Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of
Public Safety and Homeland Security Bureau Seeks Comment in the E911 Location Accuracy Proceeding on the Location Accuracy “Roadmap” Submitted by APCO, NENA, and the Four National Wireless Carriers

PS Docket No. 07-114

COMMENTS OF NTCA–THE RURAL BROADBAND ASSOCIATION

I. INTRODUCTION AND SUMMARY

NTCA–The Rural Broadband Association1 (“NTCA”) hereby submits these comments in response to the Public Safety and Homeland Security Bureau’s Public Notice which requests feedback on the “Roadmap for Improving E911 Location Accuracy” (“Roadmap”) filed by the Association of Public-Safety Communications Officials (“APCO”), the National Emergency Number Association (“NENA”), and the four national wireless carriers – AT&T Mobility, Sprint, T-Mobile USA and Verizon (“Tier 1 wireless carriers”).

NTCA commends the Commission for its continuing efforts to update 911 services and ensure that first responders can quickly and accurately locate callers in distress. The Association is generally supportive of the process undertaken by APCO, NENA, and the Tier 1 wireless carriers and outlined in the Roadmap, including the need for global standards to set the foundation for future solutions, and the development of a test bed that is vendor agnostic and

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1 NTCA represents nearly 900 rural rate-of-return regulated telecommunications providers. All of NTCA’s members are full service local exchange carriers and broadband providers, and many provide wireless, video, satellite, and/or long distance services as well.
technology neutral. However, the Roadmap does not resolve any of the limitations that constrain small and rural wireless providers from meeting the new proposed mandates specified by the Commission or the Roadmap itself. The Commission should therefore refrain from imposing any new E-911 indoor location accuracy requirements on small and rural wireless providers until such as time as global standards have been created; technology has been developed, proven, and certified; equipment is widely available, accessible, and affordable to small carriers; and, therefore, compliance can be reasonably achieved.

II. NTCA IS SUPPORTIVE OF THE PROCESS UNDERTAKEN BY THE SIGNATORIES TO THE AGREEMENT AND OUTLINED WITHIN THE ROADMAP

Improving E-911 indoor location accuracy is a laudable public policy goal and NTCA is generally supportive of the process undertaken by APCO, NENA, and the Tier 1 wireless carriers and outlined in the Roadmap. For instance, the Roadmap acknowledges a “number of variables, including but not limited to standards development and third party resources,”2 as prerequisites to any meaningful improvement in E911 location accuracy solutions. The Roadmap also implicitly acknowledges that the global standards development process is a lengthy but important foundational element. As NTCA has noted in other proceedings,3 standards are critical to ensuring that the underlying technology functions in a successful manner, providing for consistent, uniform links between the end user’s wireless handset, a wireless carrier’s network, and the public safety answering point (“PSAP”). Standards also reduce cost and time to market.

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2 See Roadmap at 2.
for new services, and enable compatibility and interoperability between vendor solutions in the marketplace.

In addition, the parties have agreed to develop a test bed to systematically evaluate the performance of different technologies and vendor solutions and their ability to meet the revised location accuracy standards.\(^4\) The test bed will be “operated in an open, transparent and competitively neutral manner” and it will “assess the performance of location solutions in real-world conditions and morphologies,”\(^5\) important attributes of any independent technology verification system.

III. THE ROADMAP HAS NOT FUNDAMENTALLY CHANGED ANY OF THE COMPONENTS THAT CONSTRAIN SMALL CMRS PROVIDERS FROM OFFERING IMPROVED E911 LOCATION ACCURACY SOLUTIONS

Despite the consensus process reached within the Roadmap agreement, the signatories cannot change the foundational elements that limit the ability of small and rural wireless providers to offer meaningful improvements to existing E911 location accuracy solutions.

Most importantly, in the third FNPRM, the Commission acknowledged that proven commercial technology is not yet available to meet the new proposed regulations for indoor location accuracy. Rather, the Commission pinned its standards proposal on the suggestion that technology is “likely” to be developed soon.\(^6\) Likewise, the signatories to the Roadmap are proceeding under the assumption that technology soon will be available to meet the new metrics. For instance, the vertical standards section of the Roadmap provides for additional study but does not commit to specific location accuracy metrics. However, the promise of a future solution

\(^4\) See Roadmap at 2.
\(^5\) Id.
\(^6\) Third FNPRM at ¶3.
does not equate to the presence of a tested and proven technological solution available today, and speculation as to potential future availability represents an insufficient basis upon which to impose a regulatory mandate.

Moreover, as NTCA has previously discussed, the availability of compliant technology is just the beginning. The technology will then need to be standardized; commercially manufactured; readily accessible and affordable to small and rural wireless providers; and, in the case of an E-911 handset-derived technology, adopted by an overwhelming majority of rural mobile wireless subscribers. Each of these steps will take significant time, effort, and cost to accomplish. Any emerging and cutting-edge technology likely will be prohibitively expensive to small companies such as NTCA’s members. Moreover, assuming that affordable equipment becomes available, equipment vendors typically fill the orders from larger carriers first, while Tier III carriers are typically last on the list to receive it.

Further, if consumers must upgrade handsets so that their wireless service providers comply with these new regulatory requirements regarding 911 service, the implementation timetable should recognize rural consumers’ reluctance to swap existing operational equipment for new, more expensive handsets. Rural America is home to segments of the overall U.S. population that may not regularly upgrade their handsets every two years, and, as such, for any new technology to reach critical mass, it will likely take longer for rural subscribers to adopt.

Experience confirms that it is problematic to mandate that CMRS providers meet new E-911 standards of care before a technological solution is tested, proven, and commercially available.

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7 CSRIC III WG 3 Report at 54: “Many positioning methods require handset modifications. Integration of these modified handsets into the subscriber base, once the location technology is commercially available, will take years to complete.”
available to CMRS providers of all sizes and varying resources. As evidenced by earlier stages of this proceeding, this regulatory approach forces carriers to file unnecessary and expensive waivers and extension requests, or places the Commission in the position of re-examining and frequently modifying its rules to extend the timetable at the last minute. For the small rural carriers who comprise NTCA’s membership, the expense of a waiver can impose a substantial financial burden, and the regulatory uncertainty can be disruptive to business planning and operations.

As such, the Commission should refrain from imposing any new E-911 indoor location accuracy requirements on CMRS providers until such as time as technology and market conditions ensure that compliance can be reasonably achieved. Should the Commission proceed forward nonetheless despite the overwhelming record of technological, industry, and economic barriers to compliance, it must, at the very least, establish revised requirements for small and

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8 The history of this proceeding is replete with instances of mandated location accuracy standards based on speculation that technology will evolve to make compliance possible.

See Statement of Commissioner Michael O’Rielly, Approving in Part and Concurring in Part, Re: Wireless E911 Location Accuracy Requirements, PS Docket No. 07-114, which comments on the importance of setting realistic deadlines for CMRS carriers’ compliance with new E-911 regulations:

“We learned these important lessons with the Phase II location accuracy rulemaking. There, the Commission established requirements and deadlines based on representations of emerging, as opposed to proven, technologies. It is fair to say that implementation did not go smoothly. A year after these rules were adopted, the Commission had to modify its benchmarks to ‘provide carriers with a reasonable prospect of meeting the [Phase II] accuracy and reliability requirements.’ Despite this relief, the Commission still had to issue approximately 40 waivers, extensions or stays and a dozen enforcement actions.”

Also see Letter from Brian M. Josef, CTIA-The Wireless Association, to Marlene H. Dortch, Secretary, Federal Communications Commission, at 1 (Feb, 14, 2014) (citing Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Fourth Memorandum Opinion and Order, 15 FCC Rcd 17442 ¶ 23 (2000)).

9 Id.
rural CMRS providers, enabling these companies to upgrade their equipment over a longer phase-in period during the normal course of their business planning and operations. In addition, in such case, the Commission should establish a streamlined, no-cost waiver process with clear guidelines and procedures. Small and rural CMRS providers should be able to apply for and obtain a waiver based upon established impediments to adoption such as technology limitations, lack of access to equipment, or compliance expense.

IV. CONCLUSION

For the aforementioned reasons, the Commission should refrain from imposing additional or revised E911 location accuracy standards upon small and rural wireless carriers, including conditions similar to those specified in the Roadmap, which was negotiated and agreed to by the nation’s largest Tier 1 wireless carriers without examining the constraints and limitations of small and rural wireless carriers.

Respectfully submitted,

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