

unnecessary costs and burdens on such carriers who will be forced to expend critical resources on the prosecution of waivers, rather than on bringing broadband to rural America.

I. Imposing Indoor Location Accuracy Requirements that Small and Rural Wireless Carriers are Incapable of Meeting Will Harm These Carriers and the Rural Areas They Serve.

The technology does not yet exist that would allow small and rural wireless carriers to meet the proposed horizontal (within 50 meters for 67% of indoor calls within two years and 80% of indoor calls within five years) and vertical (within three meters for 67% of indoor calls within three years and 80% of indoor calls within five years) 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”³ and that “even the best location technologies tested have not proven the ability to consistently identify the specific building and floor.”⁴ As it did when it adopted its initial E911 location accuracy requirements, the Commission is merely speculating that technology will advance at a sufficient rate to enable carriers to meet the proposed requirements. The Commission should not be adopting requirements that cannot be met. The burden should be on the regulator to ensure that it is not mandating the impossible, rather than on carriers to prove that the impossible remains impossible. When the Commission previously adopted location accuracy requirements that were

³ NPRM at par. 56.

⁴ *Id.* at par. 78. In addition to recognizing the lack of proven technology capable of meeting the proposed vertical accuracy requirements, the Commission’s apparent belief in the development of technology capable of meeting its proposed horizontal accuracy requirements is qualified, with the Commission stating that the results of tests conducted by the Communications Security, Reliability, and Interoperability Council, together with the representations of various parties, “suggest” that it is “likely” that location technologies can begin to be deployed in the near term that would deliver 50-meter location accuracy for “many” indoor environments with a high degree of reliability. *Id.* at par. 25.

dependent on unavailable or prohibitively expensive technology, it ended up granting hundreds of small carrier waiver requests.⁵ The need to file such requests imposes substantial cost burdens on small carriers, and results in resources being directed to the preparation of legal pleadings rather than the buildout and maintenance of the broadband networks that are critical to the health and economic well-being of rural America.

The Commission should adopt indoor location accuracy requirements that are based on reality and the state of technology today. However, if the Commission elects to continue down the path of imposing technical requirements that cannot currently be met, it should adopt compliance deadlines that have a realistic chance of being met by most carriers. If the Commission were to tie compliance to the proven availability of the necessary technology (i.e., by having the two, three and five year periods triggered by a certification by a test bed administrator that a technology has met the proposed accuracy standard in a test bed), compliance may be feasible for some small rural carriers. However, for many RWA members, meeting the proposed accuracy requirements by such extended dates will still not be feasible. Even with the necessary equipment, the cost to build the additional cell sites necessary to achieve the required degree of accuracy will be substantial, and impose particular burdens on small rural carriers, who have fewer subscribers on whom compliance costs can be spread.⁶ For some RWA members, the costs of compliance would clearly be prohibitive.⁷ In addition to cost factors,

⁵ *FCC Report to Congress on the Deployment of E-911 Phase II Services by Tier III Service Providers*, Federal Communications Commission, Submitted Pursuant to Public Law No. 108-494 (March 23, 2005).

⁶ RWA members estimate that passing compliance costs onto subscribers would result in an increase per subscriber of anywhere from \$2 to \$10 per month. Such an increase would cause substantial competitive damage to these carriers.

⁷ Although it is difficult to quantify the cost of compliance without knowing the cost of the yet-to-be developed technology, several RWA members estimate the costs of compliance at over \$1 million. For example, one carrier in rural Oklahoma anticipates the need to construction 20

small rural wireless carriers have historically experienced substantial delays in obtaining equipment from vendors after such equipment first is made available to the large nationwide carriers. One rural Alaskan carrier estimates that it will take five years after the new location accuracy technology first becomes available to large carriers for small carriers to be in a position to meet the proposed accuracy requirements. If the Commission elects to mandate the level of accuracy proposed in the NPRM, it should: (1) afford carriers at least five years after testbed administrator certification that the standard has been met to meet the initial benchmark; and (2) reevaluate the compliance timeline on an annual basis to minimize the need for carriers to file waiver requests.

RWA members consistently report that public safety answering points (PSAPs) in their service area are not ready to make use of vertical location information. Many PSAPs in rural areas are still capable of only handling Phase 0 or Phase I level location information. Before mandating that carriers prepare to incur the substantial costs necessary to provide “floor level” accuracy, the Commission should ensure that the majority of PSAPs are willing and able to expend the substantial resources that will be needed for them to properly utilize vertical location data.

II. A Testing Safe Harbor Will Afford Carriers Regulatory Certainty While Assuring the Commission and Public of Compliance.

Testing will impose significant costs on RWA member companies. However, RWA does not oppose the proposed compliance testing provided that the Commission adopts a “safe harbor” for carriers that certify to compliance with the accuracy standard under either the

additional antenna sites as a cost of \$6 million in order to comply with the proposed requirements. RWA does not anticipate that the commercial development of location technology will result in any significant cost savings with respect to E911 compliance.

proposed test bed or alternative test methodology described in the NPRM. RWA agrees with the Commission that under the safe harbor, the location technology would be presumed to comply with the FCC's rules, without the need for the provider to conduct indoor testing in all locations where the technology is actually deployed. The regulatory certainty afforded by the safe harbor should help offset the costs of undergoing testing. If the Commission determines in an individual case that this presumption is overcome, the provider should have the opportunity to resolve the issue before the FCC initiates an enforcement action, and a demonstration of "best efforts" by the provider should cause the Commission to limit the scope of potential enforcement activity.

There is no justification for periodic re-testing. If the Commission is to require re-testing, only substantial network changes, such as deployment of a new technology or vendor, or frequency band changes, should warrant re-testing.

RWA does not object to test data being made available to the Commission or to requesting PSAPs, but such data should not be made available to the public. Such data is competitively sensitive, and will harm carriers who are making efforts to demonstrate their compliance with public safety regulations. Requiring public disclosure may also limit the information released by carriers and deter them from providing potentially useful information to the Commission.

III. The Commission Should Adopt Exceptions for Rural Areas.

The NPRM asks whether certain geographic areas should be excluded from the indoor location requirements. As the need for indoor location accuracy is far more acute in urban areas than rural areas, and given the substantially greater cost of compliance in rural areas, the

Commission should exclude rural areas from the indoor location requirements. The exclusion should apply to areas with a low density of multi-story commercial buildings (e.g., less than ten multi-story buildings per square mile). The length of the exclusion will depend on the degree of accuracy and deadlines the Commission ultimately adopts, but should extend at least two years beyond the time urban carriers are required to come into compliance. The exclusion should ensure that carriers operating in such rural areas have sufficient time to come into compliance with the standards ultimately adopted without requiring such carriers to incur financial hardship to come into compliance.

The NPRM also raises the possibility of applying a different accuracy threshold (e.g., 100 meters instead of 50 meters) in certain indoor environments and whether the vertical location requirement should apply to a subset of the environments where the horizontal requirement is applied. While the exclusions discussed above would be preferable, a relaxed accuracy threshold would relieve some of the financial burden on rural carriers. However, the technical impediments to compliance would still remain. RWA would also support limiting the application of the vertical location requirement to certain urban areas with a high density of multi-story commercial buildings.

The NPRM also asks whether there are particular measures that the Commission should take to minimize the potential burdens on smaller providers. Other than adopting the requirements and exclusions discussed above, the primary measure that the Commission can take to ease the burdens of compliance on small carriers is to provide funding, through the establishment of cost recovery or other means, for such carriers to invest in the technologies and infrastructure necessary to achieve the pinpoint accuracy that the Commission seeks to mandate.

IV. The Commission Should Adopt a Streamlined Waiver Process.

The Commission should adopt a streamlined process for waiver relief. RWA supports the proposed approach whereby providers who believe they cannot comply with a particular indoor location accuracy benchmark, despite their good faith efforts, may submit a certification to this effect six months prior to the applicable benchmark. Granting a waiver based on such a certification will relieve rural carriers of much of the burden of filing a waiver request.

If the Commission rejects such an approach, it should adopt a safe harbor for waiver applicants based on a showing of technical infeasibility or financial difficulty. A showing of technical infeasibility on its own should justify a waiver. To show a requisite degree of financial difficulty to qualify for a safe harbor, RWA recommends that when the cost of coming into compliance exceeds five percent of a carrier's gross annual revenues, the safe harbor should be considered to be met. For small carriers, who are unable to spread costs of regulatory compliance among a large customer base, costs in excess of five percent of annual gross revenues are substantial. Carriers who are unable to meet the safe harbor may still demonstrate that they meet the Commission's applicable waiver standards, but the establishment of safe harbors should reduce the expense of preparing a waiver request.

V. Current Technology Does Not Allow for Differentiation Between Indoor and Outdoor Calls.

The Commission seeks comment on whether technology has evolved such that CMRS providers are able now or in the foreseeable future to determine whether a call originates from indoors and make this information available to PSAPs. RWA is unaware of any current technology that will allow carriers to differentiate between indoor and outdoor calls.

VI. The Commission Should Not Adopt a 90% Confidence Level.

The FCC seeks comment on a proposal to set 90% as a standard required confidence level. A confidence level of 90% is too high for rural carriers to meet without the expensive construction of additional cell sites.

VII. The FCC Should Not Require Reporting of Call Tracking Information.

RWA opposes any requirement that carriers periodically report E911 Phase II call tracking information. The cost of providing the FCC with call tracking information is high, and there is little certainty that such information would even be useful to the Commission.

VIII. RWA Opposes Testing of Outdoor Location Accuracy Compliance Every 24 Months.

The FCC seeks comment on the appropriate timeframe for requiring wireless carriers to test outdoor location accuracy compliance. Specifically, it asks whether 24 months is an appropriate timeframe for conducting periodic tests. Testing accuracy compliance on a periodic basis is extremely burdensome⁸, particularly for small rural carriers, and RWA opposes a requirement that such testing be conducted every 24 months. RWA believes that a one-time test should be sufficient to ensure compliance, with periodic testing appropriate contingent on the occurrence of substantial network changes such as change in technology, vendor, or frequency range.

⁸ One RWA member estimates the cost of each test to be in the neighborhood of \$100,000.

Respectfully submitted,

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