



December 19, 2018

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: Ex Parte Presentation, Wireless 9-1-1 Location Accuracy, PS Docket No.
07-114

Dear Ms. Dortch,

On December 17, 2018, CTIA representatives and CTIA member companies AT&T, Sprint, T-Mobile, and Verizon (participants) met with Public Safety and Homeland Security Bureau (Bureau) Chief Lisa M. Fowlkes, Deputy Bureau Chief David Furth, Bureau staff and FCC Chief Technologist Eric Burger (see Attachment for a full list of meeting attendees). During the meeting, the participants discussed their commitments and ongoing efforts to enhance wireless 9-1-1 location accuracy.

The participants explained that the wireless industry remains committed to providing the public safety community with the most accurate, actionable location information to use in responding to wireless 9-1-1 calls. The nationwide wireless providers have continued to deliver on their commitment to develop a solution for providing dispatchable location (DL) based on the National Emergency Address Database (NEAD) consistent with the Commission's *Fourth Report & Order*.¹ The participants also noted that wireless providers have met every benchmark in the *Fourth Report & Order* to date and wireless providers have

¹ See Letter from Matthew Gerst, Assistant Vice President, Regulatory Affairs, CTIA, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 07-114, at 2 (Oct. 1, 2018) (CTIA Letter); *Wireless E911 Location Accuracy Requirements*, Fourth Report and Order, 30 FCC Rcd 1259 (2015) (*Fourth Report & Order*).



invested substantial resources to advance the NEAD. The participants further highlighted the ongoing efforts to encourage a variety of critical stakeholders to support the NEAD.

At the same time, the participants are also committed to identifying an appropriate Z-Axis metric that will provide public safety with actionable vertical location to respond to wireless 9-1-1 calls, especially indoors, consistent with the *Fourth Report & Order*.² The participants continue to support the development and testing of technology solutions that may lead to Z-Axis information more accurate than the ± 5 meters verified in the August 2018 Stage Z Test Bed Report.³ They also recognized that public safety representatives have encouraged the Commission to adopt a more aggressive Z-Axis metric of ± 3 meters in the near term.⁴

While further testing remains necessary to validate the accuracy of vertical location technology solutions across regions, morphologies, weather conditions and devices, the participants noted that certainty as to the Z-Axis metric in the near term, whether via an Order or expeditiously seeking public comment, may help advance the development process necessary to meet the 2021 and 2023 vertical location accuracy benchmarks in the *Fourth Report & Order*. As previously noted in the record, the participants expect that new and emerging vertical location technologies including, for example, 3D WiFi, could support a more accurate Z-Axis metric and may be scalable to meet the benchmarks.⁵ To that end, the participants encouraged the Commission to ensure that the adopted Z-Axis metric is technologically neutral, consistent with the approach the Commission has typically taken.⁶ Further, the participants noted that the Test Bed LLC is evaluating whether additional Z-Axis testing can be accelerated in 2019 as wireless providers will need to validate whether a technology solution can achieve the metric consistent with *Fourth Report & Order*.

² See CTIA Letter at 2 n.3; see also, Reply Comments of CTIA, PS Dkt. 07-114 (filed October 11, 2018).

³ Letter from Scott K. Bergmann, Senior Vice President, Regulatory Affairs, CTIA *et al.*, to Marlene H. Dortch, Secretary, FCC, PS Docket No. 07-114 (filed Aug. 3, 2018) (CTIA Z-Axis Letter) and Attachment, 911 Location Test Bed, LLC, Report on Stage Z (Test Bed Report).

⁴ See Comments of NENA: The 9-1-1 Association, PS Docket. No. 07-114, at 2-3 (filed Oct. 2, 2018).

⁵ Reply Comments of CTIA at 4.

⁶ *Fourth Report & Order*, 30 FCC Rcd 1259 at ¶ 170 (noting the Commission's commitment to technology neutrality).



Finally, the participants also addressed the Commission's recent *Galileo Order* allowing U.S. earth station use of the Galileo Global Navigation Satellite System (GNSS).⁷ The participants noted that the *Galileo Order* identifies several public interest benefits that support the use of the Galileo GNSS to supplement U.S. Global Positioning System (GPS), including increased service availability, accuracy and reliability of location services.⁸ As such, the participants also discussed the Commission's express recognition that the use of the Galileo GNSS can support wireless 9-1-1 location accuracy capabilities.⁹ The participants briefly discussed how the accuracy testing required for other wireless 9-1-1 location accuracy technologies utilized by Commercial Mobile Radio Service (CMRS) providers as described in the *Fourth Report & Order*¹⁰ can satisfy the additional procedures that CMRS providers must follow before integrating the Galileo E1 and E5 signals for E911 location services.¹¹

Pursuant to Section 1.1206 of the Commission's rules, a copy of this letter is being filed in ECFS and provided to the Commission meeting attendees. Please do not hesitate to contact the undersigned with any questions.

Sincerely,

/s/ Matthew Gerst

Matthew Gerst
Assistant Vice President, Regulatory Affairs

cc: Lisa Fowlkes
David Furth

⁷ *Waiver of Part 25 Licensing Requirements for Receive-Only Earth Stations Operating with the Galileo Radionavigation-Satellite Service*, Order, IB Docket No. 17-16, (rel. Nov. 16, 2018) (*Galileo Order*), available at <https://docs.fcc.gov/public/attachments/FCC-18-158A1.pdf>.

⁸ *Id.* at ¶¶ 12-16.

⁹ *Id.* at ¶ 50.

¹⁰ *Fourth Report & Order*, 30 FCC Rcd 1259 at ¶¶ 126-132.

¹¹ *Galileo Order* at ¶ 50 n.194.



William Beckwith
Brenda Boykin
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Nellie Foosaner
Austin Randazzo
Michael Wilhelm
Eric Burger



ATTACHMENT

December 17, 2018 Meeting Attendees

CTIA

Matthew Gerst

Adam Krinsky, Wilkinson Barker Knauer, LLP

AT&T

Joe Marx

Sprint

Ray Rothermel

T-Mobile

Steve Sharkey

Eric Hagerson

Verizon

Don Brittingham

Robert Morse

Public Safety and Homeland Security Bureau

Lisa M. Fowlkes

David Furth

William Beckwith

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Nellie Foosaner

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