

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

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

COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

Competitive Carriers Association (“CCA”)¹ submits these comments in response to the *Fourth Further Notice of Proposed Rulemaking (“FNPRM”)*² in the above-captioned proceeding, which proposes vertical (“z-axis”) location accuracy metrics. CCA and its members are committed to public safety initiatives and commend the FCC’s focus on improving location accuracy for emergency communications. As part of this commitment to public safety, CCA’s members are dedicated to providing accurate and reliable communications to their customers and communities in times of emergency.

CCA encourages the Commission to be mindful when considering this latest FNPRM that the technologies needed to meet these metrics are still developing, and to allow this development to lead the FCC’s policy decisions on industry standards. The Commission also should recognize that competitive carriers often face unique obstacles in accessing, upgrading, and deploying next-generation equipment and network features. CCA therefore supports the

¹ CCA is the leading association for competitive wireless providers and stakeholders across the United States. CCA’s membership includes nearly 100 competitive wireless providers ranging from small, rural carriers serving fewer than 5,000 subscribers to regional and national providers serving millions of customers. CCA also represents associate members consisting of small businesses, vendors, and suppliers that serve carriers of all sizes.

² *In the Matter of Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114, Fourth Further Notice of Proposed Rulemaking, FCC 19-20 (rel. Mar. 18, 2019) (“FNPRM”).

Commission’s proposal to allow non-nationwide carriers that serve the top 25 or 50 markets to have additional time to meet any adopted performance benchmarks.

I. TECHNICAL FEASIBILITY CONSIDERATIONS SHOULD GUIDE Z-AXIS PERFORMANCE STANDARDS

CCA and its members continue to improve emergency communications for their consumers, and steadfastly deploy the latest technologies to enhance services and public safety efforts.³ As location accuracy technology continues to develop and evolve, carriers are adopting network features and incorporating new technologies that continue to undergo testing and development. CCA members often are also dependent upon vendor relationships to update networks capabilities and applications that support enhanced technologies and services. As CCA has noted in other contexts, these vendors and other providers are a critical component to a coherent and upgraded next-generation public safety ecosystem.⁴ CCA accordingly encourages the Commission to proceed cautiously when implementing enhanced z-axis performance standards and thoughtfully incorporate developments to the current technological landscape in its policy decisions.

³ For instance, CCA member C Spire developed and deployed a new public safety data priority service designed to help local and state emergency first responders send and receive critical mobile data communications during a crisis or natural disaster. *See* Press Release, C Spire Wireless, C Spire Introduces Free Public Safety Data Priority Service for Emergency First Responders’ Critical Mobile Data Communications (June 15, 2018) *available at* https://www.cspire.com/company_info/about/news_detail.jsp?entryId=30200004. In addition, CCA member Nokia unveiled an “Advanced Command Center” designed to meet the needs of public safety agencies as they take the next step towards NG911 standards by enabling rich media call taking, 360-degree situation awareness through video and IoT, and enhanced multi-agency cooperation through virtual emergency response centers. *See* Press Release, Nokia, Nokia’s Advanced Command Center Strengthens Situational Awareness to Enable Better Decision-Making by Emergency Services (May 15, 2018) *available at* <https://www.nokia.com/about-us/news/releases/2018/05/15/nokias-advanced-command-center-strengthens-situational-awareness-to-enable-better-decision-making-by-emergency-services/>.

⁴ *See e.g.*, Petition of Competitive Carriers Association, PS Docket No. 15-91 (filed Aug. 16, 2017) (“CCA WEA Petition”).

The FCC also should afford new technologies sufficient time to develop and be broadly accessible by all providers before accelerating compliance requirements. The *FNPRM* proposes a “vertical, or z-axis, location accuracy metric of plus or minus 3 meters relative to the handset” for each of the previously established benchmarks and geographic requirements in the E911 wireless location accuracy rules.⁵ The FCC bases its proposed z-axis metric, however, on the barometric sensor test results of just two vendors, one of which did not meet the Commission’s proposed standard.⁶ Indeed, in submitting the Stage Z Test Report in 2018, CTIA noted that although the test results provided “helpful insight” into these evolving technologies, “significant questions remain about performance and scalability in live wireless 9-1-1 calling environments.”⁷ The record also establishes that affected carriers “expect that new and emerging vertical location technologies...could support a more accurate Z-Axis metric and may be scalable to meet the benchmarks.”⁸ CCA agrees with these observations, and urges the Commission to afford emerging technologies the necessary time to sharpen certain data metrics before adopting enhanced location accuracy requirements. The *FNPRM* recognizes that a range of options would support carriers solving the challenge of indoor location.⁹ Carriers should not be faulted for failing to meet certain benchmarks based on standards that rely on technological developments that are out of their control. Moreover, diverting limited resources to add location

⁵ *FNPRM* ¶ 2.

⁶ *See id.* ¶ 4.

⁷ *Id.* ¶¶ 4-5, citing Letter from Scott K Bergmann, Senior Vice President of Regulatory Affairs, CTIA, et al., to Marlene H. Dortch, Secretary, PS Docket No. 07-144, at 5 (Aug 3. 2018).

⁸ Letter from Matthew Gerst, Vice President, Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 07-114 at 2 (filed Dec. 19, 2018) (noting that CTIA member companies expect new technologies, such as 3D WiFi, to support vertical location accuracy).

⁹ *See FNPRM* ¶ 27.

accuracy standards that are not sufficiently tested may “exhaust competitive carriers’ constrained budgets focused on bringing next-generation services to rural America and beyond.”¹⁰

Standards based on technologies that smaller carriers can reasonably access and deploy will allow carriers and vendors alike to continue to innovate and accurately relay next-generation E911 location information. CCA therefore agrees with the Commission’s acknowledgement that standards should be “technically feasible and technologically neutral” to allow providers to choose the most effective solution for their unique operations.¹¹ By recognizing that developing technologies have the potential to impact the accuracy of z-axis standards, the Commission will allow the most effective and available technologies to influence its policy decisions.

II. THE COMMISSION SHOULD PROVIDE NON-NATIONWIDE CARRIERS ADDITIONAL TIME TO COMPLY WITH PERFORMANCE BENCHMARKS

The FCC also should ensure that competitive carriers have adequate time and resources to comply with enhanced z-axis metrics. CCA’s members focus their finite resources on actively upgrading network capabilities to support critical public safety initiatives; however, these carriers often lag significantly behind Tier I providers in accessing the latest equipment and technology, with larger providers driving the development of next-generation technology and applicable standards.¹² The Commission in other contexts has recognized that these barriers “account for limits on handset availability and inventory turn-over rates” and accordingly has

¹⁰ CCA WEA Petition at 6.

¹¹ See Letter from Matthew Gerst, Vice President, Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 07-114 at 3 (filed Mar. 7, 2019) (encouraging the FCC to explore solutions that “maintain flexibility and technological neutrality so that CMRS providers can adopt any solutions that meet the proposed metric and corresponding Commission rules.”).

¹² See CCA WEA Petition at 8.

adopted timeframes that give competitive carriers “additional time to deploy network upgrades and learn from the deployment experiences of the [larger carriers].”¹³ An extended compliance process for non-nationwide carriers will appropriately recognize current barriers to the deployment of advanced technologies while enabling competitive carriers to deploy these new technologies along reasonable timelines.¹⁴

Finally, to the extent that the FCC in the future adopts z-axis requirements for E911 location accuracy nationwide, CCA urges the Commission to implement a glide path for non-nationwide carriers to comply with any adopted timeframes, particularly if these carriers operate outside of the FNPRM’s proposed benchmark of the top 50 markets.¹⁵ As noted, the Commission in other contexts has granted additional time for compliance to such carriers, recognizing that Tier II and Tier III carriers in many cases do not have the ability to drive technology development and deployment, coupled with the inability to obtain equipment on the

¹³ *Wireless Emergency Alerts, Amendments to Part 11 of the Commission’s Rules Regarding the Emergency Alert System*, Order on Reconsideration, 32 FCC Rcd 9621, ¶ 11 (2017) (granting CCA’s request for an extended 18-month timeline for non-nationwide carriers to implement embedded references in WEA systems); *Improvements to Benchmarks and Related Requirements Governing Hearing Aid-Compatible Mobile Handsets*, Fourth Report and Order and Notice of Proposed Rulemaking, 30 FCC Rcd 13845, ¶¶ 68-71 (2015) (proposing that an additional eighteen-month compliance period was necessary for non-Tier I carriers “to account for limits on handset availability and inventory turn-over rates.”).

¹⁴ See Letter from Courtney Neville, Associate General Counsel, CCA, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 07-114 (filed Mar. 6, 2017). As noted throughout this proceeding, competitive carriers continue to work to refine live 911 call data reports and overcome technical barriers to report more granular data for dispatchable location or x/y coordinates. The Commission should continue to be cognizant that the accuracy of these x/y metrics and z-axis coordinates often are correlated. For example, while many handsets can now receive more precise x/y location if they are outdoors, once signal is hindered (often just by common interference like the roof of a vehicle), a caller’s location plot can skew from their actual location. If the requisite technology therefore fails to provide accurate indoor or outdoor x/y coordinates, then measurements for a granular z-axis altitude also could be compromised.

¹⁵ See *FNPRM* ¶ 11.

same timeframe as nationwide carriers.¹⁶ A reasonable timeline for compliance in more rural and remote areas outside of the top 50 markets will allow non-nationwide carriers to adequately meet location accuracy requirements without detracting from already limited resources.

III. CONCLUSION

CCA and its members look forward to continued collaboration alongside industry stakeholders and the Commission to further enhance E911 wireless location accuracy and to advance the Commission's public safety objectives. For the reasons discussed herein, CCA respectfully encourages the Commission to be mindful of technological innovation in this proceeding by allowing technology to dictate policy, and to allow for a glide path to compliance for non-nationwide carriers.

Respectfully submitted,

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¹⁶ See CCA WEA Petition at 9; *Wireless E911 Location Accuracy Requirements*, Fourth Report and Order, 30 FCC Rcd. 1259, ¶ 104 (2015) (providing non-nationwide providers with additional time to migrate to VoLTE networks, agreeing with CCA “that the disadvantages non-nationwide CMRS providers face in deploying LTE networks warrant flexibility”); *Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, Order to Stay, 17 FCC Rcd. 14841, ¶ 10 (2002) (granting non-nationwide providers additional time to deploy E911, finding that non-nationwide carriers had “less ability than nationwide CMRS carriers to obtain the specific vendor commitments necessary”); see also *Petition for Waiver of Rules Requiring Support of TTY Technology*, Order, DA 16-435, ¶ 19 (Apr. 20, 2016) (“CCA Waiver Order”) (stating that “the Commission has granted additional time for Tier II and Tier III wireless carriers in other contexts.”).