

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

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

To: The Commission

**REPLY COMMENTS OF THE RURAL WIRELESS ASSOCIATION, INC.**

The Rural Wireless Association, Inc. (“RWA”)<sup>1</sup> files these reply comments in response to the Federal Communications Commission’s (“FCC” or “Commission”) Public Notice requesting comments 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”), AT&T Mobility, Sprint, T-Mobile USA, and Verizon (“Signatories”).<sup>2</sup> RWA was not a party to the Roadmap, nor was it consulted in the negotiation of that Roadmap. Accordingly, the Roadmap does not incorporate the perspective of rural carriers. These reply comments address the Public Notice’s request for comment on whether the requirements of the Roadmap, in whole or in part, should be incorporated into the FCC’s rules, and whether they should be applied to wireless carriers other than the Roadmap Signatories.

---

<sup>1</sup> RWA is a 501(c)(6) trade association dedicated to promoting wireless opportunities for rural telecommunications companies who serve rural consumers and those consumers traveling to rural America. RWA’s members are small businesses serving or seeking to serve secondary, tertiary, and rural markets. RWA’s members are comprised of both independent wireless carriers and wireless carriers that are affiliated with rural telephone companies. Each of RWA’s member companies serves fewer than 100,000 subscribers.

<sup>2</sup> *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*, Public Notice, PS Docket No. 07-114, DA 14-1680, rel. November 20, 2014 (“Public Notice”).

RWA appreciates the Signatories' efforts to develop an alternative to the FCC's proposed rules, and the Commission's willingness to give the public the opportunity to develop a record on the Roadmap proposal. RWA opposed the rules proposed by the FCC in its Third Further Notice of Proposed Rulemaking in this proceeding, arguing that the location accuracy standards proposed by the Commission were unachievable, particularly for small and rural carriers.<sup>3</sup> While RWA supports the Roadmap's attempt to develop a more realistic timeline and methodology for achieving greater location accuracy of wireless 911 calls placed in indoor environments, the Roadmap, while presumably capable of being implemented by the Signatory parties, would not be feasible in many respects for small, rural wireless carriers. Accordingly, the Commission should not apply the Roadmap requirements to small, rural wireless carriers absent an expanded compliance timeline and other changes that would make compliance possible for such carriers.

Other rural carrier groups filing comments on the Roadmap have recognized that, at a minimum, additional time would be needed for such carriers to comply with any FCC-imposed requirements that are based on the Roadmap.<sup>4</sup> RWA agrees with NTCA that the Commission should "refrain from imposing any new E-911 indoor location accuracy requirements on small and rural wireless providers until such as [sic] 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."<sup>5</sup>

---

<sup>3</sup> Comments of the Rural Wireless Association, Inc., *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114, filed May 12, 2014.

<sup>4</sup> Comments of NTCA – The Rural Broadband Association ("NTCA") at pp. 5-6. Comments of the Competitive Carriers Association ("CCA") at 3.

<sup>5</sup> Comments of NTCA at 2.

**I. Achieving Dispatchable Address as Proposed in the Roadmap is Not Currently Achievable by Rural Carriers. If the Commission Ultimately Decides to Adopt Such a Requirement and Apply it to All Wireless Carriers, it Should Do So Only After a Full Rulemaking, and Any Deadlines Should be Extended for Rural Carriers.**

The Roadmap's requirement that "heightened location accuracy technologies" be utilized for 40% of all wireless 911 calls by November 14, 2016 is infeasible for rural wireless carriers. The Roadmap defines "heightened location accuracy technologies" as "calls with fixes for A-GNSS (GPS and/or GLONASS), dispatchable location, and the proportion of calls from any other technology or hybrid technologies capable of location accuracy performance of 50m using a blended composite of indoor and outdoor based on available data from a test bed and/or drive test performance."<sup>6</sup> In order to achieve a dispatchable address, a carrier will need both a physical address associated with the handset and a means of obtaining the caller's physical location at the time of the 911 call. With respect to a physical address associated with the handset, many carriers have customers who obtain service on a prepaid basis, and therefore never provide the carrier with a physical address. More importantly, only a portion of indoor wireless 911 calls are placed from the address associated with the handset. Many, if not most, indoor wireless 911 calls are placed when the caller is not at his or her home address. Such calls present many challenges for obtaining a dispatchable address. Some of the issues faced by carriers seeking to obtain a dispatchable address include the need for a National Emergency Address Database ("NEAD") to be established that will have to be populated by non-carrier entities such as private operators of Wi-Fi networks. Achieving dispatchable location would also require the deployment of LTE and VoLTE. Many rural wireless carriers have yet to upgrade to LTE and

---

<sup>6</sup> Roadmap at 4.

VoLTE, and would require the construction of additional transmitter sites and in some cases the acquisition of additional spectrum, all of which will take considerable time and resources (resources which many rural carriers, who do not have the large number of customers to spread costs over that larger carriers do, simply do not have).<sup>7</sup> New standards will need to be developed and new equipment made available.<sup>8</sup> As pointed out repeatedly by RWA in other proceedings, and correctly noted by both NTCA and CCA here, handset availability is a significant issue in rural America, as rural consumers typically experience substantial delays in accessing the latest handsets made available to urban consumers. Even when handsets are made available, rural consumers are often much slower to upgrade to the newest handsets.<sup>9</sup>

Because of the technical and financial obstacles faced by small rural wireless carriers in upgrading their networks in an attempt to achieve dispatchable location, additional time would be needed for such carriers to achieve dispatchable location. Even the Roadmap Signatories recognize the need for standards development, network and handset changes, technology demonstration, testing, and implementation of a National Emergency Address Database before carriers will deliver dispatchable location to PSAPs.<sup>10</sup> RWA estimates that a *minimum* of two years beyond each of the milestones contained in the Roadmap would be needed before its members would be in a position to possibly obtain dispatchable location. Achieving dispatchable location in such a timeframe would require the occurrence of numerous events outside of such carriers' control, and any requirement applied to rural wireless carriers that fails to fully recognize the financial and technical impediments they face is likely to lead to the filing of numerous waiver requests.

---

<sup>7</sup> See, e.g., Comments of CCA at 3-4.

<sup>8</sup> See, e.g., Comments of NTCA at 4; Comments of CCA at 5.

<sup>9</sup> See Comments of NTCA at 4.

<sup>10</sup> See, e.g., Comments of APCO at 3.

Finally, RWA agrees with AARP that the record is scant on the topic of dispatchable address, and that the Commission should therefore issue a Notice of Inquiry or Further Notice of Proposed Rulemaking before proceeding to adopt any requirement based on the provision of dispatchable address.<sup>11</sup>

## **II. Deployment of OTDOA With VoLTE Would Impose Substantial Costs on Rural Wireless Carriers and Require Additional Time Beyond That Envisioned by the Roadmap.**

To the extent that the Roadmap does not require dispatchable location, it would still effectively require the deployment of LTE and VoLTE. By relying on VoLTE as the de facto industry standard, small rural carriers would be forced to adopt LTE and VoLTE technology at great expense. Even if rural carriers are not required to upgrade to LTE and VoLTE, for their subscribers to roam on the Signatories' networks, rural carriers would need to have deployed compatible technologies and handsets. As discussed above, most rural wireless carriers have not deployed LTE and those who intend to do so will have to make significant expenditures to cover the necessary expansion of their networks and spectrum acquisition that would allow for full deployment. Any regulatory scheme that relies on rural carriers upgrading to LTE and VoLTE in the near term is simply not feasible. Such upgrades are years away, and to be feasible would also require the availability of necessary handsets and the adoption by their customers of what are likely to be very expensive handsets.

Although the 50 meter/40% benchmark set forth in the Roadmap could potentially be met without the use of LTE and VoLTE, achieving such standards would still require deployment of a to-be-developed hybrid solution and the addition of numerous receivers, which would require time and resources to deploy. In addition, to the extent drive testing would be required to

---

<sup>11</sup> Comments of AARP at 2.

support performance showings, an additional and substantial expenditure of both time and resources would be required.<sup>12</sup>

### **III. The Roadmap's Data Collection Requirements are Far Too Burdensome for Rural Wireless Carriers.**

The Roadmap provides for the collection of data for all live wireless 911 calls on a monthly basis that would show the percentage of time that each “positioning source method” is used to deliver a 911 call, and quarterly reports to APCO and NENA. Application of such a requirement to small rural carriers would impose substantial and unnecessary burdens on such carriers, requiring manpower that few if any carriers can afford to deploy. If location accuracy requirements are based on proven technology as urged by RWA and others, there should not be a great need for the extensive data collection contemplated by the Roadmap. If such data collection is nonetheless deemed desirable by the Commission, relaxed requirements should apply to smaller carriers for whom such data collection is a demonstrated burden, and testing should be limited to a single test. In addition, any test results provided to APCO and NENA should be subject to a protective order that ensures that such competitively sensitive information will not be made available to the public.

### **IV. Conclusion.**

The Commission has previously recognized that the record to date is at best “divided regarding whether indoor location accuracy technology is sufficiently developed to support the near-term implementation of an indoor location accuracy requirement” and that “even the best location technologies tested have not proven the ability to consistently identify the specific

---

<sup>12</sup> See Comments of CCA at p. 7.

building and floor.”<sup>13</sup> While the Roadmap is aimed at utilizing existing technology as a solution for indoor location accuracy, the entire indoor location accuracy ecosystem it envisions does not yet exist, and is many years from the point where it could feasibly and economically be implemented by the majority of rural wireless carriers. The FCC has attempted aspirational rulemaking in the past with respect to E911 location accuracy with little success. The Commission should not impose the Roadmap requirements on rural carriers, and at a minimum any indoor location accuracy requirements ultimately imposed on rural carriers should allow for an expanded timeframe that reasonably reflects their technical and economic realities.<sup>14</sup> As RWA stated in its initial Comments filed in this proceeding, as the need for indoor location accuracy is far more acute in urban areas than rural areas, and given the substantially greater cost of compliance in rural areas, the Commission should exclude rural areas from any indoor

---

<sup>13</sup> *Wireless E911 Location Accuracy Requirements*, Third Further Notice of Proposed Rulemaking, PS Docket No. 07-114 (rel. Feb. 21, 2014) at par. 78.

<sup>14</sup> See Comments of NTCA at 5-6 (“[T]he Commission should refrain from imposing any new E-911 indoor location accuracy requirements on CMRS providers until such 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 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.”)

location accuracy requirements it adopts for at least two years beyond the time urban carriers are required to come into compliance.

Respectfully submitted,

**RURAL WIRELESS ASSOCIATION, INC.**

By: */s/ Caressa D. Bennet*

---

Caressa D. Bennet  
General Counsel  
P.O. Box 50551  
Arlington, VA 22205-5551

By: */s/ Michael R. Bennet*

---

Michael R. Bennet  
Bennet & Bennet, PLLC  
6124 MacArthur Boulevard  
Bethesda, MD 20816-3210  
(202) 371-1500

Its Attorneys

December 24, 2014