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March 12, 2001

Ms. Blanca S. Bayo, Director  
Division of Records & Reporting  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Re: Docket No. 000075-TP  
Investigation into appropriate methods to compensate carriers for exchange of  
traffic subject to Section 251 of the Telecommunications Act of 1996

Dear Ms. Bayo:

Please find enclosed for filing an original and fifteen copies of the Direct Testimonies  
of Edward C. Beauvais, Elizabeth A. Geddes, Terry A. Haynes and Howard Lee Jones  
on behalf of Verizon Florida Inc. in the above matter. Service has been made as  
indicated on the Certificate of Service. If there are any questions regarding this  
matter, please contact me at 813-483-2617.

Sincerely,

*Ernesto Maya Jr for*  
Kimberly Caswell

KC:tas  
Enclosures

*Howard Jones*  
DOCUMENT NUMBER-DATE  
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*Terry Haynes*  
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*Elizabeth Geddes*  
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*Edward Beauvais*  
DOCUMENT NUMBER-DATE  
03160 MAR 12 05  
FPSC-RECORDS/REPORTING

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that copies of the Direct Testimonies of Edward C. Beauvais, Elizabeth A. Geddes, Terry A. Haynes and Howard Lee Jones on behalf of Verizon Florida Inc. in Docket No. 000075-TP were sent via U.S. mail on March 12, 2001 to the parties on the attached list.

  
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**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Investigation into appropriate )  
methods to compensate carriers ) DOCKET NO. 000075 - TP  
for exchange of traffic subject to )  
Section 251 of the Telecommunications )  
Act of 1996. )

**DIRECT TESTIMONY OF  
EDWARD C. BEAUVAIS, PH.D.**

**ON BEHALF OF  
VERIZON FLORIDA INC.**

**March 12, 2001**

DOCUMENT NUMBER-DATE

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**DIRECT TESTIMONY OF EDWARD C. BEAUVAIS, Ph.D.**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TITLE.**

A. My name is Edward C. Beauvais. My business address is 600 Hidden Ridge Drive, Irving, Texas, 75038. I am employed by Verizon Services Group as Director - Economic and Public Policy in the Regulatory and Governmental Affairs Department and am representing Verizon Florida, Inc. ("Verizon") in this proceeding.

**Q. ARE YOU THE SAME PARTY WHO SUBMITTED TESTIMONY IN THE FIRST PHASE OF THIS CASE?**

A. Yes. I provided both direct and rebuttal testimony previously in this case.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PHASE OF THE DOCKET?**

A. I will address certain issues that have been identified for resolution in this second phase of the docket. My testimony will cover issues 12, concerning the test for an ALEC's entitlement to compensation at the tandem interconnection rates; 13, concerning the definition of "local calling area" for reciprocal compensation purposes; 14, concerning the responsibilities for an originating local carrier and the associated compensation that may be due; and 16b, concerning the compensation mechanism for IP Telephony. I will also touch on issues 10, 17, and 18, although these issues are primarily legal in nature and will be addressed more fully in Verizon's posthearing brief. Issue 10 asks about the

1 Commission's jurisdiction to specify compensation for transport and  
2 delivery of traffic subject to Section 251 of the Telecommunications Act  
3 (Act); issue 17 asks whether the Commission should establish a default  
4 compensation mechanism for transport and delivery of traffic subject to  
5 Section 251 of the Act; and issue 18 asks how the Commission should  
6 implement the policies it establishes in this docket.

7

8 The remaining issues identified by the Commission are addressed by  
9 Verizon witnesses Jones (11), Haynes (15a and 15b), and Geddes (16a).

10

11 **Q. WHAT IS THE EXTENT OF THE COMMISSION'S AUTHORITY TO**  
12 **SPECIFY THE RATES, TERMS, AND CONDITIONS GOVERNING**  
13 **COMPENSATION FOR TRANSPORT AND DELIVERY TRAFFIC**  
14 **SUBJECT TO SECTION 251 OF THE ACT?**

15 A. Under the Act section 251(b)(5), local exchange carriers have the duty to  
16 establish reciprocal compensation arrangements for the transport and  
17 termination of telecommunications. This provision is intended to ensure  
18 that when local carriers collaborate to complete a call, both the carrier  
19 originating the call and the carrier terminating the call will receive  
20 appropriate compensation. The FCC has interpreted the Act's reciprocal  
21 compensation requirement to apply to only "local telecommunications  
22 traffic." (47 C.F.R. sec. 51.70(a).) Such local traffic is typically defined in  
23 Verizon's interconnection agreements with ALECs as traffic that  
24 originates on one party's network and terminates on the other party's  
25 network within a local calling area. This definition is consistent with the

1 FCC's order, which held that reciprocal compensation provides for  
2 "recovery by each carrier of the costs associated with the transport and  
3 termination on each carrier's network facilities of calls that originate on  
4 the network facilities of the other carrier." (In the Matter of Implementation  
5 of the Local Competition Provisions of the Telecommunications Act of  
6 1996, First Report and Order, 11 FCC Rcd 15499, (First Report and  
7 Order) at ¶ 1034 (quoting 47 U.S.C. § 252(d)(2)(A)(i)) (emphasis added)  
8 (1996).) (As I explained in my Direct Testimony in Phase I of this  
9 proceeding--and as the FCC has confirmed--local traffic does not include  
10 Internet-bound calls, which are jurisdictionally interstate.)

11

12 Thus, when Verizon and an ALEC negotiate an interconnection  
13 agreement, they are obliged to include reciprocal compensation  
14 arrangements which would encompass a bill-and-keep option for local  
15 traffic. If they cannot successfully negotiate such arrangements, then  
16 either may petition the State Utilities Commission to arbitrate the issue.

17 Although I am not a lawyer, that is what I understand the Commission's  
18 jurisdiction to be—stepping in to determine reciprocal compensation  
19 arrangements for local traffic when the parties' negotiations fail.

20

21 **Q. THE COMMISSION HAS ASKED WHEN AN ALEC MIGHT BE**  
22 **ENTITLED TO COMPENSATION AT THE ILEC'S TANDEM**  
23 **INTERCONNECTION RATE. IF THE COMMISSION ADOPTS YOUR**  
24 **PROPOSED APPROACH, IS A GENERIC RESOLUTION OF THIS**  
25 **ISSUE NECESSARY?**



1 A. Not necessarily. The question seems to assume that there will be a  
2 nominal compensation paid by one carrier to another for use of a carrier's  
3 tandem switching facilities. But as I explained in my Phase I testimony,  
4 if a rate structure is adopted for intercompany compensation of "local"  
5 traffic which is consistent with the rate structure paid by the end users in  
6 Verizon Florida's areas of operations, then there is no explicit nominal  
7 compensation to be paid. Under a bill-and-keep approach, each carrier  
8 simply interconnects its facilities to that of other carriers and traffic flows  
9 between and among networks according to the arrangements in the  
10 carriers' interconnection agreements. In such situations, there is no  
11 explicit compensation to be paid by any carrier to another at the tandem  
12 rate or any other positive price per minute of use. The compensation is  
13 that each carrier allows other carriers to use its network in completing  
14 calls which both originate and terminate within the agreed-upon local  
15 calling area.

16  
17 If the Commission approves a bill-and-keep arrangement in this  
18 proceeding as the preferred default when parties fail to negotiate other  
19 arrangements, then it need not resolve the tandem interconnection issue  
20 in a generic sense. The tandem interconnection issue, however, is likely  
21 to arise in arbitrations if the Commission does not approve a bill-and-  
22 keep approach here.

23  
24 **Q. IN THESE INSTANCES, WHAT DO THE ACT AND THE FCC RULES**  
25 **REQUIRE BEFORE AN ALEC IS TO BE COMPENSATED AT THE**

1           **ILEC'S TANDEM INTERCONNECTION RATE?**

2    A.    As background for understanding this issue, it is first necessary to define  
3           a tandem switching arrangement. Tandem switching refers to the  
4           practice of using intermediate trunk-to-trunk switching in routing a call  
5           from its originating end-office switching location to the end office serving  
6           the customer for whom the call is destined. This intermediate switching  
7           is done to replace the requirement for direct trunking between all possible  
8           pairs of end office switches. Thus, tandem switching is adopted by  
9           carriers as an economically cost efficient method of concentrating traffic  
10          when a local exchange carrier has many end office switches serving a  
11          given geographical area.

12  
13          In its First Report and Order implementing the Act, the FCC recognized  
14          that the costs incurred when a carrier transports and terminates a call  
15          originating on another carrier's network are likely to vary, depending on  
16          whether tandem switching is involved. That is, tandem switching will  
17          likely entail a cost over and above that which would be incurred if just end  
18          office switching were utilized. The FCC therefore concluded that "states  
19          may establish transport and termination rates in the arbitration process  
20          that vary according to whether the traffic is routed through a tandem  
21          switch or directly to the end office switch." In doing so, it directed the  
22          states to consider whether the competitive carriers performed functions  
23          similar to those of the ILEC's tandem switch. It further observed that,  
24          where the interconnecting carrier's switch serves a geographic area  
25          comparable to that of the ILEC's tandem switch, the appropriate proxy for

1 the interconnecting carrier's additional costs is the ILEC's tandem  
2 interconnection rate. (First Report and Order at. para. 1090.) The FCC  
3 codified the guidelines for assessment of the tandem rate in its Rule  
4 51.711(a).

5  
6 Thus, assuming that some level of nominal compensation is to be paid  
7 (as an alternative to a bill-and-keep approach), then the ALEC must meet  
8 a two-prong test under the FCC's Order adopted pursuant to the Act. To  
9 receive compensation at the ILEC's tandem rate, the ALEC's switches  
10 must serve an area comparable to the ILEC's tandem switch; and the  
11 ALEC's switches must perform functions similar to the ILEC's tandem  
12 switches. In order for any payment to result in an efficient outcome,  
13 payments must be based on a switching function actually performed, not  
14 just that a switch is capable of performing such a function. That is, if an  
15 ALEC actually performs the tandem function -- intermediate trunk-to-trunk  
16 switching -- in routing a call, then assuming that reciprocal compensation  
17 is to be paid, the ALEC would be entitled to bill for that call.

18  
19 There is an important caveat in the above, however. If an ALEC only  
20 performs a single switching function, even if that same switch could serve  
21 as a tandem, then any charge should only be for the single switching  
22 function actually performed in the routing of that call, again assuming that  
23 a nominal reciprocal compensation arrangement has been agreed to by  
24 the carriers. Given how ALEC switches are likely to be configured, as  
25 discussed in Mr. Jones' testimony, Verizon's tandem cost estimate may

1 be useful as a proxy for the cost an ALEC might likely incur in routing  
2 ISP-bound traffic, as such switching is performed on a trunk-to-trunk  
3 basis, just as is a tandem switching configuration.

4

5 **Q. WHAT IS “SIMILAR FUNCTIONALITY” UNDER THE FCC’S TWO-  
6 PRONG TEST?**

7 A. As noted, similar functionality means what it says it does—that the  
8 ALEC’s equipment must perform functions like those of the ILEC’s  
9 tandem switch. The FCC defines “tandem switching capability” to include  
10 “trunk-connect facilities”; “the basic switching function of connecting  
11 trunks to trunks”; and “the functions that are centralized in tandem  
12 switches (as distinguished from separate end-office switched), including  
13 but not limited to call recording, the routing of calls to operator services,  
14 and signaling conversion features.” 47 C.F.R. sec. 51.319(c)(2). As the  
15 South Carolina Commission concluded recently in an arbitration of this  
16 issue between AT&T and BellSouth, this language “means that AT&T’s  
17 switches must connect trunks terminated in one end office switch to  
18 trunks terminated in another end office switch.” In that case, the  
19 Commission concluded that because AT&T’s switches did not connect in  
20 such a manner, “they cannot be found to perform tandem switch  
21 functions.” (Petition of AT&T Comm. of the Southern States, Inc. for  
22 Arbitration of Certain Terms and Conditions of a Proposed  
23 Interconnection Agreement with BellSouth Tels., Inc. Pursuant to 47  
24 U.S.C. Section 252, S.C. P.S.C. Order No. 2001-079, at 34 (Jan. 30,  
25 2001).) Court decisions confirm that the South Carolina Commission’s

1 common-sense interpretation of the FCC's rules is correct. (MCI  
2 Telecomms. Corp. v. Ill. Bell Tel., 1999 U.S. Dist. LEXIS 11418 (N.D. Ill.,  
3 June 22, 1999); U.S. West Comm. v. MFS Intelenet, Inc., 193 F.3d 1112,  
4 1124 (9<sup>th</sup> Cir. 1999). The same analysis is warranted here in a statement  
5 of general policy to be applied in the context of any arbitration of the  
6 tandem interconnection rate issue.

7

8 **Q. WHAT DOES "COMPARABLE GEOGRAPHIC AREA" MEAN UNDER**  
9 **THE FCC'S RULES?**

10 A. In this context, the straightforward meaning is that the area served by the  
11 ALEC's switch is about the same physical area as that served by the  
12 ILEC's tandem switch. Again, if either of the geographic comparability or  
13 the tandem functionality prongs are not met, then incremental  
14 compensation at the tandem interconnection rate (in addition to the end  
15 office switching rate) is not appropriate.

16

17 **Q. HOW SHOULD A "LOCAL CALLING AREA" BE DEFINED FOR**  
18 **PURPOSES OF DETERMINING THE APPLICABILITY OF**  
19 **RECIPROCAL COMPENSATION?**

20 A. "Local calling area" should be defined in the parties' local interconnection  
21 agreements, as is the case today. Typically, that definition relies on the  
22 ILEC's local calling scope as reflected in its local exchange tariffs. It is  
23 quite possible that an ALEC's local calling area will be different from that  
24 of the ILEC, just as the local calling scope of a wireless carrier may be  
25 different from that of the ILEC. But given that the ILEC's local calling

1 scope is subject to regulation by the Florida Public Service Commission,  
2 the fact that the retail calling scopes may be different should have no  
3 bearing on the definition of the local calling area for purposes of applying  
4 reciprocal compensation or other Commission policies or practices, such  
5 as access charges. For instance, an ALEC may define the entire state  
6 as a local calling area, but it cannot, by doing so, avoid the payment of  
7 access charges and the underlying policy of support flows to basic local  
8 services. Certainly it can be said that the Florida Commission has  
9 established access rates as a matter of public policy and such a policy  
10 should not be circumvented merely by the declaration of a calling scope  
11 as local. If it could be, then an unregulated carrier could say the entire  
12 state is its local calling area and avoid paying access charges as  
13 intended by the FPSC. Mr. Haynes' testimony on behalf of Verizon  
14 covers the issue of calling scope in much greater detail. As a practical  
15 matter, Verizon is not at liberty under Commission regulation to simply  
16 change its calling scopes in private negotiation.

17  
18 One aspect that should be beyond contention is that to be eligible for  
19 reciprocal compensation purposes, the call must be local under the  
20 definitions in place; that is, the call must both originate and terminate in  
21 the local calling scope agreed to by the parties. As I emphasized in the  
22 first phase of this proceeding, Internet-bound calls are not local because  
23 they do not terminate in the local exchange calling area, but rather  
24 continue beyond the ISP's modem.

25

1 **Q. WHAT ARE THE RESPONSIBILITIES OF AN ORIGINATING LOCAL**  
2 **CARRIER TO TRANSPORT ITS TRAFFIC TO ANOTHER LOCAL**  
3 **CARRIER?**

4 A. The first thing to point out is that it is obviously necessary for carriers to  
5 interconnect with each others' networks if an efficient form of local  
6 exchange competition is to occur. The originating carrier has an  
7 affirmative obligation to enter into negotiations with competitive local  
8 exchange carriers so as to be able to complete the calls of customers to  
9 which it offers service under its tariffs. Likewise, connecting carriers have  
10 that same obligation, so that mutually advantageous arrangements can  
11 be reached. However, as in the case of the local calling area, a number  
12 of possible arrangements can be adopted in the private interconnection  
13 agreements between the parties involved in handling the call with respect  
14 to transport arrangements.

15  
16 The first option is for the originating carrier to agree to provide the  
17 transport facilities within the local calling area to the carrier serving the  
18 user to whom the call is destined. The point of interconnection at the  
19 receiving carrier's facility can be mutually agreed upon, but it might be the  
20 receiving carrier's end office.

21  
22 A second option is for the receiving carrier to agree to provide the  
23 transport facilities within the local calling area from the carrier serving the  
24 user from which the call originates. Again, the point of interconnection at  
25 the originating carrier's facility can be mutually agreed upon, but it might

1 typically be in a co-location arrangement at the originating carrier's end  
2 office. As an example, an ALEC interested in building out a rival  
3 transport network might be interested in providing the transport facilities  
4 in lieu of the ILEC doing so, or if the ALEC believe its facilities are more  
5 efficient than those of the ILEC.

6

7 A third option would be that the interconnecting local exchange carriers  
8 could agree to a meet-point with each carrier providing its own facilities  
9 to the agreed upon point, much as is done in switched access  
10 arrangements.

11

12 Each of the above options is quite consistent with the obligation of an  
13 originating carrier to arrange for the transport of traffic to the carrier  
14 receiving the call. Again, the obligations assumed by the originating  
15 carrier should be specified in the interconnection agreement between the  
16 carriers. Those arrangements need not be the same between all pairs  
17 of carriers and all can exist with a given local calling area among different  
18 pair of companies simultaneously.

19

20 **Q. FOR EACH ARRANGEMENT YOU JUST IDENTIFIED, WHAT FORM**  
21 **OF COMPENSATION, IF ANY, SHOULD APPLY?**

22 A. Again, the intercompany compensation would depend upon the specifics  
23 of the agreements between the two companies. In the simplest  
24 arrangement, I would argue for matching the intercompany compensation  
25 arrangement to the end user rate structure most prevalent in the local



1 calling area. In the case of Verizon Florida, that suggests a zero  
2 marginal price for usage—the bill-and-keep arrangement I have already  
3 recommended. If that is the case, no explicit nominal compensation need  
4 take place for the transport facilities between the carriers on a usage-  
5 sensitive basis.

6

7 **Q. ARE THERE ANY RECENT DEVELOPMENTS WHICH MIGHT BE**  
8 **RELEVANT TO THIS COMMISSION'S CONSIDERATION OF THE**  
9 **APPROPRIATE RECIPROCAL COMPENSATION?**

10 A. In a matter which bears directly on the level of compensation for any such  
11 calls and their transport, Global NAPs, which operates in Florida, recently  
12 reported that it is the first local exchange carrier to move to an  
13 all-packet-based broadband network. By abandoning traditional circuit  
14 switch equipment, this ALEC says it can deliver four times the capacity  
15 in one-tenth the space and at one-tenth the cost. Global NAPs says that  
16 all of this equipment has been interconnected into a distributed,  
17 high-capacity "virtual" switch that carries more than 2 billion minutes of  
18 traffic each month. "Our next-generation broadband network is an order  
19 of magnitude more efficient than any other carrier's circuit switch  
20 network," Frank Gangi, president and CEO of Global NAPs, has  
21 asserted. "What previously consumed 15,000 square feet of central office  
22 space now requires just 1,500 square feet. This watershed event heralds  
23 the first major step in achieving Global NAPs' publicly stated goal of 'all  
24 calls are local.' We are now in a position to provide voice, transport and  
25 data services better, faster and cheaper than anyone else." (Global

1 NAPS February 7, 2001 release, posted on its website, attached as Ex.  
2 ECB-2.)

3

4 In addition to maintaining its own nationwide SS7 network, Global NAPs  
5 also has a switched gigabit Ethernet IP fiber backbone along the East  
6 Coast. Wholesale customers for that network include ISPs Mindspring,  
7 WebTV and Prodigy. Global NAPs says that about 75 percent of all  
8 dial-up Internet traffic in the New England states flows through its  
9 network. (Id.)

10

11 **Q. HOW SHOULD THIS INFORMATION FACTOR INTO THE**  
12 **COMMISSION'S DECISION?**

13 A. If the information provided is accurate, then it suggests two items which  
14 might affect the Commission's deliberations in this docket. First is the  
15 observation that Global NAPs would consider all calls to be "local", which  
16 obviously bears on the Commission's question posed above with respect  
17 to calling scopes. This ALEC operates in numerous states and asserts  
18 that it carries 75% of the Internet traffic in New England. Judging from its  
19 statement, then, a call originated by a customer in one of the New  
20 England states could terminate in Tampa to a Verizon customer. Global  
21 NAPs may well consider that call to be "local" for its own marketing to its  
22 customers. I certainly would not object to that. However, under current  
23 jurisdictional definitions, such a call would be interstate and not subject  
24 to reciprocal compensation payments. Likewise, should a Verizon  
25 customer in Tampa call a Global NAPs customer located in New England,

1 that call would not be considered local by Verizon, even though Global  
2 NAPs might consider the call to be local. Thus, the call would not qualify  
3 for any nominal reciprocal compensation payment.

4

5 The second aspect to consider is the level of cost being reported by  
6 Global NAPs, which indicates an order of magnitude reduction from  
7 current cost levels. That is, if the current cost of switching a minute is  
8 \$0.004, as an example, then using the Global NAPs engineered network,  
9 the cost would be reduced to only \$0.0004 for that same minute of use.

10 If it is true, and that network design is that efficient, then the applicability  
11 of the ILECs' current forward-looking cost estimates needs to be closely  
12 examined, especially with relation to the costs incurred by ALECs with a  
13 network design like that of Global NAPs. To the extent that Internet  
14 telephony moves in the direction of that type of network, as described by  
15 Ms. Geddes, then the use of a zero marginal price for intercompany  
16 compensation makes even more sense.

17

18 **Q. ARE YOU SUGGESTING THAT AS INTERNET PROTOCOL (IP)**  
19 **TELEPHONY DEVELOPS, THE COMMISSION WILL HAVE TO**  
20 **CONSIDER OTHER ISSUES ASSOCIATED WITH INTERCOMPANY**  
21 **COMPENSATION?**

22 A. Yes. For instance, one of the issues the Commission has identified in this  
23 case is what carrier-to-carrier compensation arrangements, if any, should  
24 apply to IP telephony. As the ALECs' witness Selwyn pointed out in his  
25 Direct Testimony in Phase I of this case, use of non-circuit switched

1 technologies to provide IP telephony is "negligible today". (Selwyn Phase  
2 I DT at 53.) I believe at least most parties to this docket would agree with  
3 the assessment that there is relatively little IP telephony today, especially  
4 for voice traffic. Thus there is no pressing need for the Commission to  
5 address this compensation issue now, at least in a generic sense. This  
6 is particularly true because the FCC is expected to initiate its own  
7 proceeding to address the matter, perhaps as early as this spring. This  
8 topic was also covered indirectly in the two FCC working papers I  
9 supplied in my Phase I Rebuttal Testimony on January 10, 2001 (Exhibits  
10 ECB-1 and ECB-2). Indeed, the Commission could not likely issue an  
11 empirically supported decision on compensation for IP telephony in this  
12 case. In terms of technology, this is an extremely complicated area; as  
13 Ms. Geddes testified, there is no single definition of IP telephony and the  
14 technology used in IP telephony is still very much evolving. There are  
15 numerous complex issues in this docket, and the definition of IP  
16 telephony is just an informational issue. Verizon believes that if the  
17 preliminary information the Commission gathers in this case indicates  
18 some need for the Commission to go forward with consideration of a  
19 compensation mechanism for traffic utilizing an IP protocol, then that  
20 process should take place in a separate docket where the Commission  
21 can focus exclusively on that issue. In fact, I would suggest that non-  
22 adversarial workshops might be a better approach initially than formal  
23 hearings.  
24  
25

1           Although it is premature to engage in any detailed policy discussions  
2           about internet telephony at this time, I can observe that it does seem  
3           quite likely that there may be serious future implications for the overall  
4           design of rates. I would just generally reiterate the observation I made  
5           in Phase I of this proceeding that the issue of relative prices is very much  
6           affected by the Commission's decisions. Based on the testimony of Ms.  
7           Geddes, and the public statement of Global NAPS, it would appear that  
8           the use of packet technologies will very much confuse the jurisdictional  
9           nature of the traffic being carried, making it even more difficult to  
10          segregate state, interstate and local, as is called for in current rate-  
11          making. If IP-based telephony becomes widespread, it may be  
12          necessary for significant public policy reforms with respect to the pricing  
13          mechanisms currently utilized in the industry.

14

15   **Q.   SHOULD THE COMMISSION ESTABLISH COMPENSATION**  
16   **MECHANISMS GOVERNING THE TRANSPORT AND TERMINATION**  
17   **OR DELIVERY OF TRAFFIC SUBJECT TO SECTION 251 OF THE ACT**  
18   **TO BE USED IN THE ABSENCE OF THE PARTIES REACHING AN**  
19   **AGREEMENT OR NEGOTIATING A COMPENSATION MECHANISM?**  
20   **IF SO, WHAT SHOULD BE THE MECHANISM?**

21   A.   As I explained above and in Phase I, if parties to interconnection  
22          negotiations cannot agree on an intercarrier compensation mechanism  
23          for local traffic under the Act, then the Commission may, in the context of  
24          an arbitration, establish such a compensation mechanism. But, as this  
25          Commission-designated issue seems to recognize, the Commission

1 cannot order parties to use a generic compensation mechanism without  
2 first allowing negotiations to conclude.

3

4 If parties seek arbitration of a compensation mechanism, then the  
5 Commission can conceivably use policies it establishes here to guide its  
6 decision in the arbitration, depending on the specific facts of the case.

7 As I recommended in Phase I, the best approach is to allow the  
8 additional costs associated with the increase in ISP-bound traffic,  
9 including compensation costs, to be reflected in end user rates. If that  
10 approach is not taken, then the Commission should establish a policy  
11 preference for bill-and-keep arrangements for all local traffic under  
12 Section 251 of the Act.

13

14 **Q. HOW SHOULD THE POLICIES IN THIS DOCKET BE IMPLEMENTED?**

15 A. As I discussed above, and as advised by my attorney, it is Verizon's legal  
16 position that any policies established in this docket can be implemented  
17 only in the context of arbitrations under the Act.

18

19 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

20 A. Yes.

21

22

23

24

25

The screenshot shows a website layout for Global NAPs. At the top right, there is a logo for 'GLOBAL NAPs' with the tagline 'TOMORROW'S TELECOM'. On the left side, there is a vertical navigation menu with the following items: 'About Us', 'Sites', 'Bandwidth', 'Contact', 'CO-location', and 'Chairman'. The main content area is titled 'Newsflash' and features three news items:

- January 30, 2001**  
**Global NAPs completes transition to ATM Packet based Network. "We've done the telecom equivalent of the first moonwalk" says Global NAPs President Frank T. Gangl.**
- Jan 2, 2001 -- Global NAPs lights major fiber route from New Hampshire through Boston Virginia.**
- February 21, 2000 -- Global NAPs lights its first dark fiber from Baltimore to Reston.**

Below the news items, there are two lines of text: 'Click on titles above to view stories.' and 'Click here to view more stories.' At the bottom right of the page, there is a horizontal navigation bar with the following links: 'Home', 'About', 'Sites', 'Band', and 'C'.

Back

**GLOBAL NAPS IS FIRST NATIONWIDE CARRIER TO COMPLETE  
TRANSITION FROM TRADITIONAL CIRCUIT SWITCH NETWORK  
TO "ALL-PACKET" NEXT-GENERATION NETWORK**

*Convergent Networks, Sycamore Networks and Marconi Communications Provide Enabling  
Technology for Transition of Wholesale Carrier to End-to-End Broadband Network*

QUINCY, Mass., February 7, 2001 – Abandoning traditional circuit switch equipment for a next-generation packet-based network that delivers four times the capacity, in one-tenth the space, at one-tenth the cost, Quincy, Massachusetts-based Global NAPs in January became the world's first local exchange carrier to fully transition to an all-packet broadband network. To make the transition possible, Global NAPs deployed more than thirty Convergent Networks' IC'S2000™ broadband switches as the foundation technology of its new network. Other critical components of the Global NAPs network include Sycamore Networks' SN 8000 intelligent optical transport platform and Marconi Communications' ASX™-4000 core ATM switch. Global NAPs has seamlessly interconnected equipment from all three companies into a distributed, high-capacity "virtual" switch that is carrying more than two billion minutes of traffic per month.

"At Global NAPs, we are determined to be the technology leader in everything we do," said Frank Gangi, president and CEO, Global NAPs. "Our next-generation broadband network is an order of magnitude more efficient than any other carrier's circuit switch network. What previously consumed 15,000 square feet of central office space now requires just 1,500 square feet. This watershed event heralds the first major step in achieving Global NAPs' publicly stat



goal of 'all calls are local.' We are now in a position to provide voice, transport and data services better, faster and cheaper than anyone else."

In addition to maintaining its own nationwide SS7 network, Global NAPs recently lit a new switched Gigabit Ethernet IP fiber backbone along the Eastern seaboard. The wholesale carrier's customers include high-volume, high-usage business customers as well as Internet Service Providers (ISPs) such as Mindspring, WebTV and Prodigy. In New England, nearly 7 percent of all dial-up Internet traffic currently flows through the Global NAPs network.

In January, Global NAPs decommissioned and removed the last of its traditional Class circuit switches, replacing it with the ICS2000 broadband switch from Convergent Networks. With a footprint of just two square feet, the ICS2000 supports more than 18,000 simultaneous subscribers in a single chassis when used to provide dial-up Internet access service. More than 30 ICS2000s have been deployed throughout the Global NAPs network to date, interconnected into a virtual switch configuration that currently covers the entire East Coast.

"There is no longer any doubt that the fundamental transition the market has been discussing for years is well underway in the telecommunications industry - the switch has been made from circuit to next-generation packet technology," said John C. Thibault, president and CEO, Convergent Networks. "Service providers like Global NAPs are proving this technology is ready for carrier-class deployments, and they are reaping the performance and economic benefits of next-generation products. Global NAPs has been a true business partner in defining and implementing the Convergent product family, and we are excited to be part of this industry leading transformation."

Other critical components in the Global NAPs network include Sycamore Networks' S 8000 optical transport platform and Marconi Communications' ASX-4000 core ATM switch. Enabling OC-3 through OC-192, as well as Gigabit Ethernet, services Sycamore's SN 8000 provides the industry's most versatile optical networking transport platform for the efficient delivery of wave-based services. With its software-centric design and scalable service platform Global NAPs has been able to rapidly integrate the SN 8000 as it expanded its network's footprint throughout the eastern United States.

"Global NAPs has blended together a service rich network architecture designed to facilitate the rapid deployment of new data-oriented services," said Ryker Young, senior vice president, global sales and services, Sycamore Networks. "Global NAPs is clearly a pioneer in

terms of deploying the next generation public network and Sycamore is proud to provide the optical backbone that will underpin its network's growth."

"To build a world-class next-generation packet (ATM) network, we needed to deploy world-class products, from world-class vendors that would provide us and our customers with world-class support," concluded Global NAPs' Gangi. "The cooperation among these three vendors - Convergent, Sycamore and Marconi - in the deployment of this network has been remarkable. They've made the new public network a reality at Global NAPs."

#### **About Global NAPs**

Launched in May 1995, Global NAPs is a CLEC focused on high-volume, high-usage business customers, as well as Internet Service Providers. Global NAPs provides innovative next-generation voice and data services along with the infrastructure to fully support its customers' needs. Global NAPs also maintains its own SS7 network and has recently deployed switched Gigabit Ethernet IP fiber backbone along the Eastern seaboard. The company is headquartered in Quincy, Mass. and currently offers services in more than a dozen states including Florida, Massachusetts, New York, New Jersey, Pennsylvania and Virginia. Contact Global NAPs via the web at [www.gnaps.com](http://www.gnaps.com).

#### **About Convergent Networks, Inc.**

Founded in 1998, Convergent Networks is the Voice of Broadband Networking.™ The company designs, develops and markets carrier-class switching solutions that enable emerging and incumbent carriers to economically deliver innovative broadband services to their business and residential customers. Convergent Networks' Cohesion product family is comprised of the primary elements: the ICS2000 broadband switch, the ICServiceWorks™ service creation softswitch and the ICView™ network management system. More information about the company can be found at [www.convergentnet.com](http://www.convergentnet.com).

#### **About Marconi plc**

Marconi plc is a global communications and IT company with around 49,000 employees worldwide and sales in over 100 countries. It supplies advanced communications solutions and the key technologies and services for the Internet. Marconi plc is listed on the London Stock Exchange and the NASDAQ under the symbol MONI. The headquarters of Marconi Communications is in Pittsburgh, PA. Additional information about Marconi can be found at [www.marconi.com](http://www.marconi.com)

**About Sycamore Networks**

Sycamore Networks develops and markets intelligent optical networking products that transport voice and data traffic over wavelengths of light. The Company combines significant experience in data networking with expertise in optics to develop intelligent optical networking solutions for network service providers. Sycamore's products are based on a common software foundation, enabling concentration on the delivery of services and end-to-end optical networking. Sycamore's products and product plans include optical transport, access and switching systems and end-to-end optical network management solutions. Contact Sycamore Networks at [www.sycamorenet.com](http://www.sycamorenet.com).

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*Cohesion, ICS2000, ICServiceWorks, ICView, and The Voice of Broadband Networking are trademarks of Convergent Networks. All other trademarks are the property of their respective owners.*

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