

Before the Federal Communications Commission

IN THE MATTER OF

AMENDING THE DEFINITION OF INTERCONNECTED VoIP SERVICE IN
SECTION 9.3 OF THE COMMISSION'S RULES;

WIRELESS E911 LOCATION ACCURACY REQUIREMENTS;

and

E911 REQUIREMENTS FOR IP-ENABLED SERVICE PROVIDERS

*ON FURTHER NOTICE OF PROPOSED RULEMAKING
AND NOTICE OF PROPOSED RULEMAKING*

**COMMENTS OF THE
NATIONAL EMERGENCY NUMBER
ASSOCIATION**

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CONTENTS

Comments	1
A. If the Commission establishes an E9-1-1 Technical Advisory Group, it should set clear, <i>short</i> timeframes for its work.	1
B. The Commission should not establish a consumer-oriented test for imposing 9-1-1 obligations.	2
C. The definition of Interconnected VoIP must be carefully drawn to avoid unintended consequences.	4
D. The Commission should unambiguously rule that VoIP services offered by mobile network operators are subject to the existing CMRS location accuracy requirements.	7
E. The Commission should not delay the implementation of technologies that can be used both in E9-1-1 and NG9-1-1 contexts.....	7
F. The record indicates that a generalized location accuracy framework for VoIP can be adopted without undue detriment to the market.....	8
Conclusion	9

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The National Emergency Number Association (NENA) respectfully submits the following comments in reply to those submitted in response to the *Second Further Notice of Proposed Rulemaking* and *Notice of Proposed Rulemaking* adopted by the Commission on July 12th, 2011, in the above-captioned proceedings.

COMMENTS

**A. If the Commission establishes an E9-1-1
Technical Advisory Group, it should set clear,
short timeframes for its work.**

NENA's previous recommendation that the Commission establish an E9-1-1 Technical Advisory Group is reiterated in this proceeding by a number of commenters who

would have the Commission refer specific questions to the ETAG for resolution. NENA agrees with NCTA, CenturyLink, and others that 9-1-1 issues merit an independent technical advisory group distinct from the current Communications Security, Reliability, and Interoperability Council (“CSRIC”).¹ In establishing an ETAG, however, NENA strongly recommends that the Commission ensure that the body is subject to clear and short timeframes for the completion of its work. In particular, NENA is concerned that the discussion of 9-1-1 issues in ETAG be undertaken for the explicit purpose of finalizing general principles or recommended rules, not merely to discuss future possibilities or to delay the implementation of clearly-needed rules supported by the existing record. Provided that the Commission appropriately constrains the role of the ETAG and imposes meaningful deadlines for the completion of its work, NENA wholeheartedly supports its establishment.

B. The Commission should not establish a consumer-oriented test for imposing 9-1-1 obligations.

Although NENA has itself referred to “reasonable consumer expectations” in other contexts, NENA disagrees with comments filed in this proceeding that could be read to suggest that the Commission should abandon a technical distinction between services which must comply with its 9-1-1 rules in favor of a consumer-oriented test.² NENA believes that using any consumer-oriented test is fraught with problems. For example, if the Commission were to adopt such a test, how and when would it decide whether a particular service qualified under the test? Allowing self certification would not be in the interest of public safety, and requiring pre-certification

¹National Cable & Telecommunications Association, *Comments* at 6; CenturyLink, *Comments* at 2.

²CenturyLink, *Comments* at 3.

by the Commission would be costly and burdensome. Additionally, such a test would not provide the regulatory certainty which the current, technically-oriented regime has provided to VoIP investors.

1. *In the alternative, any consumer-oriented test should be based on a “reasonable stranger, under stress.”*

While NENA does not believe that a consumer-oriented test should be adopted, it is imperative that the Commission focus any consumer-oriented test it may choose to adopt on the correct consumer: In general it is not safe – or reasonable – to assume that the consumer purchasing a VoIP service will be the consumer who reaches for a VoIP-enabled device in an emergency.³ Rather, it may be family member, roommate, or stranger. In addition, that consumer is likely to be acting in the heat of an emergency, with little time to consider subtle distinctions between services that are not readily apparent to an unacquainted user. Consequently, if the Commission adopts a consumer-oriented test, the subject of that test should be a “reasonable stranger, under stress.” Such a test would better align the purpose of the 9-1-1 rules with the on-the-ground reality of how and when 9-1-1 calls are placed.

2. *Neither, however, should reasonable consumer expectations be disappointed by a lack of callback capability when the technology exists to enable it.*

NENA agrees with TCS that the technology exists – and is commercially available – to enable callback for customers of one-way interconnected VoIP service providers.⁴ Consequently, NENA also agrees with AT&T and Sprint that reasonable consumer expectations about the

³See, e.g., Bandwidth.com, Inc., *Comments* at 5.

⁴TeleCommunications Systems, Inc., *Comments* at 5.

capabilities of services that provide, *inter alia*, outbound local dialing should not be disappointed by the lack of a callback capability requirement for such services.⁵ In addition, such a requirement would eliminate a regulatory loophole that currently places outbound-only and conceptually bifurcated services at a competitive advantage to integrated, fully interconnected services. NENA therefore urges the Commission to require that any outbound-interconnected VoIP service provide customers with at least a limited capability to receive incoming calls within a reasonable time after placing a 9-1-1 call.

C. The definition of Interconnected VoIP must be carefully drawn to avoid unintended consequences.

1. A POTS exception is not justified.

NENA respectfully disagrees with AT&T's assertion that VoIP-over-dial-up is unlikely to be used.⁶ VoIP-over-dial-up services have been on offer since at least 2005⁷, and industry leaders such as Skype offer this service routinely. In addition, for the millions of Americans who lack access to broadband data service, dial-up may be the best means of accessing competitive local and long-distance voice telephony. Neither is VoIP-over-dial-up necessarily redundant: While it is true that a dial-up user must have an existing wireline connection, a dial-up VoIP user may not have a POTS-enabled handset available or connected at all times. Consequently, NENA urges the Commission not to exempt VoIP-over-

⁵ AT&T, *Comments* at 2; Sprint Nextel Corp., *Comments* at 2.

⁶ *Id.* at 3.

⁷ *E.g.*, Dial-Up VoIP, available at <http://blog.tmcnet.com/blog/tom-keating/voip/dialup-voip.asp> (last accessed Nov. 2, 2011).

dial-up service providers from the 9-1-1 obligations they would otherwise incur by serving VoIP-over-broadband customers.

2. Neither is a general business exception.

Again, NENA respectfully disagrees with AT&T's assertion that business VoIP service should be spared the 9-1-1 obligations of their residential counterparts.⁸ While some business services, such as the call-center model described by AT&T, may be sufficiently distinguishable use cases to warrant differing treatment under the Commission's rules, the vast majority of business uses are not. For example, under the rule proposed by AT&T, NENA's own office telephone system would be exempted from 9-1-1 service obligations, despite the fact that, from the perspective of the end user, it looks and functions just like an advanced TDM-based PBX system. NENA's seven D.C.-area staff members are analogous to the millions of small business employees who could lose or be prevented from gaining 9-1-1 service in the workplace as a result of the rule proposed by AT&T. As businesses small and large increasingly adopt VoIP, it is precisely the opposite result which the Commission should encourage. NENA therefore urges the Commission to craft any special-case exceptions for business systems with the utmost care, ensuring the broadest possible coverage of 9-1-1 obligations for workplace systems without unduly hampering the deployment of VoIP in abnormal contexts that may justify an exception.

⁸AT&T, *Comments* at 2.

3. *If the Commission does not adopt NENA's proposal with regard to services that can reach only non-U.S. E.164 telephone numbers, it should clarify that a service capable of reaching any United States E.164 telephone number is subject to 9-1-1 obligations.*

NENA agrees with the consensus view⁹ that termination of calls to E.164 telephone numbers is an important element of the test for whether 9-1-1 obligations should apply to a particular service. NENA maintains that any service capable of terminating a call to an E.164 telephone number – regardless of the jurisdiction to which that number is assigned – should be subject to 9-1-1 obligations. NENA recognizes that international-only services are materially different from other VoIP services, but believes that excepting them from the 9-1-1 rules could create novel opportunities for regulatory arbitrage and degrade public safety by disappointing reasonable consumer expectations about devices that look like or, when used with an analog terminal adapter (“ATA”) are standard telephones. If, however, the Commission accepts the VON Coalition’s recommendation¹⁰ that it except international-only outbound interconnected VoIP providers from the 9-1-1 rules, NENA agrees with MetroPCS and Sprint¹¹ that the remaining, domestic-focused test should be clarified such that it cannot be circumvented by conceptually limiting a service to less than “all or substantially all” United States E.164 tele-

⁹ *E.g.*, MetroPCS Communications, Inc., *Comments* at 2; Spring Nextel Corp., *Comments* at 3; Texas Comm’n on State Emerg. Comm’ns and Texas 9-1-1 Alliance, *Comments* at 3; Bandwidth.com, Inc., *Comments* at 6.

¹⁰ Voice on the Net Coalition, *Comments* at 7-8.

¹¹ Sprint Nextel Corp., *Comments* at 3; *see* MetroPCS Comm’ns, Inc., *Comments* at 2.

phone numbers. Consequently, NENA recommends that, under those circumstances, the Commission strike that language from the proposed test.

D. The Commission should unambiguously rule that VoIP services offered by mobile network operators are subject to the existing CMRS location accuracy requirements.

While NENA generally supports the development of competitive over-the-top voice services in both the fixed and mobile environments, the Commission must make it clear that the accuracy requirements for mobile service providers will not be relaxed due to a conceptual bifurcation of the access network and originating service. NENA is particularly concerned by the Comments of MetroPCS that suggest the Commission should allow carriers to rely on registered location for mobile VoIP services integrated with the carrier's access network. MetroPCS's suggestion would eviscerate the existing location accuracy regime for carriers implementing VoLTE "until the 9-1-1 VoLTE ecosystem develops."¹² Such a rule would represent a disturbing and clearly unintended departure from the Commission's well-developed location accuracy regime. NENA therefore recommends that the Commission clarify that originating voice services offered by operators of wireless access networks are subject to 9-1-1 and E9-1-1 location accuracy requirements *regardless of the transport method(s) employed*.

E. The Commission should not delay the implementation of technologies that can be used both in E9-1-1 and NG9-1-1 contexts.

NENA disagrees with the Information Technology Industry Council, who suggests that the Commission should delay the effective date of certain requirements

¹² MetroPCS Comm'ens, Inc., *Comments* at 7.

until NG9-1-1 is available.¹³ As NENA has previously emphasized, the transition to NG9-1-1 will be accomplished over the course of several years. To the extent that certain requirements can, if implemented now, improve the capabilities or performance of E9-1-1 service without resulting in stranded investments for industry, those requirements should not be delayed. In particular, NENA believes that certain types of automatic location determination functionalities are capable of deployment in an E9-1-1 environment, and that the investments needed to do so need not be abandoned in the transition to NG9-1-1. Consequently, NENA urges the Commission to consider whether and, if so, to what extent a near-term investment required to comply with updated E9-1-1 rules would be capable of continued use in an NG9-1-1 environment, and to recognize the efficiency of such investments – both in monetary and public safety terms – as it develops final rules.

F. The record indicates that a generalized location accuracy framework for VoIP can be adopted without undue detriment to the market.

Although some in the carrier community continue to resist the imposition of endpoint location determination requirements for access networks,¹⁴ no commenter offers a compelling argument that such a requirement is unworkable, and no commenter offers an alternative solution to that contained in the NENA i3 standard. As ATIS, Bandwidth.com, Qualcomm, and CommLabs rec-

¹³ Information Technology Industry Council, *Comments* at 3.

¹⁴ Nat'l Cable and Telecomm'cns Ass'n, *Comments* at 4; MetroPCS Comm'cns, Inc., *Comments* at 8. *Contra* Bandwidth.com, Inc., *Comments* at 14.

ognize,¹⁵ the technology and standards necessary to effectively implement endpoint-based location determination capabilities for fixed access networks and VoIP originating services are either already available or in advanced stages of industry development. Consequently, it is appropriate at this time for the Commission to adopt a generalized framework to govern automatic location determination, provided that it sets technologically-neutral requirements and realistic implementation timeframes.

CONCLUSION

The Commission should propose final rules consistent with the record of comments in this proceeding.

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¹⁵ Alliance for Telecomm'cns Industry Sol'ns, *Comments* at 5; Bandwidth.com, Inc., *Comments* at 14; Qualcomm, *Comments* at 11; CommLabs, Inc., *Comments* at 18.