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December 26, 2001

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Mrs. Blanca S. Bayó
Director, Division of the Commission
Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 990649A-TP (UNE Docket)

Dear Mrs. Bayó:

Enclosed is an original and fifteen copies of BellSouth Telecommunications, Inc.'s Surrebuttal testimony for the following witnesses: D. Daonne Caldwell with Exhibit DDC-3, Jerry Kephart, John A. Ruscilli, James W. Stegeman, and Tommy Williams with Exhibits (Direct Testimony, Rebuttal Testimony, Late Filed Exhibit 12 filed in Florida Digital Network hearing, Docket 010098-TP).

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely,

Andrew D. Shore
Andrew D. Shore (KA)

cc: All Parties of Record
Marshall M. Criser III
R. Douglas Lackey
Nancy B. White

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Docket No. 990649A-TP**

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(+) Signed Protective Agreement

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BELLSOUTH TELECOMMUNICATIONS, INC.
SURREBUTTAL TESTIMONY OF THOMAS G. WILLIAMS
BEFORE FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 990649A-TP
December 26, 2001

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

A. My name is Thomas G. Williams. I am employed by BellSouth as the Product Manager for Line Sharing and Line Splitting for the nine-state BellSouth region. My business address is 3535 Colonnade Parkway, Suite E511, Birmingham, Alabama, 35243.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL AND EDUCATIONAL EXPERIENCE.

A. My career at BellSouth spans over 14 years and includes various product management positions. I also have seventeen years service with AT&T and Southern Bell, during which time I held positions in sales, marketing, and operations. I have a bachelor's degree in Marketing.

1 Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS DOCKET?

2

3 A. No.

4

5 Q. HAVE YOU TESTIFIED PREVIOUSLY IN REGULATORY
6 PROCEEDINGS?

7

8 A. Yes. I have testified, or filed testimony, in various proceedings before
9 the Florida, Georgia, Louisiana, Kentucky, Mississippi and Alabama
10 Public Service Commissions, the Public Service Commission of South
11 Carolina, the North Carolina Utilities Commission, and the Tennessee
12 Regulatory Authority.

13

14 Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

15

16 A. The purpose of my Surrebuttal Testimony is to rebut the Rebuttal
17 Testimony of Florida Digital Network, Inc. ("FDN") witness Mr. Michael
18 Gallagher.

19

20 Mr. Gallagher, attached to his testimony portions of his Rebuttal
21 Testimony, attached his Direct Testimony from this Commission's
22 Docket No. 010098-TP, an arbitration proceeding between FDN and
23 BellSouth. Although the issues in this docket are different and
24 narrower than the issues in the FDN arbitration, I also have attached
25 my Direct Testimony, Rebuttal Testimony, and my Late Filed Exhibit

1 No. 12 from the FDN arbitration to my Surrebuttal Testimony as
2 Exhibits TGW-1, 2, and 3, respectively, so that the record in this
3 proceeding will be complete.

4

5 Q. DO YOU HAVE ANY GENERAL COMMENTS REGARDING THE
6 SCOPE OF MR. GALLAGHER'S TESTIMONY?

7

8 A. Yes. This docket is an Unbundled Network Element ("UNE") Cost
9 Docket, yet Mr. Gallagher is re-arguing the very same issues currently
10 being considered in the Arbitration proceeding between BellSouth and
11 FDN. Moreover, Mr. Gallagher is doing so despite the fact that the
12 Commission issued an Issues List, after soliciting input from all parties,
13 of the issues it will resolve in this docket. While I am not a lawyer or a
14 regulatory expert, it appears to me that the majority of Mr. Gallagher's
15 Rebuttal Testimony is well outside the scope of this proceeding.

16

17 To the extent the Commission deems it is appropriate to consider Mr.
18 Gallagher's testimony in deciding the issues in this docket, I will
19 respond to his Rebuttal Testimony.

20

21 Q. PLEASE SUMMARIZE YOUR SURREBUTTAL TESTIMONY.

22

23 A. My Surrebuttal Testimony establishes that:

24 1. Mr. Gallagher is asking this Commission to require BellSouth to
25 unbundle its switched packet network, which both this

- 1 Commission and the FCC have ruled previously is not required;
- 2 2. FDN's proposal that BellSouth make certain facilities available to
- 3 FDN inappropriately places 100% of all investment and risk on
- 4 BellSouth, with FDN receiving all of the benefits;
- 5 3. FDN's arguments regarding its alleged inability to provide xDSL
- 6 services to end-users using BellSouth's network are based upon
- 7 speculation rather than fact;
- 8 4. BellSouth provides reasonable and workable solutions to
- 9 Alternative Local Exchange Carriers ("ALECs") to offer x Digital
- 10 Subscriber Line ("xDSL") services to end-users served from a
- 11 Digital Loop Carrier ("DLC") remote terminal ("RT");
- 12 5. What FDN is requesting would not serve to increase the number
- 13 of broadband users, but rather would only change the provider of
- 14 these services.

15

16 Q. WHAT IS FDN ASKING THIS COMMISSION TO ORDER?

17

18 A. FDN wants this Commission to require BellSouth to unbundle its packet

19 switching function. Mr. Gallagher states numerous times that this

20 Commission should order BellSouth to offer "xDSL loops, with and

21 without voice capability, including unbundled packet switching and

22 transport between the customer and the central office, on a per loop

23 basis". See Gallagher Rebuttal Testimony at pages 6, 7, 8, 16 and 29.

24

25 Q. SHOULD THE COMMISSION GRANT FDN'S REQUEST AND ORDER

1 BELLSOUTH TO UNBUNDLE PACKET SWITCHING?

2
3 A. No. As Mr. Ruscilli explains in greater detail in his Surrebuttal
4 Testimony, both this Commission and the FCC have concluded that
5 ILECs are not required to unbundle the switched packet network,
6 except in the very limited circumstances detailed in FCC Rule
7 51.319(c)(5).

8
9 In its *UNE Remand Order*¹, the FCC stated that “regulatory restraint . . .
10 may be the most prudent course of action in order to further the Act’s
11 goal of encouraging facilities-based investment and innovation.” -*UNE*
12 *Remand Order*, 3840. The FCC declined to require ILECs to unbundle
13 packet switching out of concern that such a requirement would impede
14 competition and stifle innovation. *Id.*, 3839-40.

15
16 There have been no significant changes in the telecommunications
17 environment that would warrant any reconsideration of this issue, and
18 accordingly, this Commission should not rule inconsistent with the FCC.

19
20 Q. PLEASE EXPLAIN THE CAPITAL AND OTHER RESOURCES

¹ See *Implementation of the Local Competition Provisions in the Telecommunication Act of 1996*, CC Docket No. 96-98, *Third report and Fourth Further Notice of Proposed Rulemaking*, 15 FCC Rcd 3690 (1999) (“UNE Remand Order”).

1 BELL SOUTH WOULD BE REQUIRED TO EXPEND IF THE
2 COMMISSION GRANTED FDN'S REQUEST.

3

4 A. BellSouth's switched packet network was designed and established
5 based on the assumption that it would be used only by BellSouth. It is
6 my understanding that to take a very large, complex and detailed
7 internal system and convert it into an offering available to ALECs would
8 require a massive amount of money and work. The detailed,
9 quantifiable information is outside of my area of expertise. I do know,
10 however, that it would require a very large amount of resources.

11

12 Q. PLEASE ELABORATE ON THE RISK BELL SOUTH WOULD BE
13 EXPOSED TO IF THIS COMMISSION GRANTED FDN'S REQUEST.

14

15 A. In addition to FDN's proposal that BellSouth unbundle its switched
16 packet network, FDN desires BellSouth to structure the proposed new
17 offering to accommodate FDN's requests for a port at a time, at any
18 location that FDN may decide to serve a single customer. Some of the
19 risks that BellSouth would be exposed to if the Commission ruled in
20 favor of FDN include:

- 21 1. The risk of obsolescence of technology (equipment, systems,
22 etc.);
- 23 2. The risk of underutilization of equipment (especially Digital
24 Subscriber Line Access Multiplexers ("DSLAMs")); and
- 25 3. The risk that BellSouth may not recoup its investment from the

1 extensive research and development, including the extensive
2 rewriting of the hundreds of related sub-systems, and the
3 significant effort required to actually deploy such an offering.
4

5 Q. WOULD YOU PLEASE EXPLAIN THE CONCERNS REGARDING
6 THE RISK OF OBSOLESCENCE OF TECHNOLOGY REFERRED TO
7 ABOVE.

8
9 A. New technology is being developed at an unprecedented rate. While
10 this is often of great benefit to end-users, it does present significant
11 risks for ILECs purchasing this better and less expensive equipment.
12 Recent history has shown that within a relatively short period of time,
13 there will most likely be even a better, less expensive piece of
14 equipment available to perform the same (or probably even expanded)
15 tasks. The concern to an ILEC is that: (1) the network and system
16 architecture is designed based on the capabilities and performance of
17 the new equipment just purchased; (2) cost studies and pricing is
18 based on the actual funds expended to procure the equipment, and
19 deploy as designed; and (3) a newer, better and less expensive piece
20 of equipment will become available within a very short period of time.
21 The "risk" arises that the ILEC is granted "interim rates" based upon
22 TELRIC and then, during a cost proceeding, is ordered to comply with
23 the TELRIC principal of using "forward looking" design of the newest
24 equipment. Unfortunately, this situation may mean that an ILEC has to
25 price the new offering based on the cost of the most modern equipment

1 (scorched node concept) which costs significantly less than what the
2 ILEC just recently paid for the equipment just deployed. The result is
3 that the ILEC could possibly not even be able to recover its actual out-
4 of-pocket costs.

5
6 Q. WOULD YOU PLEASE EXPLAIN THE CONCERNS REGARDING
7 THE RISK OF UNDER UTILIZATION REFERRED TO ABOVE.

8
9 A. Under the FDN proposal, BellSouth is being asked to deploy the
10 proposed offering a port-at-a-time, at any location where FDN may
11 desire to obtain customers, and for only as long as FDN desires to use
12 it. What this means to BellSouth is that FDN could request that
13 BellSouth install a DSLAM at an RT located in a sparsely populated
14 rural location because of interest expressed to FDN by a single
15 potential customer in that area. The risk is that only one port of the
16 DSLAM will be used, and that port could potentially be disconnected in
17 a relatively short period of time, leaving BellSouth with a DSLAM in an
18 RT with no users attached. Even though BellSouth opted to use
19 DSLAMs with as few as sixteen (16) ports, the very real risk remains
20 that the DSLAM may become a "stranded investment" and BellSouth
21 would never recoup its actual investment. Ordering BellSouth to install
22 equipment solely for the benefit of ALECs serves only to shift the
23 associated risks of utilization from the ALEC who has requested the
24 equipment to BellSouth.

25

1 Q. WHY DO YOU FEEL THERE MAY BE A RISK THAT BELLSOUTH
2 WOULD NOT RECOUP ITS INVESTMENT?
3

4 A. In addition to the financial risks discussed in my response to the above
5 two questions, an additional risk remains that, in the name of fostering
6 competition or broadband deployment, a regulatory body could order
7 BellSouth to reduce its rates to some level below BellSouth costs.
8 While in theory, BellSouth may, at some time in the very distant future,
9 be able to recoup its original investment, it probably would not be able
10 to do so, much less be able to provide a return on investment to its
11 shareholders.

12
13 Additionally, there is the risk that although an ALEC or ALECs claim
14 that they "have to have" an offering such as FDN proposes, they will
15 not actually purchase it, and accordingly, the significant amount of
16 funds and other resources expended to deliver the offering will never
17 be recouped. This has recently happened to BellSouth with Remote
18 Site Line Sharing and again with Line Splitting.

19
20 Q. DO YOU FEEL THAT IT IS APPROPRIATE FOR BELLSOUTH TO
21 ASSUME THIS LEVEL OF RISK?
22

23 A. No. Although BellSouth policy is not within my area of expertise or
24 responsibility, I strongly feel that FDNs proposal stifles any potential
25 investment an ILEC might be considering in new technologies. Such a

1 result would prohibit Florida consumers from obtaining the opportunities
2 that widespread broadband deployment could offer. I believe BellSouth
3 has indicated its risk tolerance level in this regard in its recent response
4 to the National Telecommunications and Information Administration
5 (“NTIA”)¹, as follows:

6
7 Deployment of network equipment necessary to provide
8 broadband is extremely costly. As with any investment, risk
9 and reward determine the willingness of a carrier to commit
10 capital resources to innovative network equipment.
11 Requiring ILECs to open their investment, through
12 unbundling, to others carriers that incur no risk yet have the
13 ability to achieve the rewards, has a stifling effect on any
14 investment. If ILECs are forced to unbundle their network
15 investment in a nascent market to other carriers, they may
16 simply choose not to invest. The limited rewards will not
17 justify the investment. ... Required unbundling of either of
18 these or collocation of line cards, at TELRIC pricing, would
19 strain these margins beyond viability. In such an instance

¹ “COMMENTS OF BILLSOUTH CORPORATION” to the National Telecommunications and Information Administration, U.S. Department of Commerce, December 19, 2001, re: “Deployment of Broadband Networks and Advanced Telecommunications”, Docket No. 011109273-1273-01

1 BellSouth would simply abort further deployment of the
2 integrated solution.

3

4 **Q. CAN AN ALEC CURRENTLY PROVIDE xDSL SERVICE TO A**
5 **FLORIDA END-USER SERVED BY A DLC RT?**

6

7 **A. Yes, all of the components are currently available through collocation**
8 **and UNE offerings to allow an ALEC to serve end-users, regardless of**
9 **the facilities serving the end-user.**

10

11 When BellSouth provides its own ADSL service where DLC is
12 deployed, BellSouth must locate DSLAM equipment at the DLC RT
13 location. An ALEC desiring to provide its xDSL service where DLC is
14 deployed also must collocate its DSLAM equipment at the DLC RT
15 location. This will allow the ALEC to provide the high speed data
16 service in the same manner as BellSouth.

17

18 **Q. ON PAGE 5 OF HIS TESTIMONY, MR. GALLAGHER STATES THAT**
19 **FLORIDA IS EFFECTIVELY CLOSED TO DSL COMPETITION**
20 **BECAUSE OF THE LARGE QUANTITY OF DLCs IN FLORIDA. IS**
21 **THIS AN ACCURATE STATEMENT?**

22

23 **A. No. FDN has the same options available to it as BellSouth has for**
24 **itself. If FDN wants to provide DSL service to customers served by**

1 DLC, as I will show later in my testimony, FDN has the ability to do so.
2 All of the necessary components are available.

3
4 Additionally, FDN was well aware of the extent of BellSouth's DLC
5 deployment in Florida, as well as the solutions offered by BellSouth,
6 prior to commencing operations in Florida. BellSouth achieves
7 significant savings for the ratepayers of Florida by reducing the cost of
8 voice service through the use of DLC.

9
10 Q. SHOULD AN ALEC EXPECT TO ENCOUNTER INSUFFICIENT
11 SPACE AND INFRASTRUCTURE RESOURCES AT RT's, AS MR.
12 GALLAGHER INDICATES ON PAGE 18 OF HIS REBUTTAL?

13
14 A. Not at all. BellSouth is committed to do everything within its power to
15 accommodate an ALEC's request for RT collocation, including
16 increasing the size of the RT if that is required.

17
18 Q. IN THE UNLIKELY EVENT THERE IS A PROBLEM LOCATING
19 SPACE IN AN RT FOR AN ALEC TO COLLOCATE, HOW DOES
20 BELLSOUTH RESOLVE IT?

21
22 If sufficient space exists within a DLC RT, BellSouth will allow an ALEC
23 to collocate its DSLAM in the RT, regardless of whether BellSouth has
24 installed its own DSLAM at that RT. If sufficient space does not exist
25 within the DLC RT and BellSouth has not installed its own DSLAM at

1 that DLC RT location, then BellSouth will file a collocation waiver
2 request with this Commission for that DLC RT site. If sufficient space
3 does not exist within the DLC and BellSouth has installed its own
4 DSLAM at the DLC RT location, then BellSouth will make good-faith
5 efforts to augment the space at that DLC RT, such that the ALEC can
6 install its own DLSAM at that DLC RT. In the very unlikely event that
7 BellSouth could not accommodate collocation at the particular RT
8 where BellSouth has a DSLAM, BellSouth will unbundle the BellSouth
9 packet switched network at that RT in accordance with FCC
10 requirements. BellSouth, therefore, provides ALECs the same
11 opportunity to offer DSL service where a DLC is deployed as BellSouth
12 provides itself. The 'viability' of an ALEC to collocate DSLAMs at RTs
13 is no different that what it would be for BellSouth. BellSouth has
14 absolutely no advantage or savings over an ALEC when it comes to
15 collocating DSLAMS at an RT.

16

17 Q. ARE MR. GALLAGHER'S CONCERNS ABOUT RT COLLOCATION,
18 RIGHTS-OF-WAY, ALEC'S HAVING TO CONSTRUCT NEW
19 FACILITIES AND EXPERIENCING OTHER DIFFICULTIES
20 ACCURATE, AS STATED ON PAGES 22-24 OF HIS REBUTTAL?

21

22 A. No. First, let me state that FDN has not submitted a single RT
23 Collocation Application. Its concerns are purely speculative. Moreover,
24 they are unfounded.

25

1 An ALEC certainly may construct its own facilities, however it is not at
2 all necessary. BellSouth offers sub-loop DS1, DS3, and OC3 feeder
3 UNEs that would provide all of the capacity required from an RT to a
4 CO. Accordingly, Rights-Of-Way and construction of new facilities is
5 not necessary.

6
7 Mr. Gallagher's statements regarding RTs being too small, lacking
8 sufficient power and connectivity, expansions of space, power
9 generation, climate control facilities that would be impossible, etc., and
10 his claims that the public interest would not be served by unnecessary
11 and inefficient expansions of RTs are simply not correct. While it is my
12 understanding that each of the above may occur from time-to-time, it is
13 highly unlikely that all of these, or even several of these, would be
14 present at the same time and at the same RT. I believe that when FDN
15 actually submits its first RT collocation application, it will be pleasantly
16 surprised.

17
18 Q. ON PAGE 3 OF HIS TESTIMONY, MR. GALLAGHER IMPLIES THAT
19 BELL SOUTH IS INTENTIONALLY DEPRIVING ALECS OF THE
20 OPPORTUNITY TO PROVIDE xDSL SERVICE TO END-USERS
21 SERVED FROM A DLC RT. IS THAT ASSERTION CORRECT?

22
23 A. Absolutely not. BellSouth has worked to accommodate ALECs in the
24 provisioning of their DSL services. As an example, since the inception
25 of Line Sharing and Line Splitting, BellSouth has hosted industry-wide

1 collaboratives, each one meeting from one/half day to two full days per
2 week, for the express purpose of having ALECs assist with the
3 development of Line Sharing and Line Splitting offerings and related
4 systems. Although FDN has always been welcome and encouraged to
5 attend, FDN has never participated, nor expressed any desire for any
6 information relating to the issues that were discussed and resolved
7 through the collaboratives. It would seem to me that if an ALEC was
8 desiring to target potential customers served out of an RT, it would
9 contact the local ILEC and obtain as much information, direction and
10 assistance as possible. FDN has not done so.

11
12 Q. PLEASE COMMENT ON MR. GALLAGHER'S STATEMENTS ON
13 PAGES 10 AND 17 OF HIS TESTIMONY REGARDING FDN'S NEED
14 TO PLACE ITS OWN DEDICATED DSLAM AND DS1 FEEDER IN
15 EVERY ONE OF BELL SOUTH'S 12,000 RT'S AND HOW
16 PROHIBITIVELY EXPENSIVE THAT WOULD BE.

17
18 A. When BellSouth, as well as most ALECs develop a business plan and
19 commence deployment and sales efforts of sDSL services, they are
20 targeted to those areas where the provider expects a large percentage
21 of end-users to subscribe. As experience is gained and resources are
22 built up, additional areas are targeted. BellSouth selectively placed
23 DSLAMs in the Central Offices ("CO") for several years before the first
24 RT based DSLAM was placed. As FDN is well aware, CO based xDSL
25 is far less expensive than RT based xDSL. BellSouth waited until

1 demand increased before it deployed the more expensive RT
2 infrastructure. Accordingly, Mr. Gallagher's claim that FDN would have
3 to incur the prohibitive cost of placing its own DSLAMs in every one of
4 BellSouth's 12,000 RTs in Florida is probably an exaggeration, and I
5 feel certain has never been part of FDN's business plan. To date,
6 BellSouth has placed DSLAMS in approximately 3200, or 25%, of its
7 RTs in Florida.

8
9 If FDN truly anticipates the exceptionally low take rate indicated on
10 page 16 of Mr. Gallagher's Rebuttal Testimony ('small, single-digit
11 percentage'), FDN may be best served by also being patient and
12 prudent. Additionally, it probably would be financially prudent not to
13 consider deployment in those RTs Mr. Gallagher categorizes on page
14 17, as serving a small number of customers, some as few as a hundred
15 lines.

16
17 It would be disappointing if this Commission rewards an ALEC who
18 comes to the party late, makes no capital investment, and is unwilling
19 to assume any of the risk, by allowing it to fully utilize all of the prudent
20 and patient (and capital intensive and potentially high risk sensitive)
21 investments of BellSouth.

22
23 Q. IF AN ALEC DOES NOT WANT RT COLLOCATION, ARE THERE
24 ANY OTHER OPTIONS AVAILABLE FOR AN ALEC TO PROVIDE
25 xDSL SERVICE TO AN END-USER SERVED BY A DLC RT?

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A. Yes. BellSouth will allow an ALEC to offer its end-users resold BellSouth voice service with BellSouth's ADSL Service. If the ALEC is an ISP, it can purchase the BellSouth wholesale ADSL transport service and provide xDSL data service to its end-users. If the ALEC is not an ISP, it can provide BellSouth® FastAccess® Internet Service as an authorized sales representative (ASR) or independently contract with an ISP of its choice. An alternative for an ALEC would be to enter into a Line Splitting agreement with another data-ALEC, or an ALEC could pursue an available 'home-run' loop.

In addition, end-users in Florida do have other alternatives for broadband service, including fixed satellite, wireless, and cable modem. In terms of total lines installed, cable modem is far ahead of any of these other competing technologies, including xDSL, and is the leader of broadband deployment and market penetration.

Q. MR. GALLAGHER, ON PAGES 5-8 OF HIS TESTIMONY, DISCUSSES HIS FRUSTRATION THAT THE BELLSOUTH "HYBRID COPPER/ FIBER xDSL-CAPABLE LOOP" COST STUDY DID NOT CONTAIN ALL THE ELEMENTS FDN ANTICIPATED, SUCH AS SUPPORTING EQUIPMENT NECESSARY TO PERFORM REQUIRED SWITCHING FUNCTIONS. PLEASE COMMENT ON THIS.

1 A. FDN is aware that this Commission and the FCC do not require the
2 unbundling of a switched packet network. The BellSouth "hybrid
3 copper/fiber xDSL-capable loop" cost study was prepared and
4 submitted exactly as requested. It is not, and never was intended to be
5 a total system or an end-to-end offering that included the unbundling of
6 BellSouth's switched packet network.

7
8 Q. ON PAGES 4 AND 24 OF HIS REBUTTAL, MR. GALLAGHER
9 DISCUSSES USING A DSL LINE CARD AT THE DLC AND THEN
10 ASKS THIS COMMISSION TO REQUIRE BELL SOUTH TO OFFER
11 THE SAME CAPABILITY TO FLORIDA ALECS THAT IT PROVIDES
12 FOR ITSELF. IS THIS A REASONABLE REQUEST?

13
14 A. No. Mr. Gallagher is correct when he says ALECs cannot collocate line
15 cards in DSLAMs at RTs, but not for the reason(s) he would have this
16 Commission believe. BellSouth does not deploy any equipment in
17 Florida, or anywhere in the BellSouth territory, capable of using the
18 integrated voice and data line cards Mr. Gallagher is referring to,
19 except for a very few currently under evaluation and testing.

20
21 Also, while BellSouth may have a very limited number of Next
22 Generation Digital Loop Carrier ("NGDLC") systems currently being
23 used in its network, they support voice only and are not capable of
24 using the 'combo card', except for a small number used solely for
25 testing purposes.

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The inability of BellSouth to provide a NGDLC that uses an integrated "combo card" and BellSouth not having a "hybrid copper/fiber xDSL-capable loop" offering, does not limit FDN to line sharing only over copper facilities. BellSouth provides several alternatives by which an ALEC can serve its customers. For instance, FDN could collocate its DSLAM in BellSouth's RT, acquire the unbundled loop distribution sub-element, and acquire dark fiber from BellSouth to serve its customers, as described by the FCC in its UNE Remand Order. Alternatively, FDN can also provision its own fiber optic cable, install DSLAMs in its own cabinetry in proximity to BellSouth's RT, and acquire only the unbundled loop distribution sub-loop element to serve its customers. Thus, BellSouth does not preclude ALECs from serving customers regardless of whether or not those customers are served by copper loops.

Q. ON PAGES 7 AND 23-24 OF HIS TESTIMONY, MR. GALLAGHER REQUESTS THAT DSLAMs BE PROVIDED A 'PORT AT A TIME' AND INDICATES IF THE NEW UNE IS NOT CREATED, FDN WILL INCUR SIGNIFICANT DELAYS IN DEPLOYING SERVICE. PLEASE COMMENT ON THIS STATEMENT.

A. The FCC specifically stated in its January 19, 2001 Order in CC Docket No. 96-98, at ¶322, that ILECS have no obligation to provide DSLAMs, much less provide them on a 'port-by-port' basis. Additionally,

1 BellSouth does not currently have any "common DSLAMs" or systems
2 which could support a "common DSLAM" referred to by Mr. Gallagher.

3

4 Mr. Gallagher asserts that if unbundled xDSL loops were offered on a
5 'line-at-a-time' basis, ALECs could obtain unbundled xDSL loops with
6 the same speed that BellSouth could provide for itself. That is exactly
7 what BellSouth is proposing. BellSouth had to obtain its own DSLAM
8 and DS1 feeder at every RT, and experienced delays in being able to
9 initiate service to its first customer served by a RT while these were
10 being installed, just as FDN claims it will have to do. Just how does
11 FDN believe BellSouth is now able to quickly provision new service to
12 BellSouth customers? Well, after an RT is equipped with the DSLAM
13 and DS1, the lead time is significantly shortened for subsequent new
14 service, just as it would be for FDN. What FDN is really asking this
15 Commission to do is provide FDN with all of the benefits and none of
16 the time and/or expense and/or risks that BellSouth had to incur. As
17 shown above, FDN has the exact same opportunity as BellSouth had,
18 and if it is willing to properly participate (time, money, effort, etc.), it will
19 be able to reap the benefits of its efforts.

20

21 Q. DO YOU AGREE THAT A SHARED FACILITIES MODEL, AS MR.
22 GALLAGHER DISCUSSES ON PAGES 17 AND 20 OF HIS
23 TESTIMONY, PROMOTES COMPETITION?

24

1 A. No. Actually, it discourages ALECs from building facilities. End-users
2 may feel they are buying from ALECs, but if the ALEC does not have
3 its own facilities, the features the end-user receives are the same as
4 those that BellSouth provides to its end-users. In addition to not
5 promoting competition, shared facilities discourage diversity and
6 innovation.

7
8 In his arguments, Mr. Gallagher uses examples of DSLAMs serving
9 only two (2) or four (4) customers. I do not believe that a prudent
10 business plan would consider expending the required capital, and
11 assuming all of the risks, in order to serve only four (4) end users.

12
13 Although I am not qualified to respond to all of the "cost" matters raised
14 by Mr. Gallagher, I wish to point out that the entirety of his explanations
15 compare a new UNE to existing services (retail, resale, etc.). What Mr.
16 Gallagher fails to mention is the extensive and expensive support
17 systems that would be necessary to provide what FDN requests. Had
18 BellSouth been ordered to provide a solution for ALECs at the same
19 time it was initially beginning to develop the solutions for itself, it might
20 be a different matter. But, to expect BellSouth to take an existing
21 solution, and the hundreds of related sub-systems designed for
22 BellSouth's own use, and convert this into a system capable of
23 providing the same solution to outside third parties, is a monumental
24 undertaking in both time and money.

25

1 For example, as I understand it, BellSouth ADSL was developed solely
2 for use with BellSouth voice customers. When the provisioning flows,
3 methods, procedures, etc. were developed, the assumption was made
4 that since all customers of ADSL solutions would be BellSouth voice
5 customers, it would be most efficient to use the "telephone number" as
6 the driver. Accordingly, all of the systems (and the hundreds of
7 supporting sub-systems) were developed using the telephone number.
8 Should BellSouth now have to provide this solution to end-users
9 without BellSouth telephone numbers, the provisioning systems (and it
10 is my understanding also the ordering, billing, repair and maintenance,
11 etc. systems) must be totally revamped. Accordingly, very extensive,
12 expensive and time consuming "re-writes" would be needed to all the
13 systems and sub-systems for BellSouth to do so.

14
15 Q. ON PAGE 18-20 OF HIS REBUTTAL TESTIMONY, MR. GALLAGHER
16 DISCUSSES THE VARIOUS BENEFITS THAT SHARED DSL
17 FACILITIES AT RTs WOULD AFFORD. PLEASE COMMENT.

18
19 A. Mr. Gallagher erroneously states that if each carrier has separate DSL
20 facilities at the RT, consumers would not be able to enjoy the benefits
21 of line sharing. This statement is incorrect.

22
23 If Mr. Gallagher is truly referring to line sharing, his understanding of
24 line sharing is incorrect. In line sharing, by FCC definition, the ILEC
25 (BellSouth) is the voice provider in all cases. Either BellSouth or the

1 data ALEC (the data ALEC's choice) provides a splitter at the RT, and
2 then collocates the DSLAM at the RT. The splitter routes the voice
3 portion back to the BellSouth switch at the CO, and the data portion to
4 the data ALECs collocated DSLAM for transport back to the data
5 ALECs DSLAM in the CO. Changing from one data provider to another
6 is a very simple matter.

7
8 If Mr. Gallagher is referring to line splitting, his understanding of line
9 splitting is incorrect. By FCC definition, line splitting is where a voice
10 ALEC and a data ALEC (or one ALEC performing both functions) place
11 a splitter (either BellSouth provided or ALEC provided) and a DSLAM in
12 the RT. Just as in line sharing, the splitter bifurcates the signal and
13 routes the voice portion to the voice provider and the data portion to the
14 data provider. Again, should the end-user desire to change either the
15 voice or the data provider, it is a relatively simple matter.

16
17 In either event, FDN's discussion regarding the difficulties of cross-
18 connections and potential space and resource limitations and/or
19 scarcity are totally incorrect and without merit.

20
21 Mr. Gallagher's statement that Florida consumers could often be
22 denied the ability to select different carriers to provide voice and data
23 services on the same telephone line is not correct. To my knowledge,
24 no customer in Florida, or anywhere in the BellSouth region, has ever
25 been denied the ability to select different voice or data carriers.

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It is my understanding that BellSouth performs cutovers at RTs on a routine basis. Although all cutovers are not identical, the basic principals are the same, and normally there are no problems.

5

6 Q.

ON PAGE 9 OF HIS REBUTTAL, MR. GALLAGHER STATES THAT FDN MUST BE ALLOWED TO TAKE ADVANTAGE OF VARIOUS "ECONOMIES OF SCALE." DOES THIS APPLY TO BELLSOUTH?

9

10 A.

Absolutely. FDN is very "selective" in who should receive any benefits. Mr. Gallagher goes to great length to argue that FDN must be allowed to take advantage of the benefit of the economies of scale of BellSouth's network. Yet, on page 7 of his rebuttal testimony, Mr. Gallagher would have BellSouth purchase and deploy a full DSLAM just so that FDN could use one (1) port, with total disregard to how BellSouth might recover the cost of its investment with an underutilization of the remaining ports.

18

19 Q.

ON PAGE 10 OF HIS REBUTTAL TESTIMONY, MR. GALLAGHER STATES THAT IRRESPECTIVE OF THE SIZE OF THE DSLAM DEPLOYED AT AN RT, THE RESULT WOULD BE A NEGATIVE CASH FLOW AND USES THIS AS HIS BASIS WHY FDN ADVOCATES UNBUNDLED ACCESS TO BELLSOUTH FACILITIES. WOULD YOU PLEASE COMMENT ON THIS?

25

1 A. As I have previously stated, xDSL started with a "level playing field" and
2 no one, including BellSouth, had an advantage. Accordingly, if
3 deployment of DSLAMs at an RT would cause negative cash flow to
4 FDN, BellSouth would have experienced a negative cash flow as well.
5 It would be unconscionable to require BellSouth, which expended all of
6 the capital and took all of the risk, to provide offerings to ALECs so that
7 they could avoid the negative situation, if true, that BellSouth would
8 have found itself in.

9
10 Q. WOULD YOU PLEASE BRIEFLY SUMMARIZE THE IMPACT OF
11 WHAT FDN IS PROPOSING?

12
13 A. Certainly. If BellSouth is ordered to unbundle its packet switched
14 network, no additional end-users would have broadband access
15 because ALECs would then only target those customers who currently
16 have BellSouth ADSL available to them. Such a result contradicts the
17 vision of wide-scale deployment of competitive broadband networks.
18 Instead, what would result would be nothing more than "customer
19 swapping", as no new deployment would result. In fact, such an
20 unbundling requirement would serve to dissuade ALECs from ever
21 deploying any of their own equipment.

22
23 Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

24 A. Yes.

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BELLSOUTH TELECOMMUNICATIONS, INC.

TESTIMONY OF THOMAS G. WILLIAMS

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 010098-TP

JUNE 8, 2001

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

A. My name is Thomas G. Williams. I am employed by BellSouth as Product Manager for Line Sharing for the nine-state BellSouth region. My business address is 3535 Colonnade Parkway, Suite E511, Birmingham, Alabama, 35242.

Q. WHAT IS YOUR PROFESSIONAL EXPERIENCE AND EDUCATIONAL BACKGROUND?

A. My career at BellSouth spans over 14 years and includes positions in various product management positions. I also have seventeen years service with AT&T and Southern Bell, during which I held various positions in sales, marketing, and operations. I have a bachelor's degree in Marketing.

Q. HAVE YOU TESTIFIED PREVIOUSLY?

1 Yes. I previously testified before the Alabama, Georgia, Louisiana, and South
2 Carolina Public Service Commissions, and I filed testimony with the Florida
3 Public Service Commission and the Public Utility Commission of North Carolina.
4

5 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?
6

7 A. The purpose of my testimony is to present BellSouth's position on the unresolved
8 line sharing issues in the negotiations between BellSouth and Florida Digital
9 Network. Specifically, my testimony addresses Issue 1.
10

11 *Issue 1: For Purposes of the new interconnection agreement, should BellSouth be*
12 *required to provide xDSL service over UNE loops when FDN is providing voice*
13 *service over that loop?*
14

15 Q. WHAT IS YOUR UNDERSTANDING OF THIS ISSUE?
16

17 A. FDN typically uses its own switch and UNE loops it purchases from BellSouth to
18 provide service to its end users. The situation addressed by this issue arises when
19 FDN uses this type of arrangement to provide voice service to an end user, and
20 that end user also wants xDSL service.
21

22 Q. WHAT IS FDN'S POSITION ON THIS ISSUE?
23

24 A. In the situations I just described, FDN wants the Commission to order BellSouth
25 to provide BellSouth's ADSL service to FDN's end user over the same UNE loop

1 that FDN is using to provide voice service to that end user. Significantly, in these
2 situations, BellSouth is not providing voice over the UNE loop.

3

4 Q. WHAT IS BELLSOUTH'S POSTION ON THIS ISSUE?

5

6 A. BellSouth' position is that it is not required to provide its ADSL service over a
7 loop if BellSouth is not providing voice service over that loop.

8

9 Q. HAS THE FCC ADDRESSED WHETHER OR NOT AN INCUMBENT LIKE
10 BELLSOUTH IS REQUIRED TO PROVIDE xDSL SERVICE OVER A UNE
11 LOOP THAT AN ALEC IS USING TO PROVIDE VOICE SERVICE TO AN
12 END USER?

13

14 A. Yes. In a recent Order, the FCC stated, "We deny, however, AT&T's request that
15 the Commission clarify that that incumbent LECs must continue to provide xDSL
16 service in the event customers choose to obtain service from a competing carrier
17 on the same line because we find that the *Line Sharing Order* contained no such
18 requirement." See *In Re: Deployment of Wireline Services Offering Advanced*
19 *Telecommunications Capability*, Order No. FCC 01-26 in CC Docket Nos. 98-
20 147, 96-98 (Released January 19, 2001) at ¶26. The FCC then expressly stated
21 that its *Line Sharing Order* "does not require that [LECs] provide xDSL service
22 when they are no longer the voice provider." *Id.*

23

24 Q. HAS ANY OTHER STATE COMMISSION IN BELLSOUTH'S REGION
25 ADDRESSED THIS ISSUE?

26

1 A. Yes. In an arbitration proceeding before the Public Service Commission of South
2 Carolina, IDS Telecom, LLC alleged that it was anticompetitive for BellSouth not
3 to provide xDSL services over a loop that an ALEC is using to provide voice
4 service. The South Carolina Commission rejected IDS's allegations, stating:

5 *IDS's allegation is without merit. The FCC recently stated that*
6 *"we deny AT&T's request for clarification that under the Line*
7 *Sharing Order, incumbent LECs are not permitted to deny their*
8 *xDSL [data] services to customers who obtain voice service from a*
9 *competing carrier where the competing carrier agrees to the use of*
10 *its loop for that purpose." After denying AT&T's request, the FCC*
11 *reiterated that "[a]lthough the Line Sharing Order obligated*
12 *incumbent LECs to make the high frequency portion of the loop*
13 *separately available to competing carriers on loops where the*
14 *incumbent LEC provides voice service, it does not require that they*
15 *provide xDSL service when they are no longer the voice provider."*
16 *Clearly, the FCC has not required an incumbent LEC to provide*
17 *xDSL service to a particular end user when the incumbent LEC is*
18 *no longer providing voice service to that end user. IDS'*
19 *contention that this practice is anticompetitive is therefore not*
20 *persuasive when BellSouth is acting in accordance with the*
21 *express language of the FCC's most recent Order on the subject.*

22 *See Order on Arbitration, In re Petition of IDS Telecom, LLC for Arbitration of a*
23 *Proposed Interconnection Agreement with BellSouth Telecommunications, Inc.*
24 *Pursuant to 47 U.S.C. Section 252(b), Order No. 2001-286 in Docket No. 2001-*
25 *19-C at 28-29 (April 3, 2001)(emphasis added).*

26

1 Q. ASIDE FROM THE RULINGS YOU JUST DISCUSSED, ARE THERE
2 OTHER REASONS SUPPORTING BELL SOUTH DECISION NOT TO
3 PROVIDE ITS ADSL SERVICE OVER A LOOP IF BELL SOUTH IS NOT
4 PROVIDING VOICE SERVICE OVER THAT LOOP?

5
6 A. Yes, there are several business reasons for BellSouth's decision. First, the
7 systems BellSouth uses to provide its ADSL service do not currently
8 accommodate providing ADSL service over such a loop. For example, not every
9 loop satisfies the technical requirements necessary to provide ADSL service.
10 Prior to provisioning ADSL over a given loop, therefore, BellSouth must
11 determine whether that loop will accommodate ADSL service. In order to make
12 this determination, BellSouth has developed a database that stores loop
13 information for inventoried working telephone numbers. When an ALEC like
14 FDN provides dial tone from its own switch, the ALEC (not the end user) is
15 BellSouth's customer of record, and the ALEC (not BellSouth) assigns a
16 telephone number to the end user. BellSouth's database, therefore, does not
17 include loop information for facilities-based UNE telephone numbers, and
18 BellSouth cannot use the database to readily determine whether a facilities-based
19 UNE loop is ADSL compatible.

20
21 Additionally, processing ADSL orders from an end user served by a facilities-
22 based ALEC would be inefficient and, therefore, costly. Assume, for example,
23 that an end user who is served by an ALEC over a UNE loop orders BellSouth's
24 retail ADSL service. The ALEC serving that customer has purchased a UNE loop
25 from BellSouth, and BellSouth cannot use the high frequency spectrum of that
26 loop to provide ADSL to the end user without the ALEC's permission. When an

1 ALEC purchases an unbundled loop from BellSouth, it has access to and the right
2 to use all features and functionalities associated with that loop. This means the
3 ALEC has exclusive use of the entire spectrum, which includes the high
4 frequency portion of the loop. For BellSouth to provision ADSL over this portion
5 of the loop, therefore, it must negotiate with each ALEC for use of that spectrum.

6
7 Finally, BellSouth would have to ask the end user to identify the ALEC that is
8 providing the end user's voice service and determine whether that ALEC will
9 allow BellSouth to provide its retail ADSL service over the UNE loop the ALEC
10 has purchased from BellSouth. All of this would have to take place before
11 BellSouth even began provisioning the order. This problem is exacerbated if the
12 end user orders ADSL service from an ISP. In that case, the ISP would order
13 wholesale ADSL service from BellSouth to the end user's address. BellSouth
14 would have to search its records, determine that the end user is not a BellSouth
15 customer, ask the ISP to find out which ALEC serves the end user, wait for the
16 ISP to provide that information, and determine whether that ALEC will allow
17 BellSouth to provide its retail ADSL service over the UNE loop the ALEC has
18 purchased from BellSouth. Again, all of this would have to take place before
19 BellSouth even began provisioning the order.

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21 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

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23 A. Yes.

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BELLSOUTH TELECOMMUNICATIONS, INC.
REBUTTAL TESTIMONY OF THOMAS G. WILLIAMS
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 010098-TP

July 18, 2001

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

A. My name is Thomas G. Williams. I am employed by BellSouth as Product Manager for Line Sharing and Line Splitting for the nine-state BellSouth region. My business address is 3535 Colonnade Parkway, Suite E511, Birmingham, Alabama, 35243.

Q. ARE YOU THE SAME TOMMY WILLIAMS THAT FILED DIRECT TESTIMONY IN THIS DOCKET ON JUNE 8, 2001?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my testimony is to rebut the direct testimony of Florida Digital Network, Inc. (FDN) witness, Mr. Michael P. Gallagher as it relates

1 to Issue 1.

2

3 Q. WHAT IS ISSUE 1?

4

5 A. Issue 1, as identified in Appendix A of the June 7, 2001 Order
6 Establishing Procedure, is: For purposes of the new interconnection
7 agreement, should BellSouth be required to provide xDSL service
8 over UNE loops when FDN is providing voice service over that
9 loop?

10

11 Q. DOES MR. GALLAGHER'S TESTIMONY RELATE TO ISSUE 1?

12

13 A. No, it does not. Instead of addressing whether BellSouth is required to
14 provide its wholesale ADSL service over a UNE loop that FDN is using to
15 provide voice service to its customers, Mr. Gallagher's testimony asks the
16 Commission to create a new UNE or to unbundle packet switching even
17 though, as Mr. Ruscilli explains in his testimony, both the FCC and this
18 Commission have previously declined to do so. FDN's testimony has
19 nothing to do with Issue 1, and BellSouth has filed an Objection and
20 Motion to Strike Mr. Gallagher's direct testimony addressing Issue 1. My
21 testimony is being filed subject to, and without waiver of, that Objection
22 and Motion to Strike.

23

24 Q. IS FDN'S POSITION ON ISSUE 1, AS IDENTIFIED IN THE ORDER ON
25 PROCEDURE, REASONABLE?

1 A. No. In fact, it is the first time anyone has made such a request of
2 BellSouth. Taken literally, what FDN is asking for in the stated Issue is for
3 BellSouth to provide access to BellSouth's wholesale ADSL service on a
4 UNE loop that FDN is using to provide voice service to an FDN customer.
5 This request is contrary to anything currently contained in any FCC orders.

6
7 In the Line Sharing Reconsideration Order (*Deployment of Wireline*
8 *Services Offering Advanced Telecommunications Capability*, Order No.
9 FCC 01-26, CC Docket Nos. 98-147, 96-98, January 19, 2001), for
10 instance, the FCC stated, "We deny, however, AT&T's request that the
11 Commission clarify that incumbent LECs must continue to provide xDSL
12 service in the event customers choose to obtain service from a competing
13 carrier on the same line because we find that the *Line Sharing Order*
14 contained no such requirement." See *In Re: Deployment of Wireline*
15 *Services Offering Advanced Telecommunications Capability*, Order No.
16 FCC 01-26 in CC Docket Nos. 98-147, 96-98 (Released January 19, 2001)
17 at ¶26. The FCC then expressly stated that its *Line Sharing Order* "does
18 not require that [LECs] provide xDSL service when they are no longer the
19 voice provider." *Id.*

20
21 Additionally, in Order No. PSC-01-0824-FOF-TP that was entered in the
22 MCI WorldCom Arbitration (Docket No. 000649-TP), the Florida Public
23 Service Commission found at section XIII, page 51:

24 "While we acknowledge WorldCom's concern regarding the status
25 of the DSL service over a shared loop when WorldCom wins the

1 voice service from BellSouth, we believe the FCC addressed this
2 situation in its Line Sharing Order.” The FCC states that “We note
3 that in the event that the customer terminates its incumbent LEC
4 provided voice service, for whatever reason, the competitive data
5 LEC is required to purchase the full stand-alone loop network
6 element if it wishes to continue providing xDSL service.” FCC 98-
7 147 and 96-98 ¶ 72.

8
9 We believe the FCC requires BellSouth to provide line sharing only over
10 loops where BellSouth is the voice provider. If an ALEC purchases the
11 UNE-P, the ALEC becomes the voice provider over that loop/port
12 combination. Therefore, BellSouth is no longer required to provide line
13 sharing over that loop/port combination.

14
15 Q. PLEASE ADDRESS MR. GALLAGHER'S TESTIMONY, PAGES 4 AND 5,
16 THAT THE COMMISSISON SHOULD ORDER BELLSOUTH TO OFFER
17 UNE AND RESALE PRODUCTS, IN ACCORDANCE WITH APPLICABLE
18 LAW, THAT ARE ESSENTIAL FOR FDN TO OFFER HIGH-SPEED DATA
19 SERVICES ON AN UBIQUITOUS BASIS IN FLORIDA OVER THE SAME
20 CUSTOMER LOOPS THAT IT USES TO PROVIDE ITS VOICE
21 SERVICE.

22
23 A. -There is no need for any such order, because BellSouth already is doing
24 just what Mr. Gallagher suggests. BellSouth is offering UNE and resale
25 products in accordance with applicable law. More specifically, as will be

1 shown throughout my rebuttal testimony, BellSouth offers UNE and resale
2 products that allow FDN to offer high-speed data services on a ubiquitous
3 basis in Florida, over the same UNE loops that it uses to provide voice
4 service to its customers. In some cases, BellSouth has gone beyond what
5 is required by the law. For example, although not required to do so, in
6 some situations BellSouth provides splitters to ALECs who want to provide
7 voice and data services over a single loop. FDN, therefore, is requesting
8 the Commission to order BellSouth to do what it is already doing.
9

10 Q. DO YOU AGREE WITH MR. GALLAGHER'S PREMISE, ON PAGE 4 OF
11 HIS TESTIMONY, THAT "CLECS ARE GENERALLY PRECLUDED
12 FROM OFFERING DSL SERVICE WHERE DLC'S ARE DEPLOYED"?

13
14 A. No. ALECs are not precluded from offering DSL service where Digital
15 Loop Carrier ("DLC") is deployed. When BellSouth provides ADSL service
16 where DLC is deployed, BellSouth must locate Digital Subscriber Line
17 Access Multiplexer ("DSLAM") equipment at the DLC location. Through
18 the collocation process, currently offered by BellSouth, an ALEC that
19 wants to provide xDSL where DLC is deployed also can collocate DSLAM
20 equipment at BellSouth DLC remote terminal ("RT") sites. This will allow
21 the ALEC to provide the high speed data access in the same manner as
22 BellSouth. BellSouth will attempt in good faith to accommodate any ALEC
23 requesting such collocation access at a BellSouth DLC RT site that
24 contains a BellSouth DSLAM. In the very unlikely event that BellSouth
25 cannot accommodate collocation at a particular RT, where a BellSouth

1 DSLAM is located, BellSouth will unbundle the BellSouth packet switching
2 functionality at that RT in accordance with FCC requirements. BellSouth,
3 therefore, provides ALECs the same opportunity to offer DSL service
4 where DLC is deployed as BellSouth provides itself.
5

6 Q. DO YOU AGREE WITH MR. GALLAGHER'S STATEMENT, ON PAGE 4
7 OF HIS TESTIMONY, THAT "BELLSOUTH DOES NOT OFFER ANY
8 RESALE OR UNE PRODUCTS THAT WOULD ENABLE CLECS TO
9 PROVIDE HIGH-SPEED DATA SERVICE TO CONSUMERS WHO ARE
10 SERVED BY DLC LOOPS WHERE THE CLEC IS THE VOICE
11 PROVIDER"?

12
13 A. No. There are at least two ways ALECs can use to provide high-speed
14 data service to consumers who are served by DLC loops where the ALEC
15 is the voice provider. One option would be for the ALEC to perform an
16 electronic Loop Make-Up and locate an available 'home-run' copper loop
17 from the demarcation point (end user customer's Network Interface
18 Device) all the way to their collocation space in the CO. Then, they would
19 'reserve' the loop and issue an order for that 'home-run' copper loop.
20 Another option for ALECs would be to do what BellSouth does for itself.
21 The ALEC could collocate its DSLAM at the BellSouth RT site. To
22 transport the data from the end user to the RT site, the ALEC could either
23 purchase the existing copper sub loop from the demarcation point to the
24 RT or purchase an additional copper sub loop, both of which BellSouth
25 offers as UNEs. To transport the data from the RT site to the ALEC's

1 collocation area at the Central Office, the ALEC could purchase a sub loop
2 feeder UNE DS1 (DS3 and OC3 sub loop feeder UNEs will be available
3 August 2001). Therefore, once the ALEC collocates its DSLAM at the RT
4 site, all of the parts needed to complete a voice and data combination to
5 serve an end customer that is served by BellSouth DLC facilities are
6 available to the ALEC.

7

8 Q. DO YOU AGREE WITH MR. GALLAGHER'S STATEMENT ON PAGE 5
9 OF HIS TESTIMONY, THAT UNBUNDLING PACKET SWITCHING
10 FUNCTIONALITY "IS OF PARAMOUNT IMPORTANCE FOR FDN TO BE
11 ABLE TO LAUNCH A FACILITIES-BASED COMPETITIVE LOCAL VOICE
12 OPTION FOR RESIDENTIAL SUBSCRIBERS "?

13

14 A. No. As I just explained, BellSouth offers UNEs that an ALEC can use in
15 conjunction with its own DSLAM equipment to provide local voice and data
16 service to its customers. Accordingly, rather than asking the Commission
17 to order BellSouth to do something that BellSouth is already doing, FDN
18 would be better served by working with its BellSouth Account Team to use
19 the currently available UNEs to launch its desired facilities-based
20 competitive local voice option for residential subscribers.

21

22 Q. IS MR. GALLAGHER CORRECT WHEN HE SAYS, ON PAGE 6 OF HIS
23 TESTIMONY, THAT FDN IS UNABLE TO PROVIDE DSL SERVICE TO
24 APPROXIMATELY 70% OF THESE END-USERS BECAUSE OF THE
25 PRESENCE OF BELL SOUTH DLCs?

1 A. No. FDN has the same options available to them as BellSouth has for
2 itself, as I previously explained. If FDN wants to provide DSL service to
3 customers served by DLC, FDN has the ability to do so. All of the
4 necessary components are available through collocation and UNE
5 offerings that will allow FDN to serve end user customers, regardless of
6 the facilities serving the end user.

7

8 Q. DID BELLSOUTH BEGIN DEPLOYING DLC IN FLORIDA BEFORE OR
9 AFTER FDN WAS FOUNDED IN 1998?

10

11 A. BellSouth had widely deployed DLC in Florida well before FDN was
12 founded in 1998.

13

14 Q. DO YOU AGREE WITH MR. GALLAGHER' S STATEMENT, ON PAGES
15 6 AND 7 OF HIS TESTIMONY, THAT "FDN AND OTHER CLECs
16 CANNOT COLLOCATE LINE CARDS AT REMOTE TERMINALS.
17 THEREFORE, BELLSOUTH TODAY IS THE ONLY CARRIER IN
18 FLORIDA ABLE TO OFFER DSL SERVICE WHERE ITS DLCs ARE
19 DEPLOYED"?

20

21 A. No. I agree that FDN cannot collocate dual-purpose line cards ("combo
22 cards") at remote terminals for the reasons explained below, but I do not
23 agree that this means that BellSouth today is the only carrier in Florida
24 able to offer DSL service where DLSx are deployed. Mr. Gallagher is
25 correct when he states that ALECs cannot collocate combo cards at

1 remote terminals, but BellSouth itself does not use combo cards in remote
2 terminals. The combo card at issue will, at present, only function in
3 specially equipped Next Generation Digital Loop Carrier ("NGDLC")
4 systems. Approximately seven percent of BellSouth's access lines are
5 served by NGDLC systems. Of these NGDLC systems, only a very small
6 number (which are used for technology testing) are equipped with the
7 necessary functionality to make use of combo cards. As I mentioned
8 above, BellSouth does not use the combo cards for its xDSL service.

9
10 Mr. Gallagher is incorrect when he states that BellSouth today is the only
11 carrier in Florida able to offer DSL service where its DLCs are deployed.
12 As I discuss throughout my testimony, BellSouth offers all of the necessary
13 UNEs available for ALECs to be able to offer DSL service in a DLC
14 environment.

15
16 Q. PLEASE ADDRESS MR. GALLAGHER'S CLAIM THAT ALECS CANNOT
17 COLLOCATE THEIR DSLAMS AT REMOTE TERMINALS.

18
19 A. FDN simply is not correct. If sufficient space exists within a DLC RT,
20 BellSouth will allow an ALEC to collocate its DSLAM in the RT, regardless
21 of whether BellSouth has installed its own DSLAM at that RT. If sufficient
22 space does not exist within the DLC RT and BellSouth has not installed its
23 own DSLAM at that DLC RT location, then BellSouth will file a collocation
24 waiver request with this Commission for that DLC RT site. If sufficient
25 space does not exist within the DLC and BellSouth has installed its own

1 DSLAM at the DLC RT location, then BellSouth will make good-faith
2 efforts to augment the space at that DLC RT, such that the ALEC can
3 install its own DLSAM at that DLC RT. In the very unlikely event that
4 BellSouth could not accommodate collocation at the particular RT where
5 BellSouth has a DSLAM, BellSouth will unbundle the BellSouth packet
6 switched network at that RT in accordance with FCC requirements.

7
8 Regarding FDN's concerns about power and air conditioning, as Mr.
9 Gallagher mentions on page 21 and 22, BellSouth offers various structures
10 to accommodate FDNs specific requirements (cabinets, huts,
11 environmentally controlled vaults ("CEVs"), etc). Huts and CEVs are air
12 conditioned, however the cabinets are not. BellSouth uses "hardened"
13 DLSAM equipment that can withstand extreme temperatures. Assuming
14 FDN selects the appropriate equipment for a DLC environment as
15 BellSouth does, FDN should not experience any difficulties because the
16 DSLAMs BellSouth uses do not require unique power or air conditioning.

17
18 Q. ON PAGE 7 OF MR. GALLAGHER'S TESTIMONY, HE TALKS ABOUT
19 SBC'S AND VERIZON'S OFFERINGS, AND HE INDICATES THAT FDN
20 IS SEEKING THE COMMISSION TO REQUIRE BELL SOUTH TO OFFER
21 A SIMILAR UNE OFFERING. IS THIS A REASONABLE REQUEST?

22
23 A. No. It is my understanding that SBC and Verizon have chosen not to
24 unbundle their switched packet network, but rather have chosen an
25 architecture that uses a NGDLC system with combo cards. This allows

1 SBC and Verizon to provide a tariffed end-to-end broadband service to
2 their wholesale customers, which coincidentally uses their switched packet
3 network as a part of the total offering. What they are offering is NOT an
4 unbundling of their switched packet network on a UNE basis.

5

6 Additionally, the SBC and Verizon offerings use architectures,
7 technologies, and equipment that are very different from that which
8 BellSouth uses. The fact that the SBC and Verizon decided to use an
9 NGDLC system should have no bearing on BellSouth, as is stated in ¶10
10 of FCC Third and Fourth Report And Order On Reconsideration,(Line
11 Sharing Reconsideration Order) (January 19, 2001), wherein it says "By
12 using the word "transmission facility" rather than "copper" or "fiber", we
13 specifically intended to ensure that this definition was technology-neutral."
14 (emphasis added)

15

16 Q. DO YOU AGREE WITH MR. GALLAGHER'S STATEMENT, ON PAGE 7
17 OF TESTIMONY, THAT "WITH SUCH A HIGH PERCENTAGE OF THE
18 DSL MARKET CLOSED TO CENTRAL-OFFICE ONLY STRATEGIES,
19 CLEC'S WILL NOT BE ABLE TO COMPETE. FURTHERMORE, IF
20 BELLSOUTH IS THE ONLY CARRIER THAT CAN PROVIDE DSL TO A
21 SUBSTANTIAL PERCENTAGE OF CONSUMERS, IT CAN LEVERAGE
22 ITS MARKET POWER TO SUPPRESS COMPETITION FOR VOICE
23 SERVICES ..."?

24

25 A. No. In BellSouth's territory, the market is not at all closed to Central-Office

1 ("CO") only strategies. One ALEC in particular, for instance, has been
2 very successful in Florida with their Central Office ("CO") based solutions.
3 Additionally, as of July 2001, ALECs have requested CO-based splitters,
4 to work with their CO-based DSLAMS, in 125 Central Offices throughout
5 Florida. Additionally, BellSouth has, and will continue to remove bridged
6 taps, load coils or repeaters to accommodate RT collocation requests, and
7 correct any other possible factors within its control, to assist ALECs in
8 gaining entry into the xDSL marketplace.

9

10 Q. THROUGHOUT HIS TESTIMONY, MR. GALLAGHER CONTINUALLY
11 IMPLIES THAT BELLSOUTH IS RESPONSIBLE FOR FDN'S INABILITY
12 TO OFFER VOICE AND HIGH SPEED DATA ON THE SAME
13 TELEPHONE LINE. DO YOU AGREE THIS IMPLICATION?

14

15 A. No. BellSouth has done nothing to thwart FDN's ability to offer voice and
16 high-speed data on the same line. The fact of the matter is that BellSouth
17 has not only complied with applicable laws, but it also has worked with
18 ALECs to facilitate their success. One of BellSouth's established
19 'Collaboratives' (discussed in greater detail later in my rebuttal) is
20 specifically designed for the offering of voice and data, over the same line,
21 where BellSouth is not the voice provider. During the numerous meetings
22 of this Collaborative, the ALECs discussed the various options they
23 desired, and together with BellSouth, the Collaborative agreed on the
24 prioritized direction they desired BellSouth to pursue. FDN did not
25 participate in this collaborative, and the specific option that FDN is raising

1 in their testimony was never requested by any other ALEC.

2

3 Q. ON PAGE 9 OF MR. GALLAGHER'S TESTIMONY, HE STATES
4 "SECOND, FDN IS IMPAIRED IN ITS ABILITY TO SELL LOCAL
5 EXCHANGE VOICE SERVICES BY BELL SOUTH'S UNNECESSARY
6 AND ANTICOMPETITIVE PRACTICE OF LEVERAGING ITS CONTROL
7 OF THE DSL MARKET IN FLORIDA TO INJURE COMPETITORS IN THE
8 VOICE MARKET. DOES THIS STATEMENT HAVE ANY VALIDITY?

9

10 A. No. According to Scott C. Cleland of Precursor Group, a leading
11 independent research group, of existing residential households that have
12 broadband, 73% of those households have cable modems and 26% have
13 DSL. *Precursor Group Newsletter*, February 22, 2001. (see TGW-1). In
14 addition to the cable modem option, customers may choose from the data
15 offerings of numerous data ALECs, such as Covad, Rhythms, etc. In
16 addition to the 125 offices where ALECs have requested Bellsouth to
17 deploy line sharing splitters, BellSouth completed 892 line sharing orders
18 in Florida, as of the end of June 2001. Customer choice is prevalent.

19

20 Q. DO YOU AGREE WITH MR. GALLAGHER, ON PAGE 18, THAT IF THE
21 COMMISSION DOES NOT PROVIDE THE PROPOSED "BROADBAND
22 LOOP" AS A UNE, THERE ARE NO OTHER ALTERNATIVES
23 AVAILABLE?

24

25 A. No. As previously mentioned throughout this testimony, there are other

1 alternatives available to Florida end users and accordingly, the
2 Commission should not consider FDN's proposed new UNE, the
3 'broadband loop'. In addition to the RT collocation solution I have
4 previously mentioned, an alternative for FDN would be to enter into a Line
5 Splitting agreement with another data-ALEC, or FDN could pursue an
6 available 'home-run' loop. Additionally, end users have a choice regarding
7 obtaining broadband services. Broadband competition has flourished over
8 the past several years.

9
10 Q. ON PAGE 19 OF HIS TESTIMONY, MR. GALLAGHER STATES THAT
11 PROVIDING UBIQUITOUS SERVICE THROUGHOUT THE STATE OF
12 FLORIDA BY COLLOCATING DSLAMS AT REMOTE TERMINALS
13 WOULD BE TANTAMOUNT TO DUPLICATION OF A SIGNIFICANT
14 PORTION OF BELLSOUTH'S MONOPOLY-BUILT LAST MILE
15 DISTRIBUTION NETWORK". DO YOU AGREE?

16
17 A. No. Placing DSLAMs at remote terminals has nothing to do with the 'last
18 mile distribution network' as defined by the FCC. The "last mile
19 distribution network" consists of the distribution sub-loop from the RT
20 cross box to the loop demarcation point at an end-user customer
21 premises. It does not include equipment at the RT. In its 3rd Report and
22 Order (Third report and Order and Fourth Further Notice of Proposed
23 Rulemaking – CC Docket No. 96-98) the FCC stated at ¶ 262:

24 "Requesting carriers require collocation because they have not yet
25 duplicated the incumbent LEC's loop plant to provide "last mile"

1 connectivity to end users. Obtaining unbundled loops and
2 connecting these loops to collocated equipment is therefore the
3 only reasonable and economically rational manner by which
4 requesting carriers can provide connectivity to their end users.”
5

6 As I mentioned above, BellSouth currently provides UNEs necessary to
7 allow ALECs like FDN to connect an und user served by DLC to their
8 DSLAM collocated at a remote terminal, and to have the voice and data
9 travel to FDN’s collocation space in the CO.
10

11 Q. WHEN ASKED “WHAT FACTORS PRECLUDE CLEC COLLOCATION
12 AT INDIVIDUAL REMOTE TERMINALS”, MR. GALLAGHER, ON PAGES
13 19 AND 20, REPLIES “... FDN COULD ONLY USE A REMOTELY-
14 COLLOCATED DSLAM IF IT WERE TO CONSTRUCT ITS OWN FIBER-
15 OPTIC TRANSPORT BETWEEN THE REMOTE TERMINAL AND FDN’S
16 FACILITIES”. DO YOU AGREE THAT THIS IS THE ONLY WAY FDN
17 WOULD BE ABLE TO USE A REMOTELY-COLLOCATED DSLAM?
18

19 A. No. While that would be one method available to FDN, BellSouth offers
20 several sub-loop feeder UNEs that allow ALECs to connect from the RT to
21 the CO. To the extent that it is available, BellSouth offers dark fiber feeder
22 to connect the ALECs optical equipment collocated at the remote site to
23 the CO. Regardless of whether dark fiber feeder is available, BellSouth
24 also offers a DS1 sub-loop feeder UNE that allows ALECS to connect
25 from the RT to the CO. Beginning in August 2001, BellSouth will offer a

1 DS3 and OC3 feeder UNE.

2

3 Q. BY THE STATEMENTS MADE ON PAGES 20 AND 21 OF HIS
4 TESTIMONY, IT APPEARS MR. GALLAGHER BELIEVES THAT
5 BELLSOUTH IS TRYING TO PREVENT FDN FROM BEING ABLE TO
6 GET ITS END-USER DATA BACK TO THE CO. IS THIS CORRECT?

7

8 A. No. As I previously stated, BellSouth is willing to provide sub-loop feeder
9 UNEs to FDN to connect its equipment at a BellSouth RT to the CO.
10 Contrary to Mr. Gallagher's statements, therefore, FDN will not be
11 required to provide its own fiber-optic transmission facilities.

12

13 Q. DO YOU AGREE WITH MR. GALLAGHER'S STATEMENT ON PAGE 21
14 THAT EVEN IF DARK FIBER WAS AVAILABLE, FDN WOULD NOT BE
15 ABLE TO COLLOCATE DSLAMS AT BELLSOUTH'S DLCs, IN MANY
16 CASES BECAUSE IT MAY NOT BE PHYSICALLY POSSIBLE?

17

18 A. No. As stated above, if sufficient space exists within a DLC RT, BellSouth
19 will allow an ALEC to collocate its DSLAM in the RT regardless of whether
20 BellSouth has installed its own DSLAM at that RT. I am unaware that
21 FDN has ever applied to collocate a DSLAM at a BellSouth RT, which is
22 the means that the FCC specified that ALECs provide its end users xDSL
23 service in a DLC environment. As I mentioned earlier, if FDN asks to
24 collocate a DSLAM at a specific RT where BellSouth has a DSLAM, and
25 for some reason BellSouth cannot accommodate that request, BellSouth

1 will provide unbundled packet switching functionality at that terminal
2 pursuant to the FCC's requirements.

3

4 Q. PLEASE COMMENT ON MR. GALLAGHER'S DISCUSSION, ON PAGES
5 22 AND 23, THAT COLLOCATION OF A DSLAM AT BELLSOUTH'S RTs
6 WOULD BE TIME-CONSUMING FOR FDN AND THAT FDN COULD
7 NOT COST-JUSTIFY THE RT EXPENSES FOR THE PURPOSES OF
8 OFFERING DSL.

9

10 A. Obviously, that is FDN's decision. However, it is no more expensive or
11 time-consuming for FDN to collocate a DSLAM at an RT than it would be
12 for BellSouth to accomplish the same thing. FDN is trying to shift the
13 burden and risks associated with providing DSLAM equipment to provide
14 highly competitive xDSL service from itself to BellSouth.

15

16 Q. IS BELLSOUTH UNDER ANY OBLIGATION TO PROVIDE THE LIT
17 FIBER TO CLECS THAT BELLSOUTH UTILIZES FOR BELLSOUTH'S
18 DSL TRANSPORT TO THE CO AS MR. GALLAGHER STATES ON
19 PAGE 24 OF HIS TESTIMONY?

20

21 A. No. However, as I previously testified, BellSouth does offer FDN dark
22 fiber if it is available. If dark fiber is not available, FDN can order various
23 sub-loop feeder UNE products from BellSouth to connect its equipment at
24 the RT to the CO.

25

1 Q. DO YOU AGREE WITH MR. GALLAGHER'S STATEMENT ON PAGE 24
2 THAT CLECs WILL BE SEVERELY DISADVANTAGED WHEREVER
3 BELL SOUTH DEPLOYS NEXT GENERATION DIGITAL LOOP CARRIER
4 ("NGDLC") SYSTEMS?

5
6 A. No. As I noted earlier, BellSouth does not deploy NGDLC on a wide-
7 spread basis. Should BellSouth opt to do so in the future, it should have
8 no impact on FDN or other ALECs. Mr. Gallagher is concerned that
9 BellSouth will not allow ALECs to install combo cards into DSLAM-capable
10 BellSouth remote terminals to facilitate remote site line sharing. The
11 combo card not only provides voice functions but DSLAM functions as
12 well. The FCC has defined the DSLAM as part of the packet switching
13 network. Thus, what Mr. Gallagher really wants is to impose an obligation
14 that BellSouth provide unbundled packet switching despite the fact that the
15 FCC has already addressed this very situation and declined to impose
16 such a duty except in limited situations.

17
18 There can be no serious dispute that FCC rules do not require BellSouth
19 to provide ALECs with the right to specify the type of line cards to be
20 placed in BellSouth's DLC systems. Requiring BellSouth to provide
21 ALECs with the opportunity to utilize dual-purpose line cards would result
22 in BellSouth providing unbundled packet switching, because this line card
23 provides the functionality of a DSLAM. The FCC has defined the DSLAM
24 as one element in a packet switching network. The FCC has also said that
25 incumbents are not required, unless four conditions are met, to provide

1 unbundled packet switching. (FCC Rule 51.319). The use of the dual-
2 purpose DLC line card would require BellSouth to provide unbundled
3 packet switching even in cases where it has no such obligation under the
4 FCC's rules

5
6 BellSouth will continue to allow ALECs to collocate their DSLAM at the RT
7 and, BellSouth will continue to provide the necessary UNEs for transport
8 back to their collocation area in the CO. Accordingly, BellSouth's possible
9 future deployment of NGDLC should have no impact on ALECs.

10

11 Q. PLEASE COMMENT ON MR. GALLAGHER'S ASSERTION THAT
12 BELL SOUTH WILL DENY ALECS THE ABILITY TO PLACE DSLAMS AT
13 THE RT.

14

15 A. On page 24, Mr. Gallagher makes an unsubstantiated statement that
16 "...from BellSouth 's statements in other proceedings that it has opposed
17 collocation by CLECs of line cards at BellSouth NGDLCs. Therefore,
18 BellSouth would deny the ability of CLECs to place DSLAMs at the remote
19 terminal on the same terms and conditions that it affords to its own
20 operations." First, it is BellSouth's position, and the position of the FCC,
21 that the requirements of collocation do not include placement of combo
22 cards at an NGDLC system. In other words, combo cards are not an item
23 to be considered for collocation. Second, as I have discussed earlier in
24 this testimony, the placement of a combo card does not provide xDSL
25 functionality to an end customer. Third, and most importantly, BST will

1 fully support ALECs in their efforts to place remote DSLAMS at BST sites,
2 as BellSouth does for itself.

3

4 Q. ON PAGES 24 AND 25, MR. GALLAGHER STATES THAT IF FDN
5 WANTED TO COLLOCATE DSLAMS AT THE RT, IT WOULD REQUIRE
6 WELL MORE THAN ONE YEAR BEFORE FDN COULD START TO
7 PROVIDE SERVICE. DO YOU AGREE WITH HIS ASSUMPTION THAT
8 THIS WOULD IMPAIR FDN'S ABILITY TO PROVIDE HIGH-SPEED
9 DATA SERVICE?

10

11 A. No. FDN has never yet applied for collocation at an RT, and accordingly
12 his statement must be based solely on speculation. While the time will
13 often be much shorter, BellSouth should be able to accommodate most
14 RT collocation requests well within six months. Mr. Gallagher appears to
15 base this statement on his assumption that FDN would have to install its
16 own loop facilities and, as I have stated above, this assumption is simply
17 wrong.

18 Q. PLEASE COMMENT ON MR. GALLAGHER'S STATEMENT, ON PAGE
19 25 OF HIS TESTIMONY, "THAT IN ONE OF THE FEW INSTANCES
20 WHERE A CLEC ATTEMPTED TO COLLOCATE A DSLAM AT AN ILEC
21 REMOTE TERMINAL, CROSS-CONNECTION AND CONSTRUCTION
22 ISSUES REMAINED UNRESOLVED MORE THAN ONE YEAR AFTER
23 THE INITIAL COLLOCATION REQUEST WAS MADE."

24

25 A. It is difficult to comment on this assertion because Mr. Gallagher provides

1 nothing to substantiate this statement or to identify either the ILEC or the
2 CLEC involved. I am unaware, however, of any situation in which an
3 ALEC attempted to collocate a DSLAM at an RT where cross-connection
4 and construction issues remained unresolved more than one year after the
5 initial collocation request was made.

6

7 Q. ON PAGE 26 OF HIS TESTIMONY, MR. GALLAGHER STATES THAT
8 FDN COULD NOT OFFER DSL OVER HOME RUN COPPER LOOPS. IS
9 IT POSSIBLE FOR FDN TO OFFER DSL OVER HOME RUN COPPER
10 LOOPS THAT DO NOT PASS THROUGH THE BELLSOUTH DLC'S?

11

12 A. Yes. If FDN does not want to use home run copper loops in this situation,
13 that is their business decision. Based on distance limitations, the data
14 speed may be lower than that of a DLC collocated DSLAM fed xDSL, and
15 if that is the case, FDN can obtain higher data speeds by collocating a
16 DSLAM at the BellSouth RT DLC site.

17

18 Q. ON PAGE 27, MR. GALLAGHER STATES THAT FDN CANNOT SELF-
19 PROVISION DSL TRANSPORT TO END-USERS WHO ARE SERVED
20 BY BELLSOUTH DLC FACILITIES. PLEASE COMMENT.

21

22 A. Mr. Gallagher is incorrect. FDN can place its own distribution facilities to
23 end users, should it choose to do so. As I explained above, however,
24 FDN simply is not required to self-provision DSL transport to its end users.
25 Instead, it can order transport facilities from BellSouth as UNEs.

1 Q. ON PAGE 27, MR. GALLAGHER QUESTIONS WHETHER FDN CAN
2 OBTAIN DSL TRANSPORT TO END-USERS SERVED BY BELLSOUTH
3 DLCs FROM A THIRD-PARTY PROVIDER? PLEASE COMMENT ON
4 THIS TESTIMONY.

5
6 A. It is unclear what point Mr. Gallagher is attempting to make. Even if no
7 third-party providers would provide distribution facilities to end users,
8 these facilities are available from BellSouth as UNEs.

9
10 Q. ON PAGE 28, MR. GALLAGHER DISCUSSES THE FCC'S PROJECT
11 PRONTO ORDER. SHOULD THE COMMISSION CONSIDER
12 REQUIRING BELLSOUTH TO MAKE AVAILABLE AN OFFERING
13 SIMILAR TO PROJECT PRONTO, WHICH INCLUDES THE PACKET
14 SWITCHING FUNCTIONALITY?

15
16 A. No. The SBC Project Pronto provides ALECs a packet-based service.
17 The fact that SBC chooses to use NGDLC and allow ALECs to place a
18 combo card in that equipment does not obligate BellSouth to do the same.
19 As previously stated, BellSouth uses a totally different architecture,
20 different systems and equipment. Thus, what Mr. Gallagher really wants
21 is to impose an obligation that BellSouth provide unbundled packet
22 switching despite the fact that the FCC has already addressed this very
23 situation and declined to impose such a duty except in limited situations.

24
25 Q. IN THE NEXT PARAGRAPH ON PAGE 29 AND 30, MR. GALLAGHER

1 IMPLIES THAT DSLAM FUNCTIONALITY IS FULLY SUPPORTED BY
2 LINE CARDS. COULD YOU COMMENT ON THAT TESTIMONY?

3

4 A. Mr. Gallagher is wrong when he implies that DSLAM functionality is fully
5 supported by line cards. As an example, one version of the Marconi
6 system requires an entire separate shelf that aggregates the packets
7 supplied by the line cards for transport back to the ATM switch. Without
8 this shelf, the line cards are useless. Other Marconi solutions require
9 specific common cards that supply the data aggregation.

10

11 The few NGDLC systems that BellSouth has deployed do use line cards,
12 however they are 'voice only' line cards and not capable of supporting
13 xDSL services. Also, BellSouth is testing the systems being considered
14 for deployment and has determined that they require additional
15 equipment, other than the line card, in order to operate and supply xDSL
16 services.

17

18 Q. PLEASE COMMENT ON MR. GALLAGHER'S REFERENCES, ON PAGE
19 31 OF HIS TESTIMONY, TO OTHER STATE COMMISSIONS THAT
20 HAVE REQUIRED ILECs TO UNBUNDLE THEIR PACKET SWITCHING.

21

22 A. Mr. Gallagher mentions Illinois (referencing 'Project Pronto') and New
23 York (referencing Verizon). In both of those cases, the ILEC used
24 technology, architecture and equipment that are significantly different from
25 that which BellSouth uses. Neither the FCC, the Act, nor any subsequent

1 order require the ILEC to deploy a new technology, or build facilities upon
2 request of an ALEC. The Act only requires that unbundling of existing
3 facilities. With respect to advanced services, in its Line Sharing Order
4 (Third Report and Order In CC Docket No. 98-147 and Fourth Report and
5 Order in CC Docket No. 96-98, December 9, 1999) the FCC at Para 26
6 states, "We affirm our tentative conclusion that any rules we adopt should
7 not mandate a particular technological approach to the use of a line for
8 multiple services." Thus, there is no requirement for BellSouth to provide
9 this technology upon FDN's request.

10

11 Q. PLEASE COMMENT ON MR. GALLAGHER'S DISCUSSION, ON PAGE
12 38 AND 39, OF THE FCC'S *LINE SHARING RECONSIDERATION*
13 *ORDER*.

14

15 A. In the Line Sharing Reconsideration Order referenced above, the FCC
16 stated, "We deny, however, AT&T's request that the Commission clarify
17 that incumbent LECs must continue to provide xDSL service in the event
18 customers choose to obtain service from a competing carrier on the same
19 line because we find that the *Line Sharing Order* contained no such
20 requirement." See *In Re: Deployment of Wireline Services Offering*
21 *Advanced Telecommunications Capability*, Order No. FCC 01-26 in CC
22 Docket Nos. 98-147, 96-98 (Released January 19, 2001) at ¶26. The
23 FCC then expressly stated that its *Line Sharing Order* "does not require
24 that [LECs] provide xDSL service when they are no longer the voice
25 provider." *Id.* As clearly stated by the FCC, there is no requirement for

1 BellSouth to provide its DSL service when it is no longer the voice carrier.
2 Mr. Gallagher is incorrect in his conclusion.

3

4 Q. PLEASE COMMENT ON MR. GALLAGHER'S OPINION ON PAGES 37
5 AND 38, THAT FDN' S PROPOSED BROADBAND UNE LOOP
6 INCLUDING SPLITTER FUNCTIONALITY AT THE RT IS NOT
7 INCONSISTENT WITH PRIOR COMMISSION DECISIONS WHICH
8 HAVE REJECTED ARGUMENTS THAT BELLSOUTH SHOULD BE
9 REQUIRED TO PROVIDE SPLITTERS TO ALECS.

10

11 A. What FDN is requesting in their new proposed broadband UNE is
12 inconsistent with prior FCC and this Commission's findings. As previously
13 stated, FDN's proposed new broadband UNE is not recognized by the
14 FCC, nor the industry, and includes functionality which the FCC and this
15 Commission have been very clear in their intent not to require ILECs to
16 provide on a UNE basis. Accordingly, as previously discussed, FDN's
17 proposed new broadband UNE should not be given any consideration.

18

19 Q. IS THERE ANYTHING ELSE THAT MR. GALLAGHER MENTIONED IN
20 HIS TESTIMONY THAT YOU WISH TO DISCUSS?

21

22 A. Yes. Many of the areas and issues Mr. Gallagher mentions have been
23 discussed and resolved in the various Line Sharing and Line Splitting
24 industry collaboratives that were established by BellSouth. These various
25 collaborative were established by BellSouth, for the benefit of interested

1 ALECs, to be the forum for discussion regarding all issues concerning
2 Line Sharing and Line Splitting.

3
4 On February 19, 2001, BellSouth hosted a line splitting collaborative 'kick-
5 off' meeting for all interested ALECs, for the express purpose of hearing
6 from the ALECs what they wanted and needed from BellSouth in order for
7 them to be successful. During this meeting, and subsequent weekly
8 collaborative meetings, no ALEC ever indicated an interest or desire
9 regarding what FDN is proposing

10
11 Exhibit TGW2 to my testimony is the charter for the RT collaborative team.
12 The stated goal of this collaborative "is to support the development of, with
13 the mutual agreement to, the processes and procedures required to jointly
14 implement line-sharing utilizing splitters located in the RT as one of the
15 options to meet the requirements of the FCC line-sharing order."

16 BellSouth has developed the RT Line-sharing option and performed
17 internal testing. Because no ALEC had collocated a DSLAM in a RT, nor
18 demonstrated interest in ordering the RT line sharing option, the RT line
19 sharing development effort has been suspended.

20

21 Q. HOW ACTIVE HAS FDN BEEN IN THESE COLLABORATIVES?

22

23 A. FDN has not participated in the Line Sharing – Remote Site collaborative,
24 or any other of the Collaboratives hosted by BellSouth.

25

1 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

2

3 A. Yes.

4

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17

EXHIBIT TGW-2
LINE SHARING RT PROJECT CHARTER
Consisting of Two (2) Pages

Collaborative Charter

Project Name	BST-RT-LS Line Sharing Collaborative	Project Number:	Line Share
Project Manager	Brenda Slonneger	Priority Level (1-10) <small>(1=lowest, 10=highest)</small>	8
		Date:	7/19/000

Stakeholder(s)	BellSouth - Tommy Williams NorthPoint - Chuck Polizzotti Rhythms - Jim Cuckler Duro - Richard McDaniel Sprint - Chris Monticue
-----------------------	--

Mission
 The mission of the collaborative is to support the development of, with the mutual agreement to, the processes and procedures required to jointly implement line sharing utilizing splitters located in the remote terminal as one of the options to meet the requirements of the FCC line sharing order.

Scope
 The collaborative will support the implementation of the line sharing initiative within the existing collocation guidelines in the remote terminal by mutually establishing the business processes and inter-company interface procedures required to implement and support this phase of line sharing within the BellSouth area.

- Objectives**
1. Identify line sharing system requirements for the RT located splitter option
 2. Identify, test, approve, and secure a line sharing splitter product for the RT located splitter option
 3. Implement a line sharing pilot test for the RT located splitter option
 4. Establish ordering, provisioning, maintenance, and billing processes for the RT located splitter option

- Assumptions**
1. There will be regular participation by all stakeholder members of the collaborative
 2. All the members of the collaborative will be objective and work in good faith
 3. All the members of the collaborative will maintain a mutual respect for their counterparts
 4. Any member of the CLEC/DLEC community may monitor this collaborative
 5. This is a working team and does not include legal representation from the participating companies.
 6. Waivers of existing collocation rules will be obtained in order to implement a pilot test and achieve the target implementation date

- Constraints**
1. RT collocation agreements
 2. Requirement to amend existing interconnection agreements
 3. Pilot agreements will be required in the event the collaborative agrees to implement a pilot
 4. Resource availability for participation in the collaborative meetings
 5. Product target implementation date of 3/31/2001
 6. Achieving desired target date will require waivers of existing collocation rules to implement a pilot test

- Time/Major Milestones**
1. Collaborative start date: 7/19/2000
 2. Project schedule development complete 10/16/2000

3. Product target implementation date: 3/31/2001
Cost/Budget/Financial Assumptions The collaborative is a non-funded process. Each participating member will be responsible for their own respective expenses.
Quality/Specification Deploy this phase of line sharing by 3/31/2001.
Major Risks <ul style="list-style-type: none"> Product target implementation date of 3/31/2001 Obtaining waivers of existing collocation rules to implement a pilot test prior to implementation date

Project Core Team:	Company	Phone	Email Address
Members:			
Chuck Polizzotti	NorthPoint	203-256-9317	cpolizzotti@northpointcom.com
Jim Cuckler	Rhythms	770-271-3904	jcuckler@rhythms.com
Richard McDaniel	Duro	770-326-9335	rmcdaniel@durocom.com
Chris Monticue	Sprint	913-906-7682	christine.monticue@mail.sprint.com
Steve Murray	Rhythms	404-281-1826	smurray@rhythms.com
Tommy Williams	BellSouth	205-977-0056	Tommy.G.Williams@bridge.bellsouth.com
Erick Gamble	BellSouth	205-977-7410	erick.gamble@bridge.bellsouth.com
Debbie Timmons	BellSouth	205-321-4990	debbie.timmons@bridge.bellsouth.com
Diann Hammond	BellSouth	205-321-7727	DiannHammond@bridge.bellsouth.com
Brenda Slonneger	BellSouth	205-977-1276	Brenda.B.Slonneger@bridge.bellsouth.com
Project Monitoring Members:			
Larry Gindlesberger	Covad	330-284-4177	Lgindles@covad.com
Frank Kowalski	DSL.NET		fkowalski@dsl.net
Mary Nelson	New Edge		mnelson@newedgenetworks.com

Project Manager Approval:	Signature	Date
Brenda Slonneger		

Stakeholder Approval:	Signature	Date
BellSouth - Tommy Williams		
NorthPoint - Chuck Polizzotti		
Rhythms - Jim Cukler		
Duro - Richard McDaniel		
Sprint - Chris Monticue		

EXHIBIT TGW-1

**PRECURSOR GROUP NEWSLETTER
FEBRUARY 22, 2001
Consisting of Two (2) Pages**



Precursor Group®
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Scott C. Cleland
February 22, 2001

How Broadband Deployment Skews Economic/Business Growth

Summary: Precursor believes many do not appreciate the broad investment and economic implications of the highly skewed nature of current broadband deployment. While nearly all large businesses in the U.S. already have broadband service, only around 6.5 million or roughly 6% of residential households have broadband—73% cable modem and 26% DSL (see attached chart). More importantly, investors are missing entirely the broad implications of meager broadband deployment to small and medium enterprises (SMEs) that employ less than 100 employees. Investors should care because SMEs comprise roughly 85% of U.S. business firms, 40% of employment, and one-third of the nation's economic output. The broadband deployment contrast between large businesses and SMEs is stark. Only about 6% of SMEs have broadband and this segment is almost exclusively DSL (~90% see attached chart). Precursor has discovered that the SMEs, which need broadband most, are also the least likely to get broadband deployment. That's because distance from network hubs increases the business need for broadband at the same time distance increases cost of deployment. Precursor believes this broadband skew has broad under appreciated implications for productivity and earnings growth. If large companies, which enjoy broadband productivity gains, are experiencing slower growth, this signals relatively greater trouble for SMEs, which are not enjoying broadband productivity gains. This could be a hidden negative precursor for economic growth because SMEs are the primary driver of national job and economic growth and productivity is a key driver of earnings growth.

Implications of Skewed Broadband Deployment: (1) **Distance Matters Much More for Broadband Than Dial-up:** (A) **Cost:** Unlike narrowband dial-up which requires minor modification of the telecom network, DSL and cable modems require an expensive re-engineering of their respective networks. Thus the key broadband cost variable is density/distance: how far away and how far apart the customers are, because density/distance drives average cost. Customer density matters to DSL specifically because speed directly correlates to the distance from the central office. Customer density matters to both DSL and cable because it creates breakeven efficiencies in marketing, engineering, installation, and service. (B) **Revenues:** Customer ability to pay drives average revenues. Relative customer ability to pay is also important because it drives the priority sequence of deployment and also whether deployment can ever reach breakeven in a given area. These cost and revenue realities heavily skew broadband deployment to the biggest cities with the most concentrated business districts and the most affluent, concentrated neighborhoods. Moreover,

because cable's entertainment-driven infrastructure almost exclusively serves the residential market, cable modem deployment is unlikely to be a factor for SMEs. Given the financial difficulties that CLECs are experiencing, it looks like the SME market will increasingly become the exclusive domain of DSL. (2) **Broadband Deployment Paradox:** Ironically, the geographic areas that make the least business sense to deploy to are precisely the businesses that most need broadband to grow. A substantial portion of U.S. employment is generated by SMEs, and most employment tends not to be located in the densest, highest rent areas where it makes most business sense to deploy broadband. Precursor suggests a surprising correlation: those SMEs that require lots of physical space and low rent also tend to have the most mission critical need for broadband. For example: engineering, manufacturing and construction firms that regularly use computer-aided design (CAD) need broadband to transmit schematics/blueprints efficiently; yet only about 10% have broadband. Farmers and construction companies that need equipment parts have a mission critical need for broadband to efficiently scan schematics and participate in auctions for spare parts; yet only about 10% have broadband. Some other small businesses, which need broadband, but tend to be dispersed from where broadband is being deployed include: residential rural doctors (which need bandwidth to view x-rays and CAT scans from hospitals and specialists), travel agents, and printing companies – to name some of the more obvious industries with largely unmet broadband needs. This suggests a broadband investment cleave that could advantage: large/mid cap over small/micro cap companies; concentrated/geographically-clustered industries over fragmented and dispersed industries; and high-rent industries over low rent industries. (3) **Home-to-Office Telecommuting Hindered:** To remain a proprietary network, cable broadband networks have been designed to prevent cable customers from being able to link at high speed with DSL—unless it is cable-provided DSL (a de minimis share of SMEs). This effectively prevents a cable modem telecommuter working from home from linking at high speed into their office's DSL network. On a broader scale, it also prevents the creation of integrated suburban-urban metro-wide high-speed networks. This is another hidden drag on future productivity growth. (4) **Broadband Job Flight:** Increasingly states and localities are realizing that broadband is a mission critical utility for business and a core factor in attracting or keeping businesses in a locality or state. Broadband increasingly is a prerequisite for growth. This has positive implications for relatively broadband rich REITs and negative implications for relatively broadband poor REITs. *Geo-economic data source: www.imapdata.com* • • • • •

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Precursor Watch® : Broadband Deployment Outlook

Scott C. Cleland, Patrick S. Brogan - February 22, 2001

The Precursor Group

Residential Provider	SME		SME		Total Res. Subscribers (000s)	Est. "Footprint" Growth 2001	2002	2003	Approximate Retail Pricing	Download Speed	Upload Speed	Spectrum (Mhz)
	Subs. Market Share (000s)	Subs. Market Share	Estimated Residential Subscribers (000s)	Res. Market Share								
Wireline	0%	0%	1,825	4,725	1,199	2,199	2,100	\$75 (\$0-\$150)	2 mbps	128-500 kbps	750	Available for data
Cable Modem	0%	0%	1,200	1,710	100	200	555	\$40	2 mbps	90-256 kbps	1	Available for data
ADSL	90%	26%	855	1,710	13	9	18	\$100 (\$0-\$200)	768 kbps	768 kbps	1	Available for data
Overbuilders	0%	1%	27	67	13	9	18	\$40 (\$0-\$100)	1.5 mbps	768 kbps	860	Available for data
Terrestrial Wireless	0%	0%	0	0	0	0	0	n/a	2 mbps	28-56 kbps	6+	Available for data
Digital TV	0%	0%	0	0	0	0	0	n/a	2 mbps	28-56 kbps	6+	Available for data
Geostar/Blas/WaveExpress	0%	0%	0	0	0	0	0	n/a	2 mbps	28-56 kbps	6+	Available for data
Wireless Local Loop	0%	0%	0	0	0	0	3	\$0 (\$215 waived)	512 kbps	150	10	Available for data
AT&T Digital Broadband	0%	0%	0	0	0	0	7	\$35	2 mbps	150	10	Available for data
MIMDS ("wireless cable")	1%	1%	0	0	1	0	0	\$150	1 mbps	256	198	Available for data
Sprint/Worldcom/Mucom	1%	1%	0	0	1	0	0	\$40	1 mbps	256	198	Available for data
LMSD	9%	0%	0	0	0	0	0	n/a	n/a	n/a	n/a	Available for data
Winstar/Telegen/XO/c	9%	0%	0	0	0	0	0	n/a	n/a	n/a	n/a	Available for data
3G Mobile Wireless	0%	0%	0	0	0	0	0	n/a	56-192 kbps	192	n/a	Available for data
Mobile Providers, et. al.	0%	0%	0	0	0	0	0	n/a	56-192 kbps	192	n/a	Available for data
Satellite	0%	0%	n/a	n/a	n/a	n/a	n/a	\$575	150-500 kbps	50-150	n/a	Available for data
Starband (Gila)	0%	0%	n/a	n/a	n/a	n/a	n/a	\$60-\$70	150-500 kbps	50-150	n/a	Available for data
Hughes DirecPC	0%	0%	35	35	0	0	0	\$215	400 kbps	28-56	n/a	Available for data
Totals	824	100%	1,099	959	1,776	2,714	6,548	100%				

RESIDENTIAL

SMALL BUSINESS

KEY: (V) Depicts broadband service, defined by the FCC as 200 kbps both ways (@Home & SBC upload speed is 128 kbps and Verizon upload speed is 90 kbps upload speed at prices listed above; a few cable modems and MIMDS systems still use dial-up return). Footprint: Assuming 100m U.S. households, circles depict estimated growth over time. Retailing/Speed: We show price/speed packages for broadband plus Internet service likely to have mass market appeal; circles depict speed/size of pipe. (1) SME market shown here excludes businesses using certain high-speed access lines such as ISDN, T-1, T-3, etc. (2) Some spectrum (e.g., 700MHz and unlicensed spectrum) is either not yet available, niche use, or both. (3) Many MIMDS 2-way licenses awaiting FCC approval ~1H01. (4) Planned systems include: Skybridge (Ku-band) and WildBlue, Hughes, Spaceway & Teledesic (Ka 18-30 GHz). (5) DirecPC's subscriber totals not included in market share calculation because service uses dial-up return path; 2-way service and new pricing information due out ~1Q01; upload speed will be ~128 kbps. (*) Amount is negligible.

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Graphics by Kim Sihaneck

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August 22, 2001

Mrs. Blanca S. Bayó
Director, Division of the Commission Clerk
and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

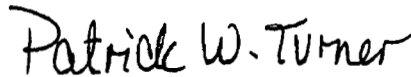
Re: Docket No. 010098-TP (Florida Digital)

Dear Ms. Bayó:

Enclosed is an original and fifteen copies of BellSouth Telecommunications, Inc.'s Late Filed Exhibit No. 12 for Tommy Williams, which we ask that you file in the captioned docket.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served to the parties shown on the attached Certificate of Service.

Sincerely,



Patrick W. Turner (KA)

cc: All Parties of Record
Marshall M. Criser III
R. Douglas Lackey
Nancy B. White

DOCUMENT NUMBER-DATE

10417 AUG 22 01

FPSC-COMMISSION CLERK


**CERTIFICATE OF SERVICE
DOCKET NO. 010098-TP**

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via
Electronic Mail and Federal Express this 22nd day of August, 2001 to the following:

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Patrick W. Turner (KA)

**(+) Signed Protective/Non Disclosure
Agreement**

**BELLSOUTH TELECOMMUNICATIONS, INC.
FLORIDA DIGITAL NETWORKS (FDN) ARBITRATION
DOCKET NO. 010098-TP
Tommy Williams' Late Filed Exhibit No. 12**

Regarding the Deployment of Remote Site DSLAMs

At the hearing of this matter, the Florida Public Service Commission ("Commission") requested information concerning the expense of deploying DSLAM equipment in remote sites. This information is intended to provide the Commission additional information concerning remote terminal (RT) DSLAM deployment. *It is not BellSouth's intent in providing this information to tell Florida Digital Network, Inc. ("FDN") or any other ALEC how to employ equipment for its data network.*

To be fiscally prudent in deploying xDSL services, one must first fully understand the technologies as well as the environment. High-speed data service using xDSL technology requires unloaded, dedicated copper loops. Generally, acceptable copper loops are shorter than 18,000 feet (which often are already unloaded).

In the BellSouth network a large number of BellSouth's analog voice-grade loops are served over digital loop carrier (DLC), which has either fiber or multiplexed copper feeder to the Central Office ("CO"). Accordingly, to accommodate xDSL service in this environment and "overcome" the presence of fiber or multiplexed copper feeder, two (2) DSLAMs are recommended: one at the RT and one at the CO.

Acknowledging the specifics of the BellSouth environment, and to minimize the initial capital outlay to establish service at RTs, BellSouth made the decision to begin offering its Wholesale ADSL with a CO based solution in targeted areas. BellSouth and its Internet Service Provider (ISP) partners initially sold BellSouth ADSL Service to end users served by dedicated, unloaded copper loops from the CO to the end user.

As BellSouth successfully deployed CO-based DSLAM solutions, it was simultaneously establishing half of a future RT solution by having the DSLAMs already in place in the CO. After operating in a pure CO DSLAM environment for a period of time, a determination was made to place RT based DSLAMs at locations that served neighborhoods with a higher propensity to buy ADSL Service. Thus, BellSouth targeted remote terminals with the most potential for ADSL service.

The first remote solutions deployed by BellSouth were 8-port Mini-Rams manufactured by Alcatel. These remote solutions were designed to be compatible with the existing CO based DSLAMs also manufactured by Alcatel. These CO DSLAMs had "triple duty". In addition to serving end users with ADSL over unloaded copper loops, the arrangement allowed the Mini-Rams to "hub" off the CO DSLAM, which eliminated the need for an ATM switch in

each CO. Finally, the CO DSLAM also serves as a hub for the feeder DS1s from the remote Mini-Rams to a DS3 interoffice channel, which transports the data to the ATM switch at a central location. After the Mini-Ram was deployed at the RT, the ADSL end users served by the RT were converted to the remote solution. By moving the DSLAM closer to the end users and further into the network, additional end users could be served with unloaded distribution sub-loops.

BellSouth and its ISPs that purchase BellSouth's tariffed DSL service use BellSouth's loop qualification system (LQS) to determine if loops are qualified for BellSouth's ADSL service. LQS is intended to qualify loops for BellSouth ADSL Service. ALECs may also use LQS to determine if loops are qualified for ADSL; however, the presence of a BellSouth remote solution will indicate that the loop will support DSL, while the loop may or may not support DSL with a CO based DSLAM. Therefore, LQS is not adequate for an ALEC to determine if a loop will support its data service. A better source of information for ALECs to determine a loop's characteristics is BellSouth's loop makeup (LMU) service. LMU is a pre-ordering tool and is available in a manual (FAX) or electronic version. LMU allows ALECs to obtain information about its end user's loops, including the medium (i.e., copper, fiber), gauge, length of gauge, presence of load coils, location of load coils, address of the RT, RT CLLI code, etc. Because different equipment may have different loop requirements, the decision of the 'suitability' of a loop is left up to the ALEC. Additional information concerning LMU is available on the BellSouth Interconnection web site at:

<http://www.interconnection.bellsouth.com/guides/unedocs/bstlmv.pdf>

FDN and other ALECs could take an approach similar to the one BellSouth has taken and begin "collecting" DSL customers with CO based DSLAMs.

The following example shows what an ALEC's estimated cost would be if the ALEC were to collocate a DSLAM at one of BellSouth's RT sites located in the state of Florida. This example should not be interpreted as an endorsement or recommendation of any particular supplier but rather, an example of the available technology and its associated costs. The current BellSouth supplier for remote solutions is Inovia Telecom, a subsidiary of ECI Telecom. Inovia supplies a line of compact DSLAMs. The MicroRam 1100 is an 8-port DSLAM with a list price of \$6,095. The MicroRam 1100 fits into a 19" or 23" rack in an RT cabinet. The product is 1 1/4" X 17" X 12". The MicroRam 1400 is a 16-port DSLAM with a list price of \$12,200 and also fits into a 19" or 23" rack. An ALEC may be able to obtain a discount based upon volume and perhaps other criteria. Estimates of the cost to establish RT collocation, equip the collocation space with a MicroRam 1100 and a UNE DS1 feeder sub-loop are as follows:

<u>Item</u>	<u>Recurring</u>	<u>Non-recurring 1st</u>	<u>Non-recurring Add'l</u>
Remote Terminal			
Collocation Application Fee		\$ 874.14	
Security Access System		\$ 26.20	
DS1 Feeder Termination*		\$ 522.41	\$ 11.32
Cabinet Space and Power	\$ 232.50		
4-Wire DS1 Feeder*	\$ 43.64	\$ 120.81	\$ 70.34
MicroRam 1100**		\$ 6,095.00	
	<u>\$ 276.14</u>	<u>\$ 7,638.36</u>	<u>\$ 81.66</u>

* This rate is based on a preliminary cost study. It was not part of the Florida Generic UNE Order (Docket No. 990649-TP), because it was developed after the cost study was submitted.

** Manufacturer's List Price for a quantity of one (1) MicroRam 1100.