Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 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 AT&T INC.

AT&T Inc., on its behalf and on the behalf of its subsidiaries, (AT&T) files these Reply Comments in response to the Commission's *Notice*.[1]

Briefly stated, the comments filed in this proceeding indicate two things. *First*, there is considerable support in favor of expanding consumer access to 911/E911 services, especially for services that mimic or supplant legacy POTS. *Second*, while commenters support improving location accuracy information for covered services, including mobile services originating indoors, there is general agreement that the best route to achieving that goal is through industry bodies (like ETAG and CSRIC) working with the public safety community and the Commission. This industry-forum path is most likely to speed the development of innovative solutions for achieving improved location accuracy information that are technologically feasible and cost-effective.

[1] *Amending the Definition of Interconnected VoIP Service in Section 9.3 of the Commission's Rules; etc*.; Notice of Proposed Rulemaking, Third Report and Order, and Second Further Notice of Proposed Rulemaking, FCC 11-107 (rel. July 13, 2011) (*Notice*).

I. DISCUSSION

A. Applying E911 Rules to Residential, Outbound-Only Interconnected VoIP Service Providers

1. The Commission should extend the Part 9 obligation to provide access to 911/E911 services to outbound-only, residential VoIP service with local calling capacity.

In response to the Commission's inquiry on whether to extend the obligation to provide 911/E911 access to outbound-only VoIP services, AT&T championed doing so. This advocacy follows from the Commission's own stated principle of using customers' "*reasonable expectation of access to 911 and E911 services*" in determining "whether particular entities should be subject to some form of 911/E911 regulation."[2] In this case, extending these Part 9 obligations to outbound, residential VoIP service with local calling capacity would follow that principle.[3]

Other commenters agreed.[4] For example, The Public Utilities Commission of Ohio (Ohio Commission) observed that "the hardware used for . . . services [like Skype and Google Voice] is often no different than the traditional landline or cordless phones [and that] the expectations of consumers for [such] VoIP service[s] are often the same as those for traditional telephone service, including the expectation to have access to 911 emergency dialing."[5] What's more, the

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[2] *IP-Enabled Services; E911 Requirements for IP-Enabled Service Providers*, First Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 10245, 10249 n16. (*VoIP E911 Order*).

[3] Limiting this extension of Part 9 obligations to *residential* outbound-only VoIP services is consistent with these regulatory goals because users of *business* outbound-only VoIP services don't have the expectation of using that service to reach 911 emergency services. This is so because the outbound-only business service is acquired to address a specific business need and because businesses usually have an alternative service—with both inbound and outbound calling capability—available for general local calling purposes, which includes access to 911/E911 service. *See* Comments of AT&T Inc., p. 2.

[4] Comments of Association of Public-Safety Communications Officials – International, Inc. (APCO), pp. 2-3; Comments of National Emergency Number Association (NENA), pp. 3-4; Comments of National Telecommunications Cooperative Association (NTCA), pp. 2-3; Comments of The Public Utilities Commission of Ohio (Ohio Commission), p. 7; and Comments of Telecommunications Systems, Inc. (TCS), pp. 3-4.

[5] Ohio Commission Comments, pp. 2-3.

Ohio Commission noted that "extending the FCC's 911 service obligations to encompass outbound-only interconnected VoIP service achieves parity among VoIP service providers and promotes shared regulatory goals of local, state and federal authorities to ensure the protection of life and property."[6]

Those commenters who oppose extending the Part 9 obligations to outbound-only VoIP services fail to explain why residential consumers who use outbound-only VoIP service for local calling would not reasonably expect to be able to use that service to reach local emergency services.[7] Such commenters instead argue that the absence of call-back capability makes outbound-only VOIP unsuitable for emergency calls, and that the use of warnings or disclaimers is sufficient to change consumer expectations.[8]

To be sure, it would be ideal for PSAPs to be able to call back end users whose emergency calls are interrupted. But access to 911 service without callback capability is better than no access at all. Certainly, the perfect should not be the enemy of the good. The better public policy goal is to ensure that consumers of outbound-only VoIP service are able to use 9-1-1 in an emergency, thus meeting their reasonable expectations rather than frustrating them. And, as for warnings or disclaimers, if the Commission's stated regulatory goal were merely to apprise consumers of their inability to access 911, then perhaps it would be sensible to discuss how to develop disclosures that would effectively modify consumers' expectations accordingly. In adopting the original VoIP 911 rules, the Commission rejected that approach because it failed to meet consumers' expectations of being able to make 911/E911 calls with their VoIP services. The same rationale should apply with respect to consumers of residential, outbound-only VoIP service who reasonably expect to make 9-1-1 calls in an emergency.

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[6] *Id.*, p. 4.

[7] *See for example* Comments of The Information Technology Industry Council (ITI), pp. 3-5; Comments of National Cable & Telecommunications Association (NCTA), pp. 10-12; Comments of Voice on the Net (VON), pp. 7-9.

[8] VON Comments, pp. 7-8.

2. The Commission should redefine the term "interconnected VoIP service" for use in Part 9 of the Commission's rules.

In its comments, AT&T supported a redefinition of the Part 9 term "interconnected VoIP service." AT&T recommended that the Commission include the requirement of a high-speed connection (as opposed to narrowband or "dial-up" connection) to avoid imposing a redundant 911 obligation.[9] Most commenters, who supported extending the Part 9 obligations to outbound-only VoIP service, also supported a redefinition of "interconnected VoIP service."[10] Not inconsistently, those that opposed the extension of the Part 9 obligations to outbound-only VoIP service also opposed any redefinition.[11]

Among those opposing a redefinition of "interconnected VoIP service" was Vonage Holding Corp. (Vonage). Vonage argued that the Commission is prohibited from amending its Part 9 definition because Congress usurped the Commission's rulemaking power over the definition when it "ratified" or codified it in the NET 911 Act.[12] In support of this argument, Vonage noted that the definition of IP-enabled service in the NET 911 Act—*i.e.*, "The term 'IP-enabled voice service' has the meaning given the term 'interconnected VoIP service' by section 9.3 of the Federal Communications Commission's regulations (*47 CFR 9.3*)"—omits language that presumably allows the statutory definition to track future changes in the regulatory definition (*e.g.*, "as such section may be amended from time to time").[13]

Vonage is mistaken. *First*, as AT&T has argued on prior occasions, the aim of the NET 911 Act is to allow the Commission "to adopt rules giving VoIP providers a 'right of access' to certain 'capabilities' . . . provide[d] by 'an entity with ownership or control over such capabilities' . . . . [so] that VoIP providers would have access to 911 capabilities in 'parity' with other voice service providers, such as CMRS providers."[14] As opposed to seeking to curtail the

[9] Comments of AT&T, p. 3.

[10] *See for example*, APCO Comments, pp. 3-4.

[11] *See for example*, ITI Comments, p. 12.

[12] Comments of Vonage Holding Corp. (Vonage), pp. 5-9.

[13] Vonage Comments, p. 6.

[14] Comments of AT&T Inc., p. 8.

Commission's rulemaking powers in this area, Congress in fact reinforced them to guarantee this access.

Second, had Congress intended to codify the definition of "interconnected VoIP service" used in the Commission's rules, it wouldn't have simply referred to it. Rather Congress would have used the Commission's definition word-for-word within the text of the statute. By referring to the Commission's rule and knowing that the rule would or could be subject to future amendments, Congress signaled its intent that the statutory definition track the Commission's definition over time as it evolved.

And *third*, the NET 911 Act clearly contemplates on-going changes to the Commission's IP-enabled regulations covering the provisioning of 911/E911 service access. The Act states that "[t]he Commission . . . may modify such regulations from time to time, as necessitated by changes in the market or technology, ..."[15] Consequently, there is no express or implied Congressional intent to freeze the Commission's rules applicable to IP-enabled service and the provisioning of 911/E911 access. Regardless, even if there were some ambiguity about Congress's intent in drafting the NET 911 Act, under the *Chevron* doctrine, a court reviewing the Commission's interpretation of the act would "defer to the FCC's reasonable interpretation so long as it doesn't contradict the Act's unambiguous text."[16] And given the text of the NET 911 Act and the intent of Congress in enacting it, it would be reasonable for the Commission to construe the Act as permitting future amendments to Commission Rule 9.3, defining "interconnected VoIP service."

B. Automatic Location Requirements for Interconnected VoIP Services

1. The Commission should acknowledge that the present mechanism for providing ALI for fixed interconnected VoIP service is acceptable.

In its comments, APCO asked the Commission to "review its use of location terminology in future proceedings" to distinguish between the "legacy term 'ALI'" and the way that location

[15] 47 U.S.C. § 615a-1(c)(3).

[16] *Verizon Cal. v. FCC*, 555 F3d 270, 273 (DC Cir. 2009).

information will be conveyed to PSAPs by means of NG9-1-1 systems.[17] APCO notes that, under legacy ALI, location information is "derived from static databases that associate telephone numbers with specific pre-determined locations."[18] With NG9-1-1 systems, however, the information will be "dynamically delivered" to PSAPs.[19]

With this in mind, the Commission should also acknowledge that the present Registered Location (47 C.F.R. § 9.3) mechanism is sufficient and appropriate for *fixed* interconnected VoIP service. In the legacy POTS world, location information is provided by means of the Master Address Street Guide (MSAG) database, which, because it involves use of *pre-determined locations*, is not too dissimilar from providing location information by means of Registered Location. As noted in AT&T's Comments, "[t]he problem, as well as the degree of technical difficulty [in providing ALI] generally increases in proportion to the degree to which the service can be moved."[20] For *fixed* interconnected VoIP service, use of the existing Registered Location mechanism makes sense, and no case has been made for the need to improve on it.

2. The Commission should not unnecessarily delay deployment of new services, like Voice over Long-Term Evolution (VoLTE), pending implementation of native 911 solutions.

In its comments, MetroPCS Communications, Inc. (MetroPCS) argues that, because the standards bodies are still developing the appropriate protocol for the provision of 911 for VoLTE technology, the Commission ought not to impose "a requirement that VoLTE have native 911 capabilities out of the box."[21] Instead, for the period between the introduction of VoLTE technology to the public and the development of appropriate standards, MetroPCS proposes that "CMRS carries be allowed to use their existing CMRS circuit-switched networks for 911 services."[22]

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[17] APCO Comments, p. 6.

[18] *Id.*

[19] *Id.*

[20] AT&T Comments, n. 15.

[21] Comments of MetroPCS Communications, Inc., pp. 3-4 (MetroPCS).

[22] MetroPCS Comments, p. 5.

AT&T submits that the Commission should not prohibit deployment of new services, like VoLTE, provided subscribers have access to 911/E911 service in every location that they are able to access the new service. MetroPCS's proposal—that CMRS carries be allowed to use their existing CMRS circuit-switched networks for 911 services—might be an acceptable 911 solution for its VoLTE service. It may be the case, however, that VoLTE and CMRS services are offered using a different spectrum or network architecture, resulting in areas where VoLTE service would be available but the underlying circuit-switched service would not. In this case, MetroPCS's proposal would not be acceptable. As long as the provider can *guarantee equivalent coverage* between the provider's VoLTE and CMRS services, MetroPCS's proposal should be deemed a regulatory compliant solution.

The Commission should generally be "agnostic" on a provider's methodology for providing access to 911/E911 services. The aim of the Commission's regulations ought to be making access to 911/E911 services widely available by mandating that, when covered providers offer a service, they make sure that the subscriber can reach the appropriate PSAP or other emergency service provider, along with passing subscriber's the call-back number and the caller's location information. Similar to MetroPCS's VoLTE proposal, the Commission should be open to allowing covered providers to choose different methods of achieving this goal. And, as asserted in AT&T's Comments, this same line of reasoning should make it unnecessary to amend the existing definition of interconnected VoIP service to include *dial-up access* because the subscriber already has access to 911/E911 service by means of the POTS line used to *dial up* the ISP.[23] The subscriber needs only to discontinue the Internet session and dial 911.

C. Improving Indoor Location Accuracy

1. The Commission should not rush to adopt standards for indoor location testing ahead of the work of industry forums charged with the task of setting standards and other criteria.

[23] AT&T Comments, p. 3.

As a general statement, commenters appear to recognize the importance of improving location accuracy, especially for mobile calls originating indoors. Yet, it is equally true that indoor location accuracy presents many challenges, not the least of which are technological and logistical barriers. The majority of commenters recognize that industry forums, such as the ETAG and CSRIC, provide the most effective and efficient means to foster the development and evaluation of new location accuracy technologies and testing regimes that will result in improved location accuracy.

APCO, for example, allowed that there are "significant technical and practical issues related to indoor testing" and urged the Commission to "look to CSRIC and to the industry's work to date on this issue to formulate a strategy forward."[24] Mirroring these comments, NENA also acknowledges that "indoor testing, particularly on a network-wide basis, poses significant challenges in terms of access and costs that outdoor location accuracy testing does not."[25] NENA supported the Commission's referral of these thorny issues to CSRIC for resolution.[26]

Similarly Verizon and T-Mobile each urged the Commission to refrain from mandating indoor testing or adopting standards at this time and to give the CSRIC process a chance to "develop reasonable guidelines."[27] For its part, Sprint agreed that is not the appropriate time to adopt indoor location accuracy testing requirements and recommended The Alliance for Telecommunications Industry Solutions' (ATIS) Emergency Services Interconnection Forum (ESIF) as an additional resource for addressing indoor testing.[28] In the end, there is general agreement that the best path forward on indoor testing is through industry forums like ETAG, CSRIC, and ESIF.

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[24] APCO Comments, p. 8.

[25] NENA Comments, p. 13.

[26] *Id. See also*, Comments of TeleCommunications Systems, Inc., pp. 12-13 (TCS). TCS urges CSRIC to assess the potential accuracy of location technologies when finding indoor callers and to determine how frequently such indoor calls are made.

[27] Comments of T-Mobile USA, Inc. (T-Mobile), pp. 7-8; Comments of Verizon, p. 28.

[28] Comments of Sprint-Nextel Corp. (Sprint), p. 8. *See also,* Comments of The Alliance for Telecommunications Industry Solutions (ATIS), p. 6.

2. The Commission should test the comments of vendors in the industry-forum process and not rely solely on their marketing claims.

Certain commenters—*e.g.*, Boeing Company, Commlabs, Inc., and TruePosition, Inc.—filed what amount to marketing documents, promoting their own solutions to location accuracy information. These comments are interesting and should give the Commission some hope that, working with providers and the public safety community, these commenters may someday help to develop effective and cost-efficient technologies addressing location accuracy information issues. Nevertheless, the Commission ought not to be in the business of choosing among different technologies to reach its goal of ubiquitous and accurate 911/E911 access. And even if it were, it would be foolish to impose any such "solutions" at this stage before any of them has proven to be a technically feasible, cost effective way to improve location accuracy or testing. Industry forums are ideally suited to perform such evaluations, and the Commission should encourage these vendors to participate in them along with the providers, the public safety community, and regulators.

II. CONCLUSION

AT&T respectfully requests that the Commission consider these reply comments in its deliberations on this proposed rulemaking proceeding.

Respectfully Submitted,

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