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Legal Department

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October 15, 1996

Mrs. Blanca S. Bayo
Director, Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399

RE: Docket No. 961150-TP

Dear Mrs. Bayo:

Enclosed are an original and fifteen copies of BellSouth Telecommunications, Inc.'s Direct Testimony of Vic Atherton, Daonne Caldwell, Gloria Calhoun, Keith Milner, Tony Pecoraro, Walter Reid, Robert Scheye, and Al Varner. Please file these documents 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 on the parties shown on the attached Certificate of Service.

Sincerely,

Nancy B. White (AW)

Nancy B. White

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SEC 1
WAS
OTH

Enclosures

cc: All Parties of Record
A. M. Lombardo
R. G. Beatty
W. J. Ellenberg

Atherton 11030-96 ✓
Caldwell 11031-96 ✓
Calhoun 11034-96 ✓
Milner 11035-96 ✓
Pecoraro 11036-96 ✓
Reid 11037-96 ✓
Scheye 11038-96 ✓
Varner 11039-96 ✓

CERTIFICATE OF SERVICE
Docket No. 961150-TP

I HEREBY CERTIFY that a copy of the foregoing has been furnished by Federal Express this 15th day of October, 1996 to:

Benjamin W. Fincher
Sprint
3100 Cumberland Circle
#802
Atlanta, GA 30339

Monica Barone
Florida Public Service
Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399

Nancy B. White (jmb)

BELLSOUTH TELECOMMUNICATIONS, INC.

DIRECT TESTIMONY OF WILLIAM VICTOR ATHERTON, JR.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 961150-TP

OCTOBER 15, 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.

Q. PLEASE DESCRIBE YOUR CURRENT RESPONSIBILITIES.

A. 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)

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unbundled network elements. Consistent with the Telecommunications Act of 1996 (hereinafter referred to as the "Act"), the Company has been negotiating these issues with Sprint in good faith since their first request in April, 1996.

Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.

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

I began my career with South Central Bell in 1979 as an engineer in the Electronic Switching Systems Group. In this assignment, I was responsible for engineering the growth and replacement of these systems. In 1984, I joined the Headquarters Staff organization where I studied emerging telecommunications technologies, making specific deployment recommendations to the Company. In 1985, I assumed the position of Project Manager for 800 Database Service. In this role, I was active in Company and industry forums and was responsible for technical analysis, while negotiating the successful implementation of the national system. During 1987, I was appointed Technical Product

Manager for Open Network Architecture and Interconnector Switched Access Services. This included involvement in the Federal Telecommunications System (FTS2000) and the National Emergency Telecommunications System (NETS). I assumed my present position in March, 1995.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to address the arrangements required for local interconnection of the Company's network with Sprint's network. Specifically, I will describe the physical Points of Interconnection ("POIs") necessary for the routing of local traffic, and the appropriate trunking architecture used to efficiently and accurately accommodate all traffic types that must be interchanged between the companies.

Q. PLEASE DEFINE POINTS OF INTERCONNECTION.

A. Points of Interconnection ("POI") are the locations at which the networks of two interconnecting companies are physically linked for the purpose of exchanging traffic. They are the demarcation points that determine where one network starts and the other ends. Direct examples of POIs may be found in today's interconnection arrangements between local exchange carriers and interexchange carriers.

Q. WHERE SHOULD POI'S BE ESTABLISHED?

A. POI's can be implemented at any point where it is technically feasible to interconnect networks for the exchange of traffic. Typically, POI's are established at facility hub locations in order to consolidate traffic exchange. Nothing however, precludes multiple POI's from being established at appropriate points within the network as long as the location comports with minimum standards of technical feasibility regarding network reliability and security. Physical interconnection must be at a clear point where each party can maintain service and retain accountability for their own network. Also, these points must not be established in a manner that conflicts with the evolution of the network. In fact, the FCC First Report and Order 96-325 states in paragraph 203 that "Each carrier must be able to retain responsibility for the management, control, and performance of its own network." "Mid-span, or mid-air, meets" compromise this ability to retain control of the Company's network by requiring BellSouth to implement and maintain a vast array of equipment types and configurations in order to interconnect with all new entrants. The consequences of this arrangement would be increased costs and decreased network efficiencies, both of which would have adverse effects on the end user.

Q. WHAT IS SPRINT PROPOSING WITH REGARD TO POI'S?

A. Sprint's proposal regarding POI's is not clear. Sprint indicates that it may designate at least one POI on BellSouth's network within a calling area for the purpose of routing local traffic. BellSouth agrees that Sprint must establish *at least* one POI, and certainly may establish additional POIs as necessary to reduce transport requirements to all tandems serving the local area. The FCC First Report and Order defines possible POI locations. It does not define the quantity.

Q. PLEASE EXPLAIN YOUR ANSWER.

A. There is a difference between the physical POI and the logical trunk groups that deliver traffic via that POI. One physical POI may interconnect multiple logical trunk groups destined for different termination points. In other words, as long as Sprint places traffic destined for specific BellSouth access tandems on separate, distinct and identifiable trunk groups, they may physically interconnect at one POI. Additional POIs may be established to reduce transport requirements. Sprint is unclear as to whether it will establish uniquely identifiable trunk groups to each access tandem in a local calling area in this required manner.

Q. WHY SHOULD UNIQUE TRUNK GROUPS BE ESTABLISHED TO EACH ACCESS TANDEM WITHIN THE LOCAL CALLING AREA?

A. Due to traffic volume, many LATAs within the BellSouth network are served by more than one access tandem. As defined in the Local Exchange Routing Guide, each access tandem serves a separate and distinct group of local switching offices. Access to a particular local switching office should only be gained through its serving access tandem. If all traffic were to be delivered to a single access tandem in a LATA where multiple access tandems exist, local calls would traverse up to four switches (two end offices and two access tandems) in order to reach the terminating end user customer. This scenario introduces dialing delays and additional possible points of failure or congestion. Using the same logic that defined equal access in the interexchange environment, it was determined that network reliability and customer service would suffer if this arrangement were to be implemented. Unique trunk groups to each access tandem would provide the best level of service to the customers of each interconnecting company.

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

A. BellSouth has designed an interconnection architecture that accommodates local, intraLATA, access, operator services and E911 traffic utilizing both one-way and two-way trunking as necessary for appropriate detailed recording and administration. In the Company's arrangement, BellSouth local and intraLATA traffic types are routed over the same one-way trunk group. Similarly, the ALEC local and

intraLATA traffic is routed over a single one-way group. Access traffic, as well as all other traffic utilizing the BellSouth intermediary tandem switching function, is routed via a single two-way trunk group. This arrangement is depicted by the generic BellSouth architecture in Attachment WVA-1.

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

A. BellSouth requires one-way trunking for local and intraLATA traffic in order to: 1) properly measure and record the specific traffic types, and 2) administer the trunk groups in a clean, non-controversial and economic manner.

Q. PLEASE EXPLAIN YOUR ANSWER.

A. The one-way trunk groups established for the mutual exchange of local and intraLATA traffic are required to distinctly and accurately measure and record the originating and terminating usage. There are two unique trunk types used in the one-way trunking arrangement. Intertoll ("IT") trunks are used for traffic originating in BellSouth's network and terminating to the ALEC network. This trunk type allows for a usage recording to be made in the switch where the call originates. Access-to-Carrier ("ATC") trunks are used for traffic originating in the ALEC network and terminating to the BellSouth network. This trunk type

allows for a usage recording to be made in the switch where the call terminates. If the IT trunk type were to be configured as a two-way group, usage recording capability would not be possible in the receiving direction. If the ATC trunk type were to be configured as a two-way group, a usage recording could conceivably be made in the originating direction, but it would require that calls originating from the BellSouth network be designated as interexchange access traffic, not local traffic. Clearly, one-way trunking, using appropriate trunk types, results in the most accurate usage measurement recording capability for each interconnecting company.

In addition to the recording and billing issues associated with two-way trunks, there are cost considerations and potential administrative difficulties. Historically, when contrasted to one-way trunking arrangements, two-way shared arrangements have been much more labor-intensive and costly to maintain. Upward trends in labor cost versus downward trends in trunk hardware costs indicate that this will continue to be the case. In other words, it is less expensive to interconnect with a slightly larger one-way trunk group than to administer a two-way group.

Q. DOES BELLSOUTH HAVE EXPERIENCE TO SUPPORT ITS POSITION?

A. Yes. At divestiture, BellSouth and AT&T had a shared trunking network. A portion of each trunk group was allocated to AT&T as its share of switched access service. As the traffic volume increased, administration of the trunk groups became difficult. Liability for the increase in traffic could not be determined, so when the trunk groups became incapable of handling additional volume, it was unclear and somewhat controversial as to which company should be responsible for adding trunks to the group. Controversy and confusion also existed over accountability for the shared trunk groups' mechanized servicing system, engineering procedures, forecasting methods and traffic routing. All of this contributed to increased costs and decreased service reliability.

Q. HOW WAS THE SITUATION RESOLVED?

A. Over time, this situation was resolved by disaggregating trunks into their distinct elements and eliminating the shared arrangement. BellSouth does not want to enter into the same situation as was experienced with AT&T at divestiture. The shared two-way local interconnection architecture would result in similar billing disputes, call blocking and other administrative problems, adversely affecting the network and ultimately the subscriber. Experience and empirical data have shown that separately provisioned facilities and one-way trunks result in clear accountability for forecasting, failure resolution and capacity additions.

Q. SHOULD ALL TRAFFIC TYPES BE COMBINED ON A SINGLE TRUNK GROUP?

A. No. The requirement to uniquely identify, and thus properly record, different traffic types makes it necessary to utilize separate trunk groups for local and access. Using separate trunk groups for the diverse traffic types, BellSouth and Sprint both possess the technical capability to make precise recordings resulting in accurate intercompany billing. It makes no sense to implement an arrangement where arbitrary, percentage use estimates are employed. BellSouth believes that accurate recording is technically feasible via separate trunk groups and therefore this arrangement should be a requirement of interconnection.

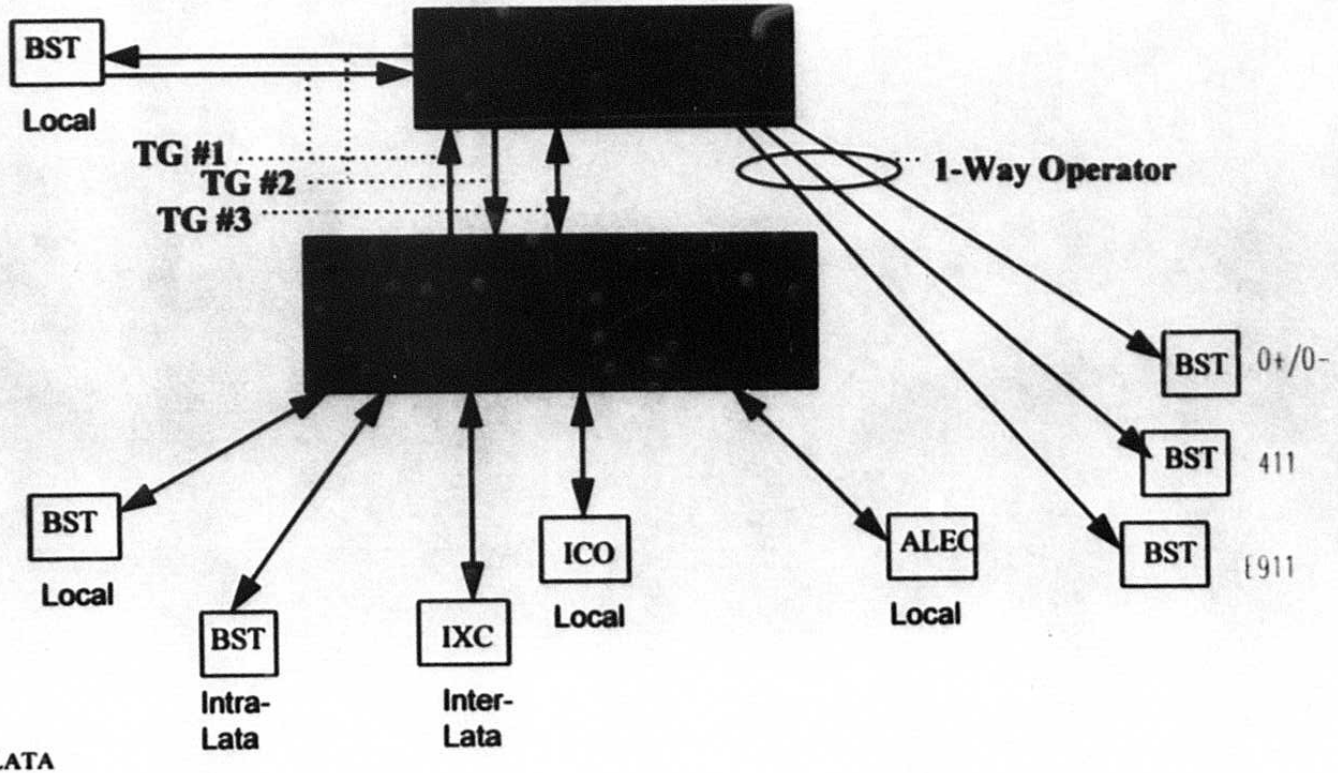
Q. PLEASE SUMMARIZE BELLSOUTH'S POSITION ON INTERCONNECTION ARRANGEMENTS.

A. BellSouth believes that parties should be free to work together and establish a variety of arrangements. Such arrangements should not be mandated.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

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