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

In the Matter of	
Amending the Definition of Interconnected VoIP Service in Section 9.3 of the Commission's Rules	GN Docket No. 11-117
Wireless E911 Location Accuracy Requirements	PS Docket No. 07-114
E911 Requirements for IP-Enabled Service Providers	WC Docket No. 05-196

REPLY COMMENTS OF VONAGE HOLDINGS CORP.

Vonage Holdings Corp. ("Vonage") submits these reply comments to reiterate its opposition to the Federal Communications Commission's ("FCC" or "Commission") proposal[1] to change the definition of interconnected Voice over Internet Protocol ("VoIP") services and impose 911 requirements on some non-interconnected VoIP services as if they were interconnected VoIP services. As Vonage and other commenters explained in the initial round of comments, the Commission can best serve public safety by enforcing existing 911 rules for traditional telephone service and its true substitutes. The Commission should not attempt to change the definition of interconnected VoIP to include outbound-only VoIP, as such an amendment is not permitted by the NET 911 Improvement Act or the Administrative Procedure Act and would be inconsistent with Commission precedent. Although the Commission should continue to facilitate the development of automatic location identification technology, it should

[1] *Amending the Definition of Interconnected VoIP Service in Section 9.3 of the Commission's Rules*, Notice of Proposed Rulemaking, Third Report and Order, and Second Further Notice of Proposed Rulemaking, 26 FCC Rcd. 10074 (2011) ("*Notice*").

not mandate any requirements until automatic location technology can deliver better results than the Commission's existing registered location rules.

I. The Record Demonstrates that Existing 911 Requirements Are a Poor Fit for Outbound-Only VoIP.

Existing 911 requirements were designed to implement 911 calling on traditional phone networks. These requirements have been successful when applied to true substitutes for traditional phone service, including interconnected VoIP services like Vonage. Outbound-only VoIP, however, cannot substitute for traditional phone service, chiefly because it does not allow users to receive telephone calls. Additionally, while some outbound-only services may duplicate certain functions of traditional phone service, many do not. Outbound-only VoIP, for example, may be integrated into a diverse array of products including social networks or web applications, enriching these innovative products with voice connectivity without offering a substitute for traditional phone service. The comments illustrate the difficulty of applying 911 obligations to the myriad variety of existing and emerging outbound-only VoIP, as even commenters who support such obligations disagree about the appropriate scope of any requirements. That consumers do not uniformly expect outbound-only VoIP to support 911 presents the Commission with an opportunity to shape consumer expectations in a way that maximizes public safety, steering consumers towards workable and effective 911 solutions.

Some commenters support extending 911 requirements to a subset of outbound-only VoIP services, but different commenters propose different subsets. AT&T Inc. ("AT&T"), for example, proposes that the Commission extend 911 obligations to "outbound, residential VoIP services with local calling capacity,"[2] but not to outbound-only business VoIP or long-distance

[2] Comments of AT&T Inc. at 1, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*AT&T Comments*").

outbound-only VoIP services.[3] In contrast, Verizon and Verizon Wireless ("Verizon") does not distinguish business and residential VoIP, but would carve out specific outbound-only VoIP services that are not "widely accepted and fungible substitutes for telephony."[4] Notably, Verizon does not explain how to identify such services beyond offering a single example: international-only outbound-only VoIP services, for which (according to Verizon) consumers "do not have the same calling and service expectations."[5] Telecommunication Systems, Inc. ("TCS"), on the other hand, argues that consumers expect 911 capabilities for outbound-only VoIP services, but concedes that only the provision of local calling service triggers this expectation and does not distinguish between business and residential services.[6] This lack of consensus on what services generate an expectation for 911 capability demonstrates that there is no clear user expectation of 911 capability on outbound-only VoIP.

Some commenters nevertheless assert that consumers expect 911 service from outbound-only VoIP services and suggest that these unproven consumer expectations justify wholesale

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[3] *Id.* AT&T claims that the "record in this proceeding shows" that residential customers have an expectation of being able to call 911 on outbound-only VoIP—but cites only to its own prior filing making the same bald assertion. Contrary to AT&T's assertion, the record shows that outbound-only VoIP is *not* used as a substitute for traditional telephone service; rather, residential customers using outbound-only VoIP are also "procuring the outbound VoIP service for a special purpose . . . and they would likely procure other communications services with 911 calling capability," such as a mobile phone or traditional phone service. AT&T Comments at 2; Comments of Vonage Holdings Corp. at 12, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*Vonage Comments*").

[4] Comments of Verizon and Verizon Wireless at 5, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*Verizon Comments*") (citing Notice ¶¶ 48-58).

[5] Verizon Comments at 5.

[6] Comments of Telecommunication Systems, Inc. at 3-4, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*TCS Comments")*.

application of 911 obligations to these services.[7] While it may be reasonable to conclude that consumers expect 911 service from true substitutes for traditional phone service such as interconnected VoIP, there is no basis for a similar assumption with respect to outbound-only service. Quite to the contrary, the record shows that current 911 requirements for interconnected VoIP accurately reflect consumer expectations regarding the availability of 911 services.

Consumers use outbound-only VoIP services to supplement their regular wireline or mobile telephone service and do not expect outbound-only VoIP to supply the same calling capabilities, including 911 capabilities.[8] As the Voice on the Net Coalition ("VON Coalition") explains, "the rapid adoption of one-way VoIP products suggests *not* that consumers expect these products to act like a phone service, but rather that non-PSTN features such as video calling, presence, instant messaging and screen sharing provide a compelling reason to use these innovative services as a complement or incidental to, rather than as a replacement for, traditional phone service."[9] The Information Technology Industry Council ("ITI") states that the "*Notice* cites no evidence that consumers have a reasonable expectation of emergency calling capability

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[7] Comments of CenturyLink to the Second Further Notice of Proposed Rulemaking at 3, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*CenturyLink Comments*"); Comments of Bandwidth.com, Inc. at 6, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*Bandwidth Comments*").

[8] *See* Comments of the Voice on the Net Coalition at 4, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*VON Coalition Comments*"); Vonage Comments at 12-13; Comments of the Information Technology Industry Council at 6-7, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*ITI Comments*"); Comments of the National Cable & Telecommunications Association at 11, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*NCTA Comments*").

[9] *See* VON Coalition Comments at 4; Comments of Motorola Mobility, Inc. at 3, GN Docket No. 11-117, PS Docket No. 07-114, WC Docket No. 05-196 (filed Oct. 3, 2011) ("*Motorola Comments*") ("New broadband technologies like mobile VoIP and outbound-only calling services are still niche products undergoing rapid changes as they develop into the consumer marketplace").

for outbound-only VoIP," noting that this is unsurprising given that outbound-only VoIP users "are aware that these outbound-only VoIP products are not substitutes for their wireline and wireless services," but rather complement those services.[10] The National Cable & Telecommunications Association ("NCTA"), which represents cable operators providing interconnected VoIP voice services to over 23 million customers, agrees that the "great majority" of outbound-only VoIP users view outbound-only VoIP as a "supplemental service," relying on wireline, iVoIP, or wireless services to provide 911 access.[11] These varying approaches illustrate that there is no existing unified customer expectation that some or all outbound-only VoIP will support 911. The Commission and industry therefore have an opportunity to set customer expectations in a way that maximizes public safety by (1) encouraging consumers to use their existing wireline or wireless phone to reach 911, and (2) encouraging providers of services or applications that ride on CMRS-enabled devices, like smartphones, to ensure that their services push all 911 calls onto the CMRS service.

II. The Best Approach Is to Enforce Existing Rules for True Replacement Services and to Educate Consumers to Use Wired or Wireless Phones to Call 911.

The best approach the Commission can take is to enforce existing rules for true replacement services while educating consumers of complementary services to use their wireless or wired phone to call 911. This approach would maximize public safety by driving consumers onto the existing 911 network rather than untested 911 solutions and ensure that users of true substitute services can reach emergency services when they need them.

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[10] ITI Comments at 7.

[11] NCTA Comments at 11.

The National Emergency Number Association ("NENA") points out that some services that are, in fact, iVoIP do not comply with the Commission's existing 911 rules.[12] This failure presents a serious public safety risk; consumers of iVoIP should be able to rely on their iVoiP service providers to meet the Commission's current requirements to provide 911. The Commission can best protect the public safety by enforcing its rules to ensure that all iVoIP providers satisfy their obligation to provide their customers with access to 911 service.

By contrast, extending 911 obligations to non-interconnected VoIP, thereby mandating development and support of a wide array of new 911 capabilities, would necessarily "divert resources from building a single reliable and accurate 911 network."[13] Instead, the Commission should encourage consumers to use their wireline or wireless phones to access the traditional 911 network, which is the reliable result of decades of investment and development.[14] Educating consumers to rely on the existing 911 network will maximize public safety and ensure that consumer expectations accurately reflect real technological capabilities. It will also minimize risks to public safety resulting from consumer confusion stemming from changing rules and technology.[15] As Bandwidth.com argued in its comments, public safety benefits from "clear guidance" to industry and consumers and standardized safety information across devices.[16] Supporting existing 911 solutions will also avoid diverting industry and public safety resources from proven 911 solutions, thus undermining their success and, potentially, the move to even

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[12] Comments of the National Emergency Number Association at 2-3, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*NENA Comments*").

[13] Vonage Comments at 13.

[14] *See* Vonage Comments at 14 (citing *Notice* ¶¶ 5-12).

[15] *See* ITI Comments at 10 (explaining the risks to public safety); NCTA Comments at 11 (noting that changing the rules could cause confusion and "disrupt settled expectations").

[16] Bandwidth Comments at 7.

more robust Next Generation 911 solutions.[17] Moreover, as the ITI explains, the Commission must consider the costs and benefits, including the cost to public safety, of any approach.[18]

The Commission should consider public safety, not regulatory parity, when crafting its requirements. There are vast differences between legacy and emerging services, and it is appropriate for regulatory treatment to reflect these differences. Providers of true substitute interconnected VoIP services are appropriately subject to 911 requirements because their services function as—and consumers expect their services to function as—replacements for traditional telephone connections. As Vonage and others have explained, however, and as discussed above, non-interconnected VoIP services are simply different from traditional wireline and wireless phone services.[19] Moreover, there is no one definition or type of outbound-only service—outbound-only VoIP may be used to deliver a wide variety of features and functions, including click-to-call features and or voice connectivity within social network or other applications, with yet more possibilities still on the horizon. Reflexively applying the same regulations to different services in a manner that disregards their differences is not parity.

The Commission may also consider requiring applications that ride on smartphones to push their 911 calls onto the underlying phone service, much like Skype mobile does today.[20] As Verizon explains, where the outbound-only VoIP applications like Skype mobile can push calls onto the underlying phone service, "there is no reason for [such] services such as Skype

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[17] *See* Comments of MetroPCS Communications, Inc. at 5, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*MetroPCS Comments*"); ITI Comments at 10. *See also* NCTA Comments at 10.

[18] ITI Comments at 9-12.

[19] *See* Vonage Comments at 12-13; Verizon Comments at 5; AT&T Comments at 2; VON Coalition Comments at 4; ITI Comments at 6-7; NCTA Comments at 11.

[20] *See* Verizon Comments at 5 ("Skype mobile™ users' 911 calls are completed via Verizon Wireless's CMRS network").

mobile™ to be subject to new E911 requirements."[21] MetroPCS Communications, Inc. ("MetroPCS") also supports this approach, suggesting that the Commission allow wireless providers to route all "E911 calls via their existing circuit-switched systems."[22] This approach is also consistent with that advocated by T-Mobile USA, Inc. ("T-Mobile"), which has suggested that the Commission "assess the wide range of potential service permutations" aside from allowing over-the-top providers to access wireless providers' location information,[23] and CTIA—The Wireless Association ("CTIA"), which supports continued enforcement of current rules ensuring that interconnected VoIP providers have access to capabilities on the underlying service needed to satisfy 911 requirements.[24]

III. The FCC Cannot Change the Definition of Interconnected VoIP to Include Non-Interconnected VoIP.

As Vonage explained in its comments, the Commission cannot use this proceeding to change the definition of interconnected VoIP service to include non-interconnected VoIP services such as outbound-only VoIP. Congress's decision to exclude language in the NET 911 Improvement Act[25] stating that subsequent changes in the regulatory definition will "flow through" to the statute restricts the Commission from amending that definition.[26] The Commission's own precedent demonstrates that it does not have the authority to change the

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[21] Verizon Comments at 5.

[22] MetroPCS Comments at 6.

[23] Comments of T-Mobile USA, Inc. at 5, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*T-Mobile Comments*").

[24] Comments of CTIA—The Wireless Association at 8, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*CTIA Comments*").

[25] New and Emerging Technologies 911 Improvement Act of 2008, Pub. L. No. 110-283, 122 Stat. 2620 (2008) ("*NET 911 Improvement Act*") (amending Wireless Communications and Public Safety Act of 1999, Pub. L. No. 106-81, 113 Stat. 1286 (1999)), *codified at* 47 U.S.C. §§ 615-615a-1.

[26] Vonage Comments at 6-7.

definition of interconnected VoIP in Section 9.3—which applies to many areas and is incorporated in two other laws—for E911 purposes only.[27] Furthermore, the Administrative Procedure Act ("APA") prohibits the Commission from changing the definition of "interconnected VoIP service" in Section 9.3 without providing other stakeholders with notice and an opportunity to comment.[28] Vonage agrees with NCTA, which argued that "the imposition of any such requirements [on outbound-only VoIP] should be the subject of a separate notice that explicitly identifies the issues at stake and gives interested parties a full opportunity to comment on those issues."[29]

Other commenters also highlight the confusion that will necessarily result if the Commission changes the definition of iVoIP for E911 purposes only. Like NCTA, the Telecommunications Industry Association ("TIA") argues that changing the definition of interconnected VoIP for E911 purposes only will create "an unnecessary new layer of confusion and uncertainty" across FCC regulations.[30] It could have other unanticipated effects, such as creating instability in the market or looping in additional services that the FCC does not intend to

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[27] Vonage Comments at 9-11 (citing *Satellite Delivery of Network Signals to Unserved Households for Purposes of the Satellite Home Viewer Act*, Report and Order, 14 FCC Rcd. 2654 (1999) ("*SHVA Report and Order*").

[28] *Am.Water Works Ass'n. v. Envtl. Prot. Agency*, 40 F.3d 1266, 1274 (D.C. Cir. 1994) (standard for when additional comment is required under the APA is "whether a new round of notice and comment would provide the first opportunity for interested parties to offer comments that could persuade the agency to modify its rule"); *see also* Vonage Comments at 11-12; NCTA Comments at 12 ("modification of section 9.3's definition of 'interconnected VoIP' in this proceeding could result in the imposition of a broad range of *other* regulatory requirements on outbound-only VoIP providers without sufficient notice and comment").

[29] NCTA Comments at 12.

[30] Comments of the Telecommunications Industry Association at 7, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*TIA Comments*"); *see also* NCTA Comments at 11.

capture.[31] State regulators like the Public Utilities Commission of Ohio ("Ohio PUC") also oppose the Commission's proposal to change the definition of interconnected VoIP for 911 purposes only, even where they otherwise agree with the Commission's proposal.[32] Because changing the definition for the limited purpose of 911 regulations is not permissible (as Vonage explained in its comments) and would create confusion among both consumers and carriers, the Commission should not do so.

IV. The FCC Should Facilitate Industry Efforts to Develop ALI Technology for iVoIP.

Vonage supports the Commission's efforts to facilitate the development of Automatic Location Identification ("ALI") technology, and stands ready to participate in any Commission or industry effort to develop ALI technology and standards for iVoIP. There is a broad consensus, however, that current technology does not support imposition of ALI requirements today. On this point, a wide array of commenters, including AT&T, CenturyLink, T-Mobile, Verizon, Qualcomm Incorporated ("Qualcomm"), Motorola Mobility, Inc. ("Motorola"), TIA, ITI, and the VON Coalition, agree with Vonage that imposition of ALI requirements on iVoIP would be premature.[33]

Conclusion

Vonage continues to be in favor of the Commission's effort to support the development of automatic location technology. But Vonage opposes the Commission's proposal to change the

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[31] TIA Comments at 8-9.

[32] Comments Submitted on Behalf of the Public Utilities Commission of Ohio at 7, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*Ohio PUC Comments*").

[33] *See* Vonage Comments at 15-16; AT&T Comments at ii, 4-5; CenturyLink Comments at 3-6; T-Mobile Comments at 7-8; Verizon Comments at 28; Comments of Qualcomm Incorporated at 10-11, GN Docket No. 11-117, PS Docket No. 07-114, and WC Docket No. 05-196 (filed Oct. 3, 2011) ("*Qualcomm Comments*"); Motorola Comments at 2; TIA Comments at 6; ITI Comments at 14; VON Coalition Comments at 10.

definition of interconnected VoIP services and impose 911 requirements on some non-interconnected VoIP services as if they were interconnected VoIP services. Such an amendment is not permitted by the NET 911 Improvement Act or the Administrative Procedure Act and would be inconsistent with Commission precedent. The Commission can best serve public safety through enforcing existing 911 rules for traditional telephone service and its true substitutes. The Commission should not mandate any requirements until automatic location technology is technically mature, economically feasible, and can deliver better results than the Commission's existing registered location rules.

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