ORIGINAL

RECEIVED-FPSC
99 NOV 24 PM 2:05
RECORDS AND REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Complaint of Global NAPs, Inc., Against BellSouth Telecommunications, Inc., for Enforcement of Section VI(B) of its Interconnection Agreement with BellSouth Telecommunications, Inc., and Request for Relief.	)	Docket No. 991267-TP Filed November 24, 1999

GLOBAL NAPS, INC.'S NOTICE OF FILING AND SERVICE OF DIRECT TESTIMONY

GLOBAL NAPS, INC., by and through its undersigned attorneys, hereby gives notice that on this 24th day of November, 1999, it filed the direct testimonies and exhibits of the witnesses listed below and served copies of same as indicated on the attached certificate of service. The direct testimonies and exhibits of the following witnesses have been filed:

Fred R. Goldstein

William J. Rooney, Esquire

Dr. Lee L. Selwyn

Respectfully submitted this 24th day of November, 1999.

Jon C. Moyle, Jr.
Fla. Bar No. 727016
Cathy M. Sellers
Fla. Bar No. 0784958
Moyle Flanigan Katz Kolins
Raymond & Sheehan, P.A.
118 North Gadsden Street
Tallahassee, FL 32301
(850) 681-3828

DOCUMENT NUMBER-DATE
14485 NOV 24 99
FPSC-RECORDS/REPORTING

AFA
APP
CAF
CMU Marsh
CTR
EAG
LEG 1
MAS 3
OPC
PAI
SEC 1
WAW
OTH

RECEIVED & FILED
FPSC-BUREAU OF RECORDS

Goldstein
DOCUMENT NUMBER-DATE
14483 NOV 24 99
FPSC-RECORDS/REPORTING

Rooney
DOCUMENT NUMBER-DATE
14484 NOV 24 99
FPSC-RECORDS/REPORTING

William J. Rooney, General Counsel
John O. Postl, Assistant General Counsel
GloBTI NAPs, Inc.
10 Merrymount Road
Quincy, MA 02169
(617) 507-5111

Christopher W. Savage
Coles, Raywid, & Braverman, L.L.P.
1919 Pennsylvania Avenue, N.W.
Washington, D.C. 20006
(202) 828-9811

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was furnished this 24th day of November, 1999 by hand delivery to Nancy White, General Counsel, BellSouth Telecommunications, Inc., 150 South Monroe Street, Suite 400, Tallahassee, FL 32301, and by U.S. Mail to Michael P. Goggin, BellSouth Telecommunications, Inc., Museum Tower, Suite 1910, 150 West Flagler Street, Miami, FL 33130, and R. Douglas Lackey and E. Earl Edenfield, Jr., BellSouth Telecommunications, Inc., BellSouth Center, Suite 4300, 675 W. Peachtree Street, N.E., Atlanta, GA 30375.

Jon C. Moyle, Jr.

ORIGINAL

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In re: Complaint and/or petition for arbitration by Global NAPs, Inc. for enforcement of Section VI(B) of its interconnection agreement with BellSouth Telecommunications, Inc. and request for relief.	)))))	Docket No. 991267-TP Filed November 24, 1999

TESTIMONY OF FRED R. GOLDSTEIN

ON BEHALF OF GLOBAL NAPS, INC.

Q. **Please state your name, address and qualifications.**

A. My name is Fred R. Goldstein. My business address is at Arthur D. Little, Inc., 20 Acorn Park, Cambridge, MA 02140. This testimony is prepared on behalf of my client, Global NAPs, Inc., and does not represent an official position of Arthur D. Little, Inc. I am a Manager in Arthur D. Little's Communications and Information Technology unit.

I have worked in the telecommunications and data network field since 1977, when I joined the consulting firm of Economics and Technology, Inc. I was later Telecommunications Manager at Bolt Beranek and Newman, Inc. and served as a telecommunications consultant and as a strategic planner for the network products business of Digital Equipment Corp. At Digital, I represented the company at ANSI-accredited standards bodies dealing with ISDN, Frame Relay and Asynchronous Transfer Mode ("ATM") networks, and I received three patents for ATM congestion management and switching. I later became a member of BBN Corp.'s Network Consulting Practice, largely dealing with dial-up Internet Service Provider ("ISP") activities. I now belong to the Arthur D. Little practice that deals with telecommunications and information technology. I am the author of the book, **ISDN In Perspective** (Reading MA: Addison-Wesley, 1992) and have taught courses for Northeastern University and National Technological University. I have previously appeared as an expert witness in regulatory proceedings, regarding

ISDN pricing and related issues, in New Jersey and Maryland. I hold a bachelor's degree in Government from Skidmore College.

Q. **What is the purpose of your testimony here?**

A. I have been asked by Global NAPs to address the technical aspects of ISP-bound calling. I understand that Global NAPs and BellSouth have a dispute about whether ISP-bound calls are to be treated as "local" calls under their existing interconnection agreement. The purpose of my testimony is to explain that ISP-bound calls are, from a technical perspective, "local" calls as opposed to "interexchange" or "toll" calls.

Q. **Please summarize your testimony.**

A. The FCC has stated that ISP-bound calls are jurisdictionally mixed and largely "interstate" in nature. At times, ILECs have been known to try to confuse this legal, jurisdictional conclusion (as to which I express no opinion, not being a lawyer) with a claim that ISP-bound calls are in some practical, technical respect properly viewed as "interexchange" or "long distance" type calls. (They often accompany this claim with a complaint that access charges "should" apply to ISP-bound calls.) The assumption underlying this claim (to the extent that it is not merely legalistic folderol) is that ISPs are, in some practical, technical sense "like"

interexchange carriers ("ISCs"). Any such assumption is quite wrong. In all practical, technical respects, ISPs "look like" end users to the network, and normal end user calls to ISPs "look like" normal local calls to any other end user such as a bank, pizza parlor, school, or government agency.

For these reasons, as a practical, technical matter, parties entering into contracts about how to handle ISP-bound calls would rationally include ISP-bound calls in the category of "local" calls, for the simple reason that, technically speaking, that is what they are. There is no ***technical*** reason to treat such calls either like interexchange calls, or in some "neither fish nor fowl" special category. (I recognize that parties are free to enter into a contract that treats otherwise technically identical calls differently for some non-technical reason. As I under it, however, nothing in the contract at issue here between Global NAPs and BellSouth separately identifies ISP-bound calls for any separate treatment at all.)

Q. **Please describe how ISP-bound calls are handled within local telephone networks.**

A. As a technical matter, ISP-bound calls are indistinguishable from local voice calls. These calls are handled just like any other local calls.

The caller, typically a subscriber of the incumbent local exchange carrier ("ILEC"),

dials a 7 or 10 digit local number. This is normally routed to a destination switch based upon prefix code (NXX). If the ISP being called is a customer of the ILEC, it is handled like any other intra-ILEC local call (*see* below). Where the ISP is a customer of a competitive local exchange carrier ("CLEC"), the routing may be based on NXX as well (*i.e.*, the ISP may have a number out of an NXX that is assigned to the CLEC's switch).

In some cases, however, the dialed number will have been "ported." In that case, the call is routed via the location routing number, or "LRN" of the dialed number. What is relevant here is that ***local*** number portability — not interexchange carrier selection, as would apply in the case of an interexchange call — is used to specify the terminating carrier.

Once it is determined that the call is bound for a CLEC, the call may go directly to the CLEC switch via a direct end office trunk ("DEOT"), or may go via an ILEC tandem switch. Ordinary Signaling System 7 arrangements are used for these calls. The same trunks carry ISP-bound calls as carry other local calls, even in areas where toll calls are segregated onto separate trunk facilities. The terminating CLEC switch offers the call to the ISP's modem bank using ordinary ISDN PRI or Channelized T1 in-band signaling. Call supervision is returned when the modem answers.

In this regard, note that the LEC-to-LEC call supervision applicable to local calls takes place, regardless of whether or not the ISP, for its own purposes, validates the end user's log-in attempt "in band." As a result, for end users on message unit plans, or making use of the per-call discounted rate for non-local calls within Florida, a message unit or call charge is applied as soon as the modem answers, even if the ISP subsequently refuses to allow the end user's data into the ISP's own equipment (*e.g.*, if the end user enters the wrong password), and even if the ISP's separate telecommunications links to "the Internet" are down (meaning that the end user could not, for example, obtain current web pages from outside the ISP's own (usually limited) cache of web sites). In this respect, too, the call to the ISP is handled just like a call to a local end user. This is to be distinguished from the situation applicable to toll calls, where the end user is not billed unless the IXC is able to establish a connection to the distant location the end user is trying to reach.

Basically, ISP-bound calls are quite similar to voice calls that are delivered in bulk to large users. Telemarketing and customer-support centers, for instance, also frequently have large volumes of traffic terminating on PBX systems or Automatic Call Distributors. From a traffic perspective, an ISP's modem pool looks very much like an incoming PBX trunk group.

Q. **How does this compare to the way in which long distance calls are handled, technically, by the network?**

A. Long distance interconnection is quite different. First, a call handed off by a LEC to an IXC is *not* supervised by the IXC; call supervision is returned only when a terminating LEC at the far end of the call provides it. Second, as a technical matter, the IXC to whom the call is routed is selected by presubscription or CIC dial-around (101xxxx) code, not by destination prefix or LRN. Third, interconnection is far more likely to make use of an access tandem, rather than a local tandem or DEOT. Signaling between the LEC and IXC uses carrier-to-carrier Signaling System 7; calls to ISPs use PRI or Channelized T1 robbed-bit signaling.

Q. **What do these considerations suggest about carriers contracting with each other regarding ISP-bound calls?**

A. Since ISP-bound calls are technically identical to local calls, the logical result from a technical perspective is to include ISP-bound calls with the category of "local" calls in contracts regarding interconnection between carriers and inter-carrier compensation. As noted above, I recognize that parties could choose to draw a distinction among types of calls that are technically identical. My point is simply that there is, indeed, no ***technical*** basis for making such a distinction between ISP-bound calls and other local calls. Consequently, any claim that contracting parties would have had any technical or cost-related reason for distinguishing ISP-bound

calls from other local calls is false.

This also means that a contract that refers generally to "local" calls (such as the one at issue here) would, from a technical perspective, be properly interpreted as including ISP-bound calls within that term. I note in this regard that the Federal Communications Commission ("FCC"), in its order from last February addressing this issue, indicated that the fact that a contract does not separately "call out" ISP-bound calls for separate treatment is a factor that logically weighs in favor of concluding that the parties intended to include ISP-bound calls within the scope of "local" calls. From a technical perspective, I fully concur in the FCC's conclusion in that regard.

Q. **Do you know of any reason why, from a technical perspective, ISP-bound calls should not be viewed as local calls?**

A. No.

Q. **Does this conclude your testimony?**

A. Yes, it does.