

**Before the
Federal Communications Commission
Washington, D.C. 20554**

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

**COMMENTS OF THE ALLIANCE FOR
TELECOMMUNICATIONS INDUSTRY SOLUTIONS**

The Alliance for Telecommunications Industry Solutions (ATIS) hereby submits these comments in response to the *Fifth Report and Order and Fifth Further Notice of Proposed Rulemaking (Fifth R&O and Fifth FNPRM)* released November 25, 2019, in the above-referenced docket. As the organization that develops technical standards related to wireless location accuracy, ATIS is pleased to provide input on technical issues raised in the *Fifth FNPRM*.

I. BACKGROUND

ATIS is a global standards development and technical planning organization that develops and promotes worldwide technical and operations standards for information, entertainment, and communications technologies. ATIS’ diverse membership includes key stakeholders from the Information and Communications Technologies (ICT) industry – wireless, wireline, and VoIP service providers, equipment manufacturers, broadband providers, software developers, consumer electronics companies, public safety agencies, and internet service providers. ATIS is also a founding partner and the North American Organizational Partner of the Third Generation Partnership Project (3GPP), the global collaborative effort that has developed the Long Term Evolution (LTE) and LTE-Advanced wireless specifications. Nearly 600 industry

subject matter experts work collaboratively in ATIS' open industry committees and incubator solutions programs.

ATIS' Emergency Services Interconnection Forum (ESIF) develops Next Generation 9-1-1 (NG9-1-1) and location accuracy requirements and solutions, and identifies and resolves technical and operational issues to facilitate interconnection of emergency services networks with other networks (e.g., wireline, cable, satellite, Internet, etc.) and issues related to the delivery of E9-1-1 and NG9-1-1 services. ESIF liaises with standards and government organizations to apprise them of its deliberations and decisions. ESIF also works closely with the Association of Public-Safety Communications Officials (APCO) International, which educates public safety communications professionals, and National Emergency Number Association (NENA), which currently manages the technical evolution of the 9-1-1 system and emergency communications process.

II. COMMENTS

In the *Fifth FNPRM*, the Commission seeks input on further changes to its location accuracy rules, including whether enhancements should be made to the vertical location accuracy testing process.¹ The Commission asks in particular whether it should require testing to include specific first responder scenarios, such as during power outages.² As an initial matter, ATIS ESIF notes that some z-axis technologies may not work or perform as intended during power outages. For example, z-axis solutions that rely on Wi-Fi infrastructure in the building would be impacted by loss of power. ATIS ESIF strongly believes that testing z-axis technology in scenarios involving the loss of power is not practical. Getting access to buildings for testing purposes is already challenging and testing a power loss scenario would be even more difficult.

¹ *Fifth FNPRM* at ¶65.

² *Id.*

Building owners also would likely oppose efforts to shut down power for testing purposes.³

The delivery of floor level information is another issue on which input is sought by the Commission.⁴ In the *Fifth FNPRM*, the Commission acknowledges the challenges associated with converting z-axis information to a floor level,⁵ some of which were described some in ATIS ESIF's comments to the *Fourth FNPRM*.⁶ ATIS ESIF agrees with the Commission that there are significant challenges associated with acquiring and delivering floor level information or converting z-axis to floor level information.

Finally, the Commission also asks for input on whether to require provision of confidence and uncertainty data with floor level information.⁷ As ATIS ESIF has already noted, there are significant challenges with the estimation of floor level information. A means for converting z-axis confidence and uncertainty into a civic representation (e.g., +/- one floor) is not yet a well-established area of study. It is expected that this issue be studied as solutions emerge and are tested. ATIS ESIF further notes that the confidence value needs to be standardized in order to be trustworthy, because having different confidence levels could skew the reliability of the data.

³ ESIF notes that one possible way to address loss of power is to encourage the development of Wi-Fi and Bluetooth technology that includes properly maintained battery backup, as well as a public education effort on the maintenance of battery backup in Wi-Fi and Bluetooth to address loss of power.

⁴ *Fifth FNPRM* at ¶66.

⁵ *Id.*

⁶ ATIS Comments to the *Fourth FNPRM* (PS Docket No. 07-114) at pp. 3-4.

⁷ *Fifth FNPRM* at ¶70.

III. CONCLUSION

ATIS appreciates the opportunity to provide its input to the *Fifth FNPRM* and urges the Commission to consider the input above.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Thomas Goode".

Thomas Goode
General Counsel
Alliance for Telecommunications Industry
Solutions
1200 G Street, NW
Suite 500
Washington, DC 20005
(202) 628-6380

February 21, 2020