1   BELLSOUTH TELECOMMUNICATIONS, INC.

2   REBUTTAL TESTIMONY OF W. KEITH MILNER

3   BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

4   DOCKET No. 991267-TP

5   DECEMBER 20, 1999

6

7

8 Q.   PLEASE STATE YOUR NAME, ADDRESS, AND POSITION WITH

9   BELLSOUTH TELECOMMUNICATIONS, INC.

10

11 A.   My name is W. Keith Milner. My business address is 675 West Peachtree

12   Street, Atlanta, Georgia 30375. I am Senior Director - Interconnection

13   Services for BellSouth Telecommunications, Inc. ("BellSouth"). I have

14   served in my present role since February 1996 and have been involved

15   with the management of certain issues related to local interconnection,

16   resale, and unbundling.

17

18 Q.   PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

19

20 A.   My business career spans over 29 years and includes responsibilities in

21   the areas of network planning, engineering, training, administration, and

22   operations. I have held positions of responsibility with a local exchange

23   telephone company, a long distance company, and a research and

24   development laboratory. I have extensive experience in all phases of

25   telecommunications network planning, deployment, and operation

1		(including research and development) in both the domestic and
2		international arenas.
3		
4		I graduated from Fayetteville Technical Institute in Fayetteville, North
5		Carolina in 1970 with an Associate of Applied Science in Business
6		Administration degree. I also graduated from Georgia State University in
7		1992 with a Master of Business Administration degree.
8		
9	Q.	HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE PUBLIC
10		SERVICE COMMISSION? IF SO, BRIEFLY DESCRIBE THE SUBJECT
11		OF YOUR TESTIMONY.
12		
13	A.	I testified before the state Public Service Commissions in Alabama,
14		Florida, Georgia, Kentucky, Louisiana, Mississippi, South Carolina, the
15		Tennessee Regulatory Authority, and the Utilities Commission in North
16		Carolina on the issues of technical capabilities of the switching and
17		facilities network regarding the introduction of new service offerings,
18		expanded calling areas, unbundling, and network interconnection.
19		
20	Q.	PLEASE DESCRIBE THE PURPOSE AND ORGANIZATION OF YOUR
21		TESTIMONY BEING FILED TODAY.
22		
23	A.	My testimony will rebut portions of the testimony filed on behalf of Global
24		NAPS, Inc. ("Global NAPS") by Mr. Fred R. Goldstein regarding the
25		technical attributes of local calls, calls to Internet Service Providers (ISPs),

1   and calls to Interexchange Carriers (IXCs).

2

3   Q.   ON PAGE 3 OF HIS TESTIMONY, MR. GOLDSTEIN ASSERTS THAT

4   "IN ALL PRACTICAL, TECHNICAL RESPECTS, ISPs 'LOOK LIKE' END

5   USERS TO THE NETWORK, AND NORMAL END USER CALLS TO ISPs

6   'LOOK LIKE' NORMAL LOCAL CALLS TO ANY OTHER END USER

7   SUCH AS A BANK, PIZZA PARLOR, SCHOOL, OR GOVERNMENT

8   AGENCY." DO YOU AGREE?

9

10   A.   No. First of all, it is irrelevant from a technical perspective how a call or a

11   company "looks". What is relevant is the equipment, routing instructions,

12   call handling practices, call supervision, and the like that have any bearing

13   on technical options and decisions regarding call handling. Second, Mr.

14   Goldstein fundamentally misses the mark when he equates a provider of

15   information services (that is, the ISP) with the consumer of such services.

16   ISPs are not end user customers. They do not choose the timing of end

17   users' calls, the duration of those calls, or the ultimate destination of those

18   calls. End user customers make all those decisions and the ISP

19   establishes connections based on those end user customer decisions.

20

21   Q.   ON PAGE 3 OF HIS TESTIMONY, MR. GOLDSTEIN STATES "AS A

22   TECHNICAL MATTER, ISP-BOUND CALLS ARE INDISTINGUISHABLE

23   FROM LOCAL VOICE CALLS." DO YOU AGREE?

24

25   A.   No. Mr. Goldstein supports his conclusion apparently on five bases he

1　　discusses in the paragraphs following that statement. Those bases for his

2　　conclusion that calls to ISPs are "handled just like any other local calls"

3　　are:

4　　　　　　1. The end user customer reaches the ISPs modem pool by dialing

5　　　　　　　　a 7-digit or 10-digit local number.

6　　　　　　2. That in some cases the 7-digit or 10-digit number dialed by the

7　　　　　　　　end user customer has been "ported".

8　　　　　　3. That similar trunking and signaling options are chosen.

9　　　　　　4. That "call supervision" applicable to local calls takes place.

10　　　　　5. That call volumes are the same as for large end users.

11

12　　I will discuss in the following paragraphs how each of these bases is either

13　　incorrect, irrelevant, or both.

14

15　Q.　DO YOU AGREE WITH MR. GOLDSTEIN THAT BECAUSE THE END

16　　USER CUSTOMER DIALS A 7-DIGIT OR 10-DIGIT LOCAL CALL TO

17　　REACH AN ISP, SUCH CALLS ARE LOCAL CALLS?

18

19　A.　No. The number of digits dialed is not determinative of the nature of the

20　　call. For example, I might call my neighbor by dialing 7-digits or 10-digits.

21　　If my neighbor subscribes to a call forwarding service and has activated

22　　that call forwarding service, my call does not terminate at my neighbor's

23　　house but rather at whatever destination my neighbor has chosen to have

24　　calls forwarded to. That destination may or may not be within the local

25　　calling area, depending on my neighbor's preference of destination.

4

1   Likewise, Feature Group A calls are placed by dialing a 7-digit or 10-digit

2   telephone number. Here again, however, the call does not terminate at

3   that 7-digit or 10-digit telephone number's location but instead at the

4   destination chosen by the end user customer.

5

6 Q. DO YOU AGREE WITH MR. GOLDSTEIN THAT BECAUSE IN SOME

7   CASES THE 7-DIGIT OR 10-DIGIT NUMBER DIALED BY THE END

8   USER CUSTOMER HAS BEEN "PORTED", SUCH CALLS ARE LOCAL

9   CALLS?

10

11 A. No. While it is correct that the 7-digit or 10-digit telephone number dialed

12   by the end user customer may have been "ported" from the previous

13   service provider to a new service provider, that fact is irrelevant to the

14   nature of the call. In fact, if an Alternative Local Exchange Carrier (ALEC)

15   originally served the end user customer and the end user customer

16   chooses to change to have its service provided by BellSouth, calls would

17   be "ported" to BellSouth's network in the same way that calls are "ported"

18   to an ALEC's network. That porting of the end user customer from the

19   original service provider's network to BellSouth's network would likewise

20   not be determinative of the nature of the call.

21

22 Q. DO YOU AGREE WITH MR. GOLDSTEIN THAT BECAUSE IN SOME

23   CASES SIMILAR TRUNKING AND SIGNALING OPTIONS ARE

24   CHOSEN, THAT SUCH CALLS ARE LOCAL CALLS?

25

1   A.   Absolutely not. Trunking arrangements are chosen for efficiency of call

2   handling, billing accuracy, regulatory requirements, and other such

3   factors. The choice of sending traffic directly between two end office

4   switches is a function of factors such as the amount of traffic expected and

5   the physical distance between the two switches, rather than the nature of

6   the traffic carried. Assume an ALEC has only one switch within a given

7   local calling area while BellSouth has several switches. The ALEC might

8   choose to interconnect its network only by establishing direct trunk groups

9   between its switch and each of BellSouth's switches within the given local

10   calling area. Alternatively, the ALEC may decide to establish only one

11   trunk group between its switch and BellSouth's local tandem or

12   BellSouth's access tandem. BellSouth offers all three of these options,

13   and the ALEC is free to choose one or a combination of these options that

14   it believes is the right solution in a given circumstance. So, the choice of

15   routing is made based on economic factors rather than on the basis of the

16   nature of the traffic. Further, the ALEC is free to choose the types of

17   traffic that are carried by a given trunk group. Let's assume the ALEC has

18   chosen to interconnect with BellSouth's network only at BellSouth's

19   access tandem. The ALEC may choose to have a single trunk group from

20   its switch to the access tandem and on that group would be carried local

21   traffic, intraLATA toll traffic, interLATA toll traffic, and "transit" traffic to

22   Incumbent Local Exchange Carriers (ILECs) other than BellSouth and

23   "transit" traffic to other ALECs. Of course the ALEC could choose to have

24   more than one trunk group carrying different combinations of the classes

25   of traffic named above. Thus, the traffic on a single trunk group is often

1   mixed. Thus, the choice of which trunk group traffic to ISPs is carried over

2   does not establish the nature of the traffic carried.

3

4   Likewise, forms of signaling (that is, information applied to operate and

5   control the component groups of a telecommunications circuit to cause it

6   to perform its intended function) are chosen based not on the nature of the

7   traffic carried by a given trunk group, but rather by what signaling

8   information is needed to effectively operate and control the network.

9   Signaling System 7 (SS7) is an internationally standardized, general-

10   purpose common channel signaling protocol. Thus, its use is pervasive in

11   many different applications, both in local and long distance networks.

12   Thus, the use of a particular signaling protocol is not determinative of the

13   nature of any end user traffic conveyed.

14

15   Q.   DO YOU AGREE WITH MR. GOLDSTEIN THAT BECAUSE "CALL

16   SUPERVISION" APPLICABLE TO LOCAL CALLS TAKES PLACE, SUCH

17   CALLS ARE LOCAL CALLS?

18

19   A.   No. First of all, it is not clear what Mr. Goldstein refers to as "call

20   supervision" because he does not define his use of that term. I refer to

21   supervisory signals as the means by which an end user customer initiates

22   a request for.service; or holds or releases a connection; or flashes to

23   recall an operator or to initiate additional features (for example, three-way

24   calling). Supervisory signals are also used to initiate and terminate

25   charging on a call. These same supervisory signals are used for local

7

1   calls, intraLATA toll calls, and interLATA toll calls. As with signaling,

2   supervisory signals allow the proper handling of end user customers' calls

3   regardless of the nature of the call. When Mr. Goldstein states that "Call

4   supervision is returned when the modem [that is, the ISP's modem]

5   answers", he makes a correct but irrelevant statement. The more

6   important point is that the call does not terminate at the ISP's modem pool

7   but is instead carried forward to the end user customer's choice of

8   destination. During such a call, other forms of supervisory signaling are

9   also employed such as the end user customer's hanging up the phone.

10   Supervisory signals are used in a wide variety of applications and are not

11   determinative of the nature of the call.

12

13   Q.   DO YOU AGREE WITH MR. GOLDSTEIN THAT BECAUSE SOME CALL

14   VOLUMES TO ISPs ARE THE SAME AS FOR LARGE END USERS

15   SUCH CALLS ARE LOCAL CALLS?

16

17   A.   No. I believe it is totally incorrect to assert that nature is somehow

18   dependent on the volume of calls handled. A medium sized business end

19   user customer may receive more calls in a day than does a newly

20   launched ISP. This is not pertinent to the question of the nature of the

21   call. The key point once again is what happens to the calls once they

22   reach the business end user customer versus what happens to the calls

23   when they reach the ISP. The calls are terminated at the business end

24   user customer when they are answered. The calls to the ISP are not

25   terminated when the ISP's modems answer the call. Instead, the call

1   proceeds to the end user customer's choice of destination, and this

2   destination may be on the other side of the world. The volume of calls

3   handled, whether "delivered in bulk" or one at a time in no way determines

4   the nature of the traffic. Here again, Mr. Goldstein's assertion that "an

5   ISP's modem pool looks very much like an incoming PBX trunk group" is

6   entirely misleading. What is relevant is not how equipment or functionality

7   "looks", which is entirely in the eye of the beholder, but rather the manner

8   in which the equipment, or functionality, handles the call. Thus, whether

9   an ISP receives one call or one million calls is not determinative of the

10   nature of the call or calls.

11

12   Q.   ON PAGE 6 OF HIS TESTIMONY, MR. GOLDSTEIN STATES THAT "A

13   CALL HANDED OFF BY A LEC TO AN IXC IS NOT SUPERVISED BY

14   THE IXC; CALL SUPERVISION IS RETURNED ONLY WHEN A

15   TERMINATING LEC AT THE FAR END OF THE CALL PROVIDES IT."

16   DO YOU AGREE?

17

18   A.   No, for the reasons I set out earlier. Supervisory signals are used in a

19   variety of situations. For example, supervisory signals are used for local

20   calls, intraLATA calls, and interLATA calls. Contrary to Mr. Goldstein's

21   assertion, the "terminating LEC at the far end of the call" does not

22   "provide" supervisory signals such as call answer, or hanging up, or switch

23   hook flash. The end user customer provides those signals such that the

24   calls are handled properly. Second, Feature Group A calls are selected

25   by the end user customer's dialing the associated 7-digit telephone

9

1   number of the interexchange carrier. Dialing such a 7-digit code, such as

2   950-XXXX, in no way determines the nature of the call. Third, Mr.

3   Goldstein is entirely wrong when he claims that "interconnection is far

4   more likely to make use of an access tandem, rather than a local tandem

5   or DEOT [that is, a direct end office trunk group]." ALECs are free to

6   choose any or all of these options, and BellSouth offers all three. Indeed,

7   ALECs have used all three of these options as they wish. There is not a

8   "one size fits all" approach chosen by ALECs. They have their own

9   business plans regarding how they will approach the market. These

10   business plans are reflected in the choice of the facilities they will own,

11   and the manner in which these facilities are interconnected and operated.

12   Fourth, while Mr. Goldstein is correct in his statement that "Signaling

13   between the LEC and IXC uses carrier-to-carrier Signaling System 7", he

14   is incorrect when he states that "calls to ISPs use PRI or Channelized T1

15   robbed-bit signaling." The call between the ILEC's switch and the ALEC's

16   switch is handled via Signaling System 7 protocols in addition to the PRI

17   or Channelized T1 robbed-bit signaling used between the ALEC's switch

18   and the ISP. The bottom line is that supervisory signaling and signaling

19   protocols serve a multitude of purposes in the modern telecommunications

20   network. The supervisory signals or signaling protocol chosen in a given

21   instance has nothing to do with the nature of the associated end user

22   customer's traffic carried.

23

24   Q.   ON PAGE 6 OF HIS TESTIMONY, MR. GOLDSTEIN STATES "SINCE

25   ISP-BOUND CALLS ARE TECHNICALLY IDENTICAL TO LOCAL CALLS,

1   THE LOGICAL RESULT FROM A TECHNICAL PERSPECTIVE IS TO

2   INCLUDE ISP-BOUND CALLS WITH THE CATEGORY OF 'LOCAL'

3   CALLS IN CONTRACTS REGARDING INTERCONNECTION BETWEEN

4   CARRIERS AND INTER-CARRIER COMPENSATION." DO YOU

5   AGREE?

6

7   A.   No, for the reasons I have stated above. I do not agree that "ISP-bound

8   calls are technically identical to local calls"; therefore, I cannot agree with

9   his conclusion regarding the treatment of ISP-bound calls for purposes of

10   reciprocal compensation or inter-carrier compensation.

11

12   Q.   DOES THAT CONCLUDE YOUR TESTIMONY?

13

14   A.   Yes.