

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

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Deployment of Wireline Services Offering)
Advanced Telecommunications Capability)
)
and)
)
Implementation of the Local Competition)
Provisions of the Telecommunications Act)
of 1996)

CC Docket No. 98-147

CC Docket No. 96-98

REPLY COMMENTS OF BELLSOUTH CORPORATION

BellSouth Corporation, for itself and its wholly owned affiliates (collectively “BellSouth”), hereby replies to the comments of interested parties in the captioned proceeding. Page citations are to the parties’ opening comments in this proceeding unless otherwise noted.

I. INTRODUCTION AND SUMMARY

The Commission should not wear blinders as it deliberates in this proceeding. Any policy decision regarding the deployment of advanced services that ignores the entire market would be unbalanced and potentially harmful. The Commission cannot, as requested by several competitive local exchange carriers (“CLEC”) that provide advanced services, isolate its decisions regarding advanced services into silos for digital subscriber line (“DSL”) services, cable services, and satellite services. Each provider of these services competes against each other in the broadband market. Accordingly, the Commission cannot simply ignore cable and wireless providers and treat DSL as the sole broadband service. Moreover, the Commission cannot reasonably take seriously the data CLECs’ attempt to blame the economic woes of the CLEC industry on the incumbent local exchange carriers (“ILECs”). Placing blame for poor

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business decisions on ILECs, the data CLECs hope to gain additional regulatory benefits against the ILECs. The Commission should not shield data CLECs from the reality that entry into a new market is a risky endeavor. They should not be able to avoid such risk by riding the ILECs' investment through regulatory fiat.

Additionally, the Commission should neither re-define the local loop to include the digital subscriber line access multiplexer ("DSLAM"), whether it is a stand alone DSLAM or a functionality included in a remote terminal ("RT") line card, nor should it unbundle the DSLAM or packet switching.¹ As BellSouth and other entities explained in their comments,² the Commission considered such action in the *UNE Remand Order*³ and declined to take it. Since the Commission reached that decision, the market has only changed by becoming even more competitive, with consumers beginning to see advanced services delivered through new forms of technology, such as fixed wireless and satellite services.

II. THE COMMISSION MUST REVIEW THE ENTIRE ADVANCED SERVICES MARKET WHEN MAKING POLICY DECISIONS

The data CLECs filing comments in this proceeding would have the Commission view the DSL market in isolation.⁴ They urge the Commission to adopt a more expansive regulatory policy regarding DSL under the theory that the ILECs hold a monopoly position in that market. They claim that this alleged monopoly position requires nothing less than further unbundling

¹ Most importantly, the Commission must realize that for BellSouth, including DSLAM functionality as part of the loop would require the unbundling of BellSouth's packet switch network. *See* Section III, *infra*.

² *See* BellSouth Comments at 15-16 and SBC Comments at 42.

³ *Implementation of the Local Competition Provisions in the Telecommunication Act of 1996*, CC Docket No. 96-98, *Third Report and Order and Fourth Further Notice of Proposed Rulemaking*, 15 FCC Rcd 3696 (1999) ("*UNE Remand Order*").

⁴ *See* AT&T Comments at 2-6; Comments of Covad Communications Company, Rhythms NetConnections Inc, and WorldCom, Inc (hereinafter "*Joint Commenters*") at 1-6, and Sprint Comments at 16.

requirements, particularly in the area of packet switching. The Commission has, however, already acknowledged that DSL is but one technology within the “broadband” market and, correctly analyzing DSL as part of the full broadband market, has also recognized that ILECs are far from the dominant service providers. That distinction belongs to cable modem providers. Moreover, wireless technologies are fast becoming viable competition to the fixed wirelines used by both the cable modem and DSL providers. When viewed in this context, even the data CLECs cannot contest the competitiveness of the market. This competition alone should preclude a finding of impairment for any facilities used to provide broadband services.

A. The Broadband Market is Competitive

The Commission has defined “broadband” as having “the capability of supporting, in both the provider-to-consumer (downstream) and the consumer-to-provider (upstream) directions, a speed (in technical terms, ‘bandwidth’) in excess of 200 kilobits per second (kbps) in the last mile.”⁵ In making this definition the Commission emphasized “that whether a capability is broadband does not depend on the use of any particular technology or nature of the provider.”⁶ The Commission therefore did not limit the broadband market to only those technologies that can be provided over traditional telephone wires. Likewise, the Commission cannot reasonably treat this type of technology, regardless of its legacy, as if it were the only means of delivering advanced services to the consumer. In making any policy decisions in the proceeding, the Commission must consider the competitiveness of the entire broadband market and not limit its analysis to DSL alone.

⁵ 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*, 14 FCC Rcd 2398, 2406, ¶ 20 (1999) (“*First Advanced Services Report*”).

⁶ *Id.* at 2407, ¶ 23.

Without doubt, the dominant provider of broadband services is cable modem. As demonstrated in the Joint Comments of BellSouth and SBC Communications, Inc. filed in response to the *Notice of Inquiry* in GN Docket No. 00-185,⁷ the cable companies are winning the broadband battle thus far. Specifically, “[c]able operators got to market first, and they have signed-up close to three out of every four residential broadband subscribers.”⁸ Cable modem service far exceeds the number of active DSL lines and is expected to hold that dominance well into the future.⁹

Moreover, the broadband market is not limited to DSL and cable modem providers. Fixed wireless and satellite providers are also beginning to provision broadband services. In a recent order regarding Local Multipoint Distribution Service (“LMDS”) and fixed satellite service, the Commission discussed the competitiveness of the broadband market. It stated that “[a]n increasing number of broadband firms and technologies are providing growing competition to incumbent LECs and incumbent cable companies, apparently limiting the threat that they will be able to preclude competition in the provision of broadband services.”¹⁰ The Commission concluded “[t]he record before us, which shows a continuing increase in consumer broadband choices within and among the various delivery technologies—xDSL, cable modems, satellite, fixed wireless, and mobile wireless, suggests that *no group of firms or technology will likely be*

⁷ *In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities*, GN Docket No. 00-185, *Notice of Inquiry*, 15 FCC Rcd 19287 (2000) (“*NOI*”).

⁸ BellSouth and SBC Joint Comments, GN Docket No. 00-185, filed December 1, 2000, at 5.

⁹ *Id.*

¹⁰ *In the Matter of Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, CC Docket No. 92-297, *Third Report and Order and Memorandum Opinion and Order*, 15 FCC Rcd 11857, 11864, ¶ 18 (2000).

able to dominate the provision of broadband services.”¹¹ Clearly, the Commission’s own orders have recognized that consumers have multiple choices in obtaining broadband services. All but one of these choices is provided over a medium other than the ILECs’ loop facilities. Significantly, the one technology that is provided over the ILECs’ loop is not the predominant mode of service delivery in the market. Unless it completely ignores the competitive marketplace it has already acknowledged to exist, the Commission cannot award the data CLECs further unbundling privileges under the same rationale it used to justify unbundling the loop for voice services.¹²

B. Entering a New Market is Risky

Some of those filing comments suggest that many DSL providers have gone out of business because of untoward actions of the ILECs in providing unbundled network elements.¹³ This suggestion is made as an attempt to persuade the Commission to place further regulatory restrictions on the ILECs in the form of more unbundling requirements. The Commission should remain unswayed by such empty rhetoric. The data CLECs entered the broadband market when DSL provisioning was at its infancy. They entered the market based on business cases that they assumed would succeed. Moreover, they gained sufficient capital from investors who believed that the business cases were sound. These business plans were developed in a regulatory climate that made the likelihood of their success far more uncertain than today’s regulatory climate does.

¹¹ *Id.* at 11865, ¶19 (emphasis added).

¹² See *In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, *Supplemental Order Clarification*, 15 FCC Rcd 9587, 9595, ¶ 15 (2000) (“Section 251(d)(2) does not compel us, once we determine that any network element meets the impair standard for one market, to grant competitors automatic access to that same network element solely or primarily for use in a different market. That provision asks whether denial of access to network elements ‘would impair the ability of the telecommunications carrier seeking access to provide *the services that it seeks to offer.*’”) (emphasis in original).

¹³ See AT&T Comments at 4; Joint Comments at 6, 15 - 17.

For example, most of the entities that the Joint Comments list as having gone out of business¹⁴ were all started and gained initial capitalization prior to the Commission's *Line Sharing Order*¹⁵ or the *UNE Remand Order*. Both of these orders greatly improved the data CLECs' positions in the broadband market.

The *Line Sharing Order* allowed the data CLECs to provision DSL service over a shared loop. Prior to this order, a data CLEC had to purchase a more expensive stand-alone loop in order to provision DSL service. Even earlier, the *UNE Remand Order* allowed data CLECs the ability to obtain unbundled packet switching from the ILEC to provide DSL service to customers being served by a digital loop carrier ("DLC") if certain conditions were met.¹⁶ The data CLEC community heavily participated in both of these proceedings making their positions well known to the Commission. Indeed, the Commission's orders clearly responded to the requests made by the data CLECs, and the ILECs are implementing both the letter and spirit of these orders. It is illusory for the data CLECs now to suggest that the market woes they currently face are of someone else's doing. It is time for the data CLECs, and the Commission, to realize the market for provisioning advanced services is risky. As Chairman Powell recently stated "the marketplace can be a killer." It can "strangle bad business models ... doing what regulators fear to do."¹⁷ The Commission must not substitute its judgment for that of the market by favoring

¹⁴ Joint Commenters at 16.

¹⁵ *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket Nos. 98-147 and 96-98, *Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98*, 14 FCC Rcd 20912 (1999) ("*Line Sharing Order*").

¹⁶ Pursuant to the *UNE Remand Order*, an ILEC must unbundle packet switching where the ILEC has: deployed DLC; there are no spare copper loops capable of supporting the xDSL services that the CLEC seeks to offer; the CLEC is unable to collocate its DSLAM at the RT; and the ILEC has deployed packet switching capability for its own use.

¹⁷ Communications Daily, March 8, 2001.

one provider of broadband service over another. Specifically, it must not allow one provider to ride the investment of another provider risk free especially considering the amount of competition that currently exists in the broadband market. It would be most unfair to allow these CLECs to use the ILECs' unbundled DSLAM and packet switching when the CLECs' only claim for impairment is that the ILECs have better access to capital than they do. This cannot possibly be the intent of Sections 251 and 706 of the Telecommunications Act of 1996.

III. THE COMMISSION SHOULD NOT RE-DEFINE THE LOOP TO INCLUDE PACKET SWITCHING

The Commission has firmly established that the loop does not include the functionality of the DSLAM. Indeed, the Commission expressly determined that the DSLAM was not an element necessary for data CLECs to obtain from ILECs in the provisioning of DSL service. Despite the claims of the data CLECs, nothing has changed since the Commission made this determination in the *UNE Remand Order*.

AT&T and Joint Commenters argue that the loop definition as currently defined actually includes the DSLAM functionality, even if this functionality is embedded in a line card. AT&T claims that the DSLAM does not perform any switching functions, but merely “creates the packets, which is an encoding function, and performs both buffering and multiplexing – all of which are transmission functions.”¹⁸ AT&T further claims that the ILEC then uses a device it labels an optical concentration device (“OCD”) to perform “complementary demultiplexing functionalities” at the central office. AT&T argues that the DSLAM and the OCD are just part of the transmission path and therefore only provide transmission functionality between the customer premises and the central office.¹⁹ AT&T contends that because the DSLAM and the

¹⁸ AT&T Comments at 12.

¹⁹ AT&T Comments at 13 – 14.

OCD do not perform any switching functionalities, they are merely part of the loop and should be treated as such.

AT&T's analysis, however, does not apply to BellSouth's network architecture. As BellSouth explained in its comments, it primarily uses three types of DLC architecture in its network. Under each of these architectures, however, asymmetrical transfer mode ("ATM") switching is involved. As an initial point of clarification, contrary to AT&T's assertion that the DSLAM does not "create" the packets (or cells); they are created in the customer premises equipment ("CPE"). The DSLAM, or equivalent functionality in the case of a combination voice data card or Fiber in the Loop product, provides statistical multiplexing -- into one shared digital "pipe" -- for all of the ATM packets/cells from subscribers served through a remote site. The packets/cells are transmitted over the shared digital "pipe" to an ATM switch, which in most cases is not at the same central office serving the remote site.²⁰ The ATM switch then switches the packets/cells to their respective designations.²¹ Accordingly, under BellSouth's architecture, allowing a CLEC access to the DSLAM functionality would require BellSouth to perform packet switching through BellSouth's ATM switch.²² As previously discussed, the Commission should not waiver from its decision to not unbundle packet switching, including the DSLAM.

²⁰ Contrary to AT&T's claims, the packets/cells are not transported to the equivalent of a distribution frame at the ILEC's central office.

²¹ It is important to note that the packets/cells do not "share" the digital pipe between the DSLAM and ATM switch using time-division multiplexing, a technique commonly used in DLC systems. If this were the case, the packets/cells could be disaggregated from the shared "pipe" -- and "handed off" to a CLEC -- using a time-division multiplexer at the serving central office. Instead, the packets/cells are statistically multiplexed together. Disaggregation of the packets/cells that are coming from or going to a CLEC requires that a piece of equipment examine the "address" of each packet/cell and switch that packet/cell to the interface either from or to the CLEC. Such functionality is, practically by definition, packet switching.

²² In its comments, AT&T accuses BellSouth of being "disingenuous" in an ex parte before the Commission where BellSouth explained that unbundling the DSLAM functionality in a line card would require the unbundling of BellSouth's ATM packet switching. AT&T Comments at 12 n. 34. The above discussion demonstrates that BellSouth's statements to the Commission are completely accurate. Furthermore, BellSouth finds it ironic that AT&T would accuse anyone of

Indeed, the data CLECs offer nothing to warrant changing that earlier finding. The broadband market continues to be highly competitive with DSL being far from the dominant mode of advanced service delivery. Moreover, data CLECs can offer DSL service to customers served by a DLC under the current rules at parity with ILECs. The data CLECs, however, contend that it is cost prohibitive for them to deploy such DSLAMs. Instead, they want the Commission to require ILECs to bear all the risk and expense of DSLAM functionality deployment and then open this functionality for use by the data CLECs. With the ILECs facing intense competition in the broadband market, it would make no economic sense for them to expend the resources necessary to deploy facilities required to provide DSL to customers served by a DLC if those facilities must be turned over at TELRIC rates to a competitor who has not invested a dime in the deployment effort. We urge the Commission to see the fallacy of this position. The current loop unbundling obligations regarding packet switching capability, including the DSLAM, should stand; further unbundling obligations are unnecessary and are bad policy.

IV. CONCLUSION

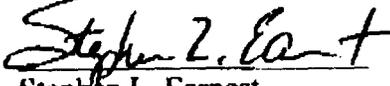
The Commission's decisions should be quite clear. The facts are simple; (1) a competitive market, (2) with no preconditions for a monopoly, and (3) the ILECs are not the dominant provider of service. Moreover, the CLECs have access to the loop and can provide DSL service in the same manner that ILECs provide it today. With these facts, it would be hard to imagine any basis that would warrant further regulatory obligations on the ILECs. Therefore,

being disingenuous when it, as one of the largest cable modem providers in the nation, is arguing for complete open access to broadband facilities in this proceeding while strenuously arguing against open access for broadband facilities related to cable.

the solution is clear, the Commission needs to take no action in this proceeding beyond what is currently required by its rules.

Respectfully submitted,

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Dated: March 13, 2001

CERTIFICATE OF SERVICE

I do hereby certify that I have this 13th day of March 2001 served the parties of record to this action with a copy of the foregoing **REPLY COMMENTS OF BELLSOUTH CORPORATION** by hand delivery and/or by placing a true and correct copy of the same in the United States Mail, postage prepaid, addressed to the parties on the attached service list.


Lynn Barclay

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