

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Level 3 Communications LLC	)	
	)	WC Docket No. 03-266
Petition for Forbearance Under	)	
47 U.S.C. § 160(c) from Enforcement	)	
of 47 U.S.C. § 251(g), Rule 51.701(b)(1)	)	
and Rule 69.5(b)	)	
	)	

**REPLY COMMENTS OF  
VONAGE HOLDINGS CORP.**

**I. INTRODUCTION**

Vonage Holdings Corp. (“Vonage”), by undersigned counsel, submits these reply comments concerning Level 3 Communications LLC’s forbearance petition (“Level 3 Petition”). Vonage is an end user of telecommunications services and purchases retail services to connect to the public switched telephone network (“PSTN”). Because Vonage is not a telecommunications carrier with interconnection rights, Vonage contracts with carriers to transport communications to destinations on the PSTN.<sup>1</sup> As a consumer of telecommunications services, Vonage recognizes that the current intercarrier compensation scheme is broken and in dire need of reform. Vonage believes that there is an immediate need for a solution that encourages the continued deployment of broadband networks and applications and does not recommend expanding the application of an asymmetrical or broken access charge system to non-geographic IP-enabled services.

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<sup>1</sup> A detailed description of Vonage’s service can be found in the Company’s Petition for a Declaratory Ruling. *See* Petition for Declaratory Ruling, *In the Matter of Vonage Holdings Corporation Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission*, WC Docket No. 03-211 (filed Sept. 22, 2003).

## II. THE FCC SHOULD NOT APPLY A BROKEN INTERCARRIER ACCESS CHARGE REGIME TO VOIP SERVICES

The intercarrier compensation scheme is irrational in part because traffic exchanged between the same two geographic end points is not subject to similar compensation obligations. Different compensation mechanisms apply depending on the type of carrier handling the traffic and can vary further depending on the characterization of the traffic by the carriers.<sup>2</sup> Despite the fact that the charges are assessed on what is, at base, the same functionality – originating, transporting, and terminating communications destined either to or from the network of another carrier – the existing intercarrier compensation scheme assesses charges inequitably.

IP networks do not track the geographic endpoints of IP communications. The nexus of geography and the communications service is at the center of the existing access charge system. When applied to traditional, circuit-switched communications, telephone numbers serve as a proxy for the locations of the caller and the called party. IP-enabled services do *not* allow carriers to make geographic assumptions based on telephone numbers.<sup>3</sup> As the Commission explained in the *Pulver Order*, the physical location of users of the Free World Dialup (“FWD”) service can continually change.<sup>4</sup> The same is true for users of Vonage’s IP-enabled service and the services described in the Level 3 Petition. So long as the Vonage customer has access to a broadband Internet access

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<sup>2</sup> See Notice of Proposed Rulemaking, *Developing a Unified Intercarrier Compensation Regime*, CC Docket 01-92, FCC 01-132 ¶ 5 (rel. April 27, 2001).

<sup>3</sup> See *Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) and Section 1.53 of the Commission’s Rules from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1), and Rule 69.5(b)*, WC Docket No. 03-266 (filed Dec. 23 2003) (“Level 3 Petition”).

<sup>4</sup> See *Petition for Declaratory Ruling that Pulver.com’s Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, Memorandum Opinion and Order ¶ 20, FCC-04-27 (rel. Feb. 19, 2004) (“*Pulver Order*”).

connection and their multimedia terminal adapter (“MTA”),<sup>5</sup> a Vonage customer is able to place and receive calls from *any* location using a single telephone number. Vonage, as well as other IP-enabled services, allow for disassociating geographically-assigned telephone numbers from the fixed geographic point associated with the PSTN number assignment. As technology evolves, Vonage will empower customers to choose the IP-enabled device that originates or terminates communications.

Developing technologies and modifying networks to track location would divert capital to unproductive uses solely to support the badly-broken access charge regime and “would improve neither service nor efficiency”<sup>6</sup> of IP-enabled communications. In the *Pulver Order*, the Commission recognized that it was impractical to separate out the interstate and intrastate components of a FWD communication.<sup>7</sup> While the Commission uses traditional end-to-end analysis to jurisdictionally separate circuit-switched traffic, such an approach fails when applied to FWD because “the concept of ‘end points’ has little relevance.”<sup>8</sup> The Commission further explained that requiring pulver.com to “locate its members for the purposes of adhering to a regulatory analysis that served another network would be forcing changes on this service for the sake of regulation itself, rather than for any particular policy purpose”<sup>9</sup> and that “[t]racking FWD’s packets to determine

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<sup>5</sup> Vonage customers will no longer need to utilize their MTA if they install specialized computer software on their personal computers. Vonage recently announced the availability of a new software product that allows Vonage customers to download a “softphone” application to their computers allowing customers to start making and receiving telephone calls immediately on their computers. *See* Press Release, Vonage Holdings Corp., Vonage Selects Xten’s X-Pro As The “Softphone Of Choice” (Mar. 23, 2004).

<sup>6</sup> *Pulver Order*, ¶ 24.

<sup>7</sup> *See id.* ¶ 21.

<sup>8</sup> *Id.* ¶ 21.

<sup>9</sup> *Id.* ¶ 21.

their geographic location would involve the installation of systems that are unrelated to providing its service to end users.”<sup>10</sup>

The same limitations associated with traditional end-to-end analysis described by the Commission in the *Pulver Order* applies equally to Vonage’s IP-enabled service and to services described in the Level 3 Petition. The IP endpoints of an IP-enabled service are known only to the end user of the IP-enabled service. Were such systems ever developed to track these IP endpoints—an unlikely prospect—any attempt to segregate IP-enabled communications into interstate and intrastate components “would involve the installation of systems that are unrelated to providing [the] service to end users.”<sup>11</sup> Such systems would impose compliance costs on Vonage and IP-enabled service providers that “would be designed simply to comply with legacy distinctions between federal and state jurisdictions[,]”<sup>12</sup> that “do not appear to serve any legitimate policy purpose”<sup>13</sup> and “would improve neither service nor efficiency.”<sup>14</sup> Accordingly, it makes no economic sense to devote resources to developing a useless and inefficient functionality.<sup>15</sup>

Many parties agree that since the endpoints of IP-enabled services are unknown, such services are interstate in nature and subject only to the Commission’s jurisdiction.<sup>16</sup>

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<sup>10</sup> *Pulver Order*, ¶ 24.

<sup>11</sup> *Id.* ¶ 24.

<sup>12</sup> *Id.* ¶ 24.

<sup>13</sup> *Id.* ¶ 24.

<sup>14</sup> *Id.* ¶ 24.

<sup>15</sup> See also Petition of SBC Communications Inc. for Forbearance, *In the Matter of Petition of SBC Communications Inc. for Forbearance from the Application of Title II Common Carrier Regulation to IP Platform Services* at 38, WC Docket No. 04-29 (filed Feb. 5, 2004).

<sup>16</sup> Even if the locations of Vonage’s customers were somehow relevant to their use of Vonage’s service, Vonage’s portable nature without fixed origination or termination points means that no one but the Vonage customer themselves know where the endpoints of the communications are. See, e.g., *Pulver Order*, ¶ 21; see also Comments of ICG Telecom Group, Inc., *In the Matter of Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1) and Rule 69.5(b)* at 3, WC Docket No. 03-266 (filed Mar. 1, 2004) (arguing that superimposing regulations developed for circuit-switched telephony onto IP-enabled services is problematic as LECs do not have the ability to segregate traffic into interstate and intrastate components);

Specifically, AT&T supports Level 3's petition and emphasizes that since it is impossible to determine the origination or termination of an IP-enabled communication, the Commission should find that IP-enabled services are subject to the Commission's exclusive jurisdiction and preempt state regulation.<sup>17</sup> Global Crossing states that IP-enabled services are configured in a way that the jurisdictional nature of the communication is "not readily discernable."<sup>18</sup> MCI highlights the fact that traditional categories used to classify communications traffic "have become historical artifacts" when applied to IP-enabled traffic.<sup>19</sup> SBC emphasizes that IP-based services are interstate information services that are not subject to common carrier regulation<sup>20</sup> and Verizon highlights the fact that IP-enabled services are interstate in nature because there is no means to determine the geographic location of the IP caller.<sup>21</sup> IP-enabled services elude traditional end-to-end analysis and superimposing the existing access charge regime on such services is infeasible. Further, it would be irrational to impose

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Comments of Pinpoint Communications Inc., *In the Matter of Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1) and Rule 69.5(b)* at 2, WC Docket No. 03-266 (filed Mar. 1, 2004) (observing that IP-enabled services are intrinsically different than services provided over the circuit-switched network and transcend geography); Comments of the Progress and Freedom Foundation, *In the Matter of Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1) and Rule 69.5(b)* at 1, WC Docket No. 03-266 (filed Mar. 1, 2004) (noting that IP-enabled services are inherently interstate).

<sup>17</sup> Comments of AT&T Corp., *In the Matter of Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1) and Rule 69.5(b)* at 4-8, WC Docket No. 03-266 (filed Mar. 1, 2004).

<sup>18</sup> Comments of Global Crossing North America Inc., *In the Matter of Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1) and Rule 69.5(b)* at 6, WC Docket No. 03-266 (filed Mar. 1, 2004).

<sup>19</sup> Comments of MCI, *In the Matter of Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1) and Rule 69.5(b)* at 7, WC Docket No. 03-266 (filed Mar. 1, 2004).

<sup>20</sup> Opposition of SBC Communications Inc., *In the Matter of Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1) and Rule 69.5(b)* at 5, WC Docket No. 03-266 (filed Mar. 1, 2004); *see also* SBC Petition at 34 ("It is practically infeasible, if not impossible, to identify a segregable intrastate component of a communication provided using an IP platform service.").

<sup>21</sup> *See* Comments of the Verizon Telephone Companies, *In the Matter of Level 3 Communications LLC Petition for Forbearance Under 47 U.S.C. § 160(c) from Enforcement of 47 U.S.C. § 251(g), Rule 51.701(b)(1) and Rule 69.5(b)* at 4-5, WC Docket No. 03-266 (filed Mar. 1, 2004).

access charges on new IP services only to remove them later after a likely transition to bill and keep. The Level 3 Petition allows the Commission to maintain the status quo, establish regulatory certainty and adopt a rational interim compensation scheme until such time as the access charge system is globally reformed by the Commission or the telecommunications industry.

### **III. APPLYING THE BROKEN ACCESS CHARGE SYSTEM TO IP-ENABLED SERVICES BEFORE REFORM WOULD HARM INNOVATION AND SLOW BROADBAND DEPLOYMENT**

Applying the current broken system of access charges to IP-enabled services without reform would impede innovation and slow the deployment of broadband networks to citizens of the United States. IP-enabled services, such as Vonage's service offering, provide consumers with powerful communications technology that delivers voice and data in an efficient manner. Vonage is continually improving its product and adding new features. The Level 3 Petition seeks to remove market uncertainty concerning the applicability of a legacy access charge framework to new and innovative IP-PSTN services and allows IP-enabled service providers, and the carriers that provide them telecommunications services, to focus on improving their product offering and enhancing the capabilities of their services.

Providers of IP-PSTN traffic also spur the adoption of broadband services, creating demand for broadband networks, and furthering the goals of Section 706 of the Telecommunications Act to achieve universal broadband for all Americans. President Bush recently recognized the importance of broadband deployment by stating "[w]e ought to have universal, affordable access to broadband technology by the year 2007 . . .

.”<sup>22</sup> The United States is lagging behind the rest of world in terms of broadband penetration rates. A recent report places the broadband penetration rate in the United States at 6.89 subscribers per 100 people, ranking the United States 11<sup>th</sup> in the world.<sup>23</sup> Further analysis illustrates the expansive gap between the United States and Korea, Hong Kong and Canada that have broadband penetration rates of 21.28, 14.90 and 11.19 subscribers per 100 people, respectively.<sup>24</sup> Imposing a broken legacy access charge system on new and innovative IP-PSTN communications will further impede the deployment of broadband networks and widen the alarming gulf of broadband penetration rates between the United States and the rest of the world.

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<sup>22</sup> Remarks of President Bush at the 24<sup>th</sup> Annual Homebuilders and Remodelers Showcase, Albuquerque, New Mexico, March 26, 2004.

<sup>23</sup> *Birth of Broadband*, ITU Internet Reports, Table A-12 (Sept. 2003). The term “broadband” is defined in the ITU Report as “transmission capacity with sufficient bandwidth to permit combined provision of voice, data and video with no lower limit. Effectively, broadband is implemented mainly through ADSL, cable modem or Wireless LAN . . . services.” *Id.* at Glossary.

<sup>24</sup> *See id.*

#### **IV. THE FCC SHOULD FIX THE INTERCARRIER COMPENSATION SYSTEM AS QUICKLY AS POSSIBLE**

Rather than applying the broken legacy access charge system to IP-PSTN communications, the Commission should fix the intercarrier compensation system immediately. Failure to fix the system will continue to impede the development and deployment of broadband services and could ultimately place the United States at a significant competitive disadvantage. If the low broadband penetration rates in the United States persist, broadband application development will gravitate to marketplaces that possess the greatest consumer demand for such services. Without a robust broadband network, the economic incentive to leverage existing resources and develop innovative technologies will be lost to those countries that are successful in deploying broadband networks at an affordable price to consumers. One significant hurdle standing in the way of widespread broadband adoption in the United States is the price for such services.<sup>25</sup> By encouraging the development of broadband applications, the Commission can stimulate demand for broadband networks. There are many companies, including Vonage, that would like to continue to improve and expand the range of the IP-enabled services available in the marketplaces. The existing legacy access charge system and the regulatory uncertainty that surrounds the provision of IP-enabled services chills investment in broadband applications and networks. The Commission must not compound the harm by applying the inherently flawed geographically-based access charge system to IP-enabled services; instead, the Commission should facilitate broadband penetration through reform of the legacy access charge system.

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<sup>25</sup> See John Barrett, *VoIP: At Last a Killer App?*, Parks and Associates § 3.0 (concluding that VoIP could be a “killer app” for broadband if the service and the underlying broadband service cost roughly \$60 a month) (rel. Jan. 2004).

## VI. CONCLUSION

Vonage submits that applying a legacy access charge system to packet-switched networks is impractical, inefficient and bad policy in part because such networks do not currently track the geographic point of origination or termination of communications. Further, the underlying problem with the access charge system is the system itself. A broken system should not be applied to new IP-enabled services. The imposition of a failed legacy access charge system could result in stifling “killer applications” that are spurring demand for broadband services and fostering the deployment of broadband networks and broadband penetration throughout the United States.

Respectfully submitted,

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