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via electronic filing

Marlene H. Dortch, Secretary
Office of the Secretary
Federal Communications Commission
445 12th Street, SW, Room TW-A325
Washington, DC 20554

Re: Wireless E9-1-1 Location Accuracy • PS Docket No. 07-114

Dear Ms. Dortch,

Throughout the proceedings in this critical docket, leaders of the national consumer advocacy groups representing Americans who are deaf, hard of hearing, late-deafened, deaf-blind, and deaf or hard of hearing and having a mobile disability, have all participated actively and strongly in support of the Commission's proposed rules on E911 indoor location accuracy. The undersigned parties represent Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI), Technology Access Program - Gallaudet University (Gallaudet TAP), National Association of the Deaf (NAD), American Association of the Deaf-Blind (AADB), Cerebral Palsy and Deaf Organization (CPADO), Association of Late-Deafened Adults (ALDA), Hearing Loss Association of America (HLAA), California Coalition of Agencies Serving the Deaf and Hard of Hearing (CCASDHH), Deaf Seniors of America (DSA), and Deaf and Hard of Hearing Consumer Advocacy Network (DHHCAN), collectively, "Consumer Groups and TAP". We file today specifically to assess the wireless carriers' proposed Roadmap for which the Commission is seeking public comment, and to reiterate our continued support for the Commission's proposed rules in this matter and the value that such improved E911 indoor location performance, both horizontal and vertical, could have for our members. The indoor location performance is crucial, including the capacity to reach those who are in hard-reaching, vulnerable locations such as underground facilities, subway stations, and tunnels.

During prior meetings and filings at the Commission,¹ and in subsequent communications with the wireless carriers, NENA and APCO, we expressed strong concern over the lack of inclusiveness of the wireless carrier discussions and their resistance to input from organizations representing the needs of the deaf and hard of hearing community, including those who are deaf-blind or have an additional disability like a mobile disability. We have made our objections loud and clear, and we will not repeat ourselves here. The key objective of this filing is to give the Commission our tentative views on the wireless carriers' proposed Roadmap.

¹ See Email from Claude Stout, Executive Director, TDI, to Derek Poach, Executive Director, APCO, PS Docket No. 07-114 (Nov. 19, 2014); Ex Parte Letter of TDI, PS Docket No. 07-114 (Nov. 3, 2014).

We value the criticality of continued Commission oversight of E911 call performance in the public interest and the Commission's continued requirement that the wireless carriers, as part of their license obligations, remain the parties with ultimate responsibility for accurate E911 call location information both outdoors and indoors, including the vulnerable locations. The wireless carriers' responsibility for accurate indoor location during emergency calls is of particular concern to those in the deaf and hard of hearing communities that we represent. Many of our members, particularly those who are deaf-blind or have low vision, or have an additional disability like mobility, spend significant amounts of time indoors and have historically been reliant upon dependable E911 call location even without interactive verbal communication.

It is important that all stakeholders understand our consumer expectations for our capacity to make emergency calls in the near future. Some of us do not use our voices enough to be understood, and others would not be able to comprehend sign language that some of us use. Some of us do not sign, and many of us use hearing devices, such as hearing aids or cochlear implants. Even if such devices work well for us in everyday communications, the emergency situation could be so disruptive that we would not clearly discriminate the spoken word or commotion itself. More importantly, we may have limited energy to make the call, and then lose the capacity to participate further in the call. We want the same capacity we had when we had the landline phones. During these days, all we had to do was to dial 9-1-1, and help would come, with much success. When we call for an emergency, the first objective is for the dispatcher to get our call, and immediately know where the call came from and be able to send police, fire, or paramedics to the scene of the emergency. With our expectations defined here, at present, we are not in position to determine the merits of dispatchable location/address. We welcome further investigation on this subject, and if it will help meet our expectations, this will be worth pursuing.

The Commission's and carriers' obligations under the Communications Act did not change as emergency calling migrated from predominantly wireline to predominantly wireless. This is acknowledged both by the Commission and the carriers. The wireless carriers' obligations remain essential as we witness an additional migration from predominantly outdoor wireless calling with a location technology that performs well (GPS/GNSS) to increasing percentages of indoor wireless calling with current location technologies that perform poorly (Cell ID/RTT/AFLT).² The Commission specifically initiated this rule-making based on recognition of this migration towards indoor wireless usage, along with numerous industry tests and assessments that better performing technologies are becoming available (OTDOA, UTDOA, MBS, etc).³

If viewed as an independent effort to explore new address-based approaches, while also meeting the Commission's proposed benchmarks for horizontal and vertical location, then the Roadmap is indeed a positive step forward. This is assuming the process to achieve the expected results with the Roadmap takes as much time, not significantly longer or more complicated than other proposed alternatives. We must have better and accurate location technology to make emergency calls in the earliest time possible.

The Commission should encourage further effort in that direction by having appropriate open and transparent bodies (e.g., CSRIC) study elements of the Roadmap such as the test bed setup, NEAD and its' privacy, reliability, and funding aspects. Consistent with that approach, our organizations view the Roadmap and its proposed use of commercial Wi-Fi databases for E911 location as an important and promising supplement to the Commission's proposed rules rather than as a replacement (that is, they would serve as a means to achieve the proposed performance benchmarks).

² See, e.g. CSRIC III, Working Group 3, Leveraging LBS and Emerging Location Technologies for Indoor Wireless E9-1-1 (March 14, 2013) (closely reviewing the potential performance and implementation considerations of a range of LBS technologies); CSRIC III, Working Group 3, E9-1-1 Location Accuracy Indoor Location Test Bed Report, PS Docket No. 07-114 (evaluating the performance of various technologies in the CSRIC test bed).

³ Wireless E911 Location Accuracy Requirements , PS Docket No. 07-114, Third Further Notice of Proposed Rulemaking, FCC 14-13, ¶ 29-30 (Feb. 21, 2014).

While we view the Roadmap as a positive step forward, as described above, we have numerous questions and concerns about what metrics will be used to evaluate accuracy, reliability, percentage of successfully located indoor calls, validation, and progress toward the goals of improved E911 accuracy across the board. We ask the Commission to examine further CTIA-proposed measures like “20% improvement in good location fixes,” because so much depends on what the baseline is (how many indoor wireless calls, how many calls with bad location data). The measures as proposed by the Roadmap are not sufficient to give deaf and hard of hearing consumers assurances that they will be found in the majority of times when they place wireless 9-1-1 calls. There is a need for developing enforceable, reasonable, and representative metrics. And it must be done in a way that the FCC can enforce them. With respect to outdoor versus indoor metrics versus total metrics, we acknowledge that this is a difficult issue. However, we see a need for assessing both separately, to ensure that improvements in outdoor location accuracy do not artificially inflate progress toward our targets, even if indoor location accuracy were to remain poor.

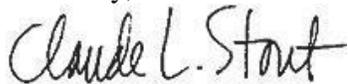
In summary, all parties should support continued, cooperative exploration and study of new and different approaches to improve E911 call performance in general, and indoor location accuracy in particular. In that respect, the carriers’ Roadmap has elements that warrant full support of the industry, public safety and consumers, most particularly in an in-depth assessment of privacy, security and reliability concerns as well as the establishment of standards and performance testing of alternative approaches.

The Commission has a fundamental responsibility to establish achievable and verifiable benchmarks to ensure acceptable call location, both outdoors and indoors for E911 call performance. The horizontal and vertical location benchmarks proposed by the Commission were not chosen arbitrarily, but after extensive study and input, and represent a balanced approach to provide significant improvement and widespread availability along with reasonable cost and staged implementation timeframes for wireless carriers. The record is robust, the benchmarks are both technology-neutral and achievable, and the benefits in lives saved and medical outcomes improved are compelling.

It is therefore critical that the Commission move forward expeditiously to adopt its proposed rules and begin the process of protecting wireless callers indoors as well as they do outdoors. The carriers’ Roadmap exploring address-based solutions will need to be considered along with other alternatives for near-term verifiable and achievable rules. Most importantly, whatever rules are adopted need to promote continued improvement in wireless E9-1-1 location accuracy.

The Commission has a responsibility to act upon the record, and the citizens of our nation have an expectation that the wireless carriers will respond as positively as they did when wireless E911 outdoor rules were put in place more than a decade ago.

Sincerely,



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