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**BELLSOUTH TELECOMMUNICATIONS, INC.**  
**DIRECT TESTIMONY OF WILLIAM VICTOR ATHERTON, JR.**  
**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
**DOCKET NO. 960833-TP**  
**AUGUST 12, 1996**

Q. PLEASE STATE YOUR NAME, ADDRESS AND POSITION WITH BELLSOUTH TELECOMMUNICATIONS, INC. (HEREINAFTER REFERRED TO AS "BELLSOUTH" OR "THE COMPANY").

A. My name is William Victor Atherton, Jr. My business address is 3535 Colonnade Parkway, Birmingham, AL 35243. I am a Manager in the Infrastructure Planning organization of the Network and Technology Group where I currently have the responsibility of leading the BellSouth Technical Negotiations Team. This team comprises technical experts of various disciplines that design, develop and negotiate the interconnection arrangements with facilities-based Alternative Local Exchange Companies ("ALECs"). The interconnection issues addressed by this team may be grouped into three distinct categories: 1) network interconnection, including all trunking and signaling necessary for intercompany traffic flow; 2) portability of telephone numbers; and, 3) unbundled network elements. Consistent with the Telecommunications Act of 1996 (hereinafter referred to as the "Act"), the Company has been negotiating these issues with AT&T in good faith since their first request in April, 1996.

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1 Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

2

3 A. I was graduated from the University of Louisville with the degree of  
4 Bachelor of Applied Science. In addition, I earned the Masters of  
5 Electrical Engineering Degree from Speed Scientific Graduate School  
6 of the University of Louisville. I am a licensed Professional Engineer in  
7 the branch of Electrical Engineering, member of the Sigma Xi and Eta  
8 Kappa Nu Engineering Honor Societies, and a member in the National  
9 and Alabama Societies of Professional Engineers.

10

11 I began my career with South Central Bell in 1979 as an engineer in the  
12 Electronic Switching Systems Group. In this assignment, I was  
13 responsible for engineering the growth and replacement of these  
14 systems. In 1984, I joined the Headquarters Staff organization where I  
15 studied emerging telecommunications technologies, making specific  
16 deployment recommendations to the Company. In 1985, I assumed the  
17 position of Project Manager for 800 Service Database. In this role, I  
18 was active in Company and industry forums and was responsible for  
19 technical analysis, while negotiating the successful implementation of  
20 the national system. During 1987, I was appointed Technical Product  
21 Manager for Open Network Architecture and Interconnector Switched  
22 Access Services. This included involvement in the Federal  
23 Telecommunications System (FTS2000) and the National Emergency  
24 Telecommunications System (NETS). I assumed my present position  
25 in March, 1995.

1 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

2

3 A. The purpose of my testimony is to describe the interim service provider  
4 number portability solutions that BellSouth will make available to  
5 ALECs, including AT&T, in accordance with the Act and pursuant to the  
6 Federal Communications Commission's ("FCC") requirements in CC  
7 Docket 95-116. Specifically, I will focus on those areas where AT&T is  
8 demanding unreasonable additions not required by the Act or the FCC,  
9 and explain why these additions are not feasible, and in fact, not  
10 necessary, nor in the public interest.

11

12 In addition, I will describe the appropriate trunking arrangements  
13 required for the interconnection of the Company's network with AT&T's  
14 network. Specifically, I will address why each interconnecting company  
15 should have the right to determine its own trunking arrangements.

16

17 **I. Interim Service Provider Number Portability**

18

19 Q. WHAT METHODS WILL BELLSOUTH UTILIZE TO PROVIDE  
20 SERVICE PROVIDER NUMBER PORTABILITY ("SPNP") ON AN  
21 INTERIM BASIS?

22

23 A. BellSouth will provide, and expects AT&T to reciprocate, SPNP through  
24 remote call forwarding ("RCF") arrangements and flexible direct inward  
25 dialing ("DID") arrangements. These methods are described by the

1 FCC as the "only methods technically feasible". (FCC Docket 95-116,  
2 paragraph 110). These solutions are generally accepted by the  
3 industry as de facto SPNP standards as evidenced by the Florida  
4 Stipulation and Agreement, signed in August, 1995, by the Company,  
5 AT&T and other parties, and approved by the Florida Public Service  
6 Commission in Docket No. 950737-TP. The above methods meet the  
7 requirements of the Act until a permanent number portability capability  
8 is fully developed, tested and implemented. At AT&T's request,  
9 however, BellSouth has tentatively agreed to an additional solution:  
10 Local Exchange Routing Guide ("LERG") reassignment of central office  
11 NXX codes. This tentative agreement is predicated on the fact that  
12 appropriate industry procedures will be followed.

13

14 Q. WHAT ADDITIONAL ITEMS REGARDING INTERIM SPNP HAS AT&T  
15 REQUESTED?

16

17 A. Per its Petition for Arbitration, AT&T has requested that: 1) BellSouth  
18 coordinate number changes associated with interim SPNP, specifically  
19 RCF, so that customers are not out of service for more than five  
20 minutes, and 2) BellSouth provide a wider range of SPNP options.

21

22 **I.1. Coordinated Number Changes**

23

24 Q. HAS BELL SOUTH AGREED TO COORDINATE NUMBER CHANGES  
25 ASSOCIATED WITH INTERIM SPNP?

1

2 A. Yes, BellSouth has agreed to coordinate these number changes to the  
3 extent possible with mechanized handling.

4

5 Q. PLEASE DESCRIBE THE ORDERING AND PROVISIONING  
6 PROCESS USED TO COORDINATE AND ESTABLISH INTERIM  
7 SPNP.

8

9 A. The service order process associated with interim SPNP involves two  
10 separate orders: 1) a disconnect on the customer's existing service,  
11 which frees the number for reassignment to the interim number  
12 portability arrangement, and 2) a new order establishing the number  
13 portability arrangement. The disconnect and new orders will be related  
14 for simultaneous processing and are completely mechanized ("flow-  
15 through"). This means that, once the order is released into the service  
16 ordering system, the work is performed entirely within the system  
17 without human intervention. The timing for the release of both orders is  
18 controlled by establishing a frame due time on the orders.

19

20 Q. PLEASE DESCRIBE HOW THE FRAME DUE TIME CONTROLS THE  
21 RELEASE OF THESE ORDERS.

22

23 A. The MARCH memory administration system holds order transaction  
24 information in its pending file until the frame due time is met. At the  
25 frame due time, the MARCH application logs into the appropriate switch

1 and transmits all order transactions to that switch. Since the MARCH  
2 system routinely communicates with hundreds of switches at the same  
3 time, many circumstances can affect the service order processing time  
4 for any given switch.

5

6 Q. IS THERE ANY GUARANTEE THAT THE END USER WILL NOT  
7 EXPERIENCE A DISRUPTION IN SERVICE?

8

9 A. No, nor is such a guarantee reasonable. While BellSouth has  
10 established procedures that will minimize any potential disruption,  
11 BellSouth's obligation per the Act is to allow the customer to retain an  
12 existing telephone number and not to ensure absolute continuity of  
13 service during the transition between providers. Moreover, it is  
14 important to realize that "disruption" does not necessarily mean that an  
15 end user is without telephone service. Assuming that the ALEC has  
16 completed its installation work, the end user would have the ability to  
17 make outgoing calls (including 911), and would also have the ability to  
18 receive calls at the ALEC-assigned number. Contrary to AT&T's  
19 assertion that disruptions are likely to last for hours, BellSouth's  
20 established procedures will limit any disruption that does occur to only a  
21 few minutes.

22

23 **I.2. Additional SPNP Options**

24

25

1 Q. WHAT IS INCLUDED IN AT&T'S REQUEST FOR A WIDER RANGE  
2 OF SPNP OPTIONS?

3

4 A. Per its list of issues in this proceeding, it is my understanding AT&T has  
5 specifically requested reassignment of central office codes through the  
6 LERG in order to accomplish interim SPNP. Therefore, I will address  
7 this method here and additional methods will be addressed in rebuttal  
8 as appropriate.

9

10 Q. PLEASE DESCRIBE THE CENTRAL OFFICE CODE  
11 REASSIGNMENT METHOD OF ACCOMPLISHING SPNP.

12

13 A. NXX codes, or central office codes, are uniquely assigned through  
14 industry code administration practices to local service providers . Such  
15 assignments are documented in the LERG and are available to the  
16 industry as public information. In a situation where an ALEC (or other  
17 service provider) is providing local exchange service to all subscribers  
18 within a given NXX, a change in the assignment of that NXX from the  
19 incumbent provider to the ALEC may be initiated through standard  
20 industry procedures. It is arguable, however, as to whether this is  
21 SPNP or merely the change in ownership of the NXX.

22

23 Q. WHAT HAS AT&T SPECIFICALLY REQUESTED WITH REGARD TO  
24 CENTRAL OFFICE CODE REASSIGNMENTS?

25

1 A. AT&T has requested the reassignment of codes both at the NXX level  
2 (as described above) and at the thousands block (NXX-X) level in order  
3 to support interim number portability. Thousands block code  
4 reassignment would allow portions of previously assigned NXX codes  
5 to be reassigned to an ALEC, thereby allowing the thousands block to  
6 be routed directly to the ALEC through routing information provided by  
7 the LERG. The reassigned NXX-X codes would in effect be "ported"  
8 from the original assignee to the ALEC as the new assignee.

9

10 Q. IS AT&T'S REQUEST TECHNICALLY FEASIBLE?

11

12 A. Partially. Reassignment of entire NXXs, as contrasted with thousands  
13 blocks, can potentially be done, provided that "per-occasion"  
14 agreements are reached between BellSouth and an ALEC, within the  
15 framework of the industry-developed Central Office Code Assignment  
16 Guidelines. There are provisions in these guidelines which allow for the  
17 information associated with an entire NXX code assignment to be  
18 changed as a result of the transfer of the code to a different company  
19 (typically a merger or acquisition). The reassignment of an entire NXX  
20 code would be allowed under these provisions, assuming the  
21 appropriate steps are taken to enable such a reassignment or transfer.  
22 Therefore, the transfer of an entire NXX code can be accommodated  
23 within the industry guidelines which also include the necessary steps  
24 for modifications to the LERG to allow calls to the transferred NXX to be  
25 routed appropriately. BellSouth and the industry can comply with



1 AT&T's request to reassign entire NXXs when in the best interest of all  
2 parties. However, the AT&T demand to reassign central office codes  
3 at the thousands block level (NXX-X) is not feasible and cannot be  
4 accommodated by BellSouth or the industry.

5

6 Q. WHY IS THE LERG REASSIGNMENT METHOD NOT FEASIBLE  
7 WHEN APPLIED TO THOUSANDS BLOCKS WITHIN AN NXX?

8

9 A. The AT&T proposal would require that call termination routing decisions  
10 be made on a seven digit (NPA-NXX-X) basis, rather than the six digits  
11 (NPA-NXX) currently used. This would affect all carriers that terminate  
12 to the NXX and not just AT&T and BellSouth. This would have a  
13 significant impact on call routing because call completion could no  
14 longer be accomplished with six digit analysis and translation. If the  
15 serving end office of the called party were required to be identified by  
16 the thousands block of the NXX, seven digit (NPA-NXX-X) analysis  
17 would have to be performed at some point in the call completion path.  
18 BellSouth's operational support systems and switch administration  
19 procedures would have to be modified to accommodate the seven digit  
20 routing required to support the NXX-X assignment. In addition, several  
21 Bellcore-maintained industry databases, including the Routing  
22 DataBase System ("RDBS"), the Bellcore Rating Input Database  
23 System ("BRIDS") and the Line Information DataBase Access Support  
24 System ("LASS"), would require changes to accommodate the split of  
25 an NXX between different companies. The required modifications to

1 accommodate thousands block assignment and NXX-X routing would  
2 take a minimum of two to three years, per industry agreement at the  
3 Industry Carrier Compatibility Forum ("ICCF"). This would extend  
4 beyond the time frame allowed for interim number portability and into  
5 the time period specified by the FCC for a permanent number portability  
6 solution. Significant utilization of BellSouth's resources would be  
7 required to implement NXX-X routing, and this would severely limit the  
8 resources available to implement permanent number portability in the  
9 time frames ordered by the FCC.

10  
11 The telecommunications industry has developed guidelines which  
12 prevent the assignment of central office codes below the NXX level.  
13 AT&T's current request for thousands block reassignment is in conflict  
14 with these industry guidelines. BellSouth intends to adhere to the  
15 industry assignment guidelines and will not entertain the LERG  
16 reassignment of number blocks at less than a full NXX.

17  
18 Q. PLEASE EXPLAIN THE RATIONALE UNDERLYING THE INDUSTRY  
19 ASSIGNMENT GUIDELINES.

20  
21 A. Central office codes are assigned as per the Central Office Code (NXX)  
22 Assignment Guidelines developed by the Industry Numbering  
23 Committee ("INC"), a standing committee of the ICCF. These  
24 guidelines treat the assignment of central office codes, including  
25 submission of new assignments for inclusion in RDBS, BRIDS, and

1 LASS, so that notification to the industry can take place through outputs  
2 from these databases. BellSouth, in its role as Central Office Code  
3 Administrator in those NPAs which it serves, adheres to these industry  
4 developed guidelines in assigning NXX codes fairly and impartially to  
5 any applicant that meets the criteria for assignment outlined in the  
6 guidelines. These guidelines, which were developed through an  
7 industry consensus process in which AT&T participated, do not provide  
8 for the reassignment (or assignment) of central office codes at the  
9 thousands block level. Even if the reassignment of NXX codes at the  
10 thousands block level is technically feasible, such a reassignment  
11 would require that the Central Office Code Assignment Guidelines be  
12 modified by the INC through the industry consensus process.

13

14 Q. IS REASSIGNMENT OF CODES AT THE THOUSANDS BLOCK  
15 LEVEL AN APPROPRIATE ISSUE FOR THIS ARBITRATION  
16 PROCEEDING?

17

18 A. No. This particular AT&T request is outside the scope of this  
19 proceeding. If AT&T wants to pursue this option for interim number  
20 portability, it should submit an Issue Identification Form to the INC  
21 requesting modifications to the existing guidelines to allow for  
22 assignment of central office codes at the thousands block level.  
23 BellSouth cannot assign or reassign central office codes below the NXX  
24 level, or more specifically at the thousands block level as requested by  
25 AT&T, without a change to the industry assignment guidelines.

1

2 Q. PLEASE SUMMARIZE THE COMPANY'S POSITION REGARDING  
3 CENTRAL OFFICE CODE REASSIGNMENT AS AN INTERIM SPNP  
4 SOLUTION.

5

6 A. It is not feasible to reassign central office NXX codes at the thousands  
7 block (NXX-X) level and to provide for appropriate routing of the call  
8 based on the assignment, nor would it be a wise use of the industry's  
9 resources. The technical impact and required network modifications to  
10 support NXX-X based routing would take such significant time and  
11 effort that this is not a viable option for interim number portability. In  
12 addition, industry guidelines and practices currently do not allow  
13 assignment of codes below the NXX level. Based on the above  
14 reasons, it is not in the public interest to allow reassignment of central  
15 office codes at the thousands block level.

16

17 **II. Trunk Interconnection Arrangements**

18

19 Q. PLEASE DESCRIBE HOW BELLSOUTH WILL INTERCONNECT  
20 WITH FACILITIES-BASED ALECS.

21

22 A. BellSouth has designed an interconnection architecture that  
23 accommodates local, intraLATA, access, operator services and E911  
24 traffic utilizing both one-way and two-way trunking as necessary for  
25 appropriate detailed recording and administration. In our arrangement,

1 BellSouth local and intraLATA traffic is routed over the same one-way  
2 trunk group. Similarly, the ALEC local and intraLATA traffic is routed  
3 over a single one-way group. Access traffic, as well as all other traffic  
4 utilizing our intermediary tandem switching function, is routed via a  
5 single two-way trunk group. This architecture is depicted in Attachment  
6 WVA-1.

7

8 Q. WHY DOES BELLSOUTH REQUIRE ONE-WAY TRUNKING FOR  
9 LOCAL AND INTRALATA TRAFFIC?

10

11 A. BellSouth requires one-way trunking for local and intraLATA traffic in  
12 order to: 1) properly record the specific traffic types, and 2) administer  
13 the trunk groups in a cleaner, non-controversial and more economical  
14 fashion.

15

16 Q. PLEASE EXPLAIN YOUR RATIONALE.

17

18 A. The one-way trunk groups established for the mutual exchange of local  
19 and intraLATA traffic are required to distinctly and accurately record  
20 and bill the access and terminating usage. In order to maintain  
21 flexibility for various compensation and billing exchange arrangements,  
22 it is imperative that these recordings be available.

23

24 In addition to the recording and billing requirements associated with  
25 trunk directionality, there are cost considerations and administrative

1 difficulties. Historically, when contrasted to one-way trunking  
2 arrangements, two-way arrangements have been much more labor-  
3 intensive and costly to maintain. Labor cost trends versus trunk  
4 hardware costs indicate that this will continue to be the case. This  
5 phenomenon can be demonstrated by reviewing the trunking  
6 architectures that were in place at Divestiture in 1984. BellSouth and  
7 AT&T had a shared trunking network. A portion of each trunk group  
8 was allocated to AT&T as their share of switched access service. As  
9 the traffic volume increased, administration of the trunk groups became  
10 difficult. The liability for the increase in traffic could not be determined.  
11 Controversy and confusion existed over accountability for the two-way  
12 group's mechanized servicing system, engineering procedures,  
13 forecasting methods, traffic routing and who would have the  
14 responsibility for adding capacity to the group. Over time, this situation  
15 was resolved by disaggregating trunks into their distinct elements.  
16 BellSouth does not want to enter into a similar situation with a local  
17 interconnection architecture that would result in billing disputes and  
18 administrative problems, adversely affecting the network and ultimately  
19 the subscriber.

20

21 Q. PLEASE SUMMARIZE YOUR POSITION ON TRUNK  
22 INTERCONNECTION ARRANGEMENTS.

23

24 A. BellSouth's interconnection architecture is based on certain recording,  
25 cost and administrative requirements that are necessary within a

1 competitive environment. It is BellSouth's position that each  
2 interconnecting party should have the right to determine the proper  
3 trunking arrangements for its network.

4

5 Q. IS THE TRUNK INTERCONNECTION ARRANGEMENT A PROPER  
6 ISSUE FOR THIS PROCEEDING?

7

8 A. No. Parties should be free to work together and establish a variety of  
9 arrangements. Such arrangements should not be mandated.  
10 BellSouth and AT&T have agreed to work together to review,  
11 continually analyze and determine the best and most efficient  
12 interconnection architectures within the evolving parameters set by  
13 local competition.

14

15 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

16

17 A. Yes.

18

19

20

21

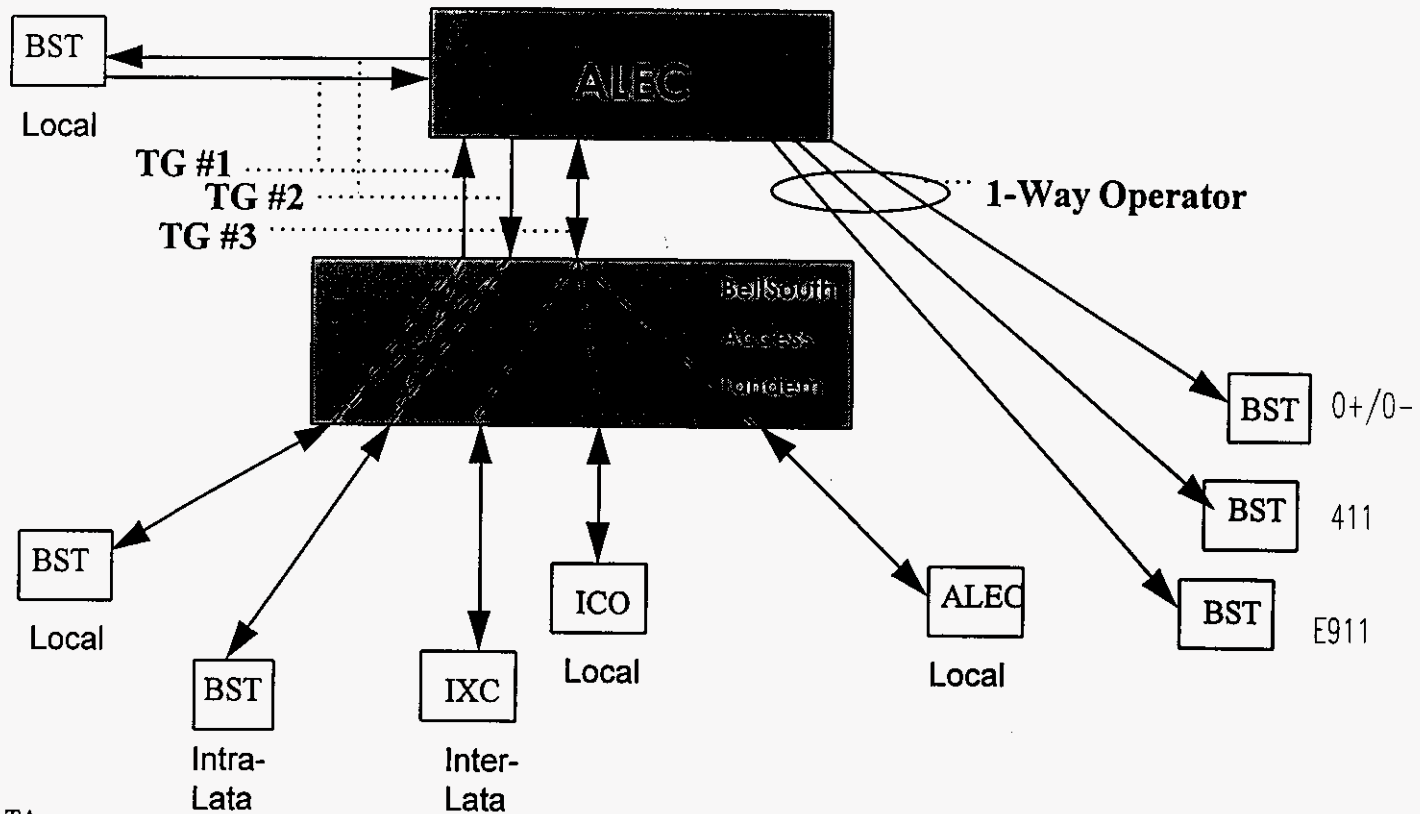
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# Interoffice Interconnection



**Legend:**

- TG #1 - Local/IntraLATA  
BST to ALEC
- TG #2 - Local/IntraLATA  
ALEC to BST
- TG #3 - Access to/from other Providers

*Possible Network Arrangement  
 For Technical Discussion Purposes Only*