



August 16, 2010

VIA ECFS

Ms. Marlene H. Dortch  
Office of the Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Suite TW-A325  
Washington, DC 20554

**Re: ET Docket No. 04-35; WC Docket No. 05-271; GN Docket Nos. 09-47, 09-51, 09-137; In the Matter of Comments—Public Safety and Homeland Security Bureau Seeks Comment on Whether the Commission’s Rules Concerning Disruptions to Communications Should Apply to Broadband Internet Service Providers and Interconnected Voice over Internet; Reply Comments to NOI released July 2, 2010**

Dear Ms. Dortch:

Please find attached comments to the Notice of Inquiry issued in the above referenced proceeding, filed today at the Commission. A copy has been electronically filed in each proceeding, as instructed. Electronic copies have also been provided via email to Best Copy and Printing.

Sincerely,

A handwritten signature in blue ink that reads "Matthew Tennis".

Matthew Tennis  
Legal Counsel  
Sr. Regulatory Analyst

Cc: Best Copy and Printing, Inc. via email (fcc@bcpiweb.com) (1)

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

<b>In the Matter of</b>	)	
	)	
<b>Comments—Public Safety and Homeland Security Bureau Seeks Comment on Whether the Commission’s Rules Concerning Disruptions to Communications Should Apply to Broadband Internet Service Providers and Interconnected Voice over Internet Protocol Service Providers</b>	)	<b>ET Docket No. 04-35  WC Docket No. 05-271  GN Docket Nos. 09-47; 09-51; 09-137</b>

**REPLY COMMENTS OF RNK COMMUNICATIONS**

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**REPLY COMMENTS OF RNK COMMUNICATIONS**

In response to the Public Safety and Homeland Security Bureau (PSHSB) Notice in advance of a potential Notice of Proposed Rulemaking, as to whether the Commission should extend current rules governing service disruption reporting requirements to providers of interconnected Voice over Internet Protocol (VoIP) services and broadband Internet Service Providers (ISPs),<sup>1</sup> RNK, Inc. d/b/a RNK Communications (“RNK”) hereby respectfully submits the following reply comments.

**I. INTRODUCTION & SUMMARY**

RNK is a Massachusetts based Integrated Communications Provider, marketing local and interexchange telecommunications services, as well as Internet services and IP-enabled services. RNK and/or its affiliates are certified facilities-based Competitive Local Exchange Carriers

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<sup>1</sup> *Public Safety and Homeland Security Bureau Seeks Comment on Whether The Commission’s Rules Concerning Disruptions To Communications Should Apply to Broadband Internet Service Providers and Interconnected Voice over Internet Protocol Service Providers*, ET Docket No. 04-35, WC Docket No. 05-271, GN Docket Nos. 09-47, 09-51, 09-137, Public Notice, DA 10-1245 (rel. July 2, 2010) (Notice).

and/or interexchange carriers in Connecticut, the District of Columbia, Florida, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Virginia, with authority to resell certain telecommunications services in Maine, Texas and Vermont, as well as international §214 authority from the Federal Communications Commission. Via its own facilities, RNK serves a variety of customers with a broad range of telecommunications and non-telecommunications services.

Under the Commission's current reporting rules,<sup>2</sup> wireline, wireless, cable and satellite service providers are required to provide notice to the Commission of certain service disruptions, which the Commission has not yet extended such requirements to VoIP providers and ISPs. In its Notice, the PSHSB inquires as to whether these service providers should be subject to the same reporting rules at all, and if so, under what conditions.<sup>3</sup>

RNK notes the Commission's recognition that Americans are increasingly relying on IP-based technologies such as VoIP as substitutes or complements to more conventional communications technologies,<sup>4</sup> but the Commission should not seek to address these issues by extending the reporting requirements of the last century to include VoIP providers and ISPs. Doing so would impose onerous, monopoly-era requirements, whose initial purpose was to monitor the sole provider of voice communication to an area, to services and providers that blur, and even defy, conventional notions of "outages" or "disruption in service," and may divert resources away from network management, impeding network stability. The Commission should not apply regulations appropriate to legacy networks to newer communications technologies. While the health of the nation's communications networks is fundamental to the

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<sup>2</sup> The Commission's service disruption reporting rules are codified under 47 C.F.R. § 4.1-4.13.

<sup>3</sup> See Notice at 2-3. Among a wide range of topics, the PSHSB inquiries include whether both facilities and non-facilities based VoIP providers should be required to provide reports, and reasonable criteria for threshold outage reporting requirements.

<sup>4</sup> *Id.* at 1 *And See* Comments of Vonage at 2.

functioning of our country, other regulatory regimes already exist, in addition to the forces of the marketplace, to safeguard network health.

## **II. DISCUSSION**

RNK strives to maintain the availability and reliability of its services, including safeguarding the integrity and efficiency of its service networks. Being involved in the highly competitive environment of VoIP and Internet service, RNK is well aware of the business necessity of keeping its networks running smoothly and securely. Our survival depends in part on our ability to maintain and protect the health of our networks.

Network stability is promoted by several mechanisms. Redundancy is used to ensure multiple communications routes are available, not only from a business efficiency perspective, but also to minimize the effect and duration of any diminished network capacity our networks may experience. In addition, our networks are monitored for traffic flow analysis and internal error reporting processes. By keeping track of this information on a real time basis, we can stay on top of any developments and address issues as they occur. Customer reporting/service is also an important component of network stability. Taken together, these practices promote the availability and reliability of RNK's networks and we devote significant time and resources to these measures.

While RNK already adheres to the Commissions reporting rules in its capacity as a provider of competitive telecommunications services, such as wireline communications services, the addition of new requirements in the VoIP and ISP space would impose an unnecessary burden on our business. The competitive nature of emergent IP-based technologies make market forces a strong driver of network service practices. If supply cannot keep pace with demand, end users will go to other providers who can deliver. Excessive outages, poor network capacity,

quality of service issues, etc., will rapidly diminish a provider's market share in this competitive environment. Thus market forces already adequately promote network health and stability.<sup>5</sup> Furthermore, if we were forced to add new regulatory requirements onto our existing compliance practices, resources may be diverted from areas more directly tied to network stability to unnecessary additional reporting requirements. Imposing additional regulatory requirements will inevitably have a monetary impact on companies providing such services as compliance regimes are put in place, employees are educated and regulatory staffs address these new requirements. The Commission maintaining the regulatory status quo in this case will represent the best use of regulatory authority to promote network stability.

These market forces obviate the need for extension of the reporting requirements to VoIP providers and ISPs.<sup>6</sup> Modern communications networks provide end users with multiple channels to share information with one another. Redundancies exist both inter- and intra-network. Users commonly have both land lines and wireless accounts. They may also have high speed Internet connections. They may use a variety of social networking applications, which co-exist on multiple platforms and may cross over legacy and emergent network technologies. This level of interconnectedness amongst modern communications technology users results in the rapid spread of information between them. IP access is equivalent to information access. Thus, market forces will compel service providers to maintain robust and efficient networks as more users adopt IP-based technologies. Providers that cannot maintain competitive networks will

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<sup>5</sup> See Department of Homeland Security (DHS) Report, *Communications, Critical Infrastructure and Key Resources, Sector-Specific Plan as input to the National Infrastructure Protection Plan*, May 2007 (available at: <http://www.dhs.gov/xlibrary/assets/nipp-sspcommunications.pdf>) (visited August 16, 2010). As noted by Vonage and others, even during major catastrophic events the reliability of broadband networks has been proven, DHS noting in the Report that while the events of September 11, 2001, and the hurricanes of 2005 "highlighted the importance of communications to public health and safety, to the economy, and to public confidence," these disasters "proved the overall resiliency of the national communications network." The Report further noted that "[d]espite the enormity of these incidents, the network backbone remained intact." (DHS Report).

<sup>6</sup> See Comments of Vonage at 7.

lose end users to other providers who can. Market forces make the proposed extension of reporting requirements unnecessary as providers must maintain robust, efficient and redundant networks in order to keep and gain subscribers. Simply put, providers that supply inadequate or substandard services will lose customers to those who provide high-quality services.

In addition, the Commission should not apply regulations developed for legacy network technologies of the last century to modern communications networks. The existing reporting requirements were formulated with traditional circuit-switched networks in mind. As noted in this proceeding,<sup>7</sup> these networks have markedly different features from newer technology networks. These features are most evident when contrasting the overall architectures of legacy and IP networks.<sup>8</sup> Mapping legacy network regulatory requirements onto emergent technologies will only serve to stifle innovation and hamstring already strained resources under the current weakened economy.

First, IP providers do not enjoy the same level of end-to-end control over their networks as is the case with owners of traditional communications networks. While packet based communications have certain advantages over circuit switched communications owing to its decentralized nature,<sup>9</sup> these same design characteristics make it difficult to isolate network disruptions to a single or set of network components as necessary to meaningful outage reporting.<sup>10</sup> A traditional reporting system likewise does not lend itself well to IP systems. An IP network outage report thus will not likely convey useful information about the extent of an IP

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<sup>7</sup> See Comments of the United States Telecom Association, at 4-5, noting the major differences between PSTN and modern IP networks centered around the highly hierarchical design of PSTN networks, direct connections between centralized points, and an overall highly centralized structure, contrasted with the increasingly decentralized and diverse complexity of IP networks (USTA).

<sup>8</sup> *Id.*

<sup>9</sup> See DHS Report at 5.

<sup>10</sup> See USTA at 5.

network outage, or end users involved.<sup>11</sup> For example, a fiber cut to a network backbone transport system might generate a high volume of outage reports from various end-user network providers, none of whom may actually know the cause of the outage.

The nature of an outage itself has different implications on IP networks. While a traditional outage on a PSTN network involves the breakdown of point to point circuit connections, which may require the actual physical replacement of circuit connections in order to fix, packet based networks are often much more resilient. Packet based switching by its nature builds a level of redundancy into communications which traditional outage reporting mechanisms do not take into account.<sup>12</sup> Indeed, the definition of what an “outage” may be for an IP network in contrast to a traditional network may be drastically different due to the robust nature of IP networks.

It has been further noted that if the Commission desires reporting information in order to generate a broad overview of the state of the Internet, there are other readily available sources that make ISP outage reporting unnecessary.<sup>13</sup> Furthermore, as IP-technology becomes more ubiquitous, and the information exchange driven by such widespread technology adoption more instantaneous, the need for a centralized reporting mechanism will only become more obsolete.

Finally, it has been suggested that extension of reporting requirements to VoIP providers and ISPs is necessary to promote the security and stability of IP networks. While we agree with the comments of the California Public Utilities Commission, that “public health and safety, as well as California’s economy, depend heavily on reliable and well functioning wireline and wireless voice and data communications networks, networks that are virtually ubiquitous,

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<sup>11</sup> See Comments of Vonage at 2.

<sup>12</sup> See Comments of the United States Internet Service Provider Association at 2, noting the ability of ISPs to route around network issues, often times to such an extent that IP network disruptions are invisible to end users.

<sup>13</sup> *Id.* at 3, citing Arbor Networks’ ATLAS, Internet Traffic Report, and Internet Weather Report.

interconnected, and interdependent,”<sup>14</sup> we respectfully disagree with the proposition that the imposition of outage reporting requirements will help achieve this goal. As noted, the resiliency of current IP networks has been proven under tremendous stresses, even national emergencies.<sup>15</sup> Other regulatory regimes require various levels of information reporting about network compromises, albeit from a data protection perspective, but nonetheless better suited to the decentralized, nonhierarchical structure of IP networks.<sup>16</sup> In fact, the imposition of additional rules may require VoIP providers and ISPs to divert resources away from network management in order to cope with new reporting requirements. Under the current economic situation, this may burden many companies already struggling with salary and workforce reductions, strapped budgets, cost-cuts, reduced coverage and other associated economic ills. These changes are unnecessary as alternative regulatory and market mechanisms exist which already promote the maintenance of robust IP networks.

It has also been suggested to justify the extension of reporting requirements that consumers already consider VoIP as a substitute phone service, and the Commission has previously acted to impose various regulatory regimes on VoIP providers similar to traditional PSTN services.<sup>17</sup> While it may be true that some consumers are substituting VoIP for traditional service, this does not alter the fundamental difference in the network structures between VoIP and traditional phone service. If providers are successful in getting consumers to swap one service for the other, it is in part due to the fact that the network differences between traditional and IP services are largely invisible to the average consumer. But these differences are at the very nature of the

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<sup>14</sup> See Comments of the California Public Utilities Commission at 9.

<sup>15</sup> See DHS Report at 5.

<sup>16</sup> Indeed, many such network reporting laws and policies currently exist, such as under FCC CPNI Rules, FTC Red Flag Rules, various state specific data breach reporting laws, industry policies (e.g., PCI standards), etc., all of which require some level of network transparency/reporting in the event of proscribed data breaches.

<sup>17</sup> See Comments of the National Exchange Carrier Association et al at 4.

argument against extension of the reporting requirements to IP network providers. Consumers may consider the services interchangeable, but the fact remains that one network is delineated, hierarchical, centralized, and end-to-end controllable, while the other is not. We ask the Commission to take into account that while certain regulations may lend themselves to IP, and be useful and necessary to safeguard consumers and promote network security and stability, outage reporting requirements are not an example of such regulations. Other regimes, for example CPNI, Red Flag, State Data Breach Laws, and PCI Standards, all mandate various levels of network reporting in the event of certain proscribed data breaches, and effectively regulate network stability. Coupled with the demands of the market, these policies and forces adequately safeguard consumers in the VoIP and ISP space.

### **III. CONCLUSION**

RNK disagrees that the Commission should extend the current outage reporting rules to include VoIP providers and ISPs. Such increased regulatory oversight of outages is unnecessary, as the competitive nature of the marketplace already drives network security and stability. Requiring providers to adhere to new regulations may necessitate the diversion of already strapped resources to an unnecessary and burdensome reporting system. The Commission should refrain from applying a set of rules developed for last century legacy communications networks to 21<sup>st</sup> century technology. Fundamental differences in the structures of traditional and IP-based networks make extension of reporting requirements to emergent technologies cumbersome and potentially stifling to innovation. RNK recognizes that the health of provider communications networks is critical to the functioning of our country, and that multiple regulatory regimes exist which already adequately promote network stability, which has been

proven time and again in the face of extreme adversity, and even national emergencies. While IP technologies may resemble other technologies consumers are familiar with, differences exist that consumers are not aware of. While these differences may not hamper adoption of VoIP or Internet service as substitute modes of communication at the consumer level, they nonetheless make outage reporting an inappropriate requirement for VoIP providers and ISPs, especially here where the goals of consumer protection and network security and stability are already being more effectively addressed by other regulations and the marketplace.

Respectfully submitted, by the undersigned,



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