

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

In the Matter of)	
)	
Wireless E911 Location Accuracy Requirements)	PS Docket No. 07-114
)	
E911 Requirements for IP-Enabled Service Providers)	WC Docket No. 05-196
)	

COMMENTS OF CTIA – THE WIRELESS ASSOCIATION®

CTIA – The Wireless Association® (“CTIA”) respectfully submits these comments in response to the Federal Communications Commission’s (“FCC” or “Commission”) Further Notice of Proposed Rulemaking and Notice of Inquiry (“*E911 Notice*”) in the above-captioned proceedings.¹ In light of the recently-adopted rules for Phase II location accuracy,² CTIA believes that any additional action by the Commission on E911 location accuracy would be inappropriate at this time. The Commission only recently required wireless providers and manufacturers to develop and deploy equipment and infrastructure to support the newly promulgated E911 location accuracy requirements. The wireless industry should be provided the time needed to implement these new rules and benchmarks for enhanced E911 location information prior to the Commission again revising these requirements.

Rather than embarking on new proposed regulations, CTIA urges the Commission to revisit location accuracy standards through an industry-based stakeholder group, which will help to form a full record regarding the new technical standards and the *E911 Notice*’s proposals.

¹ *Wireless E911 Location Accuracy Requirements; E911 Requirements for IP-Enabled Service Providers*, PS Docket No. 07-114, WC Docket No. 05-196, Further Notice of Proposed Rulemaking and Notice of Inquiry, FCC 10-177 (2010) (“*E911 Notice*”).

² *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114, Second Report and Order, FCC 10-176 (2010) (“*Second Report and Order*”).

Through these outreach efforts, an informed process can be initiated that will best serve the American public and Public Safety entities involved in the provision of E911.

Support for wireless E911 services is a critical issue for the wireless industry. Over the past 15 years, the industry has endeavored to improve and enhance consumers' ability to reach Public Safety and to ensure that location data is provided with 911 calls. Through the steps described in greater detail below, the wireless industry and other interested stakeholders can continue to build upon this strong track record.

I. ANY ADDITIONAL ACTION BY THE COMMISSION ON E911 LOCATION ACCURACY WOULD BE INAPPROPRIATE AT THIS TIME.

CTIA and its members strongly support Commission efforts to ensure that reliable and accurate location information is shared with first responders. During the past 15 years, the wireless industry has initiated and completed Phase I E911 requirements to allow for some cell site-based location of wireless 911 calls,³ has enabled wireless 911 calls to be made without user validation,⁴ and has deployed and implemented Phase II location technology throughout the country.⁵ CTIA believes this compliance record demonstrates the seriousness with which E911 issues are taken by the wireless industry. As such, Public Safety officials are able to receive wireless E911 calls, and are able to receive accurate location information for the vast majority of these calls.

³ *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 18676 (1996); 47 C.F.R. § 20.18.

⁴ *Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 18676, at 18692-18697 (1996).

⁵ *See* E911 – Carrier Quarterly Reports, <http://www.fcc.gov/pshs/services/911-services/enhanced911/phase2-waiver.html> (last visited Jan. 14, 2011).

Moreover, CTIA and its members remain committed to continuing to improve and support enhancements to E911 location accuracy. CTIA and the wireless industry are actively involved in the Communications Security, Reliability and Interoperability Council (“CSRIC”) and with other E911 standards efforts to ensure that wireless calls to 911 are connected and location data is provided. Given the importance of these calls and the complexity of wireless networks, however, any changes to these services require significant time to test, implement and integrate prior to implementation. Accordingly, the Commission should permit the wireless industry time to implement the new accuracy benchmarks before undertaking to revise them.⁶ The Commission’s *Second Report and Order*, released in September 2010, requires wireless licensees to satisfy wireless E911 Phase II location accuracy standards at either a county-based or Public Safety Answering Point (PSAP)-based geographic level, and revises the requirements of section 20.18(h) of the Commission’s rules for handset-based and network-based location technologies.⁷ As the Commission noted in the *Second Report & Order*, these rule changes will enable emergency responders to reach the site of an emergency more quickly and efficiently.⁸ It would, however, be inappropriate for the Commission to promulgate further standards before the current ones can be implemented and evaluated.

While laudable, any action by the Commission to add new requirements while the industry is implementing the more granular location accuracy benchmarks so recently adopted risks diverting resources or stalling the deployment of systems to meet those requirements. This

⁶ *Second Report and Order*.

⁷ *Id.* at ¶ 2.

⁸ *Id.* at ¶ 1.

phenomenon of “Requirements ‘Creep’” was recognized by former Office of Engineering and Technology Chief Dale Hatfield in the assessment of E911 implementation:

The tradeoff here between faster rollout of Phase II wireless E911 services and accommodating specialized and new requirements is apparent. While I am convinced that this is an issue worth mentioning because of the potential impact on the rollout of wireless E911 services in the short term, I am not convinced any formal Commission action is necessary. However, on balance, I do recommend that the Commission (a) avoid the addition of new requirements during this critical stage of the rollout, (b) encourage coalescence around standardized interfaces ..., and (c) work with the industry, in conjunction with the system engineering entity ... to prioritize the future evolution of wireline and wireless E911 in such a way that short term and long term priorities are properly balanced.⁹

Rather than pursue additional location accuracy rules, the Commission should instead opt to revisit the location accuracy standards through an interested stakeholder group. As discussed below, a stakeholder group will serve the public interest by drawing on the knowledge of wireless industry and Public Safety experts to determine the best potential modifications to the accuracy standards. Moving forward with the proposed actions in the *E911 Notice* would be premature and potentially damaging to E911 efforts without the development of a fully formed record that takes into account the new technical standards as well as recommendations from a stakeholder group.

II. CTIA SUPPORTS THE DEVELOPMENT OF A STAKEHOLDER GROUP OF TECHNICAL EXPERTS TO INFORM THE E911 LOCATION ACCURACY REQUIREMENTS.

CTIA continues to firmly believe that development of E911 location accuracy standards would greatly benefit from recommendations by a stakeholder group.¹⁰ Engineers and technical

⁹ Dale N. Hatfield, A Report on Technical and Operational Issues Impacting The Provision of Wireless Enhanced 911 Services, § 4.3 (2002) (“Hatfield Report”).

¹⁰ See Comments of CTIA – The Wireless Association®, PS Docket No. 07-114, CC Docket No. 94-102, WC Docket No. 05-196, at 6-7 (filed July 5, 2007); Comments of

experts from across the industry, including wireless carriers, technology vendors, and Public Safety groups, would make up the stakeholder group. Such a stakeholder group would be enhanced by Commission participation as well—for example, the group could be monitored by the CSRIC or another committee with technical expertise on E911 issues. The CSRIC could serve a valuable role in the stakeholder group since the CSRIC has experience with these issues, having recently met to discuss technical options for E911 location accuracy and the transition to Next Generation 911 (“NG911”).¹¹ Stakeholders involved in all aspects of the delivery of E911 service have shown enthusiastic support for the creation of such a group.¹² The Commission also recognized the value a stakeholder group would add to the E911 location accuracy discussion, noting that commenters supported creation of a working group¹³ and encouraging “the parties to meet as a group to evaluate methodologies for assessing wireless 911 location accuracy for

CTIA –The Wireless Association®, PS Docket No. 07-114, CC Docket No. 94-102, WC Docket No. 05-196, at 3-4 (filed Aug. 20, 2007); Reply Comments of CTIA – The Wireless Association®, PS Docket No. 07-114, CC Docket No. 94-102, WC Docket No. 05-196, at 6-8 (filed Sept. 18, 2007); Comments of CTIA – The Wireless Association®, PS Docket No. 07-114, at 4-6 (filed Nov. 20, 2009) (commenting on the need for a consensus-based group to develop E911 requirements).

¹¹ FCC Announces Meeting of the Communications Security, Reliability, and Interoperability Council (CSRIC) Scheduled for December 13, 2010 at FCC Headquarters, Public Notice, DA 217-10 (Nov. 29, 2010).

¹² See e.g., Comments of NENA, PS Docket No. 07-114, CC Docket No. 94-102, at 5 (July 5, 2007) (“Such a Forum could provide an organizational framework to bring all parties together to assist the Commission in providing ongoing recommendations moving forward on how best to optimize location accuracy capabilities.”); Reply Comments of T-Mobile USA, Inc., PS Docket No. 07-114, CC Docket No. 94-102, at 16 (July 11, 2007) (“Establishing an expert forum with Public Safety, Commission, technology vendor, and wireless industry participants will help ensure that wireless E911 improves as expeditiously as possible. . . [m]oreover, an expert forum would provide a mean of objective, independent testing of proposed autolocation solutions.”); Comments of Rural Cellular Association, PS Docket No. 07-114, CC Docket No. 94-102, WC Docket No. 05-196, at 9-10; Comments of Motorola, Inc. and Nokia Inc., PS Docket No. 07-114, CC Docket No. 94-102, WC Docket No. 05-196, at 5 (July 11, 2007) (“Such a forum will enable the Commission to obtain detailed information on currently available and future location technologies, thereby allowing it to make the most informed decision possible.”).

¹³ *Second Report and Order* at ¶ 38.

indoor calls.”¹⁴ Indeed, the importance of the stakeholder group concept previously was recognized and recommended by Dale Hatfield during the implementation of E911.¹⁵

The formation of a working group of stakeholders to review technical standards and make recommendations has proven worthwhile in the past. One notable example is the success of the Commercial Mobile Service Alert Advisory Committee (“CMSAAC” or “Advisory Committee”). The CMSAAC was an advisory committee created to recommend system critical protocols and technical requirements for the Commercial Mobile Alert Service.¹⁶ Made up of representatives from a broad group of stakeholders including state and local governments, representatives of the communications industry, and national organizations, the CMSAAC was able to engage in repeated discussions and reach consensus on complex issues before submitting its recommendations to the Commission.¹⁷ The CMSAAC process was a success, as the Advisory Committee’s recommendations were largely adopted by the Commission in its *First Report and Order*.¹⁸ The CMSAAC model could be replicated in the context of E911 location accuracy through the formation of an E911 stakeholder group.

¹⁴ *Id.* at ¶ 29.

¹⁵ See Hatfield Report, § 3.3 (recommending the establishment of a stakeholder advisory group that could “create a technical framework for the necessary changes, including changes to the network elements, interfaces and data required to take advantage of improving technologies and changing requirements”).

¹⁶ See Security and Accountability for Every Port Act of 2006, Pub. L. 109-347, Title VI-Commercial Mobile Alerts (“Warn Act”), sections 603(a), (d).

¹⁷ See Notice of Appointment of Members to the Commercial Mobile Alert Advisory Committee; Agenda for December 12, 2006 Public Meeting, 21 FCC Rcd 14175 (2006) (Public Notice).

¹⁸ See *The Commercial Mobile Alert System*, First Report and Order, 23 FCC Rcd 6144, ¶ 7 (2008).

In practice, the E911 stakeholder group would be charged with reviewing the current technical capabilities of wireless networks as well as the needs of Public Safety for E911 location accuracy. The stakeholder group could provide reports to the Commission as facts become available and recommendations become clear. This group also could continue to monitor and advise the Commission on recurring technical issues surrounding E911 location accuracy technology. By drawing on the expertise of those who know the wireless industry's capabilities and Public Safety's needs best, the stakeholder group would enhance the Commission's understanding and analysis of complex E911 issues.

The particular issues raised in the *E911 Notice* are especially well-suited to consideration by a stakeholder group. For example, the Commission seeks to “refresh the record on how location information and technology can be improved in more challenging environments” such as indoor settings, urban canyons and rural areas with heavy forestation or mountainous terrain.¹⁹ The Commission also seeks comment on how location information can include accurate vertical or z-axis data.²⁰ A stakeholder group would prove useful when evaluating and making recommendations on topics like these, given the fact that CTIA is aware of no current technology that has been developed or deployed that would meet the suggested improvements. Moreover, forward-looking issues brought up in the *E911 Notice*, such as leveraging emerging network devices like femtocells, picocells and microcells,²¹ could be reviewed by the stakeholder group. The stakeholder group could monitor technological developments and proceed in a considered and informed manner to build consensus on E911 recommendations.

¹⁹ *E911 Notice* at ¶ 22.

²⁰ *Id.* at ¶ 23.

²¹ *Id.* at ¶ 40-41.

CTIA and its members remain committed to continued progress on E911 location accuracy; however, the Commission should be aware that any new technology or standards require time to develop, test, implement and integrate. Accordingly, CTIA urges the Commission to refrain from promulgating any new requirements until a stakeholder group can be convened and best practice recommendations can be developed for any new location accuracy requirements.

III. CTIA URGES THE COMMISSION TO FOCUS ON OTHER RELATED ISSUES THAT WOULD ADVANCE THE PROVISION OF E911 LOCATION ACCURACY FOR THE PUBLIC.

While the *E911 Notice* is focused on new technological requirements for E911 location accuracy, CTIA notes that other policy impediments to E911 location accuracy remain. The Commission should focus on resolving these problematic issues to encourage development and deployment of accurate and reliable location information.

Initially, CTIA notes that while its member companies have generally completed Phase II location technology deployment throughout the country, the same cannot be said for PSAPs responsible for receiving location data. NENA has conducted a survey of E911 readiness across the country, and the most recent findings indicate that many states still have large geographic areas that are not yet Phase II ready.²² This lack of readiness impedes the deployment of location accuracy technologies today, and could impede deployment of NG911 networks in the future. As Senator Amy Klobuchar, a member of the Congressional E-911 Caucus, noted, “We need to make sure the technology of our 9-1-1 call centers is updated so that emergency personnel have

²² National Emergency Number Association, United States E9-1-1 Deployment, <http://nena.ddti.net/Documents/NENA%20Wireless%20E911%20deployment%20map.pdf> (October 28, 2010).

the tools they need to keep people safe and provide assistance to those in need.”²³ CTIA urges the Commission to work with Public Safety and the states to guard against the misdirection of state and local 911 funds as well as on education and other outreach to ensure that the Phase II data made available by wireless providers is actually received by PSAPs.

Second, zoning and building access issues are extremely problematic when attempting to deploy advanced location accuracy technologies.²⁴ While the Commission has taken positive steps in its “*Shot Clock*” *Declaratory Ruling* to attempt to reduce delays in local zoning,²⁵ more remains to be done to enable better coverage and location accuracy for wireless providers. Local zoning requirements may effectively prohibit the placement of new towers or ban placement of additional equipment needed for location technology on existing towers. CTIA urges the Commission to work with state and local zoning authorities to promulgate more streamlined zoning approaches that will provide more expeditious approvals for new towers and modifications to existing towers that would enhance E911 location accuracy. For example, the

²³ Congressional E911 Caucus Introduces Legislation to Fund and Improve 9-1-1 Systems (March 12, 2010) (Press Release) *available at* http://eshoo.house.gov/index.php?option=com_content&task=view&id=723&Itemid=79.

²⁴ *See, e.g.* Letter from John T. Nakahata, Counsel to T-Mobile USA, Inc. to Marlene H. Dortch, Secretary, FCC, filed Dec. 8, 2008 at 9 (discussing difficulty in meeting short E911 benchmarks due to prolonged zoning and tower siting processes); Reply Comments of SouthernLINC Wireless, PS Docket No. 07-114, CC Docket No. 94-102, WC Docket No. 05-196, at 7 (filed Sept. 18, 2007) (identifying zoning and other restrictions on the deployment of additional cell sites or the modification of existing sites as an obstacle to deploying new location accuracy solutions); Comments of MetroPCS Communications, Inc., PS Docket No. 07-114, CC Docket No. 94-102, WC Docket No. 05-196, at 8-9 (filed Aug. 20, 2007) (identifying zoning as a “hurdle” to meeting location accuracy requirements).

²⁵ *See* Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance, *Declaratory Ruling*, 24 FCC Rcd 13994 (2009) (establishing deadlines for state and local zoning authorities to act on wireless tower siting requests).

FCC could seek to ensure that local zoning authorities give timely consideration to the addition of position determining equipment needed to improve location accuracy.

Additionally, should the Commission seriously consider in-building location accuracy standards and requirements for z-axis coordinate data, the need for building access will likely become highly relevant. For wireless providers to even attempt an in-building or z-axis coordinate location finding, access to site location technology equipment within privately owned buildings will need to be addressed. The Commission should work with the states and local authorities to determine how state and local ordinances should be modified to enable the deployment of in-building location technology. Zoning and building access requirements also must be fully analyzed by the Commission before any new location accuracy requirements are created as they are likely to be the key inhibitors to any technological solution.

IV. CONCLUSION

CTIA and its members remain supportive of the Commission's efforts to enhance the public's ability to contact emergency services during times of crisis through E911 location data. In light of the recent adoption of new E911 location accuracy standards, it is inappropriate for the Commission to take additional action to revise such rules at this time. CTIA instead reiterates its support for creation of a stakeholder group to make recommendations on future E911 recommendations, and urges the Commission to consider outstanding policy impediments to deployment of advanced location accuracy technologies.

Respectfully submitted,

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