

**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 Intercarrier 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	)	

**COMMENTS OF  
NTCA–THE RURAL BROADBAND ASSOCIATION**

**I. INTRODUCTION & SUMMARY**

NTCA–The Rural Broadband Association<sup>1</sup> (“NTCA”) hereby submits these comments in response to the Notice of Proposed Rulemaking and Notice of Inquiry seeking comment on whether interconnected Voice over Internet Protocol (“VoIP”) providers should have direct

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<sup>1</sup> NTCA represents nearly 900 rural rate-of-return regulated telecommunications providers. All of NTCA’s members are full service local exchange carriers (LECs) and broadband providers, and many of its members provide wireless, cable, satellite, and long distance and other competitive services to their communities. Each member is a “rural telephone company” as defined in the Communications Act of 1934, as amended.

access to telephone numbers.<sup>2</sup> NTCA welcomes an informed dialogue about improvements to number administration and use – provided that, like other Internet Protocol (“IP”) evolution issues – core principles of protecting consumers, promoting competition, and ensuring universal service are sustained and not jeopardized. As the Commission recognizes, telephone numbers are a valuable and limited resource.<sup>3</sup> As such, numbers should be entrusted to only those who have the financial, managerial, and technical wherewithal to make judicious use of them. Numbers have also played and continue to play an important role in facilitating the seamless interconnection of networks. It is essential that the Commission and the industry enter this public policy debate considering the short and long range implications of any changes, and avoid any changes that will only exacerbate the many unresolved concerns about the fraying of systems that ensure Americans can communicate effectively with one another.

## **II. LIMITING NUMBER USE TO CARRIERS IS THE BEST MEANS OF ENSURING “QUALITY OF SERVICE” AND OPERATIONS CONSISTENT WITH THE PUBLIC INTEREST**

There is a fabric of federal regulation that applies to common carriers. Permitting non-carriers to step into the shoes of carriers calls into question the statutory framework from which the Commission derives its authority over communications in the first instance, and puts essential public policy objectives at risk. The regulatory classification of VoIP has presented an industry-splitting conundrum for many years. Many entities providing such services have asserted that they are not providing telecommunications services, whereas others have argued that they are the functional equivalent of telecommunications services and should be treated as

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<sup>2</sup> *In the Matter of Numbering Policies for Modern Communications, et al*, WC Docket No. 13-97, *et al*, Notice of Proposed Rulemaking, Order and Notice of Inquiry, (rel. April 18, 2013) (“Numbering NPRM”).

<sup>3</sup> Numbering NPRM, ¶ 1.

such, even if different technologies are used in the underlying network. The Commission created the “enhanced service provider (“ESP”) exemption” to address the desire of providers of computer-based information services to obtain connections to their networks without paying per-minute switched access charges.<sup>4</sup> The exemption permitted ESPs to elect to be treated as something other than carriers and instead procure connections to the public switched telephone network (“PSTN”) from carriers. The Commission spelled out the specific ways in which those non-carrier connections could be procured. Since its adoption, this “exemption” has enabled ESPs to obtain local business connections to the PSTN as end users and assert independence from any obligation to pay for access to and use the PSTN as carriers. With those local business connections, comes local telephone numbers.

If the Commission determines now that ESPs as a broad (and apparently entirely self-defined) category may obtain direct access to numbers, it would effectively find that ESPs can self-provide access to the PSTN as if they were carriers without bearing many of the regulatory obligations that otherwise apply to carriers. Though the Commission seeks comment on various obligations with which a self-provisioning VoIP provider might be required to comply, this discrete list of responsibilities falls short of addressing the legal and technical wrinkles that could result from this line of reasoning.

Carriers have myriad responsibilities, obligations and legal and technical requirements that help to ensure the integrity of the PSTN. Any provider with an interest in this proceeding has the ability to seek authority to provide service as a carrier, such as with a license issued by the Commission or a certificate of public convenience and necessity issued by a state regulatory

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<sup>4</sup> *MTS and WATS Market Structure*, CC Docket no 78-72, Phase I, Memorandum Opinion and Reconsideration Order, 97 FCC 2d 682 (1983) at ¶ 83, *NARUC v. FCC*, 737 F.2d 1095, 36-1137 (D.C. Cir 1984).

body, and obtain direct access to numbers. These very basic licensing requirements are not terribly onerous – particularly for non-incumbent carriers – but provide an essential understanding of who is providing services in particular markets and visibility into where issues may be arising when, for example, calls fail to complete. To the extent a state will not (or cannot by law) certify a VoIP provider, the Commission should assume that responsibility. Such certifications provide some level of review of the providers’ services and provide the regulator, and through the regulator, the public, the ability to monitor the market and operations to address market failures. Rather than put together a patchwork of insufficient obligations and new regulations that create new technical and jurisdictional issues (while limiting operational oversight) the Commission should continue to limit direct access of numbers to certified carriers.

**III. IF THE COMMISSION IS GOING TO PERMIT DIRECT ACCESS TO NUMBERING RESOURCES TO NON-CARRIERS, IT MUST ADOPT PROCESSES AND PROCEDURES THAT PROTECT THE PUBLIC’S INTEREST**

In the Order, the Commission established a limited technical trial of direct access to numbers. The Commission stated that it was tailoring its waiver specifically to test whether giving interconnected VoIP providers access to numbers will raise issues relating to number exhaust, number porting, VoIP interconnection, or intercarrier compensation.<sup>5</sup> Given this context, it is simply premature for the Commission to be considering further movement on this issue and expansion of the pool of direct recipients of public telephone numbering resources. Instead, the trials must be completed, the data analyzed (presuming that any meaningful data can actually be gathered from such trials given their self-selected structure), and any interested parties must be given the opportunity to examine the results and comment on the trials and its

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<sup>5</sup> Numbering NPRM, ¶ 94.

results. After that data collection exercise is completed, then, *and only then*, should the Commission propose rules on which the public has the opportunity to comment.

If the Commission nonetheless proceeds to consider in advance of gathering any useful information to be gleaned from the trials that non-carriers should have direct access to numbering resources, it must put a process into place that ensures the continued monitoring of operations that ensure quality of service and operations consistent with the public interest. The Commission's Form 477 data collection effort is insufficient in this regard. The form itself offers no commitments and no oversight. A certificate of public convenience and necessity requires a higher showing than what is reported on Form 477. Moreover, if VoIP providers are given direct access to numbering resources, they should be required to file Numbering Resources and Utilization Forecast ("NRUF") Form 502, as carriers are presently required to do.

If the Commission will not require such full certification from a provider that is making use of public numbering resources and holding itself out as transmitting or receiving calls from such numbers, the Commission should, at the bare minimum, establish a registration process with minimum service quality requirements. For example, the North American Numbering Council ("NANC") in its capacity as the Commission's expert advisory body on numbering matters should be engaged to ensure applicant 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.

Furthermore, a number of state governments have received delegated authority to administer numbering resources. In addition, numbers are still in many consumers' minds associated with (if not tied mechanically to) geographic locations, even if the service is nomadic. Therefore, the Commission should engage in detailed consultation with state governments.

In short, all that gain access to direct number resources should be subject to the same rules, procedures, and requirements that carriers are subject to in making use of such numbers, unless a thoughtful and holistic “smart regulation review” finds good reason for a specific rule to be waived, modified, or the subject of forbearance.<sup>6</sup> Requirements that should apply include NRUF requirements (as discussed above), call completion rules and metrics, cramming and slamming rules, Enhanced 911 (“E911”) requirements and, to the extent they are not required already, contributions to the universal service fund. Just as importantly, applicants should also be required to consent to the enforcement authority of the Commission and the states in which the service is provided to ensure that there are “teeth” connected with the application of such rules. The Commission should not be limited in its ability to demand accountability in the public interest and to swiftly sanction those gaining direct access to numbering resources if they fail to live up to the requirements of the Communications Act, which serve to protect consumers and the public interest.

#### **IV. EXISTING INTERCONNECTION ISSUES MUST BE EXAMINED AND RESOLVED BEFORE PULLING APART THE SYSTEM**

VoIP providers with direct access to numbers should be required to abide by the existing intercarrier compensation rules, and the continued overarching issues should be examined and resolved before the system is pulled apart irretrievably. Industry efforts are now underway to consider how routing and databases should be updated to allow for numbers to be reconciled to IP endpoints. That process should be tried and tested before the numbering system is discarded without any necessary quality controls. The Commission must also address “phantom traffic.” A provider with direct access to numbering resources should be liable for the cost of routing

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<sup>6</sup> Such a review and consultation with NANC could also include more detailed consideration of the changes to numbering databases

calls. If a “carrier partner” through which interconnection is achieved fails to pay, liability should attach to the number holder. The Commission must also address public internet routing. Routing via “best effort” IP technologies will almost certainly result in substantial failures, if not unmitigated disasters, in call routing. Indeed, there is ample evidence that this is an ongoing problem that significantly contributes to the call termination crises.<sup>7</sup> The Commission must recognize that VoIP calls that are not routed through carefully managed paths subject to enforceable service level agreements or similar quality-assurance measures will not be reliable and will contribute to the instability of voice service that customers rely upon.

To get traffic to and from the PSTN, it must be connected to the time-division multiplexing (“TDM”) path. VoIP providers will have to interface with the existing TDM, Signaling System 7 (“SS7”)-controlled PSTN. For routing and interconnection issues the Commission should look to shared housing arrangement (“SHAs”) that exist today as a model. SHAs allow multiple carriers, each with their own code, to use the same switch. If VoIP providers have direct access to numbers they should have their own codes like carriers do today. If VoIP providers are given direct access to numbering resources, they should be subject to the same procedures for populating and updating the appropriate databases as carriers are today.

**V. NUMBERING EXHAUST QUESTIONS MUST BE THOROUGHLY CONSIDERED AND ADDRESSED BEFORE ANY PROPOSALS ARE ADVANCED**

This proceeding must be conducted thoughtfully, without rush and without experiments. Telephone numbers are a valuable and limited resource. The threat of number exhaust is real, and hasty, unconsidered action in this proceeding could speed it up. To ensure the consequences

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<sup>7</sup> See, Comments of National Exchange Carrier Association, NTCA –The Rural Broadband Association, Western Telecommunications Alliance and Easter Rural Telecom Alliance, *Rural Call Completion*, WC Doc. No. 13-39 (filed May 13, 2013).

of such issues are fully considered, however, they should be referred to the NANC and the North American Number Plan Administrator (“NANPA”) as subject matter experts. These groups should be given the opportunity to provide specific proposals that can then be published for public comment, in lieu of relying upon open-ended questions that are unlikely to capture the full breadth of technical issues that must be considered. The NANC has extensive experience serving as the Commission’s expert advisory body on number administration, porting, and exhaust, and has done so while representing a variety of industry segments that often rely upon different technologies and provide service under different business models and regulatory regimes. Similarly, the NANPA has executed the Commission’s directives based on NANC recommendations, navigating anticipated and unanticipated operational challenges while respecting the perspectives of industry segments whose viewpoints frequently do not align. The hard-won experience of the NANC and NANPA should be a prime resource as the Commission considers the question of granting VoIP providers direct access to numbering resources.

## **VI. CONCLUSION**

NTCA welcomes an informed dialogue about improvements to number administration and use that include the core principles of protecting consumers, promoting competition, and ensuring universal service. It is essential that the Commission and the industry enter an informed public policy debate. Not only is it important that the Commission adopt policies and procedures that protect valuable numbering resources before making them available to any non-carriers, but the Commission must as a first step resolve important and outstanding routing, interconnection, and number exhaust issues, considering any data gleaned from on-going trials to the extent that any becomes available.

Respectfully submitted,

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