



**Qwest**  
607 14<sup>th</sup> Street, NW, Suite 950  
Washington, DC 20005  
Phone 202.429.3121  
Fax 202.293.0561

**Cronan O'Connell**  
Vice President-Federal Regulatory

*EX PARTE*

November 2, 2004

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., TW-A325  
Washington, DC 20554

RE: *In the Matters of IP-Enabled Services, WC Docket No. 04-36; Vonage Holdings Corporation Petition for Declaratory Ruling, WC Docket No. 03-211*

Dear Ms Dortch:

There are two fundamental concepts that Qwest would like to address in this proceeding. In particular, it is important for the Commission to ensure that artificial and harmful regulatory distinctions are not inadvertently created among providers of IP-Enabled services, including IP voice applications. First we address the concept that the Internet can be classified as “public” versus “private” and that the Commission can meaningfully address, on a separate basis, only those IP-Enabled service providers who route specific and identifiable messages over the Internet backbone facilities of non-affiliated providers. IP-Enabled communications include all IP communications over the collection of computers and fiber that comprises the public Internet, and it would not be rational to try to separate out specific physical “pieces” of the public Internet based on who owns what particular fiber and/or computers. The second concept is that providers of IP voice applications who provide “managed” IP services (generally consisting of quality of service standards) can thereby determine the geographic location of the user, further permitting regulators to chop the public Internet on that basis into discrete regulatory segments for regulatory purposes.<sup>1</sup>

As an initial proposition, it would be arbitrary and capricious if the Commission, in dealing with IP-Enabled services, including IP voice applications such as are provided by Vonage and Qwest, to establish a regulatory structure which discriminated against the owners of Internet backbone facilities. There is no evidence to support any such discriminatory treatment, nor is there any evidence to support a conclusion that the fundamentally interstate nature of the Internet becomes less so based on who owns the fiber and computers that are used to route any individual IP

---

<sup>1</sup> In submitting this letter, Qwest continues to believe that the most propitious course for the Commission to take in evaluating the jurisdictional issues attendant to Internet regulation is to follow the mandate of Section 230(b)(2) of the Act, which directs the Commission to preserve the free competitive market for the Internet free from federal and state regulation. Qwest submits that this is a statutory command and that the Commission is not free to permit states to regulate IP-Enabled services, even if some undeniably intrastate IP-Enabled services could be identified.

communication. What makes the Internet work is the mutual cooperation (peering) of all IP backbone providers in a manner that permits seamless operation that permits the entire public Internet to function.<sup>2</sup>

The first concept derives from the erroneous belief that a regulatory distinction can be drawn between so-called “private” Internet communications and communications using what is commonly viewed as the “public Internet.” While it is, of course, possible to have a completely closed IP network that does not physically permit communication beyond the boundaries of that network, the concept of “private Internet communications” is often used to describe something quite different. Specifically, some argue that a “private Internet communication” is one between two customers of a single Internet backbone provider, established by that provider, and which never leaves the fiber/computer facilities of that Internet Service provider. This is not a valid classification. If the fiber and computers that establish the communication are themselves part of the public Internet, the communications are likewise considered as communications on the public Internet, regardless of how the IP protocol routes the communications and regardless of the identities of the end points of the communications. The seamless nature of the public Internet precludes drawing a distinction based on whether a specific communication transits multiple IP backbone facilities.

The “public Internet” is a collection of sets of computers and fiber that comprise multiple networks that interact with each other on a peering basis based on IP routing protocols. As a general principle, the outer physical boundary of the public Internet can be defined as beginning with the edge routers that directly advertise the addresses of the routes that they serve to their peering partners. All communications over this “public Internet” follow the routes and paths specified by the IP routing protocols that govern their routing.

If the recipient of the message is an end point that is also on the facilities of the originating provider, it is highly likely that the message will never leave the network of the originating provider during the entire transmission. This does not mean that the communication is a “private” Internet message from the perspective of the facilities of the backbone provider. It is simply a routing function of the IP protocol, which determines the best route for each IP packet.

Qwest is a provider of IP backbone facilities. In the case of Qwest’s IP voice application, this means that, when the Qwest customer is also a Qwest broadband customer, the IP protocol routes the call to a Qwest end-point over Qwest’s Internet backbone facilities. However, when the Qwest IP voice customer connects to Qwest over the broadband connection of another Internet provider, the IP protocol works in exactly the same fashion and starts the communication on the network of that originating provider — even if the other end point is a Qwest IP connection. In neither case is the fundamentally “nomadic” character of the communication altered by the

---

<sup>2</sup> A regulatory structure that penalizes those entrepreneurs who actually went out and participated in constructing the public Internet would be inconsistent with the Commission’s mandate with regard to the Internet and broadband deployment in general.

nature or the identity of the Internet backbone provider. In fact, if a Vonage IP voice application uses a Qwest broadband connection to call another Vonage IP voice customer also connected to the Internet via Qwest, exactly the same routing phenomenon would occur.

In short, it is not accurate to declare that a communication over a portion of the “public Internet” that does not leave the fiber/computer facilities of a single Internet provider is a private Internet communication. Any such distinction would be artificial and misleading, and ultimately could impede the ability of the Internet to continue to expand to reach the maximum number of users.

A second and related concept has arisen over whether the definition of “managed” or “mediated” Internet services might provide a useful tool for distinguishing, for regulatory and jurisdictional purposes, between IP-Enabled services and other Internet functions that might not be covered by the IP-Enabled definition. It cannot. The distinction is set forth in the Commission’s CALEA NPRM and Declaratory Ruling at paragraph 37.<sup>3</sup>

Law Enforcement distinguishes managed communications from “non-managed” or “peer-to-peer” communications, which involve disintermediated communications that are set up and managed by the end use via its customer premises equipment or personal computer. In these non-managed, or disintermediated, communications, the VOIP provider has minimal or non involvement in the flow of packets during the communication, serving instead primarily as a directory that provides users’ Internet web addresses to facilitate peer-to-peer communications.”

In the CALEA NPRM, the Commission was focusing on the inability of a “disintermediated” service to determine the geographic location of the end-points of an IP communication, and cites to the pulver.com service as an example of such a “disintermediated” service.<sup>4</sup> The concept seems to be that, if an IP-enabled service provider offers features commonly seen in circuit networks such as quality of service (“QoS”) control, this means that the IP-enabled service provider can also control and determine the geographic end-points of that specific call in real time to permit jurisdictional parceling of IP-enabled services which offer such features. This type of reasoning by analogy from the circuit network is simply not valid. QoS and other features, when offered as part of IP-enabled services, are functions of the structure of the packets themselves, and the treatment of them by “QoS” aware routers. They do not represent a deviation from the routing principles that make the Internet function, or introduce a new

---

<sup>3</sup> *In the Matter of Communications Assistance for Law Enforcement Act and Broadband Access and Services, Notice of Proposed Rulemaking and Declaratory Ruling*, 19 FCC Rcd 15676 ¶ 37 (2004).

<sup>4</sup> *In the Matter of Petition for Declaratory Ruling that Pulver.com’s Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, 19 FCC Rcd 3307 ¶¶ 5-6 (2004). The *Pulver Order* deals solely with IP voice communications that never touch the public switched network. In the case of such communications, the Pulver service and the Qwest service are generally identical in terms of how the dynamic addressing function is performed. The Pulver service now permits subscribers to launch calls to the PSTN and to receive calls from PSTN subscribers.

Ms. Marlene H. Dortch, Secretary  
November 2, 2004

Page 4 of 4

mechanism to relate physical location information (*e.g.*, 123 Main Street) to an IP address, and they do not create an analog to a hard-wired circuit that would permit the public Internet to be regulated like a circuit network.

In a typical IP voice application, including the Qwest IP voice service, it is simply not possible to determine accurately (certainly not in “real time”) the physical location of the end-points of a call even if QoS and similar features are offered. In those cases where the Qwest IP voice customer utilizes the broadband connection of another provider, the service will function in precisely the same manner as does the Vonage service, and Qwest’s first contact with the call will be at the Qwest IP voice server. In the case of a customer who accesses the server via a Qwest broadband connection, even though Qwest can determine the physical location of the broadband connection itself, it cannot determine whether that is where the customer is physically located at the time of the initiation of the call (in all events, it would be totally irrational to distinguish between customers using the Qwest service based on whether they used a Qwest broadband connection). When a customer wants Qwest to know its physical location (*e.g.*, for 911 service), the customer must register with Qwest and tell Qwest where it is located. As dynamic ‘address mapping’ standards are determined in the IP community (similar to analogous developments in the cellular networks) and the Internet infrastructure is updated to accommodate them, Qwest IP voice services will embrace these standards. In other words, even assuming that the “mediated” and “disintermediated” distinction might be workable in determining CALEA obligations, the distinction has no utility in distinguishing among IP-Enabled services and IP voice applications and determining that some, but not all, must be subject to exclusive federal jurisdiction. All IP-Enabled services, including all IP voice applications, must be subject solely to federal jurisdiction, whether or not features such as QoS are available.

Sincerely,

/s/ Cronan O’Connell

cc: Christopher Libertelli ([christopher.libertelli@fcc.gov](mailto:christopher.libertelli@fcc.gov))  
Matthew Brill ([matthew.brill@fcc.gov](mailto:matthew.brill@fcc.gov))  
Dan Gonzalez ([dan.gonzalez@fcc.gov](mailto:dan.gonzalez@fcc.gov))  
Jessica Rosenworcel ([jessica.rosenworcel@fcc.gov](mailto:jessica.rosenworcel@fcc.gov))  
Scott Bergmann ([scott.bergmann@fcc.gov](mailto:scott.bergmann@fcc.gov))  
Jeffrey Carlisle ([jeffrey.carlisle@fcc.gov](mailto:jeffrey.carlisle@fcc.gov))  
Michelle Carey ([michelle.carey@fcc.gov](mailto:michelle.carey@fcc.gov))  
Tom Navin ([thomas.navin@fcc.gov](mailto:thomas.navin@fcc.gov))  
Julie Veach ([julie.veach@fcc.gov](mailto:julie.veach@fcc.gov))  
Terri Natoli ([terri.natoli@fcc.gov](mailto:terri.natoli@fcc.gov))