November 3, 2017

Via Email
James Wiley
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Ex Parte – Wireless Emergency Alerts -- PS Docket No. 15-91

Dear Mr. Wiley:

Following the August 16, 2017, meeting between representatives from the Alliance for Telecommunications Industry Solutions (ATIS) Wireless Technologies and Systems Committee (WTSC) and representatives of the Commission’s Public Safety & Homeland Security Bureau (PSHSB) and Enforcement Bureau (EB), further input was required on technical issues associated with Wireless Emergency Alerts (WEA). The information is provided below.

While ATIS supports the Commission’s effort to improve WEA, ATIS believes that there are technical challenges that would make compliance with the FCC’s proposed mandate for 100% WEA accuracy with no more than 0.1 mile overshoot infeasible.

- ATIS is concerned that comparisons are being made to current-day device-based applications that are perceived to be able to achieve this level of accuracy; however, this level of accuracy has not been proven in this context. Those comparisons need to account for large-scale scenarios where a significant number of devices in an alerting area need to obtain location simultaneously. This would make the 100% accuracy target unachievable and would make the testing for this scenario virtually impossible.

- ATIS understands the Commission’s desire to support the public safety call for improved geo-targeting accuracy and will continue to investigate, evaluate, and ultimately standardize techniques and technologies to enhance geo-targeting accuracy to provide greater granularity than cell sector geo-targeting of today’s network-based cell broadcast, based upon device capability, best location available on the device, cell coverage in the alert area, device settings, user privacy considerations, etc.
  - ATIS notes that the industry has never shied away from the making enhancements to WEA even without regulatory mandates.
  - As noted in ATIS’ Feasibility Study for WEA Cell Broadcast Geo-Targeting (ATIS-0700027), there are many factors that impact the ability to enhance geo-targeting.
  - ATIS recognizes the potential for improvements that device-based geo-fencing offers over cell broadcast sector-level geo-targeting, and has an open project to evaluate and develop a standards-based solution for WEA.

- ATIS has significant concerns that any proposed mandate with strict accuracy and overshoot compliance numbers is both unrealistic and technically infeasible to achieve. ATIS notes that the 0.1 mile accuracy level sought by the proposed regulation may not be applicable to all types of events. Instead, ATIS recommends that the Commission recognize the challenges of mandating such precise geo-targeting and focus any requirement on adhering to future ATIS geo-fencing industry standards and performance best practices focusing on the common goal of delivering the WEA alerts to the maximum number of impacted citizens within the specified alert area.
• ATIS also recognizes that each iteration of WEA changes requires a new mobile device. With the initial deployment of WEA-capable handsets beginning around 2012, there is a significant base of handsets that are WEA capable. The Commission’s September 2016 R&O will require a second iteration of changes in the device; additional WEA enhancements, such as the proposed mobile device based geo-fencing, will also require yet another (significant) iteration. Thus, it should be noted that at a given point in the future, there likely will be multiple versions of WEA-capable handsets deployed. ATIS asks the Commission to consider the compatibility and impact of future WEA capabilities and associated standards iterations to deployed WEA-capable devices.

• Finally, ATIS notes that the industry is already focusing resources to enhance WEA, as well as other standards supporting regulatory mandates. Given the limited pool of subject matter experts, especially those with location expertise already working on these technology improvements to other mandated initiatives, ATIS cautions that requiring these same experts to also work on WEA geo-targeting accuracy could be counterproductive and slow progress.

Please let us know if there are any questions. If it would be useful, ATIS would be happy to arrange a call with ATIS WTSC subject matter experts to discuss this input.

A copy of this letter is being submitted on the record of the above-referenced docket. If there are any questions, please contact the undersigned.

Sincerely,

Thomas Goode
ATIS General Counsel

cc: Marcus Brown, Marcus.Brown@fcc.gov
    Megan Henry, Megan.Henry@fcc.gov
    Linda Nagel, Linda.Nagel@fcc.gov
    Rasoul Safavian, Rasoul.Safavian@fcc.gov
    Emily Talaga, Emily.Talaga@fcc.gov