

State of Florida



Public Service Commission

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**DATE:** JANUARY 25, 2001

**TO:** DIRECTOR, DIVISION OF RECORDS AND REPORTING (BAYÓ)

**FROM:** DIVISION OF COMPETITIVE SERVICES (AUDU, DOWDS, SIMMONS) SAS  
DIVISION OF LEGAL SERVICES (CHRISTENSEN) K J

**RE:** DOCKET NO. 001332-TL - INTRASTATE TARIFFING OF xDSL SERVICE BY BELLSOUTH TELECOMMUNICATIONS, INC., VERIZON FLORIDA, INC., AND SPRINT - FLORIDA, INCORPORATED.

**AGENDA:** 02/06/2001 - REGULAR AGENDA - PROPOSED AGENCY ACTION - INTERESTED PERSONS MAY PARTICIPATE

**CRITICAL DATES:** NONE

**SPECIAL INSTRUCTIONS:** NONE

**FILE NAME AND LOCATION:** S:\PSC\CMP\WP\001332.RCM

CASE BACKGROUND

When the FCC first approved ILECs' ADSL (an xDSL technology) tariff filings in FCC Orders 98-292 and 98-317<sup>1</sup>, it appears that the FCC was led to believe that ADSL service was exclusively marketed to Internet Service Providers (ISPs)<sup>2</sup>. Today, more ILECs are themselves becoming ISPs, with end user customers being the target market. With the rising awareness of xDSL service in the

<sup>1</sup> FCC 98-292 in CC Docket No. 98-79 approved GTE's ADSL tariff filing; FCC 98-317 in CC Docket Nos. 103, 161, 167, and 168 approved Pacific Bell Telephone Co., BellSouth Telecommunications, Inc., GTE System Telephone Cos., and Bell Atlantic Telephone Cos. tariff filings, respectively.

<sup>2</sup> FCC 98-292 states that: "[G]TE expects ISPs to purchase GTE's ADSL service to provide faster connections to end user customers." (FCC 98-292, ¶10)

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marketplace, the demand for xDSL service has likewise grown. As the ILECs roll out xDSL to meet this growing demand, more customers are experiencing problems with the service. This has resulted in an increasing number of customer complaints. For example, the FPSC processed approximately 50 complaints during the period September 1999 through August 2000, and another 50 complaints during the recent and much shorter period of September 2000 through January 10, 2001. To date, the FCC and ILECs have taken the position that xDSL service is jurisdictionally interstate, but customers make their complaints to the state commissions. Due to this jurisdictional issue, state commissions are hampered in their ability to resolve these customer complaints.

On October 30, 1998, the FCC issued Order 98-292 in CC Docket No. 98-97, approving GTE's ADSL tariff filing. In this Order, the FCC addressed the threshold issue raised by GTE's DSL tariff: whether GTE's DSL service is an interstate service, properly tariffed at the federal level, or an intrastate service that should be tariffed at the state level.

In this Order, the FCC ruled that GTE's ADSL service is interstate and that GTE correctly filed it at the federal level. The FCC based its decision on the fact that GTE's DSL service is an interstate special access data service that provides a high speed access connection between an end user customer and an ISP. (FCC 98-292, ¶8) Indeed, the xDSL technology is only made possible using the existing LEC copper facility. The FCC agreed with GTE that the nature of the communication, rather than the physical location of the technology, determines the jurisdictional classification of the DSL service. (FCC 98-292, ¶¶12, 17)

The FCC disagreed with some commenters who argued that the purported "end-to-end" DSL communication consists of two distinct components -- an intrastate "telecommunications service," which ends at the ISP's local server, and an interstate "information service," which begins where the telecommunications service ends. (FCC 98-292, ¶15) The FCC found that the end-to-end nature of the communications is more significant than the facilities used to complete such communications. Therefore, the FCC concluded that ". . . [T]he interstate communication itself extends from the inception of a call to its completion, regardless of any intermediate facilities." (FCC 98-292, ¶18)

The FCC also determined that while an information service is not itself a telecommunications service, it is provided via telecommunications. Thus, the FCC ruled that the ISP traffic is a

continuous transmission from the end user to a distant Internet site. (FCC 98-292, ¶20) Accordingly, the FCC concluded that

. . . [W]e believe federal tariffing of DSL service is appropriate where the service will carry more than a de minimis amount of inseparable interstate traffic. Should GTE or any other incumbent LEC offer an xDSL service that is intrastate in nature, . . . , that service should be tariffed at the state level. (FCC 98-292, ¶27)

Although the FCC upheld GTE's position that the service was appropriately tariffed at the federal level, the FCC noted that there could be times and situations in which xDSL traffic could be deemed intrastate. (FCC 98-292, ¶27) Since the FCC did not rule that xDSL service was exclusively an interstate service, the FCC Order does not prohibit the dual tariffing of xDSL service. Thus, state commissions may examine the merits of dual tariffing of xDSL.

A key advantage of xDSL service is that it can be provided in conjunction with "POTS" service over a single loop. Where provisioned in this manner, customers would be justified in expecting that the quality of service (especially installation and repair intervals) would not deteriorate. Moreover, under this single loop scenario, since the "POTS" service is jurisdictionally intrastate, it would be reasonable to conclude that the xDSL service is jurisdictionally intrastate, too.

Staff notes that the Florida Public Service Commission (FPSC) is not the only state commission evaluating the merits of the FCC ruling that xDSL traffic is interstate in nature. In a recent decision, the Kentucky Public Service Commission<sup>3</sup> ordered BellSouth to file intrastate xDSL wholesale tariffs in response to a complaint filed by IgLou Internet Services, Inc. (IgLou) In its filing, IgLou asserted that BellSouth structured its wholesale DSL rates to favor large market providers, including BellSouth.net, its own Internet service affiliate. IgLou contended that BellSouth structured its tariff such that only large providers could obtain the best volume discounts available. BellSouth's interstate xDSL tariff provides for major discounts based on a large volume of service spread over BellSouth's nine-state region. IgLou concluded that with the given tariff price differential, " . . . , a

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<sup>3</sup> The Commonwealth of Kentucky, in the Matter of: IgLou Internet Services, Inc. vs. BellSouth Telecommunications, Inc., in Case No. 99-484, issued on November 30, 2000.

Kentucky-based ISP simply cannot compete with BellSouth in providing Internet service." (Order, page 3)

Staff believes that in order for the FPSC to adequately address customer complaints, it is necessary that xDSL service also be tariffed at the state level. Moreover, staff believes that an analysis of the components of the communications, coupled with the fact that xDSL is often provisioned over the same loop that is used to provide a customer's "POTS" service, supports the premise that xDSL service is at least in large part, jurisdictionally intrastate. Thus, staff's recommendation outlines the need for and provides support for, the dual tariffing of xDSL.

**JURISDICTION**

This Commission has jurisdiction over this matter pursuant to Sections 364.01(4), 364.04, 364.051 and 364.15, Florida Statutes.

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**DISCUSSION OF ISSUES**

**ISSUE 1:** Should the Commission order BellSouth Telecommunications, Inc., Verizon Florida, Inc., and Sprint - Florida, Incorporated to file intrastate xDSL tariffs?

**RECOMMENDATION:** Yes. The Commission should order BellSouth, Verizon and Sprint to file intrastate xDSL tariffs with this Commission within 30 days of the issuance of a Consummating Order. The ILECs' intrastate xDSL tariffs should mirror their FCC tariffs. (AUDU, DOWDS, SIMMONS)

**STAFF ANALYSIS:**

This recommendation addresses the need for the dual tariffing of xDSL service at both the federal and the state levels. In the FCC's October 1998 decision on GTE's tariff filing, it appears that the FCC was led to believe that xDSL service was exclusively marketed to ISPs, and that the ISP and its customers were generally located in separate states. On this basis, the FCC found that xDSL service was an interstate service and that GTE appropriately filed its tariffs at the federal level. This is not entirely the case today, because more ILECs are themselves becoming ISPs, thereby redefining their target market to include end user customers. This departure significantly changes the ISP/customer location consideration. These changes are significant departures from the initial assumptions under which the FCC ruled in FCC Order 98-292. Moreover, some xDSL customers may be using this service for traditional local and intrastate telecommunications. With these changes and the lack of compelling and convincing arguments on the part of the FCC on the end-to-end theory, the mixed-use facilities arguments, and the ever increasing quality of service questions arising from customers' complaints, it is necessary to consider the dual tariffing of xDSL.

**COMPONENTS OF THE SPECIFIC COMMUNICATIONS**

Opponents of the FCC's "end-to-end" analysis believe that the jurisdictional issue should be resolved by looking at the components of the specific communications. Under the components approach, there is an intrastate "telecommunications service," which ends at the ISP's local server, and an interstate "information service," which begins where the telecommunications service ends. (FCC 98-292, ¶15) With specific reference to ISP-bound traffic, one could argue that an end user's ISP could be located in a different state from the end user. However, it is

often the case that an ISP has a local point of presence where this ISP-bound traffic is aggregated before it is sent into "cyberspace." When the ISP happens to be the ILEC, the end user and the ISP's point of presence are generally located within the same local calling area. In this instance, most of the Internet bound traffic would likely be local traffic. Indeed, in Order No. PSC-00-1680-FOF-TP in Docket No. 991220-TP, Petition by Global NAPS, Inc. for the arbitration of interconnection rates, terms and conditions and related relief of proposed agreement with BellSouth Telecommunications, Inc., issued on September 19, 2000, there is reference to Global NAPS witness Rooney's testimony that ". . . end users almost never make long distance calls to their ISPs." He states that "end users select ISPs with local points of presence and local telephone numbers so that calls to the ISP will, in fact, be local." (Id. at 5) As the FCC itself noted in FCC Order 99-38,

[F]urther complicating the matter of identifying the geographical destinations of Internet traffic is that the contents of popular websites increasingly are being stored in multiple servers throughout the Internet, based on "Caching" or website "mirroring" techniques. (FCC 99-38, ¶18)

Hence, one can argue that ISP traffic to popular websites is local traffic, since these popular websites are "cached" at the ISP's server which often is located within the same local calling area as the end user customer. Apparently in recognition of this possibility, the FCC ruled that

[S]hould GTE or any other incumbent LEC offer an xDSL service that is intrastate in nature, . . . , that service should be tariffed at the state level. (FCC 98-292, ¶27)

Thus, staff believes that xDSL should also be tariffed at the state level.

#### **TWO-CALL THEORY**

The FCC disagreed for jurisdictional purposes that ISP-bound communication includes both a "telecommunications service" to the ISP serving center and an "information service" which begins thereafter. In a contrasting opinion, the FCC found a distinction between the "telecommunications services components" and "information services components" of Internet access for purposes of universal service. (FCC 98-292, ¶20). The FCC elected to rely on its characterization of the "end-to-end" nature of this

communications, in order to reach a conclusion that xDSL is an interstate service (FCC 98-292, ¶18). Due to the perceived need for a "continuous transmission" for ADSL service, the FCC classified ADSL service as interstate in nature. Staff believes that the notion of the "continuous transmission" is very suspect. Consistent with the Kentucky Order in Case No. 99-484<sup>4</sup>, staff believes that xDSL uses intrastate communications facilities from the end user premises to the ISP server; these facilities are significantly different from the Internet backbone which allows the ISP access to cyberspace. To this effect, in its vacation and remand decision of the FCC Order on Intercarrier Compensation for ISP-Bound Traffic, the United States Court of Appeals for the District of Columbia Circuit (Circuit Court) questioned the FCC's reasoning when it found that

Calls to ISPs are not quite local, because there is some communication taking place between the ISP and out-of-state websites. But they are not quite long-distance, because the subsequent communication is not really continuation, in the conventional sense, of the initial call to the ISP. (Bell Atlantic v. F.C.C., 206 F.3d 1, at 5 (D.C. Cir. 2000))

The Circuit Court observed that

ISPs in contrast, are "information service providers," . . . , which upon receiving a call originate further communications to deliver and retrieve information to and from distant websites. (Id. at 6)

The Circuit Court appeared to cast doubt on the FCC's "end-to-end" analysis, and in particular, stated that

. . . , the mere fact that the ISP originates further telecommunications does not imply that the original telecommunications does not "terminate" at the ISP. (Id. at 7)

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<sup>4</sup> Case No. 99-484, the Commonwealth of Kentucky, in the Matter of: IgLou Internet Services, Inc. vs. BellSouth Telecommunications, Inc., issued November 30, 2000, the Kentucky PSC states that "[T]his Commission has previously stated that it does not purport to regulate the Internet *per se*. However, the issue here has to do with intrastate utility service over intrastate communications facilities. See 47 U.S.C. 152(b). Although DSL is used to connect to the Internet, other uses for this service exist, . . ." (Order, page 10)

This idea is further explored in Order No. PSC-00-1680-FOF-TP which was referenced earlier. In this Order, there is reference to Global NAPS witness Goldstein's testimony that ". . . , only a very small percentage of traffic exchanged between end-users and ISPs are actually bound to or received from a distant web site." (Order, page 6) Further, witness Goldstein contended that more than 90% of ISP-bound traffic actually never goes beyond the ISP's own equipment. (Order, page 6) Witness Goldstein explained that while there is always continuous communications between end users and the ISP's modem<sup>5</sup> in order to stay in synch, these communications never go beyond those two modems. Witness Goldstein asserted that

. . . , while the end user is reviewing information received either from the ISP's database, or retrieved by the ISP from the Internet, the only communication taking place is between the end user's modem and the ISP's modem. He states that no communication goes to or comes from the Internet during that time. (Order, page 6)

For purposes of that arbitration case, the Commission relied, at least in part, on witness Goldstein's testimony in concluding that ISP-bound traffic is subject to reciprocal compensation, just the same as other calls to local telephone numbers.

Looking at the two-call theory, one can argue that the only distinctive "telecommunications service" in question is the service that exists between the end user and the ISP point of presence. From this perspective, it is clear that the only telecommunications service subject to regulatory treatment is the telecommunications service that exists between the end user and the ISP, which is largely intrastate in nature.

Under the two-call theory for ISP-bound traffic, once the transmission reaches the ISP's server, the transmission exits the public switched network and is carried henceforth to its ultimate destination via the Internet backbone. Therefore, the only portion of this traffic that would be subject to Florida regulatory oversight is the intrastate portion (i.e., the transmission between the end user and the ISP server). Thus, the predominantly intrastate nature of the telecommunications component implies the need for xDSL service to be tariffed at the state level.

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<sup>5</sup> Witness Goldstein also explained that ". . . , while an individual ISP's servers and routers are part of the Internet, the ISP's modems that connect to the end user are not." (Order, page 6)



**ANALOGOUS FX SERVICE**

A regulated service that is seemingly analogous to DSL is foreign exchange (FX) service. FX service is provisioned using a dedicated path to a central office in the foreign exchange, where access is provided to the public switched network. While the FX service differs from xDSL service, it similarly utilizes a dedicated path to a point of presence where the intended communications is implemented. FX service is tariffed at both the state and the federal levels. Staff notes that there is nothing in FCC Orders 98-292 and 98-317 that precludes the dual tariffing of xDSL service, which is akin to the dual tariffed FX service.

**MIXED-USE FACILITIES AND TRAFFIC**

In FCC Order 98-292, the FCC stated that:

GTE argues that its ADSL service is . . . , similar to existing special access services that are subject to federal regulation under the mixed-use facilities rule because more than ten percent of the traffic is interstate. . . . The Commission found that special access lines carrying more than de minimis amounts of interstate traffic to private line systems should be assigned to the interstate jurisdiction. Interstate traffic is deemed de minimis when it amounts to ten percent or less of the total traffic on a special access line. (FCC 98-292, ¶23)

Regarding mixed-use facilities and traffic, the FCC has used the ten percent de minimis threshold to decide whether particular traffic was jurisdictionally intrastate or interstate. The FCC decided that xDSL ISP-bound traffic is interstate based on the "end-to-end" nature of ISP-bound traffic. Even under the "end-to-end" analysis, however, there is no empirical data that supports the FCC's decision that ISP-bound traffic is generally comprised of more than ten percent interstate traffic. The reality is that there are undoubtedly instances when the interstate portion of the ISP-bound traffic is less than the de minimis ten percent threshold. This argument is supported by the FCC's observation that

. . . , the matter of identifying the geographical destinations of Internet traffic is that the contents of popular websites increasingly are being stored in multiple servers throughout the Internet, based on

"Caching" or website "mirroring" techniques. (FCC 99-38, ¶18)

Because of "caching" or website "mirroring," it is equally reasonable to conclude that ISP-bound traffic is predominantly intrastate. At a minimum, even under the one-call theory, xDSL ISP-bound traffic is an unknown mixture of intrastate and interstate traffics. Thus, xDSL service should also be tariffed at the state level.

Staff agrees with the FCC that it is conceivable that a single call to an ISP could be bound for an intrastate, interstate or international destination; however, it is also possible that the same call could easily cover all three jurisdictions. (FCC 98-292, ¶22) Depending on the locations of the end user and the ISP's server, it is possible that with different calls and times, any one of these scenarios is possible at a level greater than the ten percent de minimis threshold. Further, in making its decision, the FCC expressed its uncertainty when it stated:

. . . , we believe federal tariffing of ADSL service is appropriate where the service will carry more than a de minimis amount of inseparable interstate traffic. (FCC 98-292, ¶27). (emphasis added)

Staff believes that in using the word "where," the FCC anticipated there could be situations where the interstate portion of ISP-bound traffic will be less than the ten percent de minimis threshold. Thus, staff believes that xDSL service should also be tariffed at the intrastate level.

#### **QUALITY OF SERVICE**

Both at the national and state levels, there have been numerous customer complaints outlining difficulties that customers have experienced in attempting to take advantage of the dedicated path that xDSL is intended to provide. While state commissions are handicapped in resolving xDSL complaints due to the jurisdictional issue, customers nonetheless look to state commissions for resolution of their complaints. Customers are losing patience with this situation and using Internet news groups to vent their frustrations. Two Internet sites that stand out in posting customers' experiences and opinions on xDSL are "epinions.com/cmd-review" and "dslreports.com/shownews." On these sites, customers' opinions are split between the relief that is realized from an xDSL fast access connection, and the general frustration that is associated with establishing xDSL service.

According to the "Cyberguide" of the Miami Herald: Super-fast access is a bumpy thrill, ". . . , the deployment of high-speed connections comes with glitches and outages." (Cyberguide, herald.com). This opinion is echoed in a CNET.com article:

[T]he challenge of meeting broadband subscriber goals is not solely SBC's. Dozens of high-speed Internet access providers are racing to sign up customers quickly. But costly and difficult network upgrades, cumbersome installation processes and modem shortages have affected many providers.

(Corey Grice, CNET.com-News-Communications)

The deployment of xDSL is not without challenges for both communications carriers and customers. Customers' complaints associated with obtaining xDSL service include poor customer service, unreliable service, long waits for installation appointments, uninformed customer service representatives and sometimes untrained technicians. Opinions on these same general subjects are expressed by customers all over the nation. These problems are not unique to any one incumbent LEC, but are associated with the deployment of xDSL service in general. From the various Internet news groups, opinions expressed indicate that it can take from as little as a few days, to as long as four weeks to have xDSL service installed at a customer's premises. However, reliability is definitely another "animal." Customers recounted stories of outages that last anywhere from a few days to about two months with no reasonable explanation from the carriers. A customer of BellSouth.net writes that in his opinion that xDSL service, ". . . , can not be your only access to the Internet or you will go without." (M1james, Epinions.com - Reviews of BS = BellSouth) Another customer indicated, "[T]hat BellSouth.net ADSL support news groups are full of complaints about the uneven service . . ." (niel, Epinions.com - Reviews of FastAccess or No Access?)

From September 2, 1999 through January 10, 2001, the Commission has received and processed (i.e., closed) 100 cases involving xDSL. Between September 1999 and August 2000, the FPSC processed approximately 50 complaints with more than half of these cases forwarded either to the Division of Consumer Services, Department of Agriculture or to the Federal Communications Commission (FCC), due to the issue of the Commission's jurisdiction and the fact that these services are not tariffed at the state level. From September 2000 through January 10, 2001, the FPSC processed an additional 50 complaints, all of which were handled by Commission staff. Looking at these numbers, one will notice that

the number of complaints is steadily increasing. Indeed, while staff processed approximately four complaints per month on average between September 1999 and August 2000, this number grew to approximately 12 complaints per month on average between September 2000 and January 2001. This is approximately a 200% growth.

The above cases involved complaints such as drawn-out installation intervals, frequent and lengthy outages, persistent billing problems, etc. While Florida customers cherish the fast access, they are apparently disappointed with the customer service they are provided when they call to report service problems.

Of the complaints processed by the Commission, over 25% were forwarded to either the FCC or the Division of Consumer Services. Prior to September 2000, over 70% of these complaints were forwarded to either the FCC or the Division of Consumer Services. xDSL is not an exclusive offering of the ILECs. Indeed, the ALECs are aggressively marketing xDSL to both ISPs and end user customers. Accordingly, the Commission has begun to receive complaints against the ALECs.

Although Florida consumers depend on the FPSC to assist them with these types of problems, in more than a quarter of these cases, the Commission has not been able to assist them due to lack of cooperation from company representatives. In the instances in which these cases have been handled by the Commission, it appears that resolution has been achieved at the ILEC's discretion.

Staff has limited the focus of this recommendation only to BellSouth, Verizon and Sprint because the majority of the complaints the Commission has processed, to date, concern these ILECs. However, if this trend changes to include other providers, staff believes those cases should be reviewed to determine whether they should be required to make similar filings for their intrastate xDSL services.

**xDSL COMPLAINTS PROCESSED BY THE COMMISSION FROM 9/99 - 1/10/01**

	Handled by the Commission	Division of Consumer Services	Federal Communications Commission	TOTAL
Sprint	12	0	3	15
Verizon	16	0	1	17
BellSouth	43	5	19	67
Others	1			1
Total	72	5	23	100

**xDSL SERVICE AS A NEW FORM OF "POTS"**

A key advantage of xDSL service is that it can be provided in conjunction with "POTS" service over a single loop. Where provisioned in this manner, customers would be justified in expecting that the quality of service (especially installation and repair intervals) would not deteriorate. Moreover, under this single loop scenario, since the "POTS" service is jurisdictionally intrastate, it would be reasonable to conclude that the xDSL service is jurisdictionally intrastate, too.

In addition, for certain customers and applications, xDSL may soon be a necessity, in the same sense as "POTS" has been viewed as a necessity for the past several decades. For example, business-to-business applications such as ordering and inventory control may require that even a small business have xDSL service. As there are technological advancements, the manner in which companies and households conduct their daily affairs will inherently change, and so will their means of basic communication.

**CONCLUSION**

In summary, staff believes that Florida's xDSL customers deserve better service for this premium offering. Moreover, staff believes that based on the components of the communications and the fact that xDSL service is often provisioned using the same loop used to provide traditional "POTS," the service is at least in significant part, jurisdictionally intrastate. Staff believes that ILECs are not disadvantaged with the dual tariffing of xDSL service. Thus, staff recommends that the Commission should order

DOCKET NO. 001332-TL  
DATE: JANUARY 25, 2001

BellSouth, Verizon and Sprint to file intrastate xDSL tariffs with this Commission within 30 days of the issuance of a Consummating Order. The ILECs' intrastate xDSL tariffs should mirror their FCC tariffs.

DOCKET NO. 001332-TL  
DATE: JANUARY 25, 2001

**ISSUE 2:** Should this docket be closed?

**RECOMMENDATION:** Yes. If no person whose substantial interests are affected files a protest within 21 days of the issuance date of the Order, the Order will become final upon the issuance of a Consummating Order. Thereafter, tariffs should be filed within 30 days of the issuance of the Commission's order. This docket should be closed after tariffs have been filed. If a timely protest is filed, the docket should remain open pending the outcome of further proceedings. (CHRISTENSEN)

**STAFF ANALYSIS:** If no person whose substantial interests are affected files a protest within 21 days of the issuance date of the Order, the Order will become final upon the issuance of a Consummating Order. Thereafter, tariffs should be filed within 30 days of the issuance of the Commission's order. This docket should be closed after tariffs have been filed. If a timely protest is filed, the docket should remain open pending the outcome of further proceedings.