being used to compete in the provision of advanced services. As set out above, these alternative facilities include cable loops, wireless and satellite access and the use of the incumbent's local loop. Cable and wireless providers, using their own facilities, lead incumbents in deploying advanced services. As described above, CLECs have been able to provide advanced services over incumbent loops to the extent that they can also claim to be ahead of incumbents in rolling out service. The availability of these alternative facilities precludes a finding that failure to unbundle spectrum could impair an efficient CLEC's meaningful opportunity to compete.

Unbundling incumbent loop spectrum can have no consumer benefits because the advanced services market is already competitive.[44] Even CLECs that wish to provide only advanced services over the telephone local loop have competitive options open to them -- they can ally with CLECs that offer voice services and offer voice and data separately or in a bundle over a loop. In this case, the loop would be taken in its entirety, then shared depending on the responsible CLEC's plans. Thus, CLECs have the same competitive options open to them as do the incumbent LECs. Forcing the incumbent to unbundle loop spectrum would create only a special advantage for particular CLECs.[45] Consumers benefit from rules that benefit competition not from rules that benefit only particular competitors.

Although there are no consumer benefits from spectrum unbundling, it would have substantial real costs. Unbundling under the Commission's TELRIC pricing scheme would

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[44] Any benefit that could be advocated at this stage would be premature until after the industry and the Commission have gained experience with the Commission's recently changed collocation rules.

[45] Pricing unbundled spectrum under the Commission's TELRC pricing scheme, given the cost allocation issues, is certain to create a fertile field for profitable arbitrage. The Commission should not mistake requests to create the potential for arbitrage based on regulated prices with competition.

create a significant disincentive to incumbent LEC and CLEC investment in advanced services. *Jorde, Sidak and Teece* at ¶ 57, 65 (calculating no net public benefits from spectrum unbundling). The operational and regulatory costs to administer a spectrum unbundling scheme would also be extremely high.

6. Conclusion

Failure to unbundle incumbent LEC DSLAMs and packet switches would not impair the opportunities for efficient competitors to compete in the provision of advanced services. Cable, wireless and satellite providers have rolled out service broadly and successfully without these elements. In fact, incumbent LEC DSLAMs and packet switches have no place in these alternative networks. CLECs have competed successfully to-date without unbundled DSLAMs and packet switches and continue to publicly announce their future success. Thus, the impairment standard is not satisfied. On the other hand, forced unbundling of those elements would reduce investment in the provision of advanced services by incumbents and CLECs alike.

Similarly, the unbundling of loop spectrum cannot be justified under section 251(d)(2).

B. Interoffice Transmission Facilities

The Commission's *First Report and Order* recognized that "there are alternative suppliers of interoffice facilities in a few areas." *First Report and Order* at 15718. Although there have been competing providers of local transport for years,[46] the Commission ordered that these incumbent facilities be unbundled and provided at cost-based prices throughout the entire United States because it felt that competitors would be better off with more rather than fewer options. *Id.* The closer attention to competitive alternatives required by the Court and the

[46] *UNE Fact Report: Interoffice Transport Section* at 1. In fact, both MCI and Sprint argued at divestiture that local transport was not part of the local monopoly and should be opened to competition. *Id.* at 2.

BellSouth Telecommunications, Inc.
FPSC Docket No. 990649-TP
Rebuttal Exhibit AJV-2

PLEASE DATE-STAMP AND RETURN

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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

REPLY COMMENTS OF BELLSOUTH CORPORATION

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IV. ADVANCED SERVICES ELEMENTS

BellSouth's Comments and the *UNE Fact Report* spelled out just how new and how competitive the market for providing high-speed, advanced services is. BellSouth Comments at 32-47; *UNE Fact Report: Advanced Services* at VI. By rights, and aiming at regulatory parity, the Commission should not even consider unbundling network elements used to deliver advanced services.

No one has stated the case better than AT&T that regulating this market is likely to harm investment, competition and consumers. As AT&T explains, the market is highly competitive now—the market leading cable companies face competition from "RBOCs, CLECs, ISPs, wireless providers, satellite companies and others, who are investing billions of dollars to deploy broadband facilities and compete for customers."[4] AT&T's and TCI's economists state that "it is impossible to predict from today's vantage point who the leading competitors will be and how the competitive uncertainties concerning technologies, qualities and design of services, availabilities and prices will resolve."[5]

AT&T and TCI take the position that the "[c]ompetition between [cable companies] and ILECs will promote consumer welfare."[6] The competition between these

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[4] *In the Matter of Joint Application of AT&T Corp. and Tele-Communications, Inc. for Transfer of Control to AT&T of Licenses and Authorizations Held by TCI and its Affiliates Or Subsidiaries*, AT&T's and TCI's Joint Reply To Comments And Joint Oppostion To Petitions To Deny Or To Impose Conditions, CS Docket No. 98-178, at 34-35 (Nov. 13, 1998)(*AT&T-TCI Joint Reply*)(footnotes omitted).

[5] Ordover and Willig Affidavit, Attached to *AT&T-TCI Joint Reply* at ¶ 23.

[6] *Id.* at ¶ 27.

two networks is sufficient to ensure access to "broadband networks," presumably of any type, "so long as that access is efficient and consistent with consumers' demands"[7]

Given the degree of competition to provide advanced services, AT&T concludes that

> far from promoting the widespread availability of advanced services, subjecting new entrants such as TCI [and incumbent LECs are even newer entrants] to the unbundling and other obligations" would thwart competition. Forced unbundling with its attendant regulatory uncertainty would likely slow down investment in the development of broadband last mile data transport.[8]

The entire cable industry echoes this advanced services refrain. Although cable providers have a substantial lead in deploying advanced services capabilities, they are confident that any regulatory mandate of access to advanced service elements will discourage or eliminate the prospect of further investment, reduce innovation and harm consumers.

> requiring a particular provider of Internet access to make its facilities available to other Internet service providers would only stifle innovation, the development of facilities-based alternatives and the growth of the Internet....Mandating access to an Internet service provider's facilities, however, would not encourage competition because it would reduce substantially the incentives for competitors to develop additional facilities-based alternatives.

Cox Communications, Inc. 706 Comments at 3-4.[9]

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[7] *Id.* at ¶ 50.

[8] *Id.* at ¶ 49. AT&T and TCI doubt whether it is even administratively possible to regulate access to advanced services facilities. *AT&T-TCI Joint Reply* at 49.

[9] Comments of Cox Communications, Inc., *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 (filed October 8, 1998). Cites to other comments filed in this round of the 706 proceeding are referred to by the name of the commenter followed by "706 Comments."

> Imposing unbundling and resale obligations on cable operators for the benefit of entities that chose not to construct their own networks would turn section 706 on its head by suppressing cable's incentives to invest in new broadband capability.

National Cable Television Association 706 Comments at 25.

> One of the most durable barriers to new entry into telecommunications markets is the prospect that new entrants will be subject to burdensome regulation.

Comcast Corporation 706 Comments at 12.

Of course, AT&T's and the cable industry's comments set out above were made in other proceedings. Only AT&T has reversed course.

A. Section 251(d)(2) Can Be Stretched No Farther Than To Require Incumbent LECs To Provide Local Loops And Collocation To Aid CLECs In Providing Advanced Services Through xDSL Technology

The debate over whether to unbundle network elements used by incumbent LECs to provide advanced services cannot go beyond collocation and loops.[10] Where collocation is available to allow CLEC xDSL competition over incumbent LEC local loops, an entitlement to free ride on incumbent LEC investment in DSLAMS could never meet section 251(d)(2)'s limiting standard. As described by AT&T and cable companies above, any such requirement could never be in the interests of competition or consumers. No such decision could be squared with the absence of an unbundling requirement for network elements used to provide the same advanced services over cable networks. Regulatory parity is a simple goal that would ennable greater competition.

CLECs are using incumbent LEC local loops and collocation to compete very successfully today. "As a general matter, the collocation of DSLAMs in an ILEC central office is not an expensive, capital intensive exercise." Information Technology Industry Council Comments at 7. As set out in BellSouth's Comments, the process has worked well enough that CLECs can claim to have a substantial advanced services lead over incumbent LECs. CLECs predict that this lead will continue. BellSouth Comments at 41. In fact, "ILECs have no legacy advantage with respect to the installation and use of advanced services electronics ... ILECs must now acquire and install new equipment just like their advanced services competitors." Information Technology Industry Council Comments at 6-7.

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[10] Of course, cable operators are not required to offer, and do not provide, similar access to their facilities.

CLECs focusing on the advanced services market agree that the availability of collocation and loops is all that is required from incumbent LECs. Unbundled DSLAMs and packet switching are not. Northpoint sums this up.

> To date, all of the competitive LECs have entered the advanced services market by installing their own DSLAMs in central office collocation cages purchased from the incumbent LECs. Where competitive LECs enjoy access to loops and collocation, any competitive LEC can provide the necessary infrastructure (DSLAMs and packet switches) required to provide advanced services.

Northpoint Comments at 18; Rhythms Comments at 12; Covad Comments at III; Information Technology Industry Council Comments at 6-8.

Northpoint concludes that only where "loops and collocation are unavailable" should the incumbent LEC "be required to provide competitive LECs with access to unbundled DSLAMs. Northpoint Comments at 19; Information Technology Industry Council Comments.

Of course, whether there is competition between xDSL providers should not be the issue. As described above, competition between advanced services networks exists. Focusing only on one technology is not the genuine look at alternatives that the Court ordered. Focusing on competition among DSL providers to the exclusion of competition from other networks is fundamentally identical to excluding PCS carriers from the wireless service market.[11]

Nonetheless, BellSouth provides loops and collocation. Where conditioned loops are available, BellSouth makes them available to CLECs. Where they are not, BellSouth will condition them for CLECs. There are about 1,000 CLEC collocation arrangements already in place or in progress in BellSouth's region. Of BellSouth's approximately

[11] The Commission does not define wireless markets so narrowly. *Third CMRS Report.*

1,600 central offices, 251 have at least one completed collocation, and 99 more offices have arrangements in progress. Shortly, 350 BellSouth offices will have at least one collocation arrangement. Of course, CLEC collocation is occurring in the central offices that serve disproportionately high numbers of lines, so the competitive reach of CLEC collocation is very substantial.

The *Advanced Services Order*[12] provides CLECs more flexibility in collocating and creates additional options for reducing collocations costs substantially. BellSouth provides CLECs the ability to collocate DSLAMs in the field. For example, BellSouth allows CLECs to collocate DSLAMs adjacent to BellSouth remote terminals.

To the extent collocation could possibly be still viewed as impairing CLEC opportunities to compete, the right approach is to address the collocation issue, not to unbundle DSLAMs. In markets depending on risky, new investment unbundling requirements are all but certain to reduce investment and harm innovation and consumers.[13]

Some CLECs, particularly AT&T and MCI WorldCom, argue that they should be allowed to free ride on new incumbent LEC investment in new DSLAMs.[14] AT&T

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[12] *In the Matter of Deployment of Wireline Services offering Advanced Telecommunications* Capability, CC Docket No. 98-147, *First Report and Order and Further Notice of Proposed Rulemaking*, FCC 99-48, released March 31, 1999, (*Advanced Services Order*).

[13] *See, e.g.*, Kahn Declaration at ¶ 7.g. Information Technology Industry Council Comments at 8 ("the elimination of unbundling obligations for ILEC advanced service equipment would encourage ILECs to deploy advanced services technologies").

[14] BellSouth's Comments pointed out that BellSouth has just begun deploying DSLAMs. Only 147 had been installed by the end of March. Thus, any unbundling requirement will in fact apply principally to future incumbent investment. Unbundling investment dollars is not the goal of section251(d)(2). The potential return of that new investment would be

makes no mention of its directly opposing views on unbundling cable network elements used to provide advanced services. This is not a matter of *different* statutory contexts. AT&T is arguing exactly opposite policy points -- unbundling incumbent LEC advanced service elements will be pro-competitive while unbundling cable network advanced service elements will be anti-competitive. Or, in the alternative, market forces are strong enough to guarantee that cable providers will grant access to their facilities where it would benefit consumers, but those same competitive forces will have no effect on incumbent LECs. AT&T's arguments here are so directly counter to its cable positions that they cannot carry any weight.

MCI WorldCom chooses to argue that it needs unbundled incumbent LEC DSLAMS at risk-free TELRIC prices even though DSLAMs are "affordable." MCI WorldCom Comments at 50 (DSLAMs cost $8,000-20,000 apiece and serve from 200-300 lines). It argues that collocation costs make deployment of DSLAMs "uneconomic." MCI WorldCom Comments at 50. This unsupported assertion not only runs counter to the actual experience of CLECs that are deploying DSLAMs (and CLECs have deployed DSLAMS in urban and rural areas),[15] and to BellSouth's analysis of collocation costs attached to its Comments, but also gives no credit to the Commission's recent *Advanced Services Order*, which will further reduce collocation costs.[16] That order "further

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severely limited by an unbundling requirement at TELRIC prices. *See* Kahn Declaration at ¶ 7.g; Hausman and Sidak Reply Affidavit; *T&T-TCI Joint Reply*, Ordover and Willig Affidavit at ¶ 49.

[15] *See, e.g.*, Information Industry Technology Council Comments at 7 ("collocation of DSLAMs in an ILEC central office not an expensive, capital intensive exercise").

[16] MCI WorldCom's argument illustrates the Court's caution that a return lower than one a CLEC could imagine cannot support a finding of that a CLEC's opportunities to compete would be impaired. No doubt providing advanced services over an incumbent

erode[s] arguments for requiring ILECs to offer the electronics associated with their advanced services." Information Industry Technology Council Comments at 9.

MCI WorldCom also argues that it should get unbundled access to DSLAMs because in rural areas revenue opportunities would make deployment by MCI WorldCom "difficult to justify." MCI WorldCom Comments at 50-51. This argument is belied by the market fact that other CLECs can justify rural deployment, as evidenced by their deploying in rural areas. The deployment by these CLECs shows that an efficient CLEC can operate in rural areas too.

MCI WorldCom's argument demonstrates the dangers of unbundling described by Professor Kahn and in the Jorde, Sidak and Teece Affidavit attached to USTA's Comments. In MCI WorldCom's example, a CLEC is free to make a risky investment in providing advanced services in rural areas, but does not view it as likely to be sufficiently profitable. An incumbent LEC may weigh the situation differently, and decide to invest. The CLEC could then claim the right to use the incumbent LEC's investment at TELRIC prices. This illustrates nicely the point that unbundling obligations reduce CLEC incentives to invest and will discourage incumbent incentives as well. The example also illustrates how unbundling obligations create regulation rather than competition. That is, real facilities-based competition that could have existed in MCI WorldCom's example is replaced with regulated access to the incumbent LEC's DSLAM. CLECs that have the opportunity to invest in providing services are not impaired if they choose not to.

LEC's network would be more profitable if collocation were free or DSLAMs grew on trees, but that is hardly the point.