

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

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 Inter-carrier Compensation Regime)	CC Docket No. 01-92
)	
)	
Connect America Fund)	WC Docket No. 10-90
)	
)	
Numbering Resource Optimization)	CC Docket No. 99-200
)	
)	
Petition of Vonage Holdings Corp. for Limited Waiver of Section 52.15(g)(2)(i) of the Commission's Rules Regarding Access to Numbering Resources)	
)	
)	
Petition of TeleCommunication Systems, Inc. and HBF Group, Inc. for Waiver of Part 52 of the Commission's Rules)	
)	

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I. INTRODUCTION AND SUMMARY

The record in this proceeding shows broad agreement that the Commission should grant interconnected VoIP providers direct access to numbering resources. Not only are commenters in agreement that granting VoIP providers direct access to numbers is a good idea; they also agree that the Commission should ensure that interconnected VoIP providers with direct access to numbers are not treated differently than carriers. VoIP providers with access to numbers should have the same obligations and rights as any other entity with numbers.

A broad cross-section of commenters agrees that the Commission should take care to adopt rules that promote innovation and competition and do not disadvantage VoIP providers with respect to other providers with direct access to numbers. In every respect, VoIP providers should be subject to competitively neutral requirements. In many cases, the existing rules and procedures can be applied to VoIP providers without modification, such as local number portability requirements, numbering cost allocation, and number utilization requirements. Where the Commission must develop new procedures for VoIP providers—such as determining the appropriate documentation requirements—it should ensure that those procedures are fair and impose no greater burden on VoIP providers than is necessary.

In particular, Vonage joins with many commenters in requesting that the Commission ensure the following:

- Documentation requirements should not be unduly burdensome and should, instead, serve as a simple gating mechanism to ensure that number recipients have the financial and managerial capabilities to assume the obligations that accompany direct access to numbers.
- VoIP providers must provide states with the information they need to ensure that they may exercise their delegated numbering authority but need not seek state certification.

- The NANPA should continue to serve as the body determining whether any entity seeking numbering resources, including VoIP providers, is capable of providing service with those numbers.
- VoIP providers should be subject to the same numbering obligations, including numbering cost allocation, local number portability, and number utilization requirements, as carriers.
- VoIP providers should have access to the same rate centers as carriers, and should be able to access numbers directly or indirectly, as carriers also do.
- The Commission should ensure that VoIP providers are subject to the same routing requirements as carriers and need not adopt unusual or unnecessary routing schemes.

Tellingly, the record also reflects little evidence supporting those commenters concerned that granting VoIP providers direct access to numbers may have negative technical, logistical, or financial repercussions. Granting VoIP providers direct access to numbers is nothing more than a minor technical change that will not undermine the existing regulatory structures governing voice traffic. The Commission should resist efforts by some commenters to use this proceeding to draw it into an unwieldy discussion of longer-term, unrelated issues, or to expand the regulatory burdens on VoIP providers without justification.

Vonage continues to commend the Commission for taking this important step in modernizing its numbering rules and facilitating innovation and competition in voice services. The record is clear—many stakeholders agree that competitively neutral rules appropriately limited in scope will best serve the Commission in supporting the ongoing IP transition and enhancing consumer services.

II. THE RECORD SHOWS WIDESPREAD CONSENSUS THAT VOIP PROVIDERS SHOULD HAVE DIRECT ACCESS TO NUMBERS ON THE SAME TERMS AS CARRIERS.

A. Direct Access to Numbers By VoIP Providers on the Same Terms as Carriers Will Promote Competition and Innovation.

The Commission’s proposal to grant direct access to numbers to interconnected VoIP providers has garnered support from all corners of the industry, from ILECs, to CLECs, to innovative service providers. There is broad consensus that granting VoIP providers direct access to numbers will have tremendous benefits for the public by facilitating innovation and enhancing competition. AT&T notes that “[VoIP providers] want this right in order to provide telephone numbers to their customers in the most efficient and cost-effective way possible....[and] that might involve new, creative marketplace solutions to interconnect with the public switched telephone network.”¹ CenturyLink similarly states that “[e]xtending direct access to numbers by interconnected VoIP providers is in the public interest, is desirable and should be workable.”² Comcast believes that direct access to numbers will “facilitate a smoother and faster transition to an all-IP world for voice services,”³ and Flowroute believes it will “spur the introduction of innovative new technologies and services, increase efficiency and facilitate increased choices for American consumers.”⁴ SmartEdgeNet also asserts that removal of legacy regulatory barriers, as proposed in the NPRM, will enable VoIP providers to move beyond

¹ Comments of AT&T at ii, WC Docket No. 13-97 et al. (filed July 19, 2013) (“AT&T Comments”).

² Comments of CenturyLink at 2, WC Docket No. 13-97 et al. (filed July 19, 2013) (“CenturyLink Comments”).

³ Comments of Comcast Corporation at 2, WC Docket No. 13-97 et al. (filed July 19, 2013) (“Comcast Comments”).

⁴ Comments of Flowroute LLC at 2, WC Docket No. 13-97 et al. (filed July 19, 2013) (“Flowroute Comments”). *See also, e.g.*, Comments of IntelePeer, Inc. at 2-3, WC Docket No. 13-97 et al. (filed July 19, 2013) (“IntelePeer Comments”); Comments of the Voice on the Net Coalition at 2, WC Docket No. 13-97 et al. (filed July 19, 2013).

“expensive and inefficient arrangements with telecommunications service providers” and “lower costs and prices, and increase interconnected VoIP providers’ operational flexibility.”⁵ Even COMPTTEL, which opposes many of the Commission’s proposals in this proceeding, notes that it “does not oppose, as a general matter, interconnected VoIP providers having direct access to numbering resources.”⁶

It is equally clear from the record that commenters across the industry believe that VoIP providers with direct access to numbers must not be treated any differently than carriers.⁷ This is true of parties that opposed Vonage’s request for a waiver, with Level 3 arguing that the Commission must ensure the numbering administration requirements imposed on interconnected

⁵ Comments of SmartEdgeNet at 2, 5, WC Docket No. 13-97 et al. (filed July 19, 2013) (“SmartEdgeNet Comments”).

⁶ Comments of COMPTTEL at 2, WC Docket No. 13-97 et al. (filed July 19, 2013) (“COMPTTEL Comments”).

⁷ *See, e.g.*, CenturyLink Comments at 6 (noting that those receiving numbers directly should be treated comparably); Comcast Comments at 7-8 (noting that VoIP providers should be held to the same standards as other telecom carriers); Comments of the New Jersey Division of Rate Counsel at 2, 9, WC Docket No. 13-97 et al. (filed July 19, 2013) (noting that Rate Counsel supports direct access by interconnected VoIP providers, and supports proposals to hold VoIP providers to the same requirements as other carriers) (“NJ Rate Counsel Comments”); Comments of the Pennsylvania Public Utilities Commission at 3, WC Docket No. 13-97 et al. (filed July 19, 2013) (“All carriers or providers, including VoIP providers must follow the same numbering rules.”) (“PA PUC Comments”); Joint Comments of Pennsylvania, New York, and Indiana at 3, WC Docket No. 13-97 et al. (filed July 19, 2013) (“The FCC must impose uniform standards across the board regardless of provider whenever a provider seeks access to scarce numbering resources.”) (“Multi-State General Comments”); SmartEdgeNet Comments at 11 (“The Commission should create a unified, national numbering regime that would apply equally to all service providers using these nationally available numbers, regardless of the type of service being offered or location.”); Joint Comments of the Public Service Commission of Wisconsin et al. at 13, WC Docket No. 13-97 et al. (filed July 19, 2013) (“There needs to be a level playing field for access to and use of numbering resources for all participants—including VoIP providers.”) (“Wisconsin PSC et al. Comments”).

VoIP providers with direct access to numbers are “competitively neutral.”⁸ Other commenters who continue to oppose many of the Commission’s proposals seem to agree with this fundamental point, with Interisle, for instance, opposing any action that would grant VoIP providers “special rights and privileges not conveyed to others.”⁹ State commissions agree as well, with the New Jersey Rate Counsel supporting proposals to hold VoIP providers to the same requirements as carriers,¹⁰ the Pennsylvania Public Utilities Commission arguing that carriers and VoIP providers alike must be held to the same requirements,¹¹ and the Joint Comments of Pennsylvania, New York, and Indiana asking the Commission to impose “uniform standards across the board regardless of provider.”¹²

Vonage agrees with the overwhelming consensus on this question—VoIP providers, with respect to numbers, should not be treated any differently than carriers. As Interisle notes, to do otherwise “would be to pick winners and losers even before the game is played.”¹³ If VoIP providers are to be given direct access to numbers as other providers of voice telephony services are, that access must not be constrained by conditions to which those other providers are not subject.

⁸ Comments of Level 3 Communications, LLC at 4, WC Docket No. 13-97 et al. (filed July 19, 2013) (“Level 3 Comments”).

⁹ Comments of Interisle Consulting Group LLC, Terra Nova Telecom Inc., and Aero Communications LLC at 17, WC Docket No. 13-97 et al. (filed July 19, 2013) (“Interisle Comments”).

¹⁰ NJ Rate Counsel Comments at 9.

¹¹ PA PUC Comments at 3.

¹² Multi-State General Comments at 3.

¹³ Interisle Comments at 18.

B. Direct Access to Numbers Is a Small, Incremental Change That Will Promote the Commission’s Larger IP Transitions Goal.

In moving forward to grant VoIP providers direct access to numbers, the Commission must take care to remain focused on the narrow questions it has presented. While Vonage and others have explained how numbering rights will further wide-ranging FCC goals, including IP interconnection and the transition to bill-and-keep, the Commission need not resolve every detail of the IP transition in order to take the careful, incremental steps it has proposed here. This proceeding likewise should not be a vehicle for the Commission to expand regulation over VoIP providers where unnecessary. Calls by commenters to expand the scope of this proceeding to address myriad issues, from the structure of the intercarrier compensation regime, to the scope of Section 251 and 252 obligations, to the regulatory status of interconnected VoIP providers, are misplaced.

This proceeding is about a single, simple change—granting interconnected VoIP providers direct access to numbering resources—and the mechanisms supporting that change. The Commission should not use this proceeding to “drag[] inappropriate regulations and obligations from the TDM world into the IP world, creating barriers to entry into markets or discouraging creative marketplace solutions to interconnection, and branding the new IP-enabled providers second-class citizens of the communications community.”¹⁴ Instead, the Commission must take this opportunity to regulate narrowly, adopting only those regulations necessary to ensure that all providers exercise numbering rights responsibly and consistently.

Commenters calling for broader regulatory action seem, in large part, motivated by concerns that giving VoIP providers direct access to numbers will undermine the existing

¹⁴ AT&T Comments at iii.

Section 251 and 252 regime.¹⁵ Those concerns are not supported by the record, and it is clear that direct access to numbers is not going to do away with the existing Section 251 and 252 regime. This proposal is a small step on the path to full IP interconnection, and there should be no misconception that it will affect a sudden dramatic change.

Those commenters that believe this proceeding will undermine the existing numbering infrastructure likewise ignore the reality that major transitions simply do not happen overnight. Vonage believes that this proceeding represents one relatively simple change the Commission can implement to facilitate the transition to IP networks, a transition that will necessarily involve “TDM and IP systems running on parallel tracks, with IP-based providers having to interconnect with the PSTN in order to provider [sic] the connectivity that consumers expect and demand.”¹⁶ Such incremental steps serve the public interest by furthering that transition in a measured way, and by providing the Commission and the industry with real-world experience and information that can inform future regulatory action.

III. A STRAIGHTFORWARD NUMBERING REGIME WITH CLEAR RULES WILL MOST EFFECTIVELY PROMOTE COMPETITION.

A. The Commission Should Use the Form 499-A to Demonstrate Eligibility for Numbering Resources.

As Vonage and others suggested in opening comments,¹⁷ using FCC Form 499-A as the documentation required from providers wishing to apply for numbers will most effectively balance the Commission’s goals of promoting innovation and competition while ensuring good

¹⁵ See, e.g., Comments of Spencer Telecom, LLC at 10-11, WC Docket No. 13-97 et al. (filed July 19, 2013) (discussing concerns regarding provision of IP interconnection).

¹⁶ AT&T Comments at ii.

¹⁷ See Comments of Vonage Holdings Corp. at 13, WC Docket No. 13-97 et al. (filed July 19, 2013) (“Vonage Comments”). See also Comcast Comments at 4-5; Flowroute Comments at 5.

stewardship of scarce numbering resources. Like FCC Form 477, Form 499-A “show[s] that the entity submitting the form provides interconnected VoIP service and in which states it provides those services.”¹⁸ The Form 499-A therefore “would provide to those assigning telephone numbers the necessary information regarding the geographic areas that an applicant for numbers serves or plans to serve, much like the CPCN does on a state level,” as Comcast explained in its initial comments.¹⁹

Additionally, as Vonage and Comcast noted, new providers must file a Form 499-A upon beginning service. Requiring a Form-499A from any provider wishing to obtain numbering resources would enable new entrants to obtain numbers on the same terms as other providers.²⁰ In contrast, requiring a Form 477, which is only filed after an entity has commenced service, would disadvantage new interconnected VoIP entrants relative to other new entrants permitted to seek numbers.²¹

The record broadly supports minimizing regulatory burdens while facilitating necessary oversight, both of which would be easily accomplished by relying on the Form 499-A. In joint comments, the state commissions of Wisconsin, Oregon, Idaho, Nebraska, and Minnesota explain that VoIP providers’ documentation should provide contact information and retail service information,²² which, as explained above, is accomplished by the Form 499-A. Both

¹⁸ *Numbering Policies for Modern Communications* et al., Notice of Proposed Rulemaking, Order and Notice of Inquiry, FCC 13-51, 28 FCC Rcd. 5842, 5853-54 ¶ 20 (2013). *See also* Comcast Comments at 5.

¹⁹ Comcast Comments at 5.

²⁰ Vonage Comments at 13 (citing *See 2013 Telecommunications Reporting Worksheet Instructions* (FCC Form 499-A) at 6, 12 (Feb. 2013), *available at* http://www.usac.org/_res/documents/cont/pdf/forms/2013/FCC_499A_Form-Instructions.pdf); Comcast Comments at 5.

²¹ *See* Vonage Comments at 13.

²² Wisconsin PSC et al. Comments at 6.

LECs and VoIP providers urge the Commission to use a light touch: CenturyLink suggested that the process “should be easy and self-effectuating, requiring minimum regulatory oversight.”²³

AT&T also supports a simple filing with the FCC that would facilitate permitting providers who meet the Commission’s standards for direct access to numbering resources to make use of those resources.²⁴ Similarly, Flowroute agrees that documentation filed by providers with the Commission is sufficient to grant VoIP providers authorization for numbering access purposes.²⁵

Importantly, Form 499-A carries regulatory obligations that ensure only responsible and well-managed carriers who are authorized to provide service²⁶ can obtain direct access to numbers. Proper filing of Form 499-A requires providers to have sufficient financial and managerial capabilities to comply with the Commission’s detailed revenue reporting and regulatory payment requirements, satisfying the concerns raised by commenters like COMPTEL.²⁷

The comments widely agree that providers under red-light status should be denied access to numbers;²⁸ Vonage agrees. Use of the Form 499-A as required documentation to permit interconnected VoIP providers to apply for numbers will ensure that the Commission can monitor those entities for compliance with its rules and leverage its red-light process. As AT&T argued in its opening comments, “[i]f ‘red-lighting’ and ‘deemed ineligible’ are enforcement

²³ CenturyLink Comments at 9.

²⁴ AT&T Comments at 3-5.

²⁵ Flowroute Comments at 5-6.

²⁶ *See, e.g.*, Comments of NTCA–The Rural Broadband Association at 5, WC Docket No. 13-97 et al. (filed July 19, 2013) (suggesting that the FCC confirm applicants demonstrate “qualifications are consistent with 47 C.F.R. § 52.15(g)(2)(i), which sets up the minimum parameters for grant of applications for initial number resources”) (“NTCA Comments”).

²⁷ COMPTEL Comments at 13-14.

²⁸ *See, e.g.*, AT&T Comments at 16; Level 3 Comments at 4.

tools appropriate to and applied against authorized providers, then they should be applied equally to interconnected VoIP providers as well.”²⁹ Level 3 also “agrees that an applicant for a Commission-issued certification should be ineligible for that certification while it is subject to red-light treatment, just as applicants for any other Commission authorization would be.”³⁰

B. State Certifications Are Unnecessary and Will Deter Competition.

The record supports requiring that VoIP providers only provide essential contact and service area information to state regulators so that states can exercise their delegated numbering authority,³¹ stopping short of any additional certifications.³²

Vonage agrees with the consensus that VoIP providers should be required to provide relevant contact information to state regulators so that states can exercise their delegated numbering authority.³³ Requiring additional state certification, however, is unnecessary and inconsistent with the limited regulation imposed on VoIP providers.³⁴ The Commission should

²⁹ AT&T Comments at 16.

³⁰ Level 3 Comments at 4.

³¹ *See* CenturyLink Comments at 2; Comcast Comments at 2-3; IntelPeer Comments at 3-4 (advocating a regime that does not require iVoIP providers to become carriers or maintain carrier partners); PA PUC Comments at 6-7 (advocating a regime that does not require iVoIP providers to become carriers); Wisconsin PSC et al. Comments at 6; Comments of the Michigan Public Service Commission at 3, WC Docket No. 13-97 et al. (filed July 19, 2013) (“Michigan PSC Comments”); Level 3 Comments at 2-3; Flowroute Comments at 2.

³² *See, e.g.*, PA PUC Comments at 9 (suggesting that the FCC develop a “Recognition of Registration” for VoIP providers to provide states); Wisconsin PSC et al. Comments at 6 (arguing that VoIP providers should be required to “register” contact information with the relevant states).

³³ *See, e.g.*, Wisconsin PSC et al. Comments at 6; Michigan PSC Comments at 3-4; Multi-State General Comments at 3; Vonage Comments at 16-17. *See also* Letter from Brita D. Strandberg, Wiltshire & Grannis LLP, counsel to Vonage Holdings Corp., to Marlene H. Dortch, Secretary, FCC, CC Docket No. 99-200, at 2-3 (filed Feb. 9, 2012) (explaining that Vonage would “provide relevant state commissions with regulatory and numbering contacts” when it requests numbering resources within the state).

³⁴ *See, e.g.*, CenturyLink Comments at 9.

reject calls by commenters like Bandwidth.com to grossly expand regulation of VoIP providers or require that VoIP providers become carriers in order to access numbering resources directly.³⁵ Such expansive changes are completely unnecessary; as Vonage and others have demonstrated, enabling interconnected VoIP providers to obtain direct access to numbers is a feasible and innovative incremental change that does not require a wholesale reworking of VoIP regulation.

C. Determination of Facilities Readiness Should Remain with the NANPA.

As it does today, the NANPA should evaluate whether “[t]he applicant is or will be capable of providing service within sixty (60) days of the numbering resources activation date”³⁶ as required by the Commission’s rules. As HyperCube and others argued, the “Commission should continue to condition direct access to numbers on compliance with the ‘facilities readiness’ requirement of 47 C.F.R. § 52.15(g)(2)(ii)” by making the appropriate showing to the NANPA.³⁷ The NANPA is uniquely well-qualified to make determinations regarding the facilities readiness of providers seeking numbers both quickly and efficiently and nimble in adjusting to changing industry standards and NANC recommendations. As a practical matter, only legitimate providers with the necessary technical expertise and financial and managerial wherewithal to responsibly manage their numbering obligations will be able to show facilities readiness. The NANPA’s careful review will necessarily exclude providers that have not been

³⁵ See Comments of Bandwidth.com, Inc. at 14-15, WC Docket No. 13-97 et al. (filed July 19, 2013) (“Bandwidth.com Comments”); COMPTTEL Comments at 3, 7-8. See also Interisle Comments at 2 (arguing that there “is no fundamental need for Interconnected VoIP providers to be given the privileges already granted to common carriers”).

³⁶ 47 CFR § 52.15(g)(2)(ii).

³⁷ Comments of HyperCube Telecom, LLC at 7, WC Docket No. 13-97 et al. (filed July 19, 2013) (“HyperCube Comments”). See also Comments of the California Public Utilities Commission and the People of the State of California at 20, WC Docket No. 13-97 et al. (filed July 19, 2013) (arguing that providers should have to provide “company specific information to the NANPA or to any state acting, pursuant to delegated numbering authority”) (“CPUC Comments”).

able to work with carriers or alternative tandem providers to achieve universal connectivity within sixty days of the numbering resources activation date.

Commenters agree that the evidence required to demonstrate facilities readiness should be flexible.³⁸ As CenturyLink suggested, the “Commission should adopt the NANC Recommendation and allow any of the potential ‘proofs’ of readiness to be used.”³⁹ AT&T also agreed that providers should demonstrate “universal connectivity and provide proof that they have in fact followed through on their plan of making it possible,” which could come in a number of forms.⁴⁰ Proof of facilities readiness “could take the form of certifications of having purchased products pursuant to carrier tariffs, or having entered into commercial agreements with carriers for the exchange of traffic or other mechanisms” or one of “many other possible ‘proofs’ that could demonstrate that a VoIP provider has sufficient facilities available and is ready to serve its potential customers.”⁴¹ As Vonage explained in its initial comments, however, providers must be able to demonstrate the ability to properly route calls to the PSTN; the Commission should permit providers that partner with carriers to deliver universal connectivity to rely on certifications from those underlying carriers to the NANPA demonstrating that appropriate PSTN connectivity is in place.⁴²

³⁸ See CenturyLink Comments at 10; AT&T Comments at iii; Vonage Comments at 18-19. See also IntelPeer Comments at 3-4 (urging the Commission not to adopt inflexible rules).

³⁹ CenturyLink Comments at 10.

⁴⁰ AT&T Comments at iv.

⁴¹ CenturyLink Comments at 10. See also AT&T Comments at 10 (arguing that Commission should relax the facilities readiness requirement and provide more flexibility in this area as the industry moves from the old TDM-based world to the new IP-based world).

⁴² Vonage Comments at 19-20.

D. The Commission’s Plenary Numbering Authority Is Sufficient to Ensure Enforcement Against VoIP Providers with Direct Access to Numbers.

The Commission has plenary authority over numbers, and can enforce its numbering regulations against any providers that obtain direct access to those resources.⁴³ Just as it currently does with carriers, the Commission should prevent providers in red-light status or otherwise out of compliance with the Commission’s numbering rules from obtaining additional numbering resources, and should require providers to return numbers where necessary to ensure compliance with its rules. California, for example, argued for the “imposition of penalties on VoIP providers on the same basis as they are imposed on traditional providers.”⁴⁴ The ability to force an entity to turn its numbers in is a powerful enforcement tool, as providers like Vonage are making substantial financial and technical investments to accommodate direct access to numbers.⁴⁵

IV. INTERCONNECTED VOIP PROVIDERS WITH DIRECT ACCESS TO NUMBERS SHOULD BE SUBJECT TO THE SAME OBLIGATIONS AS OTHER PROVIDERS WITH DIRECT ACCESS TO NUMBERS.

The comments reflect confusion about the rights and responsibilities of VoIP providers seeking direct access to numbers. There should be no confusion: with regard to numbering, VoIP providers must be subject to the same rules and guidelines as any other entity that obtains numbers directly. The record clearly supports treating all recipients of direct access to numbers

⁴³ See, e.g., Vonage Comments at 9-10 (citing 47 U.S.C. § 551(e); *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996* et al., Second Report and Order and Memorandum Opinion and Order, FCC 96-333, 11 FCC Rcd 19,392, 19,512, ¶ 271 (1996)); HyperCube Comments at 3 n.7; AT&T Comments at 5.

⁴⁴ CPUC Comments at 20.

⁴⁵ See, e.g., Comments of Vonage Holdings Corp. at 5-8, CC Docket No. 99-200 (filed Jan. 25, 2012) (explaining the work Vonage has done and will do to implement direct access, and describing the costs and complications Vonage encounters when using numbers obtained indirectly through carrier partners).

the same under Commission rules and industry guidelines.⁴⁶ To do otherwise would put “interconnected VoIP providers in second-class status with respect to their use of numbering resources.”⁴⁷ Instead, commenters agree that numbering administration requirements should be competitively neutral⁴⁸ and the “beneficiaries of direct access to telephone numbers should be subject to the same Commission rules, industry guidelines and practices and delegated state authority.”⁴⁹ Requiring service providers to follow uniform rules is necessary to “ensur[e] a predictable and uniform numbering system administration,”⁵⁰ as the state commissions of Pennsylvania, New York, and Indiana explain in their joint comments. Vonage agrees.

⁴⁶ *See, e.g.*, Level 3 Comments at 4 (arguing that “numbering administration requirements should be competitively neutral”); CenturyLink Comments at 6-7 (noting that those receiving numbers directly should be treated comparably); Comcast Comments at 6 (noting that VoIP providers should be held to the same standards as other telecom carriers); NJ Rate Counsel Comments at 2, 9 (noting that Rate Counsel supports direct access by interconnected VoIP providers, and supports proposals to hold VoIP providers to the same requirements as other carriers); PA PUC Comments at 3 (“All carriers or providers, including VoIP providers must follow the same numbering rules.”); Multi-State General Comments at 3 (“The FCC must impose uniform standards across the board regardless of provider whenever a provider seeks access to scarce numbering resources.”); SmartEdgeNet Comments at 11 (“The Commission should create a unified, national numbering regime that would apply equally to all service providers using these nationally available numbers, regardless of the type of service being offered or location.”); Wisconsin PSC et al. Comments at 13 (“There needs to be a level playing field for access to and use of numbering resources for all participants—including VOIP providers.”).

⁴⁷ AT&T Comments at iv.

⁴⁸ Level 3 Comments at 4.

⁴⁹ CenturyLink Comments at 2. *See also* Multi-State General Comments at 4-5.

⁵⁰ Multi-State General Comments at 4-5.

A. This Proceeding Has Always Been Premised on VoIP Providers Accepting the Commission’s Numbering Obligations.

Interconnected VoIP providers seeking direct access to numbers have always acknowledged that they must comply with the Commission’s numbering obligations and relevant industry standards.⁵¹

Concerns that VoIP providers might get numbers without having to meet the same numbering obligations imposed on carriers are unfounded. Some stakeholders simply misunderstand the commitments Vonage and other number trial participants have made. HyperCube, for example, expresses concern that Vonage will not participate in the LERG.⁵² But, in fact, Vonage and other providers *are* participating in the LERG in the numbering trial, as explained in more detail below. Similarly, concerns that VoIP providers will not—and do not already—participate in cost allocation are completely without merit.⁵³ As Vonage has stated on the record: “VoIP providers are already subject to numbering cost allocation.”⁵⁴ Furthermore, the Commission should reject the calls of some commenters to co-opt this proceeding as a forum to evaluate Bell South’s long-standing cost allocation petition.⁵⁵

⁵¹ See Reply Comments of SBC IP Communications, Inc. at 6, CC Docket No. 99-200 (filed Aug. 31, 2004) (promising that SBCIP will “take whatever appropriate steps are necessary to comply with [the Commission’s] final rules”); see also Vonage’s Petition for Limited Waiver, CC Docket No. 99-200 (filed March 4, 2005) (agreeing to comply with the SBC-IS waiver conditions, as well as all relevant regulations, specifically including utilization, NRUF, and LNP obligations).

⁵² HyperCube Comments at 14-15.

⁵³ See, e.g., NJ Rate Counsel Comments at 10-11 (incorrectly describing VoIP providers as “free riders by obtaining direct access without paying the requisite costs that other providers face”).

⁵⁴ Vonage Comments at 24.

⁵⁵ See Comments of the Verizon and Verizon Wireless at 6-7, WC Docket No. 13-97 et al. (filed July 19, 2013) (“Verizon Comments”); see also Letter from Ann D. Berkowitz, Director, Federal Regulatory Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 11-95 (filed April 5, 2013).

VoIP providers with direct access to numbers will also have the same obligations as carriers with respect to the NRUF, NPAC databases, and local number portability.⁵⁶ Vonage agrees with commenters asking that “VoIP providers [that] are given direct access to numbering resources . . . be required to file Numbering Resources and Utilization Forecast (“NRUF”) Form 502, as carriers are presently required to do.”⁵⁷ To the extent commenters raise ancillary concerns, such as the changes needed to transition numbering databases to an IP world, the Commission has wisely sought comment on such changes in a separate proceeding. These and similar concerns should be explored more fully by the appropriate industry groups and considered by the Commission with a more complete and targeted record.⁵⁸

B. The Record Confirms that VoIP Providers Should Be Treated the Same as Carriers With Respect to Numbers.

Stakeholders across the board also urge the Commission not to impose on VoIP providers “special commitments . . . as a condition precedent to getting direct access” outside of the waiver context.⁵⁹ The Commission should resist calls to impose higher utilization rates on VoIP providers or limit VoIP provider to certain rate centers; such disparate treatment would be anticompetitive and harmful to consumers.

⁵⁶ See, e.g., Comcast Comments at 6; AT&T Comments at 6-7;

⁵⁷ NTCA Comments at 5.

⁵⁸ For example, iconectiv advocates for working “with industry through the CIGRR and ATIS committees in a collaborative process” to transition industry databases from a TDM to IP world. iconectiv Comments at 5-6. Similarly, commenters across the board suggest referring consideration of crucial number exhaust issues to industry working groups, like the NANC and NANPA as “subject matter experts.” See, e.g., NTCA Comments at 8.

⁵⁹ AT&T Comments at iv; see also, e.g., CenturyLink Comments at 6-7; Comcast Comments at 6-7; Vonage Comments at 10-16.

Similarly, the Commission should reject suggestions that VoIP providers be required to obtain all of their numbers directly.⁶⁰ This suggestion is contrary to industry practice and could even exacerbate number exhaust issues: VoIP providers should not be required to obtain numbers directly in rate centers where they have few customers when they could meet their own needs and safeguard numbering resources more effectively by obtaining numbers through carrier partners, as they do today. Furthermore, Vonage understands that it is common practice for CLECs to obtain numbers indirectly in some areas. There is no reason to require a subset of providers—or all providers—to use an all-or-nothing approach to direct access.

The Commission should reject demands that states be allowed to restrict VoIP providers to certain rate centers, whether to push VoIP providers to pooling rate centers⁶¹ or more highly populated urban areas.⁶² Doing so would be anticompetitive and relegate VoIP providers and their customers to second-class status. Instead, as CenturyLink and others suggest, all service providers should be allowed access to numbers in all rate centers.⁶³ The proposed constraints are, in any event, likely unnecessary. As CenturyLink explained, the natural business needs of VoIP providers will likely discourage VoIP providers from seeking large blocks of numbers in areas

⁶⁰ See Multi-State General Comments at 6 (arguing that “VoIP providers need to transfer their entire inventory of numbering resources to their own operating company number (OCN) from their numbering partner as a condition of receiving numbers directly.”); Wisconsin PSC et al. Comments at 8 (arguing that once it gets its own OCN, a VoIP should not be able to “simultaneously obtain numbers through a numbering partner.”).

⁶¹ CPUC Comments at 15 (proposing “that VoIP number requests be steered to rate centers where the pools have twenty or more blocks, and no VoIP number requests should be accommodated in non-pooling rate centers”).

⁶² PA PUC Comments at 10 (arguing that “the FCC must grant the states the right to steer LRN requests toward rate centers in more populated areas, where the numbers are more likely to be utilized”).

⁶³ CenturyLink Comments at 7. See also AT&T Comments at 7; Comcast Comments at 7; Vonage Comments at 12.

where they have few customers, instead “continu[ing] to provide service in some areas through LEC partners.”⁶⁴

The Commission must also apply consistent number utilization thresholds to all providers and reject suggestions that it impose a higher utilization threshold on VoIP providers.⁶⁵ VoIP providers should be subject to the same number utilization requirements as any other provider seeking direct access to numbers.⁶⁶ To the extent commenters are concerned about industry standards and guidelines that may contribute to number exhaust,⁶⁷ they should defer to the working groups that are currently reviewing those standards and guidelines. Commenters across the board suggest referring consideration of crucial number exhaust issues to industry working groups, like the NANC and NANPA, as “subject matter experts.”⁶⁸

New standards or regulations that the Commission considers with regard to numbers should be applied on an industry-wide basis.⁶⁹ While many commenters suggest modifications to pooling,⁷⁰ which Vonage supports, those modifications should be considered industry-wide and not only with respect to VoIP providers with access to numbers. Vonage also supports calls

⁶⁴ CenturyLink Comments at 8 n.10.

⁶⁵ *See, e.g.*, CPUC Comments at 17.

⁶⁶ AT&T Comments at 6-7; Comcast Comments at 6; Level 3 Comments at 7; NJ Rate Counsel at 9.

⁶⁷ *See, e.g.*, Comments of Terra Nova Telecom at 3 WC Docket No. 13-97 et al. (filed May 22, 2013) (“Terra Nova Telecom Comments”).

⁶⁸ NTCA Comments at 7-8.

⁶⁹ *See generally* Comments of Neustar, WC Docket No. 13-97 et al. (filed July 19, 2013) (“Neustar Comments”); iconectiv Comments. *See also* PA PUC Comments at 11 (“The Pa. PUC believes that now is the time to rewrite the INC guidelines that dictate the rules for numbering assignment to reflect the substantial changes within the industry”).

⁷⁰ For example, Pennsylvania argues that “[t]he final rules should move to blocks of 100, similar to that used for 1000-block pooling.” PA PUC Comments at 11. The State Commissions of Wisconsin, Oregon, Idaho, Nebraska, and Minnesota suggest that there should be mandatory pooling in all rate centers. Wisconsin PSC et al. Comments at 6-7.

for providers to return unused numbers, but any such rule must apply equally to all providers that obtain direct access to numbers.

In addition, the Commission should not hamstring VoIP providers by imposing unnecessary and technically difficult requirements. For example, VoIP providers should be subject to N11 obligations only for N11 codes actually in use in a given jurisdiction.⁷¹ Vonage believes it is capable of providing N11 access, as long as local governments request it and provide the necessary information, but imposing a regulatory obligation where technical questions remain, and where it creates imbalance in the industry, is inappropriate and unfair.

C. VoIP Routing and Participation in Industry Databases Is Feasible and Easily Implemented.

Vonage is confident that the numbering trials will show that calls to and from interconnected VoIP providers with numbers will be properly routed. The existing system, which associates numbers assigned to Vonage end-users with Vonage's underlying carriers rather than Vonage, is not transparent and can make it difficult for other providers to track calls between their customers and Vonage subscribers.⁷² This arrangement creates problems not only in determining the origin of a routing problem, but also in resolving such problems. Vonage and many other commenters who seek to resolve these problems on a routine basis therefore recognize and appreciate the potential benefits of this proceeding with respect to routing problems. For instance, AT&T notes that “[p]roviding interconnected VoIP providers, like Vonage, direct access to numbering resources will facilitate, rather than hinder, call routing and tracking” because “the existing workaround arrangements between interconnected VoIP

⁷¹ CenturyLink explains more fully: Providers should be required to provide N11 services only where (1) a government or authorized private party has asked for such a deployment; (2) the requesting entity pays for the deployment; and (3) the provider is given sufficient time to accomplish the deployment. CenturyLink Comments at 12.

⁷² See AT&T Comments at 16.

providers and their numbering partners are inefficient and more prone to error than routing processes enabled by direct number assignment.”⁷³

Vonage, for its part, is relying on currently available marketplace solutions that are not unique and are fully supported by iconectiv, which provides the BIRRDS and LERG routing databases for the industry.⁷⁴ Iconectiv expressly noted that it “does not anticipate any database-related call routing or tracking problems arising from allowing VoIP providers to have direct access to numbers.”⁷⁵ Neustar similarly notes that “the NPAC already has the capability to associate IP routing information, including Session Initiation Protocol (“SIP”) endpoints, to TNs.”⁷⁶ In fact, as iconectiv points out, Vonage is “already established to enter data directly into BIRRDS, and iconectiv is working with other VoIP providers who have requested BIRRDS access.”⁷⁷ Because Vonage is established to enter data in BIRRDS, it is also fully able to establish orders in the LERG—and, indeed, has already done so, in anticipation of the next phase in the numbering trials.

The record simply does not support arguments that VoIP providers with direct access to numbers will “fail to engage in industry standard routing practices”⁷⁸ and that “the operational and security implications of providing access to industry databases and signaling systems to OTT

⁷³ *Id.* at 16-17; *see also, e.g.*, Comcast Comments at 10-11; Flowroute Comments at 4; SmartEdgeNet Comments at 20-21.

⁷⁴ *See* iconectiv Comments at 5.

⁷⁵ *Id.*

⁷⁶ Neustar Comments at 10.

⁷⁷ iconectiv Comments at 3.

⁷⁸ *See, e.g.*, Bandwidth.com Comments at 14.

providers is simply unknown.”⁷⁹ Similarly, concerns that consumers will suffer if a requirement that VoIP providers maintain carrier-partner relationships is absent are misplaced. There is likewise no need for the Commission to delay action in order to “consider how routing and databases should be updated”⁸⁰—as noted by iconectiv and Neustar, industry databases can already accommodate VoIP providers. As Comcast noted, “[m]aking NANP numbers directly accessible by VoIP providers should not necessitate any new routing requirements.”⁸¹ The Commission should particularly reject suggestions that would undermine the basic premise of this proceeding, that direct access to numbers by VoIP providers will enable innovation and competition by freeing VoIP providers from relying on carrier partners for interconnection.

Vonage therefore encourages the Commission to reject out of hand any calls for a requirement that “all non-carriers [sic] calls be routed through a carrier partner.”⁸² Where VoIP providers “find it advantageous to enter into a carrier partner relationship directly, they will do so,”⁸³ as even some carriers do today. VoIP providers will continue to encounter business circumstances that lead them to “outsource [their] PSTN connection function to a wholesale vendor that may or may not be a telecommunications carrier.”⁸⁴ Even where VoIP providers may wish to enter into IP interconnection agreements, they may be unable to do so because of limitations at the LEC—as CenturyLink notes, some LECs will not have facilities that can

⁷⁹ COMPTTEL Comments at 11; *see also, e.g.*, NTCA Comments at 6 (arguing that industry efforts now underway must be “tried and tested before the numbering system is discarded without any necessary quality controls”).

⁸⁰ NTCA Comments at 6.

⁸¹ Comcast Comments at 9. *See also, e.g.*, SmartEdgeNet Comments at 20 (noting that direct access to numbers will not change routing but may have direct and indirect benefits).

⁸² Bandwidth.com Comments at 14.

⁸³ SmartEdgeNet Comments at 21.

⁸⁴ *Id.*

accommodate IP interconnection in all areas, and thus will not be able to enter into an IP interconnection agreement.⁸⁵ For these and other reasons, Vonage expects that it will continue to enter into carrier partnerships for some time.

But where a VoIP provider can use a marketplace solution or negotiate direct IP interconnection, it should not be required to route calls through a carrier partner. Requiring calls to be routed through a carrier partner notwithstanding the actual arrangement established by a VoIP provider would create roadblocks for the IP transition and undermine the entire purpose of this proceeding for no benefit. Similarly, ensuring that VoIP providers have access to the same tools available to carriers—including arranging for interconnection via a relationship with an intermediary CLEC—is critical to the success of this proceeding. Hampering VoIP providers with unnecessary and burdensome requirements to which carriers are not subject does not serve the public interest.

Other proposals by commenters seem to misunderstand the current state of routing and interconnection and should similarly be rejected. In that respect, calls for express restrictions on VoIP providers related to database functionality, such the requirement to “maintain an alternative LEC routing of ‘last resort’ with their switches homed to a LERG-listed LEC tandem, as a default routing option”⁸⁶ as suggested by HyperCube, are simply unnecessary.⁸⁷ The pertinent industry databases are already able to accommodate “the needs of industry and the FCC’s

⁸⁵ See CenturyLink Comments at 18.

⁸⁶ HyperCube Comments at 13.

⁸⁷ Indeed, Vonage noted in its Numbering Proposal that this is the precise arrangement it would be using. See Letter from Brita D. Strandberg, Wiltshire & Grannis LLP, counsel to Vonage Holdings Corp., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-97 et al., at 3 (filed May 17, 2013) (noting that Vonage would “configure to Switch Homing Arrangement (‘SHA’) in LERG & NPAC”).

regulatory decisions,”⁸⁸ and establishing specific routing requirements would restrict providers and industry databases from taking a flexible approach to routing innovations.

Likewise, proposals like CenturyLink’s, asking the Commission to adopt what appears to be an interim traffic-exchange solution for those VoIP providers participating in the trials, requiring VoIP providers to enter into traffic exchange agreements with TDM LECs, are not only unnecessarily complex but also entirely duplicative of the transit and tandem routing functions available from competitive tandem providers. As an initial matter, CenturyLink’s proposal appears to be a reaction to demands from some trial participants that it exchange traffic only in IP. Vonage does not read the *Order* to require IP interconnection with trial participants and so believes CenturyLink’s proposal to be essentially moot. Nevertheless, it is an unnecessary requirement—as CenturyLink itself notes, tandem providers are not doing anything differently with respect to their interactions with the TDM LECs with whom they exchange traffic just because the traffic originates or terminates with an interconnected VoIP provider.⁸⁹ Entering into a special traffic exchange agreement with a TDM LEC where a VoIP provider has already arranged for interconnection via a tandem provider would simply limit flexibility and, in many cases, require duplicative and unnecessary routing arrangements.

Most stakeholders understand that direct access to numbers by VoIP providers will not suddenly shift the entire market to IP interconnection.⁹⁰ But Vonage does believe that, as it and other VoIP providers with direct access to numbers are able to negotiate for direct IP interconnection, routing will become even simpler. Vonage expects, for example, to use direct access to simplify routing by avoiding unnecessary hand-offs between providers and unnecessary

⁸⁸ iconectiv Comments at 3.

⁸⁹ CenturyLink Comments at 16.

⁹⁰ *See, e.g.*, AT&T Comments at ii, Verizon Comments at 13.

protocol conversions, both increasing transparency and improving performance.⁹¹ In that respect, the Commission's proposal *will* result in changes to routing and the use of industry databases. Those changes, however, are inevitable, as the Commission seeks to transition the entire industry to IP and away from TDM. Vonage believes that the steps the Commission is considering in this proceeding can assist that transition by facilitating IP interconnection. Companies like Vonage will be able to demonstrate not only how IP interconnection agreements will work in practice on a technical level, but also the increased consumer benefits that will result from IP interconnection.

D. Intercarrier Compensation Will Not Be Directly Affected by Granting VoIP Providers Direct Access to Numbers.

The structure of the Commission's current intercarrier compensation regime ensures that no changes need be made to accommodate direct access to numbers by VoIP providers. In this respect, claims by commenters like NTCA, which states that granting interconnected VoIP providers direct access to numbers will "pull[] apart" the intercarrier compensation system "irretrievably,"⁹² and Interisle, which argues that granting VoIP providers direct access to numbers will "create even more complexity by creating yet another set of rates for interconnected VoIP providers that have their own numbers,"⁹³ are plainly contradicted by the record.

The plain fact is that numbers have essentially nothing to do with intercarrier compensation. The Commission's proposal simply will not change intercarrier compensation.

⁹¹ See, e.g., Flowroute Comments at 4 ("In certain instances, VoIP providers have to direct traffic through LECs even though a more direct route exists. Eliminating this necessity will result in higher call quality and lessen call failures resulting in increased end user satisfaction.").

⁹² NTCA Comments at 6.

⁹³ Interisle Comments at 13.

As AT&T noted, “[b]ecause the obligation to pay intercarrier compensation has never stemmed from numbers, allowing direct access to them by interconnected VoIP providers will not change existing intercarrier compensation rights and obligations.”⁹⁴

Direct access to numbers may result in more bill-and-keep arrangements where VoIP providers are able to negotiate IP interconnection agreements, but that is consistent with the Commission’s stated goal to move *all* compensation to bill-and-keep.⁹⁵ To that end, Terra Nova Telecom’s assertion that “the single largest reason that VoIP carriers choose not to become CLECs is to avoid Intercarrier Compensation liability”⁹⁶ is without foundation. This market-wide transition to bill-and-keep is slated to occur whether or not VoIP providers receive direct access to numbers, though the ability of VoIP providers to negotiate IP interconnection agreements will certainly facilitate that transition. Such agreements, however, are not likely to be the default for many years, and “Vonage anticipates that a sizeable number of carriers will prefer to continue with current arrangements rather than shift to IP-interconnection.”⁹⁷ Where calls to and from Vonage subscribers are carried by LECs, those LECs will remain subject to the intercarrier compensation requirements associated with the transport and delivery of that traffic.⁹⁸

⁹⁴ AT&T Comments at v; *see also* CenturyLink Comments at 15-16 (noting that the numbering trials and the Commission’s proposals do “nothing to change the application of these existing intercarrier compensation rules”); SmartEdgeNet Comments at 14 (“Allowing VoIP providers to assign numbers directly has no bearing on whether intercarrier compensation payments are made or not.”).

⁹⁵ *See Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161, FN 26 FCC Rcd. 17,663, 17,905-14 ¶¶ 740-759 (2011).

⁹⁶ Terra Nova Telecom Comments at 2.

⁹⁷ Letter from Brita D. Strandberg, Wiltshire & Grannis LLP, counsel to Vonage Holdings Corp., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 13-97 et al., at 2 (filed Aug. 14, 2012).

⁹⁸ *See* Vonage Comments at 23.

V. CONCLUSION

Vonage appreciates this opportunity to participate as the Commission seeks to bring to fruition the innovation, competition, and benefits to consumers promised by broadening direct access to numbers. Vonage urges swift action by the Commission on these crucial issues.

Respectfully submitted,



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