

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

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

To: The Commission

**OPPOSITION OF CTIA—THE WIRELESS ASSOCIATION® TO  
PETITION FOR RECONSIDERATION OF BOULDER REGIONAL  
EMERGENCY TELEPHONE SERVICE AUTHORITY**

**I. INTRODUCTION AND EXECUTIVE SUMMARY**

CTIA—The Wireless Association® (“CTIA”) supports the Commission’s forward-looking *Fourth Report & Order* (“*Order*”) on wireless 9-1-1 location accuracy, including its endorsement of the approach set forth in the public safety- and industry-led *Roadmap for Improving E911 Location Accuracy* (“*Roadmap*”).<sup>1</sup> The *Roadmap* will help improve wireless 9-1-1 indoor location accuracy with dispatchable location, public safety’s gold standard, while also improving location accuracy for outdoor 9-1-1 calls.

The Boulder Regional Emergency Telephone Service Authority (“BRETSA”) subsequently filed a petition for reconsideration filled with baseless criticisms – some of which reflect a misunderstanding of the *Order*, others seek unwarranted changes, and still others demand action outside the scope of this proceeding.<sup>2</sup> Specifically, the Petition:

---

<sup>1</sup> *Wireless E911 Location Accuracy Requirements*, Fourth Report and Order, 29 FCC Rcd 13938 (2014) (“*Order*”).

<sup>2</sup> Petition for Reconsideration of the Fourth Report and Order of the Boulder Regional Emergency Telephone Service Authority, PS Docket No. 07-114 (filed Apr. 3, 2015) (“*Petition*”).

- Misconstrues the *Order*'s requirement to deliver dispatchable location *or* coordinates within 50 meters, as well as the robust nature of the rules governing the test bed process;
- Fails to justify its requests regarding the provision of raw data, reconsideration of the Public Safety Answering Point ("PSAP") complaint process, and assertion that test bed data should be public;
- Urges the Commission to depart from its long-standing policy of technological neutrality with regard to the carriers' selection of location accuracy technologies; and
- Raises issues outside of this proceeding, including call routing and an SMS messaging coverage area for text-to-911.

CTIA and others are actively engaged in advancing the significant goals set forth in the *Order*.

The Petition should not be a distraction from those critical efforts. For these reasons, CTIA urges the Commission to act swiftly and deny the Petition.

## **II. THE PETITION MISCONSTRUES ELEMENTS OF THE ROADMAP AND THE *ORDER***

### **A. The Petition Misrepresents or Ignores the *Order*'s Requirement to Deliver Dispatchable Location *or* Coordinates within 50 Meters**

BRETSA calls on the Commission to require dispatchable location solutions to be validated within 50 meters<sup>3</sup> – in other words, it wants to make the 50-meter requirement mandatory for all wireless 9-1-1 location solutions, with dispatchable location serving as an optional add-on. It is instructive that BRETSA characterizes as “myth” that dispatchable location is the gold standard for 9-1-1 location accuracy – despite broad public safety support<sup>4</sup> – and asserts that “dispatchers are quite capable of viewing coordinates on GIS-calibrated CAD maps, aerial photos and pictometry to identify not only the civic address ... but the location of

---

<sup>3</sup> *Id.* at 13.

<sup>4</sup> *See, e.g., Order* ¶ 63 (“As APCO and NENA point out, dispatchable location represents the ‘gold standard’ for first responders, because it provides the functional equivalent of address-based location information provided with wireline 911 calls.”).

the caller within a structure if more accurate coordinates are available.”<sup>5</sup> BRETSA appears to favor use of dispatchable location technology – Wi-Fi and Bluetooth access points –solely to improve ALI data “for use in call routing.”<sup>6</sup>

Given BRETSA’s views, it is no surprise that the Petition misconstrues the *Order* as to horizontal location requirements: the Commission called for x-, y- coordinates within 50 meters *or* the provision of dispatchable location. In particular, the rule provides that “Nationwide CMRS providers shall provide (1) dispatchable location, *or* (2) x/y location within 50 meters” pursuant to certain timeframes.<sup>7</sup> The rules “require CMRS providers to provide location information based on a horizontal 50-meter search radius where a dispatchable location is not available.”<sup>8</sup>

BRETSA’s suggestion ignores the significance of dispatchable location. Dispatchable location provides the civic address information, *i.e.*, the “functional equivalent of address-based location information provided with wireline 911 calls.”<sup>9</sup> The *Order* calls for the development of the National Emergency Address Database to ensure the accuracy of the civic address information that dispatchable location derives and adopts specific milestones to ensure a

---

<sup>5</sup> Petition at 15.

<sup>6</sup> *Id.* Section V below explains that BRETSA’s concerns regarding call routing are outside the scope of this proceeding and thus should be dismissed. BRETSA also asks that carriers deliver a code indicating that address information is derived from dispatchable location rather than wireline ALI. Petition at 16 n.16. This is a matter for the standards that ATIS and/or NENA are working on for dispatchable location.

<sup>7</sup> 47 C.F.R. § 20.18(i)(2)(i) (emphasis added).

<sup>8</sup> *Order* ¶ 77; *see also id.* ¶ 95 (“To the extent that CMRS providers choose to move forward with dispatchable location ... any dispatchable location solution will count towards the horizontal benchmark at the appropriate thresholds.”).

<sup>9</sup> *Id.* ¶ 63.

widespread and accurate dataset.<sup>10</sup> BRETSA would have the Commission double-up on 9-1-1 obligations, and it would be irrational to layer a 50-meter requirement on top of dispatchable location.<sup>11</sup> The Commission should reject BRETSA’s unnecessary request.

**B. BRETSA Disregards the Robust Nature of the *Order’s* Rules Governing the Test Bed Process**

BRETSA demands that the Commission “expressly require that the Test Bed include the six [ATIS ESF] Test Cities” or “eliminate entirely the approach of establishing performance statistics in a test bed and applying them to live test calls as a means of assessing compliance.”<sup>12</sup> But BRETSA is wrong to assert that wireless providers can somehow manipulate the test bed process by picking the “least challenging test bed location for application to live call data from the Test Cities.”<sup>13</sup> The rules specifically prohibit any type of test bed “cherry-picking.” In particular, the test bed must “include testing in representative indoor environments, including dense urban, urban, suburban and rural morphologies.”<sup>14</sup> As the *Order* established, this test bed approach “reflect[s] a representative sampling of different real world environments in which

---

<sup>10</sup> *Id.* ¶ 66.

<sup>11</sup> BRETSA further misunderstands the horizontal location accuracy requirement by suggesting that the Commission will merely “assume” that “VoLTE-based location technologies[] will meet the 50-meter accuracy standard.” Petition at 13. In fact, such a showing for VoLTE-based location technologies such as OTDOA is required. As the *Order* makes clear, CMRS providers can meet the horizontal requirement by, for example, “us[ing] OTDOA to comply with the horizontal benchmark to the extent that OTDOA is determined through testing to meet the 50-meter standard.” *Id.* ¶ 95. See also *Order* ¶ 124 (noting that “[t]he Roadmap signatories pledge to establish the test bed by November 2015 and to operate it in a technology neutral manner in order to test and validate existing and future location technologies, including ‘OTDOA/AGNSS, dispatchable location solutions, and other possible location solutions (including but not limited to technologies described in PS Docket No. 07-114).’”).

<sup>12</sup> Petition at 8.

<sup>13</sup> *Id.*

<sup>14</sup> 47 C.F.R. § 20.18(i)(3)(i)(A).

CMRS providers will be required to deliver indoor location information.”<sup>15</sup> There is “no least challenging test bed” – each test bed must, by rule, reflect the variety of different environments in which the technology will be applied.

Moreover, BRETSA ignores that the test bed results create a presumption of compliance with respect to a particular location accuracy solution to be used in a wireless provider’s network, but that presumption can be rebutted with live call data that CMRS providers must collect and report on for *each of the six ATIS ESIF cities*.<sup>16</sup> Accordingly, the Commission will have access to data that “will provide a viable, real world evaluation of particular indoor location technologies,”<sup>17</sup> and location accuracy technologies will need to be able to perform successfully in the morphologies presented in the six test cities. The *Order* adopted a robust test bed and compliance regime, and BRETSA’s effort to undermine the Commission’s approach is without merit.

### **III. THE PETITION FAILS TO JUSTIFY RECONSIDERATION OF OTHER ASPECTS OF THE *ORDER***

#### **A. The Provision of Raw Data and Location Fixes from Multiple Technologies Would Be Unnecessary and Counterproductive**

BRETSA appears to argue that for each 9-1-1 call, carriers should provide PSAPs with the raw information from which confidence/uncertainty (“C/U”) information is derived, or alternatively 60 percent as well as 90 percent C/U radiuses, and further seeks use of multiple location technologies so that a dispatcher can decide which technology to rely on, with access to

---

<sup>15</sup> *Order* ¶ 128.

<sup>16</sup> *Id.* ¶¶ 140, 147-148.

<sup>17</sup> *Id.* ¶ 140.

different C/U areas.<sup>18</sup> In fact, the Commission found that just the opposite approach, a single, standardized 90 percent confidence value, would “serve to eliminate confusion on the part of emergency call-takers....”<sup>19</sup> The Commission should reject this BRETSA request, as BRETSA fails to provide any evidence that 9-1-1 call-takers – and, in turn, 9-1-1 callers – would be better served by carriers heaping raw data and multiple location fixes onto them.

**B. The *Order* Establishes a Strong Complaint Process**

BRETSA also wants the Commission to adopt specific test procedures for PSAPs to adhere to in filing complaints against wireless providers for failure to meet the standards.<sup>20</sup> However, the Petition fails to establish any basis for Commission micromanagement of the PSAP complaint process that has not even gone into effect yet. The *Order* adopts a strong complaint process to allow PSAPs to measure, and if necessary, challenge carriers with respect to compliance with the *Order*'s performance requirements at the county and PSAP levels.<sup>21</sup> In particular, PSAPs are able to obtain meaningful data regarding the quality of fixes delivered with 9-1-1 calls, which will allow them to troubleshoot and identify issues with carriers, and ultimately seek Commission enforcement if needed.<sup>22</sup>

BRETSA wants to straightjacket the complaint process by demanding that the Commission identify now the methodology and types of showings a PSAP must provide to show

---

<sup>18</sup> Petition at 10 n.11.

<sup>19</sup> *Order* ¶ 185.

<sup>20</sup> Petition at 9-10.

<sup>21</sup> In addition, if needed, PSAPs also may file an informal complaint pursuant to the Commission's existing complaint procedures. *Order* ¶ 149. As the Commission correctly noted, the “existing informal complaint procedures should be sufficient to address PSAP concerns.” *Id.*

<sup>22</sup> *Id.* ¶ 148.

non-compliance, offering up two approaches.<sup>23</sup> Any such consideration is premature. The Commission should allow providers to take initial steps regarding deployment of these technologies and compliance with the rules. Further, public safety should be able to present concerns in BRETSA's two formats or in others, and the Commission may assess what methodology is most appropriate in the context of a real complaint (and only after the PSAP and carrier work to resolve any problems). At this point, there simply is no need for the Commission to micromanage local procedures to evaluate compliance.

### **C. Test Bed Data Is Proprietary and Must Be Kept Confidential**

BRETSA argues that test bed testing and performance testing results should be public,<sup>24</sup> but fails to explain its belief that the Commission was wrong in deciding that a test administrator's certification is sufficient to establish that a technology meets key performance indicators.<sup>25</sup> Moreover, BRETSA errs in asserting that the test results do not include proprietary information.

Test results include information that, if disclosed, "could result in substantial competitive harm" and that is not routinely made available to the public.<sup>26</sup> As such, test results would satisfy FOIA Exemption 4, as well as the Commission's rules regarding confidential treatment of

---

<sup>23</sup> Specifically, BRETSA offers (i) a "Live Call" test procedure in which PSAPs and first responders would gather information to compare the ALI data for live 9-1-1 calls with the actual caller locations as reported by the callers and (ii) an "objective test procedure" based upon test calls within a PSAP's jurisdiction. Petition at 10-11.

<sup>24</sup> Petition at 11.

<sup>25</sup> See *Order* ¶ 131 ("We believe the test administrators' certification is sufficient notification that a technology meets our key performance indicators.").

<sup>26</sup> 47 C.F.R. § 0.459(b)(5), (7).

submissions.<sup>27</sup> For example, as the Commission confirmed, raw test results include proprietary information<sup>28</sup> and parties to the CSRIC III test bed regime signed nondisclosure agreements.<sup>29</sup> BRETSA's requests provide no basis for reconsidering the Commission's well-reasoned decision. Accordingly, the Commission should dismiss this BRETSA request as well.

#### **IV. THE COMMISSION SHOULD MAINTAIN TECHNOLOGICAL NEUTRALITY AND REJECT THE PETITION'S DEMANDS REGARDING LOCATION ACCURACY SOLUTIONS**

BRETSA would have the Commission reserve the ability to approve the technology solutions selected by wireless providers to comply with the new requirements<sup>30</sup> – a sharp departure from long-standing precedent. Instead, the rules appropriately maintain the Commission's policy of technological neutrality.<sup>31</sup> As the Commission observed earlier in this proceeding, “a technology-neutral indoor accuracy requirement should allow providers flexibility to adopt an indoor location accuracy solution that best fits with their long-term business and technology plans.”<sup>32</sup> The *Order* wisely steers clear of any Commission review or approval of

---

<sup>27</sup> 5 U.S.C. § 552(b)(4); 47 C.F.R. § 0.459(b)(5), (7).

<sup>28</sup> *Order* ¶ 131.

<sup>29</sup> *Id.* (citing Presentation by CSRIC WG3, Indoor Location Accuracy – Test Bed Framework, at 6 (Sept. 12, 2012), available at <http://transition.fcc.gov/pshs/advisory/csric3/3-WG%20Presentation%209-12-12.pdf>; CSRIC III Working Group 3, Indoor Location Test Bed Report, at 12 (Mar. 14, 2013), available at [http://transition.fcc.gov/bureaus/pshs/advisory/csric3/CSRIC\\_III\\_WG3\\_Report\\_March\\_%202013\\_ILTestBedReport.pdf](http://transition.fcc.gov/bureaus/pshs/advisory/csric3/CSRIC_III_WG3_Report_March_%202013_ILTestBedReport.pdf)).

<sup>30</sup> Petition at 18.

<sup>31</sup> *See Order* ¶ 89 (“These elements are consistent with our strong preference for flexible and technologically neutral rules...”).

<sup>32</sup> *Wireless E911 Location Accuracy Requirements*, Third Further Notice of Proposed Rulemaking, 29 FCC Rcd 2374 ¶ 63 (2014) (“*Third Further Notice*”).

technology choices, in keeping with its long-held policy. The Commission should deny BRETSA's request.

**V. THE COMMISSION SHOULD DISMISS REMAINING REQUESTS THAT ARE OUTSIDE THE SCOPE OF THIS PROCEEDING**

The Commission's rules and court precedent require that the subject matter of petitions for reconsideration must pertain to the scope of the matters addressed in the underlying proceeding,<sup>33</sup> and here the Commission must dismiss BRETSA's claims that clearly fall outside the scope of this rulemaking.

The Commission must dismiss BRETSA's 9-1-1 call routing claims as outside the scope of the proceeding. BRETSA readily admits that the *Order* did not address 9-1-1 call routing practices,<sup>34</sup> and the underlying *Third Further Notice* did not contain any consideration of call routing. To the extent call routing issues arise,<sup>35</sup> CTIA respectfully suggests that PSAPs should work together to address ways to efficiently transfer any misrouted calls to the proper PSAP.

Nor should the Commission take up BRETSA's claims about the transition to Long Term Evolution – IP Multimedia Subsystem (“LTE-IMS”) wireless systems and SMS messaging

---

<sup>33</sup> See *Implementation of Section 302 of the Telecommunications Act of 1996 Open Video Systems*, 13 FCC Rcd 14553 ¶ 13 (1998) (citing 47 C.F.R. § 1.429(c); *Illinois Bell Telephone Co. v. FCC*, 911 F.2d 776, 783 (D.C. Cir. 1990)); see also, e.g., *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Order on Reconsideration and Fifth Memorandum Opinion and Order and Third Memorandum Opinion and Order and Second Report and Order, 21 FCC Rcd 5606 ¶ 42 (2006) (dismissing a petition for reconsideration as outside the scope of the rulemaking proceeding).

<sup>34</sup> Petition at 6 (“BRETSA is disappointed that the Commission has not chosen to address in this proceeding wireless location accuracy and time-to-first-fix for wireless 9-1-1 *call routing* purposes.”).

<sup>35</sup> BRETSA asserts that over 99 percent of 9-1-1 calls involve a caller that can identify and communicate his or her location to the PSAP, see *id.* at 3, raising questions regarding the relevance and necessity of its proposal.

coverage area for text-to-911.<sup>36</sup> This too is outside the scope of this proceeding and, further, there currently is no SMS coverage requirement. Therefore, this request also must be dismissed.

## VI. CONCLUSION

For the reasons explained above, the Commission should act swiftly and deny BRETSA's Petition.

Respectfully submitted,

By: /s/ Brian M. Josef  
Brian M. Josef  
Assistant Vice President, Regulatory Affairs

Thomas C. Power  
Senior Vice President, General Counsel

Scott K. Bergmann  
Vice President, Regulatory Affairs

Matthew Gerst  
Director, Regulatory Affairs

CTIA—The Wireless Association®  
1400 16<sup>th</sup> Street, NW, Suite 600  
Washington, D.C. 20036  
(202) 785-0081

May 11, 2015

---

<sup>36</sup> *Id.* at 6 n.8.