

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

In the Matter of	)	
	)	
Wireless E911 Location Accuracy	)	PS Docket No. 07-114
Requirements	)	

**COMMENTS OF NENA AND APCO**

The National Emergency Number Association (“NENA”) and the Association of Public-Safety Communications Officials International (“APCO”) hereby reply to the comments of others in response to the Commission’s *Public Notice*, DA 08-2129, released September 22, 2008, in the above-captioned proceeding.

**Confidence and uncertainty.** In our response of September 9, 2008 to proposals from Verizon Wireless and AT&T Mobility – all included in Appendix A to the *Public Notice* – we stressed the importance to PSAPs of the transmittal, with each emergency call, of “uncertainty” information in a standard format expressing the estimated radius of error in a caller’s location based on a fixed percentage of confidence. Both Verizon Wireless and AT&T Mobility, and we hope the entire wireless industry, have agreed to pass uncertainty based on a standardized confidence percentage with every 9-1-1 call. In their comments, Verizon Wireless, AT&T Mobility and Sprint Nextel each stress that while they have the ability to generate this information, it is first delivered to a 9-1-1 System Service Provider (“SSP”) who ultimately delivers the

uncertainty data to the PSAP.<sup>1</sup> Verizon Wireless warns (Comments, 5) that some SSPs (at this time, usually LECs) “do[] not have the capability to transmit confidence and uncertainty information.” We understand this to be a very rare case and that in the vast majority of situations the SSP has the capability to provide the data to the PSAP. We agree with SprintNextel (Comments, 6) that “the Commission must require the owners of E911 networks to take the steps necessary to accommodate such data.” For those SSPs who do not pass uncertainty data to PSAPs, the burden should be on the SSP to demonstrate that they do not pass uncertainty data at the request of the PSAP or because of technical infeasibility, in which case a waiver may be warranted.

**E9-1-1 Technical Advisory Group.** NENA and APCO support the numerous comments of parties agreeing on the need for an E9-1-1 Technology Advisory Group (“ETAG”). While there is a need for an ETAG, the proposals being considered in this Notice should in no way be dependent on the establishment of an ETAG. The Commission should issue rules based on the proposals and comments received establishing accuracy requirements and benchmarks measured at the county level. The ETAG should be established to address additional issues beyond the scope of this *Notice*. In the Order, the Commission should delegate to the Public Safety and Homeland Security Bureau the responsibility to seek input on the desired structure, goals and activities of an ETAG and require the ETAG to be formed within 45 days after the final rules are in effect.

NENA and APCO will offer detailed suggestions on the structure, goals and activities in subsequent communications. For now, we will respond to specific comments

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<sup>1</sup> Comments, 4; Comments, 7; and Comments, 5, respectively.

made in response to this *Notice*. First, AT&T Mobility suggests that the ETAG operate under the auspices of CTIA and ATIS and that its membership be open to “representatives from public safety, the wireless industry, local exchange carriers, and technology vendors.”<sup>2</sup> NENA and APCO agree that ETAG membership should be broadly representative and open to all who have the ability and will to contribute. We do not agree that the ETAG should solely operate under the “auspices” of CTIA and ATIS. Including NENA and APCO, on behalf of the public safety community, as leaders of the ETAG along with the appropriate industry groups is essential to a successful outcome.

AT&T Mobility suggests numerous issues that the ETAG should address, including indoor testing, development and testing of location accuracy solutions, E9-1-1 requirements in an open-access environment and a process to ensure uncertainty information is passed to PSAPs in a standardized format.<sup>3</sup> AT&T Mobility also suggests specific structural, process and timeline details about the ETAG. These detailed issues should be separately addressed shortly after a resolution to this proceeding, as discussed above. When an ETAG is convened, we agree with WCA that this is the place to clarify further “the feasibility of applying location accuracy requirements to wireless interconnected VoIP service”<sup>4</sup> and other emerging technologies, including femtocells. Motorola suggests a preference for a single, technology neutral accuracy requirement.<sup>5</sup> Based on current technology implementation and capabilities, NENA and APCO believe that there is still a need for bifurcated rules based on GPS and network-based location

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<sup>2</sup> Comments, 4.

<sup>3</sup> *Id.*

<sup>4</sup> Further Comments, 7.

<sup>5</sup> Comments, 2.

technologies. However, the goal of a single standard is logical and is an issue that could be addressed by the ETAG.<sup>6</sup>

Finally, NENA and APCO agree with the comments of Andrew Corporation that "the discussions and comments regarding location accuracy have generally failed to discuss the critical importance of location yield, which Andrew believes is at least as important a measure as accuracy of the effectiveness of high performance location technologies."<sup>7</sup> Location accuracy is important for displaying the location of an emergency on a 9-1-1 telecommunicator's screen, but increasing location yield<sup>8</sup> will enable routing to the right PSAP based on an actual call location, rather than routing call based on a less granular location, such as cell sector. This is another issue that could be addressed by the ETAG.

**T-Mobile and RCA.** T-Mobile and RCA propose benchmarks based in part on the AT&T Mobility benchmarks, but with significant extensions of the time periods to reach full compliance (compare Table 1 and Table 2 in T-Mobile/RCA comments). NENA and APCO cannot accept the T-Mobile and RCA proposals. The most critical aspect of the location accuracy rules is the core requirement that 67% of calls be accurate to within 50/100 meters depending upon location technology. We have been consistent, as has the Commission, in requiring that this benchmark be met within no more than five years. T-Mobile and RCA propose seven years, and probably more than seven years as they would link the start-date to the deployment of A-GPS handsets. We also question whether differences among carriers' spectrum acquisition strategies and the timing of

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<sup>6</sup> See also comments of Rural Telecom Group who suggests a preference for mandating that all carriers utilize GPS.

<sup>7</sup> Comments, 2.

<sup>8</sup> Location yield means the sum of positions produced by primary, backup and hybrid technologies. Comments of Andrew Corporation, August 21, 2007, 4.

their deployments of next generation technologies should provide the basis for different FCC rules.<sup>9</sup> At most, such variations might be among the factors that could be considered in a waiver process.

NENA and APCO are willing to discuss other aspects of the T-Mobile and RCA proposals with the relevant carriers, but we cannot and will not vary from our core principles regarding the accuracy of 9-1-1 call location information.

**Rural exceptions.** NENA and APCO also prefer a waiver process to the wholesale “exceptions” for rural carriers proposed by Corr Wireless which would essentially only require Phase I in many parts of the country. We are glad to see that NTCA acknowledges waiver as a useful alternative because we have no idea what it means to say that “the accuracy requirements should not apply to small, rural wireless carriers until such time as compliance is reasonably achievable.”(Comments, 3) How are we to know when that time comes?

When Blooston (Comments, 3) and RCA declare that “[t]he single most important public safety tool offered by wireless carriers in rural America is voice service availability,” they literally regress to the days prior to 1994 and the opening of Docket 94-102, when wireless carriers were resisting any mandate for emergency caller location on the grounds that the presence of cell phones alone was a sufficient blessing for public safety. NENA and APCO agree that mobile telephony generally has been a boon to emergency communications, but it is too late now to reverse consumers’ expectations that their wireless 9-1-1 access will be effective, especially in rural areas where an accurate

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<sup>9</sup> We recognize that T-Mobile acquired AWS spectrum with a strategy of deploying 3G services in those bands and we also recognize that access to this spectrum is dependent on government users clearing the bands which is still in process.

location of a caller who cannot effectively describe their location is exceedingly important.

**The need for compromise.** .

NYPD asks us to clarify why we departed from our earlier proposal for a PSAP area of compliance measurement.<sup>10</sup> In recent years, NENA and APCO have sought consensus among public safety and carriers on this vexing issue. The national carriers began by arguing for the entire national carrier footprint as the area over which compliance should be measured. Eventually, many CMRS providers agreed upon compliance averaged by state.<sup>11</sup> The present compromise of county level may appear to NYPD as a retreat, but we respectfully submit it is a significant advance from the total disagreement that persisted earlier, and does not represent a substantial change from PSAP-level compliance. We also look to an ongoing ETAG forum as a place to track the feasibility of closer measurements of compliance over time and as new and improved technologies emerge.

For the time being, as we said in our September 9<sup>th</sup> letter, NENA and APCO agree that these proposals will promote the public interest and should be adopted by the Commission. To reiterate our position as to the positive public safety benefits of the compromise proposals:

- First, Verizon and AT&T have both agreed that location accuracy should be measured at the county level. This represents a substantial improvement over the

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<sup>10</sup> NYPD may be confused in its assertion, at page 2 of its comments, that there exists today “a single location accuracy standard regardless of technology” (unless by standard NYPD meant “PSAP” or “county” measurement as a single approach). The current rules, such as they are, expressly accommodate a dual standard based on disparate handset and network technologies. While a single technology standard may be an admirable goal – or the practical outcome of technological competition – at the present time, NENA and APCO believe that the preferred way forward is to acknowledge years of carrier reliance on the dual standard.

<sup>11</sup> NRIC VII, Focus Group 1A, Final Report, December 2005, 21.

measurement areas currently used by carriers and the positions they had previously advocated. County-level accuracy would in some cases be identical to measuring accuracy within the jurisdictional boundaries of each PSAP. Counties also are more easily defined than PSAPs and are not prone to administrative boundary changes.

- Second, the joint proposals, if adopted by the Commission, could bring an end to years of distracting debates regarding the appropriate accuracy standards. All parties will then be able to focus attention on the important, critical task of implementing and improving wireless E9-1-1 capabilities and transitioning to an IP-based Next Generation 9-1-1 system.
- Third, the specific standards identified in the letters present a sensible approach that will achieve improved accuracy in a reasonable time frame. Most importantly, the requirements for 67% of 9-1-1 calls (50/100 meters) will be met at the county level within two years for Verizon and five years for AT&T, consistent with the five-year benchmark that APCO and NENA had previously recommended and was adopted in the last FCC order. Also, we are pleased that AT&T proposes to combine handset and network based technologies to provide improved accuracy across a variety of geographic settings.
- Fourth, the carriers have also agreed to provide confidence and uncertainty data in a standardized manner on a per call basis upon receiving PSAP requests. This will greatly improve the ability of PSAPs to utilize accuracy data and manage their 9-1-1 calls by presenting such information in a consistent format.

- Finally, the proposal calls for the establishment of a public/private E9-1-1 Telecommunications Advisory Group to develop approaches for assessing indoor call accuracy and other emerging issues.

The county level solution is not perfect, but it is a good near-term compromise with a promise to focus on improvements over time.

Respectfully submitted,

NENA and APCO

By \_\_\_\_\_

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