

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

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

REPLY COMMENTS OF COMPETITIVE CARRIERS ASSOCIATION

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TABLE OF CONTENTS

INTRODUCTION AND SUMMARY	1
DISCUSSION	3
I. AS OF TODAY, NO VIABLE SOLUTION EXISTS TO MEET THE COMMISSION’S PROPOSED INDOOR LOCATION REQUIREMENTS IN ALL ENVIRONMENTS	3
II. ONCE A SOLUTION OR SET OF SOLUTIONS IS PROVEN VIABLE, IT NONETHELESS WILL NEED TO BE CERTIFIED THROUGH RELEVANT STANDARDS SETTING PROCESSES AND COMMERCIALY DEPLOYED INTO DEVICES.....	7
III. THE COMMISSION SHOULD REFOCUS ITS EFFORTS ON ACHIEVING LONGER-TERM SOLUTIONS OR ADOPT EQUITABLE, COMMON-SENSE IMPLEMENTATION DEADLINES WITH APPROPRIATE REGULATORY BACKSTOPS	9
IV. THE COMMISSION’S PROPOSALS FOR TESTING INDOOR LOCATION ACCURACY REQUIREMENTS MUST BE MINDFUL OF THE NEEDS AND LIMITATIONS OF SMALLER CARRIERS.....	14
V. .EXISTING OUTDOOR BENCHMARKS SHOULD NOT BE ACCELERATED, AND THE COMMISSION SHOULD NOT REQUIRE PERIODIC COMPLIANCE TESTING.....	16
CONCLUSION	18

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Competitive Carriers Association (“CCA”) hereby submits these comments in reply to initial comments submitted in response to the Federal Communications Commission’s (“FCC” or “Commission”) Third Further Notice of Proposed Rulemaking in the above-captioned proceeding.¹

INTRODUCTION AND SUMMARY

CCA represents the interests of more than 100 competitive wireless carriers, as well as more than 200 associate members who provide the products and services needed to deploy and maintain a wireless network. CCA’s carrier and associate members work cooperatively on a day-to-day basis to ensure that American consumers are provided with a superior mobile wireless experience.

CCA and its members recognize the importance of getting the most accurate information possible to first responders in times of emergency. As Chairman Wheeler has stated and as others have shown in this proceeding, accurate location information saves valuable time and lives when every second counts. Despite this important goal, however, no viable, commercially available solution currently exists to meet the Commission’s proposed location accuracy requirements in all environments. The Commission’s *near term* horizontal requirements were

¹ *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-114, Third Further Notice of Proposed Rulemaking, 29 FCC Rcd 2374 (2014) (“*Notice*”).

only achievable in rare instances by the products tested by the Communications Security, Reliability and Interoperability Council (“CSRIC”) III Working Group 3 (“WG 3”), and only one vendor offered a vertical location product for testing. Even if or when solutions are finally proven to perform reliably in all environments to the Commission’s proposed standards, there remains the serious task of certifying these products through the relevant standards setting processes. After certification, additional time is needed so that the technology can be integrated into handsets, which must then make their way into the marketplace and into the hands of consumers.

All of this must be taken into account as the Commission reviews its rules related to E911 wireless indoor location accuracy requirements. In the first instance, CCA agrees with commenters that the Commission should focus resources on the longer-term goal of getting to a “dispatchable” address over shorter-term efforts to “shrink the circle.” But to the extent it continues to focus on nearer-term implementation requirements, the Commission should only adopt compliance deadlines after numerous standardized technologies become commercially available. Moreover, the Commission should adopt different implementation deadlines for rural areas, particularly as applied to vertical (z-axis) location requirements. If, however, the Commission refuses to adopt this alternative approach, at a minimum it should implement a limited, automatic waiver applicable to all CMRS providers in the event no technology or set of technologies is proven capable of meeting the Commission’s performance standards within six months of an applicable deadline.

CCA is also concerned by the Commission’s proposal in the *Notice* for compliance testing of the indoor location accuracy requirements. Both the independently administered test bed and alternative testing proposals present significant challenges, particularly for smaller

carriers. If a smaller carrier doesn't hold spectrum licenses in the area where the test bed is located, it won't be able to participate, and creating a standalone testing platform would be cost-prohibitive to these carriers who lack scale. As such, CCA urges the Commission to exempt or delay application of the benchmarks in rural areas. Finally, the Commission should neither accelerate existing benchmarks for outdoor location accuracy rules nor require periodic compliance testing.²

CCA's members recognize how important precise information is to improving emergency response, and makes the recommendations contained herein to help develop a common-sense, achievable implementation regime for the benefit of the public safety community, wireless providers and their subscribers.

DISCUSSION

I. AS OF TODAY, NO VIABLE SOLUTION EXISTS TO MEET THE COMMISSION'S PROPOSED INDOOR LOCATION REQUIREMENTS IN ALL ENVIRONMENTS

The record is replete with concern that today's available technologies are unable to meet the Commission's proposed location requirements.³ The Commission itself "acknowledge[s]

² While CCA comments on many of the aspects of the *Notice* it does not comment on *every* proposal contained in it. This, however, should not be construed by the Commission as a tacit endorsement of any proposal or rule modification not commented on herein.

³ *See* Comments of AT&T Service, Inc., PS Docket No. 07-114 at 7-10 (filed May 12, 2014) ("AT&T Comments"); Comments of Sprint Corp., PS Docket No. 07-114 at 3-11 (filed May 12, 2014) ("Sprint Comments"); Comments of T-Mobile USA, Inc., PS Docket No. 07-114 at 9-18 (filed May 12, 2014) ("T-Mobile Comments"); Comments of Verizon and Verizon Wireless, PS Docket No. 07-114 at 11-22 (filed May 12, 2014) ("Verizon Comments"); *see also* Comments of CTIA – The Wireless Association®, PS Docket No. 07-114 at 7-10 (filed May 12, 2014) ("CTIA Comments"); Comments of NTCA – The Rural Broadband Association, PS Docket No. 07-114 at 2-5 (filed May 12, 2014) ("NTCA Comments"); Comments of Rural Wireless Association, Inc., PS Docket No. 07-114 at 2 (filed May 12, 2014) ("RWA Comments"); Comments of Telecommunications Industry Association, PS Docket No. 07-114 at 5-9 (filed May 12, 2014) ("TIA Comments").

that . . . further improvement is necessary” before the 50-meter horizontal accuracy requirement can be universally met.⁴ This recognition is separate and apart from the absence of independently tested vertical accuracy solutions.⁵

The Commission appears to rely heavily on the results of NextNav’s Metropolitan Beacon System (“MBS”) in the CSRIC III test bed as a basis for its proposed rules.⁶ But importantly, NextNav’s MBS is not commercially deployed throughout the country.⁷ As AT&T notes, “this means the NextNav system will be deployed in limited areas nationwide, but, ironically, not in many suburban and rural areas where it appears to perform best.”⁸ And T-Mobile not only questions whether NextNav has the spectrum licenses necessary to deploy its solution nationwide, but also raises serious technical concerns with the operation of barometric sensors in certain buildings and handsets.⁹

TruePosition’s hybrid UTDOA/A-GPS product likewise misses the mark. TruePosition decided to forgo participating in the CSRIC III test bed.¹⁰ Several months later in February and

⁴ Notice ¶ 47.

⁵ *Id.* at ¶ 78.

⁶ Notice ¶ 47 (noting that the Commission is “encouraged that, at least in suburban and rural environments, a 50-meter (or less) search ring can already be produced by existing technology”); *see also id.* at ¶ 16, Table 1 (identifying performance metrics for solutions tested in the CSRIC III San Francisco Bay area test bed).

⁷ *Indoor Location Test Bed Report*, Working Group 3, Communications Security, Reliability and Interoperability Council III at 45 (March 14, 2013), *available at* http://transition.fcc.gov/bureaus/pshs/advisory/csric3/CSRIC_III_WG3_Report_March_202013_ILTestBedReport.pdf (“CSRIC III Test Bed Report”) (noting that “NextNav has largely completed its commercial deployment *in the San Francisco Bay area where the tests were conducted*, and has an initial network deployment in the top 40 metropolitan areas . . .”).

⁸ AT&T Comments at 9-10.

⁹ T-Mobile Comments at 12-15.

¹⁰ CSRIC III Test Bed Report at 55.

March of 2013, however, TruePosition unilaterally conducted testing and produced results which purported to show that in urban and suburban settings, 67 percent of calls were located within 87 and 414 meters, respectively.¹¹ Most recently, TruePosition conducted testing involving a small number of calls in Wilmington, Delaware.¹² Yet TruePosition’s service has been criticized as having “inherent shortcomings, including poor performance in rural environments and environments such as highways, beaches, edges of service areas, and other areas with suboptimal cell geometry.”¹³ In fact, according to Polaris Wireless (“Polaris”), “U-TDOA is a high-cost, hardware-based, non-scalable location solution that . . . uses multiple hardware radio receivers or Location Measurement Units (“LMUs”) that require manual installation at each base station across an operator’s network”¹⁴ Polaris goes on to note that U-TDOA has been deployed only on 2G GSM networks and “would require major hardware upgrades for 3G UMTS networks” and “has not been standardized for support in 4G LTE or WiMAX.”¹⁵ AT&T similarly has called TruePosition’s approach “antithetical to the design of modern 3G and 4G networks.”¹⁶

¹¹ Notice ¶ 17.

¹² TruePosition Indoor Test Report: Wilmington, DE (June 18, 2014), *attached to Ex Parte Letter from Masoud Motamedi, President, TechnoCom Corporation to Marlene H. Dortch, Secretary, FCC, PS Docket No. 07-114 (filed June 23, 2014).*

¹³ T-Mobile Comments at 17-18.

¹⁴ See Polaris Wireless, What Wireless Operators Need to Consider When Choosing a Location Solution, <http://www.polariswireless.com/what-wireless-operators-need-to-consider-when-choosing-a-location-solution/> (last visited July 11, 2014).

¹⁵ *Id.*

¹⁶ Joan Marsh, 911 Location Accuracy: Getting to Dispatchable Addresses, AT&T Public Policy Blog, <http://www.attpublicpolicyblog.com> (June 27, 2014, 11:39 EST).

Moreover, both Qualcomm’s AGPS/AFLT and Polaris’s RF Pattern Matching (“RFPM”) technologies performed less than ideally in the CSRIC III test bed.¹⁷ To these providers’ credit, they have both acknowledged in response to the *Notice* that meeting the Commission’s proposed mandates will be challenging.¹⁸

Therefore, no product tested by CSRIC to date has proven reliable in all testing environments. On the contrary, based on the evidence available to date each product has its own technical shortcomings that make it unready for broad commercial deployment—and any rules adopted in this space should reflect this current market reality.

Finally, beyond the technical limitations identified thus far, CCA would note that the National Institute of Standards and Technology (“NIST”) expressed concern that the size of the data set used in the CSRIC III test bed might not have been large enough to produce statistically sound data.¹⁹ As opposed to the testing methodology utilized by CSRIC III WG 3, NIST recommends that techniques be used to simultaneously determine the number of buildings to use in each morphology test, the number of test points for each building, the number of test calls to make at each test point, and perhaps even the number of handsets to test from each vendor, so as

¹⁷ CSRIC III Test Bed Report at 45; *see also* T-Mobile Comments at 17.

¹⁸ *See* Comments of QUALCOMM Inc., PS Docket No. 07-114 at iv (filed May 12, 2014) (“Qualcomm Comments”) (recognizing that “there is no defensible justification under the current set of circumstances for the FCC to impose new E911 location accuracy requirements upon mobile carriers.”); Comments of Polaris Wireless, Inc., PS Docket No. 07-114 at 6 (filed May 12, 2014) (“Polaris Comments”) (admitting that there are “substantial challenges to meeting the accuracy and reliability targets the Commission proposes” for vertical location data.).

¹⁹ *Final Report, Specification for Indoor Location Accuracy Test Bed*, Working Group 1, Communications Security, Reliability and Interoperability Council IV at 22 (June 2014), available at http://transition.fcc.gov/pshs/advisory/csric4/CSRIC_IV_WG-1_Subgroup3_061814.pdf (“CSRIC IV Final Report”).

to produce more statistically sound results.²⁰ As the *Notice* relies predominately on the results from the CSRIC III test bed in establishing the proposed timeframes for meeting the accuracy requirements, and to the extent the test bed results were derived from questionable methodology, the Commission should consider reassessing these proposals prior to engaging in an additional round of testing or adopting final rules.

In short, there does not appear to be a viable solution on the horizon to the indoor location accuracy requirements proposed by the Commission, and to the extent it is relying on results from the CSRIC III test bed to develop a forward-looking expectation of future capabilities, it should bear in mind that the methodology of that test bed has recently been called into question. The record makes clear that indoor location accuracy solutions are not yet ready for use.

II. ONCE A SOLUTION OR SET OF SOLUTIONS IS PROVEN VIABLE, IT NONETHELESS WILL NEED TO BE CERTIFIED THROUGH RELEVANT STANDARDS SETTING PROCESSES AND COMMERCIALY DEPLOYED INTO DEVICES

Assuming, however, that the Commission acts on the presumption that the product vendors are on the precipice of a commercially viable solution, these products still need to be standardized, certified and implemented into devices—all of which will take substantial time.

CSRIC III WG 3 previously noted that “[s]ignificant standards work is required to allow practical implementation of many emerging location technologies for emergency services use.”²¹ Regarding vertical measurements, the majority of PSAPs do not possess conversion software to receive z-axis location information. Moreover, “[p]ublic safety recognizes that additional work remains before actionable altitude measurements can be broadly provided and utilized to aid first

²⁰ CSRIC IV Final Report at 22-23.

²¹ CSRIC III Test Bed Report at 54.

responders, including standardization, commercial availability, and deployment of such technologies.”²²

AT&T reminds the Commission in its comments that neither NextNav’s MBS nor Polaris’s RFPM system are fully standardized for 3G and 4G networks.²³ Sprint estimates that standards “are approximately two to three years away from being completed to the level where vendors can develop proof of concept technology that can then be tested.”²⁴ T-Mobile is slightly more optimistic, noting that the standards-setting process takes “at least 12 to 24 months in the appropriate standards bodies.”²⁵

Once a product or set of products is fully standardized, it will then need to be deployed in handsets. This presents several potential hurdles. First, both Sprint and T-Mobile have noted that handset turnover is a lengthy process.²⁶ The decision to upgrade to a newer device is ultimately up to the subscriber, and is a highly personal one. As NTCA notes, “Rural America is home to segments of the overall U.S. population that may not regularly upgrade their handsets every two years”²⁷ Moreover, assuming CCA’s members’ subscribers to want to upgrade their devices, oftentimes these smaller carriers are unable to get access to the newest devices from original equipment manufacturers (“OEMs”).²⁸ Competitive carriers should not be

²² CSRIC III Test Bed Report at 9.

²³ AT&T Comments at 9, n.24.

²⁴ Sprint Comments at 9.

²⁵ T-Mobile Comments at 19.

²⁶ Sprint Comments at 10-11; T-Mobile Comments at 19-20.

²⁷ NTCA Comments at 3.

²⁸ *See, e.g.* CCA, *A Framework for Sustainable Competition in the Digital Age: Fostering Connectivity, Innovation and Consumer Choice* at 16-17 (2013), available at http://competitivecarriers.org/wp-content/uploads/2014/01/CCA_SustainableCompetition_FINAL.pdf (“CCA Competition White Paper”).

penalized because they cannot be guaranteed access to the state-of-the-art equipment necessary to meet the Commission's mandates.

In sum, even if a viable indoor location accuracy product were available today, it would nonetheless take several years for this product to become standardized and implemented into carriers' device portfolios. Unfortunately, this time does not appear to have been factored into the Commission's policy framework, and therefore the Commission should refrain from adopting the short-term location accuracy threshold requirements proposed in the *Notice*.

III. THE COMMISSION SHOULD REFOCUS ITS EFFORTS ON ACHIEVING LONGER-TERM SOLUTIONS OR ADOPT EQUITABLE, COMMON-SENSE IMPLEMENTATION DEADLINES WITH APPROPRIATE REGULATORY BACKSTOPS

Given the state of currently-available technologies, and the amount of time needed to standardize and implement those solutions into devices, CCA urges the Commission to refocus its efforts away from the short-term requirements proposed in the *Notice* and instead focus on the long-term goal of achieving a "dispatchable" address.

A hefty weight of the evidence counsels that the Commission's proposed short-term deadlines are unreasonable based on the current technological landscape.²⁹ CCA's members are

²⁹ See AT&T Comments at 8 ("[T]here is no evidence in the record that reliably indicates that a compliant technology will be commercially available and deployed nationwide for use in the timeframe articulated in the Third Further Notice. In fact, because all evidence is to the contrary, it would be arbitrary and capricious for the Commission to require CMRS providers to meet the proposed location accuracy benchmarks in the proposed timeframe."); Comments of The Blooston Rural Carriers, PS Docket No. 07-114 at 2 (filed May 12, 2014) ("Blooston Rural Carriers Comments") ("[T]he [*Notice*] clearly indicates that development of the necessary technology is in its infancy, that significant time will be needed to perfect the technology and have it available for commercial deployment, and that the costs associated with the new requirement will be significant."); CTIA Comments at 12 ("[The *Notice*] proposes to adopt accuracy requirements that are unachievable today in the hope that solutions will follow."); NTCA Comments at 1 ("Unfortunately, the [T]hird [F]NPRM seeks to impose standards on [CMRS] providers that are not reasonably achievable today."); RWA Comments at 2 ("The technology does

similarly concerned that they will not be capable of meeting the Commission’s aggressive short-term benchmarks for horizontal and vertical indoor location accuracy.

The Commission’s proposed horizontal thresholds are all the more incredulous when one considers that these requirements do not even deliver to the public safety community the information it is truly after. For example, AT&T notes that “public safety’s ‘expressed needs’ really amount to a dispatchable address” and that the Commission should focus on this goal, “especially since forcing providers to near-term solutions would significantly delay implementation of a dispatchable-address solution.”³⁰ T-Mobile points out that new technological solutions are on the horizon which could deliver significant improvements in location accuracy over what the Commission currently proposes.³¹ CTIA likewise supports

not yet exist that would allow small and rural wireless carriers to meet the proposed horizontal . . . and vertical . . . indoor location accuracy requirements. Indeed, the Commission recognizes that the record to date is at best ‘divided regarding whether location accuracy technology is sufficiently developed to support the near-term implementation of an indoor location accuracy requirement’ and that ‘even the best location technologies tested have not proven the ability to consistently identify the specific building and floor.’” (citations omitted); Sprint Comments at 3 (“The lack of available, robust indoor location accuracy technology and the recent findings of CSRIC III on indoor location accuracy make the Commission’s proposed indoor location accuracy requirements and proposed implementation timeline unrealistic.”); T-Mobile Comments at 10 (“The currently proposed . . . benchmarks ignore the CSRIC III test bed results, which clearly demonstrate the difficulties of currently available technologies to meet the proposed benchmarks in challenging environments. In the face of those results, the Commission’s proposed rules are simply not achievable—certainly not within the Commission’s proposed time frames—particularly given that the Commission has based these benchmarks in part on the test results of a single beacon-based technology that has only been deployed in one metropolitan area and cannot be accessed by any currently or near-term available handset.”); TIA Comments at 3 (“The Commission should refrain from adopting new location accuracy rules at this time. Although TIA supports the development of improved location accuracy, many concerns remain regarding . . . whether technology is sufficiently developed to support the proposed mandate.”); Verizon Comments at 11-12 (“The proposed rules . . . cannot be implemented within the proposed deadlines.”).

³⁰ AT&T Comments at 1-2.

³¹ T-Mobile Comments at 2-3.

further study of longer-term potential solutions, while urging the Commission “to maintain a technology-neutral position with regard to location accuracy requirements”³²—a position CCA also supports. Rather than pursuing piecemeal products or offerings that only serve to “shrink the circle,” CCA agrees with commenters that the FCC should focus its efforts on the longer-term goal of arriving at a “dispatchable” address.

Should the Commission continue its pursuit of short-term gains, however, CCA encourages the Commission to adopt implementation rules based on economic and technical feasibility, and which are targeted to solving the concerns identified by the Commission. First, CCA reiterates the request that it and Mobile Future made in their initial comments, that the Commission only adopt a compliance deadline “after a competitive number of standardized technology or set of technologies that can satisfy the standards in all environments become commercially available”³³ Several commenters agree with this approach. For example, Verizon “supports use of a test bed, but as a threshold to determine whether a solution is able to meet the standard in any rules, which in turn, would serve as a mechanism to trigger the start of any implementation timelines in the first instance.”³⁴ Sprint likewise “strongly supports initiating a compliance timeline only after the test bed administrator has certified multiple vendors that meet any proposed accuracy standards.”³⁵ The Blooston Rural Carriers “submit that the triggering event for the compliance deadlines should be measured from the date the Commission, after review of the test bed certifications that two competing technology options

³² CTIA Comments at 22.

³³ *See Ex Parte* Letter from Steven K. Berry, President & CEO, CCA and Jonathan Spalter, Chair, Mobile Future to Marlene H. Dortch, Secretary, FCC, PS Docket No. 07-114 (filed May 12, 2014).

³⁴ Verizon Comments at 22.

³⁵ Sprint Comments at 12.

are compliant, completes a review of those determinations following receipt of public comment.”³⁶ NTCA, RWA and T-Mobile have urged the Commission to adopt similar approaches.³⁷ Smaller carriers oftentimes do not have the same resources as the largest carriers to participate in industry forums such as CSRIC. With this in mind, the Blooston Rural Carriers’ proposal is particularly appealing, as it would allow these carriers time to review and provide informed comment on the data and recommendations produced by the industry forum.

The *Notice* also asks whether the Commission should “apply [its] proposed indoor location accuracy requirement in a more targeted fashion,” such as “limit[ing] the application of [its] horizontal indoor location accuracy requirements to urban areas”³⁸ or “exclud[ing] certain geographic areas from the indoor location requirements”³⁹ CCA agrees with those commenters who have asked the Commission to exclude rural areas or delay implementation of the requirements in those areas.⁴⁰ At a minimum, it makes little sense to require a carrier serving towns in rural Arizona with only a few (if any) multi-story buildings to implement the same vertical accuracy requirements at the same time as providers serving cities like Manhattan. A relaxed x/y horizontal accuracy threshold requirement in rural areas (such as 100 meters instead

³⁶ Blooston Rural Carriers Comments at 3-4.

³⁷ See NTCA Comments at 4 (“[I]t is problematic to mandate that CMRS providers meet new E-911 standards of care before a technological solution is tested, proven, and commercially available to CMRS providers of all sizes and varying resources.”); RWA Comments at 3 (“If the Commission were to tie compliance to the proven availability of the necessary technology . . . compliance may be feasible for some small rural carriers.”); T-Mobile Comments at 9-10 (arguing that the Commission should “refrain from imposing new indoor location accuracy standards until the establishment of an indoor test bed to evaluate emerging location technologies.”).

³⁸ *Notice* ¶ 106.

³⁹ *Id.* at ¶ 107.

⁴⁰ See Blooston Rural Carriers Comments at 6; NTCA Comments at 5; RWA Comments at 5-6.

of 50 meters) implemented on an alternative schedule (perhaps two years) to that established for urban areas would be a pragmatic framework. This delay would greatly relieve the costly and time-consuming burden of implementation for carriers that are already competitively challenged, in areas where it may not be necessary.

Finally, should the Commission refuse to adopt either or both of the implementation recommendations set forth above, at a minimum it should adopt a limited, automatic waiver. In the event no technology or set of technologies is proven through an independently administered test bed of being capable of meeting the Commission's performance standards within six months of a required performance date, the FCC should waive its location accuracy rules for CMRS providers only until a reasonable period of time (not to exceed two years) after a product is certified through the test bed process as meeting the Commission's requirements in all environments.⁴¹ Several parties have called on the Commission to provide a clear, meaningful waiver process.⁴² As the Commission's proposed rules rely significantly on particular technologies "show[ing] significant promise,"⁴³ it is imperative that the Commission put into place a robust regulatory backstop, to prevent a situation similar to the one confronted by the Commission following adoption of its E911 Phase II requirements.

⁴¹ See Notice ¶¶ 61, 79.

⁴² See Blooston Rural Carriers Comments at 5-6; CTIA Comments at 19; NTCA Comments at 5; RWA Comments at 7.

⁴³ Notice ¶ 15 (quoting CSRIC III Test Bed Report at 9).

IV. THE COMMISSION’S PROPOSALS FOR TESTING INDOOR LOCATION ACCURACY REQUIREMENTS MUST BE MINDFUL OF THE NEEDS AND LIMITATIONS OF SMALLER CARRIERS

The *Notice* seeks comment on a proposal to create an independently administered test bed to certify compliance with the Commission’s proposed indoor location accuracy requirements.⁴⁴ Alternatively, the Commission proposes allowing providers to use other testing methods that “may suit their particular business plans or practices,” so long as the procedures are at least as rigorous as those used in the test bed.⁴⁵ A demonstration of compliance through either means would provide a safe harbor.⁴⁶ While CCA agrees that a compliance mechanism which utilizes representative test environments is preferable to ubiquitous field testing, and is generally supportive of a compliance safe harbor, smaller carriers will likely not be able to take advantage of either “safe harbor” as currently proposed.

For the independent test bed, the Commission relies on the work performed by CSRIC III WG 3 in proposing minimum test bed requirements, and also notes the ongoing work of CSRIC IV WG 1. In its June 2014 Final Report, CSRIC IV WG 1 recommends retesting the San Francisco Bay area, then extending into the Northeast (Philadelphia and Manhattan), followed by the other 5 + 1 test bed regions proposed by the Alliance for Telecommunications Industry Solutions’s (“ATIS”) Emergency Services Interconnection Forum (ESIF).⁴⁷ While providers who hold spectrum in these areas will be capable of “testing [] the indoor location technology . . .

⁴⁴ *Notice* ¶ 84.

⁴⁵ *Id.*

⁴⁶ *Id.* at ¶ 85.

⁴⁷ *See* CSRIC IV Final Report at 9; *see also* Letter from Thomas Goode, General Counsel, Alliance for Telecommunications Industry Solutions to David De Lorenzo, Chair, CSRIC IV, Working Group 1, Task Group 3, attachment at 3-4 (Feb. 7, 2014), *available at* https://www.atis.org/legal/Docs/ESIF%20DOCS/ESIF_Letter_DeLorenzo_Feb2014.pdf (recommending the San Francisco Bay Area, Chicago, Atlanta, Denver/Front Range, Philadelphia and Manhattan be selected as test bed regions).

as it will actually be deployed in [their] network[s],”⁴⁸ the Commission fails to explain how smaller providers who do not hold spectrum licenses in the limited number of test bed areas would participate in such a test bed (if at all). Moreover, the “alternative methodology” proposed by the Commission puts the onus on the carrier to demonstrate that its testing procedures are “at least equivalent to the testing methodology and procedural standards used in the independently administered indoor location accuracy test bed,”⁴⁹ which inherently creates regulatory uncertainty. Meanwhile the *Notice* makes no mention of any vendor’s obligation to participate in or otherwise facilitate alternative testing, as compared to the more formal structure of the independent test bed.

A separate (but related) concern with the proposed testing mechanisms is cost. Assuming smaller carriers are fortunate enough to hold spectrum in one of the test bed locations, they may nonetheless be financially foreclosed from participating in the testing. CSRIC IV WG 1 has noted that “participants who may seek to demonstrate compliance likely will expect heightened scrutiny of the results and therefore more extensive (and consequently more expensive) testing.”⁵⁰ This will undoubtedly be the case in the event providers are forced to implement a hybrid of multiple technologies. And while CSRIC IV WG 1 does not explicitly state as much, it suggests that wireless providers primarily will bear the costs for compliance testing.⁵¹ These same cost concerns are amplified in an alternative testing scenario, where a provider in a sparsely populated area may not have other providers to share costs with. Proportionately these carriers will incur increased costs due to their lack of scale.

⁴⁸ *Notice* ¶ 93.

⁴⁹ *Id.* at ¶ 84.

⁵⁰ CSRIC IV Final Report at 17.

⁵¹ *Id.* at 18.

These challenges, both in terms of availability and costs, similarly counsel in favor of the Commission considering an alternative threshold requirement and implementation schedule for rural areas. Providing rural carriers with additional time could allow for the test bed to bid out to additional locations.⁵² At a minimum this would give smaller carriers additional time to budget for the inevitable expenses associated with compliance testing.

V. EXISTING OUTDOOR BENCHMARKS SHOULD NOT BE ACCELERATED, AND THE COMMISSION SHOULD NOT REQUIRE PERIODIC COMPLIANCE TESTING

Finally, the Commission should refrain from modifying its Phase II requirements for outdoor measurements,⁵³ or requiring periodic outdoor compliance testing and reporting.⁵⁴ CCA agrees with Sprint that it would be inappropriate to change the outdoor requirements again, following the recent modifications to the standard.⁵⁵ The industry is less than half-way through an eight-year transition plan, which itself was seen as aggressive at the time of its adoption.⁵⁶ Nonetheless, since its adoption, carriers have crafted business plans based on those requirements, and changing them now midstream would create regulatory uncertainty and add unnecessary expense. The *Notice* claims that providers are quickly migrating to 4G and LTE networks as support for its proposal, but cites almost exclusively to statements from *one* large GSM-based provider for this claim.⁵⁷ CCA has previously cataloged the challenges its smaller members face

⁵² See *Notice* ¶ 93 (seeking comment on whether “the selection of test points should change periodically or cover a larger geographic area.”).

⁵³ *Id.* at ¶ 164.

⁵⁴ *Id.* at ¶ 178.

⁵⁵ Sprint Comments at 20.

⁵⁶ See CTIA Comments at 23-24.

⁵⁷ *Notice* ¶ 164 n.351 (collecting *ex partes* and press statements primarily prepared by AT&T).

in deploying next generation networks,⁵⁸ and this proposal would disproportionately impact smaller GSM-based carriers. Moreover, as T-Mobile points out, “the move to handset-based accuracy will always be subject to the ability of carriers to roll out new handsets throughout their footprint.”⁵⁹ CCA agrees. As noted previously, issues around device availability and consumer turnover further complicate this process.⁶⁰ For these reasons, the Commission should not modify its existing outdoor location accuracy requirements.

Moreover, once a carrier has demonstrated compliance it should not be forced to engage in redundant retesting. Sprint makes the obvious point that carriers are already obligated to meet the Commission’s current E911 location accuracy rules, and that imposing testing and reporting requirements would only siphon resources away from other public safety initiatives.⁶¹ For this same reason it makes little sense to automatically retest for compliance based on the passage of time alone.⁶² A single test to show compliance should suffice, and the Commission should only require retesting upon the occurrence of a substantial network change.⁶³ CCA agrees with Verizon’s suggested approach that, to the extent a PSAP believes it is experiencing a performance issue, it should first contact the service provider before lodging a complaint with the Commission.⁶⁴ This will help to conserve PSAP, carrier, and Commission resources.

⁵⁸ See generally CCA Competition White Paper.

⁵⁹ T-Mobile Comments at 22.

⁶⁰ See *supra* at 8-9.

⁶¹ Sprint Comments at 21.

⁶² T-Mobile Comments at 20.

⁶³ See *id.*; RWA Comments at 8.

⁶⁴ Verizon Comments at 33.

CONCLUSION

Providing first responders with precise location information in times of emergency is more than a laudable goal—it should be a national prerogative. But stakeholders cannot act on this prerogative until solutions are proven, standardized and deployed into consumer devices. Rather than crafting predetermined deadlines based on questionable assumptions, the Commission along with industry should focus on longer-term goals of getting to a dispatchable address. The Commission should craft rules that are narrowly tailored to meeting the objectives it has identified, and ensure that smaller, competitive carriers are not sidestepped in the process. Finally, the Commission should refrain from revising existing rules that are working today and that wireless providers have relied on in making long-range business decisions.

Respectfully submitted,

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