

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

In the Matters of	)	
	)	
Wireless E911 Location Accuracy Requirements	)	PS Docket No. 07-114
	)	
Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems	)	CC Docket No. 94-102
	)	
Association of Public-Safety Communications Officials-International, Inc. Request for Declaratory Ruling	)	
	)	
911 Requirements for IP-Enabled Service Providers	)	WC Docket No. 05-196

REPLY COMMENTS OF NENA

The National Emergency Number Association (“NENA”) hereby replies to the comments of others in the captioned proceeding.<sup>1</sup> In our own Comments last month (at 2), we hoped for more data – such as King County, Washington and Project LOCATE have provided – on “where the current [location accuracy] requirements are being met at anything resembling PSAP level.” We also asked (*Id.*, n. 3) for an update on topological or terrain modeling of the kind recommended by the NRIC VII

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<sup>1</sup> NENA submitted Comments July 5, 2007 on the questions at Section IIIA of the NPRM, FCC 07-108, released June 1, 2007, 72 Fed Reg 33948, June 20, 2007. The Commission’s initial decision on Section IIIA was adopted September 11, 2007. We commented on the questions at Section IIIB on August 20, 2007. This reply is focused on those Section IIIB issues. We intend separately to say more about locating VOIP callers in the joint proceeding where these issues were first raised, Dockets 04-36 and 05-196.

Focus Group 1A Report, and we note the reference to a pertinent document (ATIS-0500011) in the ATIS/ESIF Comments (5).

NENA’s initial Section IIIB Comments also suggested additional attention to topics other than accuracy *per se*, such as per-call uncertainty information and methods and timing for both maintenance and compliance testing. This Reply focuses on several of these complementary issues, building on the work of NRIC VII Focus Group 1A.<sup>2</sup> The recommendations in the Group’s Final Report of December 2005 included the boldfaced items below. Each deserves serious and prompt consideration to complement the five-year transition to PSAP-level accuracy.

- **Representative performance characteristics for various topographical areas.**

The ESIF technical report referenced earlier is a blueprint that proposes “mining existing location accuracy data” from the “great wealth” of information already accumulated by carriers simply through the exercise of Phase II deployments. (ATIS-0500011, at 1) The report suggests that purely for the purpose of defining topologies and their expected accuracies, additional testing should not be needed. We welcome the use of this data and hope that carriers will share it, but we suspect some it is dated and will need to be supplemented by more recent test data.

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<sup>2</sup> While these recommendations were made in the context of suggested statewide averaging for wireless call accuracy, we believe they remain worthy of consideration despite the Commission’s different decision of September 11<sup>th</sup> (note 1, *supra*). Achievement of PSAP-level compliance with current location accuracy requirements will take several years. During such a transition, the use of terrain modeling to educate our expectations, together with feasible testing programs, should prove valuable.

- **Maintenance testing, including accuracy verification, to be further defined by ESIF.**

ATIS-0500010, “Maintenance Testing,” does not recommend or impose any specific test methodology, “but rather provides a common frame of reference that individual stakeholders can use to ensure continued accuracy and functionality compliance” with Phase I or Phase II standards.

- **Public safety access to maintenance and compliance testing data, upon request, subject to confidentiality protections if and as required.**

NENA supports the recommendation. Over time, this provides similar information as would compliance testing, without requiring carriers to spend extra money and time to do concentrated compliance testing.

- **Achievement of consensus on percentage of test calls from indoors.**

We will be interested in the work the FCC has ordered on this subject from OET. Generally, we believe that the percentage of indoor calls to total calls should be in the range of 30% to keep up with today’s realities.

- **Passing of uncertainty information with each call, with a preference for standardized confidence indicators.**

To our discussion of this subject in NENA’s initial comments of August 20<sup>th</sup>, we would add the caveat that the fixed confidence percentage that would be employed with the passing of uncertainty information should be uniform among all wireless carriers, rather than varying by five points or more as is the case today.

Beyond these recommendations of NRIC Focus Group 1A, NENA urges the Commission to require location data meeting the FCC accuracy criteria to be available within the time intervals required to control call routing. This would typically be no more than five seconds after call dialing completion. Such prompt timing would provide precise routing control and display accurate location data to the PSAP via Automatic Location Identification (“ALI”) upon initial data display for each call. NENA believes this objective could be attained during the five-year period over which PSAP-level accuracy standards are to be met, according to the order of September 11, 2007.

Plainly, the two objectives deserve to be linked. If compliance tests for location accuracy were to allow a succession of iterative “fixes” over a period of, say, 30 or 45 seconds, the accuracy data would look good but call routing would not have been improved, since it would still depend on a first fix at a cell site or some other broader gauge. NENA repeats (Comments, 6) its great faith in the ingenuity and persistence of telecommunicators to work with less than perfect location data in aiding wireless callers. But whatever is to be supplied must be transmitted quickly to have best effect.

Caller Location, Innovation and Privacy.      The Center for Democracy and Technology, in Joint Comments with the Electronic Frontier Foundation and Sun Microsystems, makes a statement that sounds unexceptional but may lead us backward:

Any technology that increases the availability and affordability of real-time to person communications will increase the ability of the public to report emergencies or suspicious activities, and in the vast majority of cases such reporting can be completely effective without any automatic location determination or transmission.<sup>3</sup>

Taken on its face, the statement could apply to what has become conventional wire and wireless telephony, as well as to the IP-based devices and systems the Joint Commenters appear to have chiefly in mind. The argument is similar to one made by cellular and PCS providers 15 years ago, before they agreed to try automatic location for 9-1-1 callers. It remains true today that in the “vast majority of cases” callers are able to give their locations. But this does not rule out the policy decision to care for those callers who do not know where they are – children, strangers, those persons temporarily disoriented or disabled. We should not backtrack on that sound decision.

The Joint Commenters are concerned that a 9-1-1 location requirement will (a) overstep its bounds to become a “tracking” vehicle and an invasion of privacy and/or (b) discourage innovation where auto-location would be inordinately expensive, cumbersome or even impossible. More than a decade ago, the Justice Department advised the FCC that wireless callers to 9-1-1 have no expectation of privacy and have impliedly consented to be located when they ask for help.<sup>4</sup>

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<sup>3</sup> Comments, August 20, 2007, 5.

<sup>4</sup> Memorandum Opinion to Criminal Division from Office of Legal Counsel, Department of Justice, September 10, 1996, page 6, n. 13, citations omitted. The document is posted on the FCC’s Electronic Comment Filing System under date of 12/13/1996, CC Docket 94-102. In due course, the opinion was made available to the

Neither NENA nor the FCC can prevent technological advances from abusive use, but we believe there must be a presumption of public safety over privacy.

Today the FCC allows new mobile communications technology to overcome the presumption of emergency access by answering negatively any one of four questions. Does the innovation permit:

(a) real-time, two-way voice service interconnected to the public switched telephone network (“PSTN”)? (b) reasonable customer expectation of 9-1-1 access? (c) competition with conventional wire or wireless voice service? and (d) technical and operational feasibility for support of E9-1-1?<sup>5</sup>

In the examples cited by the Joint Commenters, it would seem that items (a) and (d) could be answered negatively in many cases and that – at least under the current tests – E9-1-1 access would not be required.

In any event the examples of MLTS and satellite communications (Joint Comments, 7) are inapt because, in the first case, the states are permitted to impose MLTS caller location requirements and the FCC has, in effect, retained jurisdiction over the policy question of federal rules. In the second case, the reality of the technical feasibility criterion above has led the Commission to require emergency call center connection for satellite telephone systems.

A Forum for Problem-Solving and Consensus. In its Section IIIA

Comments (at 4), NENA stated:

[I]t is crucial for wireless carriers, public safety organizations and

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FCC and used in deciding issues of wireless carrier liability. Memorandum Opinion and Order, 12 FCC Rcd 22665 (1997), ¶131.

<sup>5</sup> *E911 Scope Order*, 18 FCC Rcd 25340, 25347 (2003).

PSAPs/9-1-1 governing authorities to stay in touch not only during these comment periods but throughout the period of implementation for any new accuracy rules.

We announced our intent to sponsor, with APCO, a suitable forum to stay in touch and discuss the issues. We will need the Commission's help and encouragement here. The agency itself played host in 1999 to a public safety/wireless carrier/vendor roundtable on issues of wireless emergency caller location.<sup>6</sup> Other similar FCC conferences have been held since. The existence of accuracy rules in 1999 and after did not preclude these gatherings, but instead made them more important. The same is true now in the wake of the Commission's September 11<sup>th</sup> decision.

Respectfully submitted,

NENA

By \_\_\_\_\_

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ITS ATTORNEY

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<sup>6</sup> <http://www.fcc.gov/pshs/911/enhanced911/archives.html>