BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY

OF

FRANK R. HOFFMANN, JR.

ON BEHALF OF

TELEPORT COMMUNICATIONS GROUP INC.

DOCKET NO. 960786-TL

JULY 31, 1997

**Q. PLEASE STATE YOUR NAME, ADDRESS AND POSITION WITH TELEPORT COMMUNICATIONS GROUP, INC.**

A. My name is Frank R. Hoffmann, Jr. My business address is 25 South Charles St., Suite 2001, Baltimore, MD 21201. I am the Regional Director of Carrier Relations, for Teleport Communications Group, Inc., I am responsible, among other things, for ensuring compliance with the Interconnection Agreement between TCG and BellSouth Communications ("BellSouth"), dated July 15, 1996, and with the 1996 Telecommunications Act in TCG's Southern Region.

**Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

A. I am testifying on behalf of Teleport Communications Group, Inc.'s affiliate TCG South Florida (collectively referred to as "TCG").

**Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.**

A. I received a Masters of Business Administration in Finance in 1988

from the University of Maryland, in College Park, Maryland. I have ten years of experience in the telecommunications industry, including nine years with Bell Atlantic. I held positions of increasing responsibility in the areas of Service Costs, External Affairs, Finance and Marketing with Bell Atlantic. I joined TCG in February, 1997.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. I will rebut the Direct Testimony of BellSouth witness W. Keith Milner who concludes that BellSouth meets the first Checklist Item contained in Section 271(c)(2)(B). The first Checklist item requires BellSouth to provide interconnection to TCG that is "at least equal in quality" to that which BellSouth provides to itself or other parties with whom it interconnects. While Mr. Milner concludes that BellSouth meets this checklist item, my operational experience with BellSouth leads me to conclude that they do not. My testimony will address four specific circumstances in which BellSouth is not providing equal quality interconnection to TCG in Florida:

- BellSouth fails to provide properly size interconnection trunks to TCG, which results in blockage of calls to TCG's customers from BellSouth's customers;
- BellSouth's network design exacerbates the call blocking problem, and increases TCG's risk of significant network failure;
- BellSouth fails to provide timely meet-point billing data so as to allow TCG to bill interexchange carriers (IXCs); and
- BellSouth fails to confirm TCG's Signaling System 7 ("SS7") point codes.

In sum, I conclude that BellSouth has not and cannot demonstrate that it is providing TCG with interconnection that is at least equal in quality to that provided by BellSouth to itself, its subsidiaries and affiliates and to any other carrier to which it provides service.

**INTERCONNECTION TRUNK GROUPS**

**Q. WHAT IS INTERCONNECTION?**

A. Interconnection is the physical linking of two networks for the mutual exchange of telecommunications traffic. GTE and BellSouth have utilized interconnection to exchange local traffic between their customers for decades.

**Q. WHY IS INTERCONNECTION IMPORTANT TO ALECS LIKE TCG?**

A. Interconnection is vitally important because like GTE, TCG is a facilities-based LEC whose customers make local calls to and receive calls from BellSouth's customers. The difference between GTE and TCG is that GTE's service area is contiguous to BellSouth's, while TCG directly competes within the same service territory as BellSouth.

**Q. WHAT HARM DOES BELLSOUTH CAUSE BY PROVIDING INADEQUATE INTERCONNECTION TO TCG?**

A. When customers move their service from BellSouth' network to TCG's network, suddenly callers' attempts to reach A party experience a high level of blocked calls. Obviously this is completely unacceptable to

TCG, and to its customers. This call blockage is a source of enormous operational frustration to TCG's otherwise successful effort to provide quality service. The call blockage degrades the quality of service that TCG's customers experience and undermines their first impression of TCG as a competitive alternative to BellSouth. Significantly, TCG's customers are not able to discern that the call blockage problem is caused by BellSouth.

**Q. IF BELLSOUTH'S INADEQUATE INTERCONNECTION IS A COMPETITIVE IMPAIRMENT TO TCG, CAN'T TCG JUST FIX IT?**

A. There is nothing TCG can do to our side of the network to overcome BellSouth's refusal to properly operate its half of these jointly provisioned local calls between competing carriers. Given the reality that no single ALEC, including TCG will ever have 100% of the customers, ALECs will forever be reliant on competing carriers to originate and terminate calls from or to their customers respectively.

If BellSouth actually provide equal quality interconnection as they are required to do, TCG would have an opportunity to be more competitive, and accordingly we would take more business away from BellSouth. Obviously BellSouth has no commercial incentive to help TCG take business away from it. Under ordinary commercial circumstances, the Regional Bell Operating Companies ("RBOCs")

would not sell competitors equal quality interconnection. This is precisely why equal quality interconnection is a requirement under law.

**Q. WHAT MOTIVATION DOES BELLSOUTH HAVE TO PROVIDE TCG WITH EQUAL QUALITY INTERCONNECTION?**

A. The revenue opportunities associated with BellSouth's entry into the interLATA toll market were the "carrot" to motivate BellSouth to provide TCG the equal quality interconnection required by the Act. BellSouth's incentive is to provide the required Checklist item, so that it can provide interLATA toll.

**Q. DO TCG AND BELLSOUTH HAVE AN APPROVED INTERCONNECTION AGREEMENT?**

A. Yes. TCG and BellSouth filed their interconnection agreement with the Florida Public Service Commission ("PSC") over one year ago, on July 26, 1996. The Commission approved that agreement on October 29, 1996, by Order No. PSC-96-1313-FOF-TP.

**Q. DOES A SIGNED AND APPROVED INTERCONNECTION AGREEMENT DEMONSTRATE THE PRESENCE OF FACILITIES-BASED COMPETITION IN FLORIDA?**

A. No. Full implementation of an interconnection is not instantaneous. TCG's experience with BellSouth in Florida (and with other Regional Bell Operating Companies in other states) suggests that it will take some time before full implementation is achieved. Until the interconnection

agreement is fully implemented, the concept of vigorous local exchange competition remains illusory.

**Q. BELLSOUTH WITNESS MILNER TESTIFIED THAT BELLSOUTH IS MEETING THE REQUIREMENTS OF SECTION 251(C)(2). DO YOU AGREE?**

A. No, I strongly disagree. Section 251(c)(2) provides that BellSouth has the duty to provide interconnection with a local exchange carrier's network "that is at least equal in quality to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection." BellSouth has not demonstrated that it provides interconnection parity in a number of areas.

**Q. PLEASE DESCRIBE THE AREAS WHERE BELLSOUTH IS NOT PROVIDING INTERCONNECTION TO TCG "THAT IS AT LEAST EQUAL IN QUALITY" TO THE SERVICE IT PROVIDES TO ITSELF.**

A. BellSouth fails to provide equal quality interconnection to TCG by improperly undersizing interconnection trunks to TCG, thereby causing network congestion and call blocking problems. This adversely and disproportionately affects TCG and its customers.

**Q. BASED UPON YOUR EXPERIENCE, HAS BELLSOUTH PROPERLY SIZED INTERCONNECTION TRUNKS BETWEEN**

**ITSELF AND TCG?**

A. No. I believe that BellSouth continually fails to adequately size its end of the interconnection trunk groups. Likewise, even when the interconnection trunks might be properly sized, BellSouth is too slow to grow the trunks to handle the increased traffic flowing between BellSouth and TCG. As a result, a significant amount of traffic destined for TCG is blocked by BellSouth. Because BellSouth blocks the traffic at their office, TCG is unable to measure the traffic that it consequently does not receive.

**Q. HOW HAVE YOU DETERMINED THAT THIS BLOCKAGE IS OCCURRING?**

A. Often when a new trunk group or trunk group augmentation is added, the trunk group immediately fills up to capacity with traffic. Basically, there are two possible explanations. This could indicate that a large quality of additional traffic is instantaneously materializing from somewhere within BellSouth's network at the precise time of installation. Alternatively, this could indicate that the original set of trunk groups was insufficiently sized to handle the traffic.

The only reasonable explanation for this avalanche of traffic suddenly transmitted by BellSouth to TCG is that the new trunk groups are filling up with traffic which was previously being blocked by BellSouth because of their lack of trunk capacity in the direction from

BellSouth to TCG. BellSouth offers no other reasonable explanation.

**Q. DOES TCG EXPERIENCE BLOCKING ON THE INTERCONNECTION TRUNKS IN THE OPPOSITE DIRECTION, I.E., FROM TCG TO BELLSOUTH?**

A. No. TCG monitors those trunks and trunk ports and installs additional capacity in a timely fashion. TCG only seeks BellSouth to do the same on their end.

**Q. HAS TCG RECEIVED COMPLAINTS FROM ITS CUSTOMERS CONCERNING CALL BLOCKAGE?**

A. Yes. TCG has received and continues to receive complaints from its customers about blocked incoming traffic. Customers who subscribe to TCG local dial tone suddenly experience complaints from their customers that they are having difficulty being reached and that calls are not getting through. Our end user customers then complaint to TCG about blocked calls. In several instances customers have threatened to discontinue service directly as a result of blocking. This blocking is occurring even though there is available capacity within TCG's switched network. These occurrences demonstrate the existence of call blocking.

**Q. HAS TCG ALERTED BELLSOUTH TO ITS CONCERNS ABOUT BLOCKING?**

A. Yes. TCG has contacted BellSouth regarding numerous customer complaints concerning blocked calls. TCG representatives also have

met with BellSouth representatives in an attempt to persuade BellSouth to address the underlying cuase of the blocked calls. BellSouth. however, has been largely unresponsive to this problem and uncommunicative to TCG's concerns.

**Q. SHOULD BELLSOUTH KNOW WHERE THE PROBLEM IS AND HOW TO FIX IT?**

A. Yes, from my years of experience in the telecommunications industry, I have no doubt that the BellSouth engineers could easily provision the necessary trunks, in a timely fashion during the course of routine business, and to industry standards.

**Q. *CAN YOU DETERMINE WHETHER BELLSOUTH IS* PROVIDING TCG INTERCONNECTION WITH BELLSOUTH'S NETWORK THAT IS AT LEAST EQUAL IN QUALITY TO THAT PROVIDED BY BELLSOUTH TO ITSELF?**

A. Unfortunately, BellSouth has not presented data regarding the percentage of call blockage it experiences for its own internal traffic as compared to the percentage of TCG's traffic which is being blocked. The industry standard blocking criteria for tandem routed traffic is P-.01. This criteria is applicable to the busiest time the trunk is in use during any given day and is measured in Busy Hours. This equates to one in every 10,000 call attempts not being completed. Conversely, the industry standard blocking criteria for direct and office routed traffic is

P-.005. This criteria is also applicable to the busiest time the trunk is in use during any given day and is measured in Busy Hours. This type of trunking experiences half the blocking and is also the type of trunking BellSouth has refused to install for interconnection to TCG's network. Unless BellSouth can establish that the parameters of call blocking are the same for itself as well as for TCG and other carriers, it cannot meet the first checklist item. The Rebuttal Testimony of TCG witness Paul Kouroupas addresses the reporting requirements that are crucial to determine whether the parity standard is met.

**NETWORK DESIGN**

**Q. ARE THERE ANY SOLUTIONS TO THE CALL BLOCKING PROBLEM YOU DESCRIBE?**

A. Yes. One solution would be for BellSouth to establish direct end-office interconnection trunks between certain BellSouth switches and TCG's switches. This architecture is an industry standard, both for local and toll traffic routing. Its implementation would alleviate to large degree the congestion BellSouth is experiencing at its tandems.

**Q. HOW DOES BELLSOUTH CURRENTLY ROUTE TRAFFIC TO TCG?**

A. Today, BellSouth aggregates traffic destined to ALECs at its tandem switches and then routes the traffic to TCG and other ALECs. This local traffic was previously routed via BellSouth's local network and

never traversed the tandem. By aggregating the traffic as its tandem, not only is BellSouth causing severe tandem congestion, it is prematurely and unnecessarily exhausting its tandem capacity. BellSouth is thereby providing service to its competitors that is indisputably inferior to the quality of service its own customers receive. On high volume routes, it is also typically less expensive to route (at least the majority of) the traffic via a direct trunk rather than through the tandem. This exclusive usage of tandem routing imposed by BellSouth causes ALECs' costs to be higher than they would otherwise be.

**Q. CAN YOU DESCRIBE HOW BELLSOUTH ROUTES TRAFFIC TO ITS OWN END-USERS?**

A. In its own network, BellSouth establishes direct trunks between many end offices as the "primary route" for call completion. When those trunks are at capacity, an end office will overflow traffic to a local tandem switch to be completed to the send end office. Therefore, a BellSouth customer call has two different options for completion -- directly to the end office, or alternatively through the tandem, as opposed to one tandem route to which BellSouth relegates TCG. This direct trunking between end-offices is common industry practice and has been for years.

**Q. COULD SUCH ROUTING BE USED FOR CALLS TO AND**

**FROM TCG CUSTOMERS?**

A. Yes. Despite the uncontested and undeniable fact that such direct end-office trunking is used in its own network, BellSouth has chosen to provide no direct end-office routed facilities to TCG. BellSouth refuses to employ this customary and efficient architecture, even though TCG has collocation arrangements at end offices where BellSouth could easily arrange for such interconnection. Sound and nondiscriminatory engineering practices would dictate that BellSouth establish interconnection trunks directly from its end offices to ALEC switches where substantial traffic is expected or realized.

**Q. HOW ARE TCG AND ITS CUSTOMERS HARMED BY BELLSOUTH'S ENGINEERING DECISIONS?**

A. TCG customers calling BellSouth customers and BellSouth customers calling TCG customers have only one path -- through the tandem -- and hence no alternative route if the tandem trunks are blocked out of service. BellSouth is discriminatorily placing ALECs at unnecessary risk of catastrophic network failure by creating a single point of failure within the BellSouth network. This creates a disproportionate impact on ALECs who are unable to receive traffic from BellSouth's end offices.

**Q. DO YOU BELIEVE THAT BELLSOUTH'S FAILURE TO PROVIDE ROBUST ROUTING OPTIONS TO ALECS CONSTITUTE DISCRIMINATORY TREATMENT?**

A. Yes. If BellSouth's tandem switch fails at any time, BellSouth will still be able to route its own traffic through its end office network or to other tandems. Because BellSouth has elected to provide no end office routed facilities to TCG, a tandem failure would severely impact TCG's customers, as well as the other ALECs.

**Q. HAVE OTHER REGULATORY COMMISSIONS ADDRESSED THESE CALL BLOCKAGE ISSUES?**

A. Yes. The New York Public Service Commission, when weighing similar facts regarding New York Telephone, found that because of the blockage, the RBOC had not "established a prima facie case for availability" for interconnection at the trunk-side of a local switch.

**IMPLEMENTATION PROCESS**

**Q. HAS BELLSOUTH BEEN RESPONSIVE TO TCG'S NEEDS REGARDING IMPLEMENTATION OF THE INTERCONNECTION AGREEMENT?**

A. No. BellSouth has been very slow in implementing the details of the interconnection agreement. Despite TCG's attempts to implement its interconnection agreement, BellSouth has not developed the coherent processes and procedures to facilitate implementation of the interconnection agreement.

**Q. CAN YOU PROVIDE AN EXAMPLE OF THE DIFFICULTIES TCG HAS HAD WITH BELLSOUTH IN IMPLEMENTING THE**

**INTERCONNECTION AGREEMENT?**

A. Yes. BellSouth does not provide TCG with the records necessary to issue meet-point billing invoices to the interexchange carriers ("IXCs") in a timely fashion.

**Q. PLEASE DESCRIBE MEET-POINT BILLING.**

A. Meet-point billing is an arrangement whereby two or more local exchange carriers (e.g., TCG and BellSouth) jointly provide to a third party the transport element of switched exchange access service to one of the LEC's end office switches, with both LECs receiving a share of the transport element revenues.

**Q. HOW DOES THE BILLING PROCESS WORK IN SUCH A MEET-POINT BILLING ARRANGEMENT?**

A. BellSouth must provide TCG with switched access detail usage data on magnetic tape, or other agreed upon media, within a reasonable time after the usage occurred. To the extent that BellSouth does not provide the usage data, TCG is unable to bill the IXC, thereby depriving it of timely receipt of revenues to which it is entitled.

**Q. HAS BELLSOUTH PROVIDED THE APPROPRIATE DATA TO TCG?**

A. No. BellSouth has not provided, on a timely basis, the billing data that would allow TCG to bill the appropriate IXC. TCG, therefore, is being directly financially harmed by BellSouth's dilatory tactics.

**Q. HAS BELLSOUTH TIMELY PROVIDED THAT BILLING INFORMATION TO ITSELF OR OTHERS?**

A. Presumably yes. BellSouth, however, has not demonstrated in testimony or otherwise that it is providing this meet-point billing data to TCG in the same manner and time frame as it provides this information to itself or others. In the absence of data supporting his conclusion, I do not see any foundation to support BellSouth witness Milner's claim that BellSouth meets the first checklist item.

**Q. IS THERE ANY INFORMATION BELLSOUTH IS REQUIRED TO PROVIDE UNDER THE INTERCONNECTION AGREEMENT WHICH BELLSOUTH IS NOT PROVIDING?**

A. Yes. BellSouth has refused to provide the Carrier Identification Codes ("CIC") that are active within BellSouth's access tandem switches.

**Q. WHAT IS A CIC AND WHAT IS ITS PURPOSE?**

A. A CIC is a code assigned to an Interexchange Carrier and is used to identify and route traffic to that Interexchange Carrier. TCG needs to be made aware of the CIC codes active in BellSouth's access tandem switches in order to properly route traffic to them. To date BellSouth has refused to provide the CIC to TCG but rather has chosen to provide the Carrier's Access Customer Name Abbreviation ("ACNA"). TCG must then cross reference the ACNA in the Local Exchange Routing Guide ("LERG") to ascertain the appropriate CIC. In several instances

the ACNA has not matched the associated Carrier Name provided by BellSouth causing further confusion and misrouting of calls.

**Q. DO YOU HAVE OTHER EXAMPLES OF BELLSOUTH'S UNRESPONSIVENESS TO TCG IN IMPLEMENTING THE TCG-BELLSOUTH INTERCONNECTION AGREEMENT?**

A. Yes. Another example of a problem with the implementation of the interconnection agreement is BellSouth's failure to confirm the opening of Signaling System 7 ("SS7") point codes for TCG.

**Q. WHAT IS AN SS7 POINT CODE?**

A. SS7 provides routing and call set-up information for carriers. The SS7 point code is a node that either originates or receives signaling messages. The signaling point code identifies a specific signaling point.

**Q. WHAT ARE THE IMPLICATIONS OF BELLSOUTH'S FAILURE TO CONFIRM THE OPENING OF AN SS7 POINT CODE?**

A. TCG is significantly harmed because without testing point codes prior to their deployment for carrying traffic, TCG cannot be sufficiently certain the traffic will route correctly. It is necessary for each carrier to open the other carrier's point codes in their respective switches to facilitate the exchange of SS7 messages (i.e., TCAP, ISUP). TCG has been attempting since October of 1996 to have BellSouth confirm whether or not BellSouth has performed the necessary translations.

**Q. HAS BELLSOUTH TIMELY CONFIRMED SS7 POINT CODES FOR ITSELF OR OTHERS?**

A. As with meet-point billing data, I am unable to provide an unqualified yes to the question posed. BellSouth, however, has not demonstrated in testimony or otherwise that it is providing SS7 point codes to TCG in the same manner and time frame as it provides them to itself or others. It is my experience that a Bell company would routinely test new circuits, including point-codes, before carrying commercial traffic over them. Again, I do not understand how BellSouth witness Milner can claim that BellSouth meets the first checklist item.

**Q. DO YOU HAVE ANY CONCLUSIONS REGARDING BELLSOUTH'S COMPLIANCE WITH THE CHECKLIST REQUIREMENTS?**

A. Based upon TCG's experience in implementing the TCG-BellSouth interconnection agreement, I believe that BellSouth is far from meeting the first check list requirement.

**Q. DO YOU HAVE A POSITION ON BELLSOUTH'S COMPLIANCE WITH THE OTHER THIRTEEN COMPLIANCE CHECKLIST ITEMS?**

A. TCG has insufficient information, at this time, to comment on BellSouth's compliance with the other checklist requirements.

**Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

A. Yes.