

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

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In the Matter of	)	
	)	
Numbering Policies for Modern Communications	)	WC Docket No. 13-97
	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	
Telephone Number Requirements for IP-Enabled Services Providers	)	WC Docket No. 07-243
	)	
Telephone Number Portability	)	CC Docket No. 95-116
	)	
Developing a Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200

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**COMMENTS OF THE VOICE ON THE NET COALITION**

The Voice on the Net Coalition (“VON”)<sup>1</sup> hereby submits these comments in response to the issues raised in the Commission’s *Notice of Proposed Rulemaking* (“NPRM”) in the above-referenced matter.<sup>2</sup> VON supports the Commission’s proposal to permit interconnected Voice over Internet Protocol (“VoIP”) providers to obtain phone numbers directly from the North American Numbering Plan Administrator (“NANPA”) and/or the Pooling Administrator (“PA”), rather than requiring purchase from third party Competitive Local Exchange Carriers (“CLECs”). Direct access to phone numbers by VoIP providers will benefit consumers through enhanced efficiency, innovation, and competition in the voice communications market.

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<sup>1</sup> The Voice on the Net Coalition works to advance regulatory policies that enable Americans to take advantage of the promise and potential of Internet communications. See [www.von.org](http://www.von.org) for more information about VON.

<sup>2</sup> In the Matter of Numbering Policies for Modern Communications, *Notice of Proposed Rulemaking, Order and Notice of Inquiry*, WC Docket No. 13-97 (rel. Apr. 18, 2013); published in 78 Fed. Reg. 36725 (Jun. 19, 2013).

**I. ALLOWING VoIP PROVIDERS DIRECT ACCESS TO TELEPHONE NUMBERS WILL RESULT IN INNOVATIVE SERVICES AND GREATER CHOICE FOR CONSUMERS.**

Allowing interconnected VoIP providers the option to access numbering resources directly from the NANPA and the PA will provide benefits for efficiency, technological innovation, and consumer choice consistent with the Commission’s objectives and the public interest. By removing the need for unnecessary negotiations with CLECs, direct access will aid efficiency by eliminating cumbersome structural barriers to the deployment of VoIP services.<sup>3</sup> This will allow the time and resources previously spent seeking cooperation from CLECs to instead be directed towards delivering quality services to consumers.<sup>4</sup>

As the development of IP enabled communications technologies is streamlined, VoIP providers will be able to expand their offerings to include more varied and innovative new products and services. Because access to numbers is a vital component of such services, improving the ease and availability of access will support the further expansion and development of VoIP service offerings.<sup>5</sup> This is positive for providers and consumers alike.

Adoption of the proposed rule will also lead to greater numbering resource optimization, as “[l]ike any valuable resource, the easier numbering resources are to obtain, the more productive uses they can be put to.”<sup>6</sup> Allowing direct access to numbering resources is thus consistent with the Commission’s objectives. Indeed the Commission has previously found that “direct access to telephone numbers is in the public interest because it . . . will help to achieve

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<sup>3</sup> Comments of Vonage Holdings Corp., CC Docket No. 99-200, filed Jan. 25, 2012, (“Vonage Comments”), p. 5.

<sup>4</sup> *Id.*

<sup>5</sup> Comments of Twilio Inc., CC Docket No. 99-200, filed January 25, 2012, (“Twilio Comments”), p. 2.

<sup>6</sup> *Id.*, p. 4.

the Commission's goals of fostering innovation and speeding the delivery of advanced services to consumers."<sup>7</sup>

The wider variety of creative services developed and offered as a result of allowing direct access to numbers will lead to public benefits in the form of greater and more meaningful choices. Easier and less costly access to numbers will allow VoIP providers to more vigorously compete in the voice services market, which can be expected to result in lower prices for consumers.<sup>8</sup> Additionally, access to numbers will facilitate new and innovative VoIP products and services from which consumers may choose. For example, Twilio, which has developed innovative products using IP technology,<sup>9</sup> has noted that direct access would make it easier to offer services like SMS and caller ID.<sup>10</sup> These services could be integrated into other offerings, facilitating the quick development and deployment of "any number of new VoIP-based products"<sup>11</sup> from which the public will benefit.

For providers and regulators, allowing interconnected VoIP providers direct access to numbering resources will also promote accountability and a more accurate view of number utilization. Without direct access, "[h]aving multiple parties involved in the numbering process can lead to inefficiencies when issues arise since it can be difficult to identify quickly who is actually using a specific numbering resource."<sup>12</sup> Currently, a wholesale CLEC's numbering reports could include numbers "sold" to many VoIP providers. In addition, a given VoIP provider's numbers may be spread among multiple CLECs. By eliminating the need for CLECs

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<sup>7</sup> *Administration of the North American Numbering Plan*, Order, 20 FCC Rcd. 2957 (2005) ("SBCIS Order") ¶ 6.

<sup>8</sup> *Ex Parte* Letter of Brita D. Strandberg, Counsel to Vonage Holdings Corp., to Marlene H. Dortch, Secretary, FCC, Docket No. 99-200, filed November 11, 2011, p. 5, ("Vonage Ex Parte").

<sup>9</sup> Twilio Comments, p. 3 (Describing using VoIP technology to help prevent identity theft, scale phone hotlines, and allow automated callback for event ticketing purchases).

<sup>10</sup> Twilio Comments, p. 5.

<sup>11</sup> *Id.*

<sup>12</sup> Comments of the Public Service Commission of Wisconsin, CC Docket No. 99-200, filed January 25, 2012, ("Wisconsin PSC Comments"), p. 2.

to act as middlemen in obtaining numbers, the Commission's proposed rule will make it easier to determine who is ultimately responsible when problems arise, thereby streamlining the channels through which those problems can be resolved. Further, direct access will allow for a more accurate picture of number utilization as utilization reports would be consolidated under the VoIP provider that is actually serving end user customers.

Enhancements to efficiency gained from adoption of the proposed rule will also extend to other areas. By facilitating IP interconnection, direct access will eliminate the need for certain protocol conversions necessary for using PSTN interconnections, which will enhance the quality of voice service.<sup>13</sup> Further, end to end IP connections will allow for the use of HD voice codecs that offer better sound quality than a PSTN call. Additionally, direct access will allow number porting without forced coordination with a third-party numbering provider, thereby simplifying the number porting process and reducing the opportunity for error.<sup>14</sup>

The availability of innovative, new IP services will also encourage and expedite the development and deployment of broadband architecture. As demand for new VoIP services increases and the associated costs of providing these services decline, providers will have greater incentive to expand their offerings to new areas. This will result in the expansion of the broadband infrastructure necessary to support VoIP, and will further the Commission's goals of accelerating broadband deployment and ensuring that more people have access to higher quality broadband service.<sup>15</sup>

CLEC opposition to VoIP providers having direct access to numbering resources appears to be based solely on a selfish desire to maintain an outdated business model dependent on

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<sup>13</sup> Vonage Comments, p. 6.

<sup>14</sup> *See Id.*

<sup>15</sup> *See* CAF Order, ¶ 67.

revenues derived from the acquisition and provision of phone numbers to their VoIP provider customers.<sup>16</sup> The Commission should not allow such transparent efforts to stymie the consumer benefits that will follow from allowing VoIP providers direct access to telephone numbers. VON is confident that the trials currently being conducted by Vonage and others will provide data demonstrating that the technical issues raised by opponents to this proposal, the most common of which is the alleged inability of carriers to route traffic directly to or from VoIP providers,<sup>17</sup> are without merit. As has been pointed out by several parties, existing industry standards and agreements are sufficient to deal with any concerns regarding potential routing problems.<sup>18</sup> Indeed, expanding access to numbering resources may actually reduce technical problems by enabling improved service quality and network redundancy.<sup>19</sup> In light of the extensive public benefits and the lack of legitimate opposition, VON urges the Commission to adopt the proposed rule allowing interconnected VoIP providers direct access to numbers.

## **II. DIRECT ACCESS TO NUMBERS WILL FACILITATE IMPLEMENTATION OF IP-TO-IP INTERCONNECTION.**

Allowing VoIP providers direct access to numbering resources will facilitate IP-to-IP interconnection consistent with key Commission policy objectives.<sup>20</sup> As the industry transitions

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<sup>16</sup> See, e.g., Ex Parte of RNK Communications, CC Docket No. 99-200, filed December 22, 2011 (“RNK is not aware of any gaps in coverage that cannot be filled upon reasonable terms by Interconnected VoIP Providers by using wholesale partners ...”). Reply Comments of Bandwidth.com, CC Docket No. 99-200, filed August 30, 2012, pp. 3-4.

<sup>17</sup> See e.g., Ex Parte Letter from Erin Boone, Senior Corporate Counsel, Level 3, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 99-200 (filed Dec. 20, 2011), p. 2; Comments of National Telecommunications Cooperative Association, CC Docket No. 99-200, filed January 25, 2012, p. 5 (“Granting the relief requested by Vonage and other petitioners would also present technical. . . complications with respect to interconnection and the routing of traffic between consumers and provider networks.”).

<sup>18</sup> See e.g., Comments of Neutral Tandem, CC Docket No. 99-200, filed January 25, 2012, p. 2 (“Operationally, allowing interconnected VoIP providers such as Vonage to designate alternative tandems in the LERG as the homing tandems for their telephone numbers does not appear to present any unique issues.”).

<sup>19</sup> See Vonage Holdings Corp., Petition for Limited Waiver, CC Docket No. 99-200, filed March 4, 2005, p. 6., (“Vonage Petition”).

<sup>20</sup> See *Connect America Fund: A National Broadband Plan for Our Future; Establishing Just and reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing a Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-*

to all IP networks, it is important that the Commission take steps to remove unnecessary roadblocks to IP interconnection.<sup>21</sup>

Vonage has previously noted that the inability to distinguish numbers used by the VoIP provider from those used by the CLEC from which the numbers were purchased makes it difficult for potential IP interconnection partners to route traffic from their network to the VoIP provider. Further, even if VoIP numbers can be identified by building custom routing databases, some carriers would still be reluctant to route around the CLEC number “owner” identified in the industry routing database.<sup>22</sup> As such, the lack of direct access to numbers has obstructed VoIP providers’ good-faith attempts to establish IP interconnection arrangements with other providers. Additionally, the complexity derived from potentially creating custom, non-industry standard routing databases to identify VoIP numbers would lead not only to greater expense, but also to greater potential for routing issues.<sup>23</sup> Allowing direct access will remove these barriers, making the process of negotiating interconnection agreements significantly more efficient and eliminating the need for the development of costly non-industry-standard databases.

As the industry continues to transition to all-IP networks, establishing and nurturing a framework that permits effective, industry-delivered IP interconnection will only increase in importance. Enabling direct access to numbers will aid in generating broader and more efficient interconnection. Further, these interconnection arrangements will be developed in the

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*Up; Universal Service Reform--Mobility Fund*; WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-92, 96-45, GN Docket No. 09-51, WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161, ¶ 1377 (rel. Nov. 18, 2011) (“*CAF Order*”) at 1010.

<sup>21</sup> *See id.* at 1011.

<sup>22</sup> Vonage Comments at 6-7.

<sup>23</sup> *Id.* at 7.

marketplace by good faith negotiations, rather than being imposed upon providers through new regulations, fully consistent with and supportive of the Commission's preferences.<sup>24</sup>

### **III. INTERCONNECTED VoIP PROVIDERS SHOULD NOT BE HELD TO A HIGHER STANDARD THAN OTHER CARRIERS FOR OBTAINING DIRECT ACCESS TO NUMBERS.**

While VON understands the Commission's desire to combat the threat of number exhaust, interconnected VoIP providers should not be held to a higher standard than other carriers for obtaining numbers directly from NANPA or the PA. Given that Vonage's commitment to maintain at least 65% number utilization across its telephone number inventory "vastly exceed[s] the average industry utilization of approximately 50%,"<sup>25</sup> it is unreasonable and inexplicable to require that all interconnected VoIP providers maintain such a high level of utilization as a condition for direct access. In addition, these commitments were in the waiver context, where it is more appropriate to apply conditions to an individual party seeking the waiver to ensure the waiver is in the public interest. In a rulemaking context, the Commission should not create special conditions for one segment of the industry as doing so is likely to skew competition. As such, VoIP providers seeking such access should be subject to the same utilization requirements as traditional telecommunications carriers.

Along similar lines, the Commission should not limit rate centers that are available to VoIP providers or allow states to do so.<sup>26</sup> Limiting VoIP providers to only certain rate centers will put VoIP providers at a competitive disadvantage versus other voice service providers. In general, VoIP providers that directly obtain numbers should be subject to the same utilization

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<sup>24</sup> CAF Order at 1011.

<sup>25</sup> Vonage Ex Parte, p. 5.

<sup>26</sup> For example, the California PUC has proposed that the FCC grant it authority to specify what rate centers are available to VoIP providers. See NPRM, ¶27.

and reporting requirements as other providers to obtain numbers and should be able to request the same numbers as any other voice provider that directly obtains numbers.

**IV. DIRECT ACCESS TO NUMBERS SHOULD BE EXPANDED TO INCLUDE NON-INTERCONNECTED OR ONE-WAY VoIP.**

VON supports allowing direct access to numbers by non-interconnected or one-way VoIP providers that choose to do so, though obtaining numbers directly from NANPA and PA should not be required. Many of the same advantages to allowing interconnected VoIP providers direct access to numbers also apply to non-interconnected and one-way VoIP providers. As such, expanding direct access to cover these providers will allow further gains in innovation and consumer choice as they take advantage of their improved access to efficiently develop new products and services. The potential for innovation as a product of direct access is not and should not be limited to interconnected VoIP.

**CONCLUSION**

In light of the extensive public benefits that will be derived from enabling greater access to phone numbers, the VON Coalition urges the Commission to adopt the proposed rule allowing VoIP providers to obtain numbering resources directly from the North American Numbering Plan Administrator and/or the Pooling Administrator.

Respectfully submitted,

VOICE ON THE NET COALITION

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/s/

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July 19, 2013