

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

In the Matter of)
)
Revision of the Commission’s Rules) CC Docket 94-102
to Ensure Compatibility with Enhanced)
911 Emergency Calling Systems)

REQUEST FOR DECLARATORY RULING

The Association of Public-Safety Communications Officials-International, Inc. (“APCO”) hereby requests that the Federal Communications Commission issue a declaratory ruling pursuant to Section 1.2 of its rules, 47 C.F.R. §1.2, to provide clarification of Section 20.18(h), 47 C.F.R. §20.18(h), of its rules. In particular, clarification is needed regarding the geographic area over which a wireless carrier must provide the levels of 9-1-1 location accuracy specified in the Commission’s rules, and the degree to which carriers must provide accuracy data to relevant Public Safety Answering Points (“PSAPs”).

APCO is the nation’s oldest and largest public safety communications organization.¹ Founded in 1935, APCO has over 16,000 members, most of whom are state or local government personnel who manage and operate communications systems for police, fire, EMS and other public safety agencies. APCO has long been an active participant in FCC proceedings concerning public safety communications, addressing both radio spectrum issues and Enhanced 9-1-1 (E9-1-1) matters that impact the

¹ www.apcointl.org

operational requirements of Public Safety Answering Points (“PSAP”) and the ability of emergency personnel to respond quickly and accurately to 9-1-1 calls.

The Commission’s wireless E9-1-1 rules require wireless carriers to provide PSAPs with the location of 9-1-1 calls. Pursuant to Section 20.18(h), carriers using network-based location technologies are to provide accuracy within 100 meters for 67 percent of calls, and 300 meters for 95 percent of calls. Carriers using handset-based location technologies are to provide accuracy within 50 meters for 67 percent of calls, and 150 meters for 95 percent of calls. The rules do not specify the relevant area over which such accuracy is to be measured.

A. Accuracy Measurement Area

In April 2000, the FCC’s Office of Engineering and Technology issued OET Bulletin No. 71, “Guidelines for Testing and Verifying the Accuracy of Wireless E9-1-1 Location Systems,” which describes E9-1-1 accuracy testing methodology. However, OET Bulletin No. 71 does not provide clear guidance as to whether the relevant area of measurement should be a PSAP service area, a carrier’s service area, or some other alternative:

Reports of compliance testing should clearly define the subject geographical areas. Accuracy tests may be based on the coverage areas of local PSAPs that request Phase II deployment. It may be appropriate to subject a wireless service provider's entire advertised coverage area within a metropolitan area or similar region to testing, as suggested by the National Emergency Number Association, but these are typically large areas and initial ALI deployment may proceed more gradually. Thus, testing may initially cover an urban core and later extend to the response area of a local PSAP. Compliance may be verified for these subareas separately or in combination. However, the areas delineated for compliance testing should not overlap. It is unacceptable to include the same geographic sub-area in two or more test areas, especially if the sub-area is relatively undemanding for the location technology.

This matter has also been the subject of extensive discussion within the Emergency Service Interconnection Forum (ESIF) and the Network Reliability and Interoperability Council (NRIC) VII. However, as recently described in the E9-1-1 Institute's Wireless Networks Issue Committee White Paper, neither of these advisory bodies have been able to reach consensus:

Through the efforts of ESIF subcommittee G, consensus has been reached on the technical methodology for performing accuracy. While this provides the structure for how the testing is to be performed, policy issues such as where and when the testing should be conducted and who should have access to the results of that testing are still being discussed. As a result the OET Compliance and Reporting Subcommittee identified the following specific issues that still need to be resolved: the definition of the test area, the frequency of testing, and access to test data. While there does appear to be consensus on some aspects of these issues, such as a single Public Safety Answering Point (PSAP) area is too small to be a test area and PSAPs need access to at least some test results, consensus has not been reached on the broader issues.²

The Commission has entered into consent decrees with Cingular Wireless and T-Mobile which reference portions of OET Bulletin No. 71. Some have suggested that the consent decrees go further and expressly authorize the use of carriers' service area for accuracy measurement purposes. In fact, the decrees are far narrower. For example, the Cingular consent decree provides that

location accuracy testing should be consistent with the guidelines in OET Bulletin No. 71, which states that accuracy testing may be based on, among other things, the coverage areas of local PSAPs that request Phase II deployment or the wireless carrier's entire advertised coverage area *within* a metropolitan area.³

² E9-1-1 Institute, "Wireless Network Issues Committee Report" (September 21, 2004), at 3.

³ *In the Matter of Cingular Wireless LLC*, File No. EB-02-TS-003, released June 12, 2003, at n. 9 (emphasis added). See also *In the Matter of T-Mobile USA, Inc.*, File No. EB-02-TS-012, July 17, 2003, at n.11.

If anything, the consent decree suggest that nothing larger than a metropolitan area should be the relevant area of measurement.

Some carriers, whether or not they are subject to consent decrees, have continued to insist within the ESIF process and elsewhere that accuracy should be averaged over their entire service area, a result that is unacceptable to the public safety community. Under such an approach, a nationwide carrier could use the very high accuracy levels in one portion of the nation to offset extremely low accuracy levels in other substantial areas. That could leave significant portions of the country with virtually useless levels of E9-1-1 accuracy, essentially nullifying Phase II in those areas.

Ideally, each PSAP should be able to assume that the location information that it receives will be accurate within its service area at least to the degree specified in the Commission's rules. There is no benefit to that PSAP (or the citizens served by it) if a carrier's accuracy levels meets FCC guidelines in distant areas, but not within the PSAP's own area of jurisdiction. Measurement of anything larger than a PSAP service area runs the risk that the accuracy provided within a particular PSAP area will be significantly less than that required by the Commission or otherwise necessary to protect public safety.

The Commission adopted the accuracy levels in the rules based upon an understanding that lower levels of accuracy would not provide sufficient information to first responders. A variance of 50-100 meters can be the difference between life and death when an emergency occurs on a darkened highway or in a dense residential or commercial area, or anytime when the few extra minutes needed to pinpoint a location are a few minutes too many to save a victim.

We recognize the potential difficulties of requiring that accuracy be measured within the service area of each of the estimated 6,000 PSAPs throughout the country, at least at the present time. We believe that a reasoned, balanced interpretation of the Commission's rules would be to require that the specified levels of accuracy be provided and measured over a geographic area corresponding to the consolidated service area of PSAPs that choose to be treated together at least for this purpose. For example, there are many metropolitan and regional 9-1-1 authorities that provide varying degrees of coordinated, and in some cases consolidated, PSAP operations to specific geographic areas. Those regions would provide natural geographic boundaries for purposes of accuracy measurement.

More difficult to address are areas without pre-existing cooperative arrangements among PSAPs (many rural PSAPs may fall into this category). The Commission should encourage PSAPs in such areas to join together to create generic service areas for purposes of measuring accuracy, though the "default" for carriers should always be that accuracy levels must be provided on the basis of a particular PSAP service area. APCO and its Project LOCATE are currently examining this issue further, and hope to provide the Commission with additional recommendations in the near future.

B. Providing Accuracy Data to PSAPs

Regardless of the geographic area over which accuracy is measured, it is critical for PSAPs to know just how accurate the information is that they do receive. Despite some carrier's fears, this is not to permit PSAPs to pursue enforcement actions against noncompliant carriers. Rather, PSAPs need to know the level of E9-1-1 accuracy to facilitate appropriate dispatching of emergency responders. For example, responders

need to know what to do if they arrive at the “wrong address” or are unable to see the emergency upon arrival. If the call was delivered with a high degree of accuracy, the search for the actual emergency can be narrowed without requiring additional personnel. However, if the accuracy levels are actually low, then responders need to be prepared for a wider area search, and additional scarce resources may need to be dispatched.

We urge the Commission to clarify that carriers must be required to provide PSAPs with accuracy data, at least upon the PSAP’s request. How that information is transferred, its degree of granularity, and its frequency of reporting, are issues that can be resolved through ongoing industry/public safety discussions. However, those discussions are unlikely to proceed in a productive manner absent clear direction from the FCC regarding the fundamental obligation of carriers to provide accuracy information data to PSAPs.

CONCLUSION

Therefore, for the reasons set forth above, we urge the Commission to clarify the geographic area over which a wireless carrier must provide the levels of 9-1-1 location accuracy specified in the Commission’s rules, and the degree to which carriers must provide accuracy data to relevant PSAPs.

Respectfully submitted,



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