

**Before the
Federal Communications Commission
Washington, D.C. 20554**

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

REPLY COMMENTS OF APCO

The Association of Public-Safety Communications Officials-International, Inc. (“APCO”) hereby submits the following reply to comments filed in response to the Commission’s *Third Further Notice of Proposed Rulemaking*, FCC 14-13 (released February 21, 2014) (“*Third FNPRM*”), in the above-captioned proceeding.

APCO continues to support the Commission’s proposed requirements to improve location accuracy for wireless 9-1-1 calls. The proposed rules would provide near term improvements to alleviate the serious problem of locating wireless 9-1-1 callers in indoor locations. However, APCO also stated in its prior comments, and reemphasizes herein, that the ultimate goal must be to provide a “dispatchable address” for all locations, indoor and outdoor. The incremental improvements in the Commission’s proposal, while helpful, will not provide sufficient accuracy in many cases to dispatch emergency personnel to a specific indoor location (*e.g.*, an apartment or room number). Thus, APCO reiterates its desire to help develop a consensus approach that provides for “meaningful, universal, verifiable, and enforceable improvements,”¹ including a requirement, effective within a reasonable time frame, that wireless service providers deliver a dispatchable address to PSAPs for all wireless 9-1-1 calls.

¹ See Comments of APCO (May 12, 2014) at 3.

The following discussion addresses a few of the points contained in the initial comments of the wireless industry and others.

Testing and Certification

A number of comments from wireless service providers argue that the Commission should refrain from adopting its proposed rules for near term indoor location improvements until there are additional tests and certification by CSRIC or a similar body. However, CSRIC certification will do little more than cause unnecessary delay. The Commission has the discretion and the statutory obligation now to review the record before it, including the existing CSRIC test bed results and other data, and make a determination as the expert agency whether the proposed location benchmarks are feasible. Going forward, we do agree that additional test bed data may be needed to verify the ability of wireless carriers to deliver a *dispatchable address* to PSAPs for indoor locations. APCO is willing to assist in the development and hosting of such a test bed.

Building Codes

APCO agrees in principle with comments suggesting that achieving a dispatchable address for indoor locations may require a new paradigm and involve an array of additional technologies. One step that may help to improve indoor accuracy in the very long term is updated building codes to require installation of certain location determination devices in new structures. However, we strongly oppose any suggestion that accuracy requirements adopted by the FCC should be conditioned upon changes to the thousands of building codes covering the U.S. Aside from enormous administrative delays, reliance on building codes does little to

address the millions of *existing* residential and workplace structures from which 9-1-1 calls are made.²

PSAP Readiness

Several wireless industry comments criticized the Commission for not including a “PSAP readiness” condition in its proposed rules.³ PSAP readiness was a factor for certain of the Phase II rules, and may have a limited role for future 9-1-1 location provisions. However, it would be premature to consider a PSAP readiness condition now, especially as to potential requirements that carriers provide a dispatchable address. Such a requirement will likely involve complex solutions with uncertain steps that may or may not be needed for PSAPs to process and utilize the enhanced data. The first step, in any event, is for the rules to be finalized with firm commitments and time tables for carrier compliance. As indicated in our initial comments, PSAPs and state/local governing authorities are unlikely to commit scarce public resources to upgrade PSAP equipment without knowing for certain that wireless service providers will deliver the required data and that upgrades will in fact be useful within a specific, brief time frame. Even then, many PSAPs will need additional funding sources to pay for any necessary upgrades.

Current Air Interfaces

CTIA suggests in its comments that the FCC should focus its policies on next-generation air interface technologies, such as LTE, and not make any changes to location requirements for currently used air interface technologies.⁴ However, widespread use of voice over LTE (VoLTE) is still far into the future. Waiting for universal VoLTE will delay location accuracy

² While existing structures are sometimes “brought up to code,” that process can take decades to complete.

³ See, e.g. Comments of Verizon and Verizon Wireless at 26.

⁴ Comments of CTIA at 15.

improvements for many years and, in the interim, first responders will continue to have difficulty locating life-threatening emergencies reported by the increasing number of callers using wireless phones to reach 9-1-1 from inside buildings.

Confidence and Uncertainty

As APCO indicated in its initial comments, the Commission should require that there be a uniform approach and standardized values for delivering confidence and uncertainty data to PSAPs. More specifically, wireless service providers should fix the *confidence* value in the location determination algorithm at 90%, which will ensure a uniform approach. While the *uncertainty* value may vary depending on the location solution implemented by each carrier, a set value for the confidence level, and a uniform approach to providing confidence and uncertainty information, will assist PSAPs in determining the true value of the information presented to them.

There may be merit in revisiting the 90% confidence metric as emerging technologies are analyzed and evaluated, assuming that there are eventual improvements in the ability of location technologies to significantly reduce the uncertainty value, while increasing the confidence level. Thus, we encourage the Commission to leave the door open to revisit this metric if and when new technologies make it both financially viable, and operationally realistic (for both wireless service providers and PSAPs).

In short, wireless service providers should identify as many tools as possible to enhance the value of all location data delivered to PSAPs. Such tools, should offer consistency and predictability that is both observable and measurable.

CONCLUSION

For the reasons set forth above, in APCO's initial comments, and in the *Third FNPRM*, the Commission should proceed with rules to improve the accuracy of location information for both indoor and outdoor calls to 9-1-1.

Respectfully submitted,

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