



Sprint Nextel
2001 Edmund Halley Drive
Reston, VA 20191
Office: (703) 433-3786
Fax: (913) 523-9831

Charles W. McKee
Director
Government Affairs-Federal Regulatory
Charles.W.McKee@sprint.com

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Via Electronic Submission

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W., Room TW-A325
Washington, D.C. 20554

Re: Ex Parte Communication, PS Docket 07-114

Dear Ms. Dortch:

On August 21, 2008, Sprint Nextel Corporation (“Sprint”) filed a written *ex parte* presentation applauding the efforts of the Association of Public-Safety Communications Officials, International (“APCO”), the National Emergency Numbering Association (“NENA”), and Verizon Wireless in developing a reasonable compromise position regarding the appropriate standards for wireless E911 location accuracy for handset-based systems.¹ Sprint submits this *ex parte* letter in further support of that proposal.

The proposed accuracy standards would establish the following requirements and resolve the issues now pending before the Commission in this docket:

- (1) Accuracy would be measured at the county level;
- (2) Within two years after Commission rules are adopted, 67% of calls must be accurate to within 50 meters and 80% of calls must be accurate to within 150 meters;
- (3) Within eight years after Commission rules are adopted, 67% of calls must be accurate to within 50 meters and 90% of calls must be accurate to within 150 meters;
- (4) The 150 meter benchmark would also be subject to a 15% exclusion for issues associated with terrain, such as heavy forestation;
- (5) Carriers will continue good faith efforts to identify approaches for assessing wireless 911 location accuracy for calls originating indoors, including the development of an industry group to evaluate methodologies for assessing indoor wireless 911 location accuracy.

¹ See Letter to Chairman Martin, filed on behalf of APCO, NENA and Verizon Wireless, PS Docket 07-114, August 20, 2008 (“*E911 Compromise Proposal*”).

It is important to note that the new standards retain the existing benchmark for operation of wireless networks (locate callers within 50 meters 67% of the time) but applies it to a much smaller geographic area (the county level). Requiring carriers to meet the 50 meter accuracy standard at the county level will, in fact, require carriers to exceed the performance standard of the current rule. Accordingly, Sprint views these rule changes as furthering the goals of public safety; both by holding carriers to a higher standard and by ensuring that carriers are optimizing their networks at the local level.

As has been discussed at length in this docket, different geographic terrains and network configurations will limit the ability of any given technology to deliver accurate location information.² For handset-based systems, any environment that reduces the ability of the handset to receive signals from satellites will reduce the number of data points available to calculate location. By limiting the geographic area over which performance can be measured, the likelihood increase that a specific geographic area will contain a significant percentage of challenging locations. Thus, the smaller the geographic area used for measurement, the more difficult it will be to meet any given location accuracy standard and the more accurate the entire system must be.

The proposed accuracy compromise recognizes these technical issues and strikes an appropriate balance. Specifically, the location accuracy proposal includes a modification to the 150 meter benchmark, which would now apply to 80% of calls, but would increase over time to 90% of calls. This modification is critical because the ability to meet the location accuracy standards is most variable as the percentage of calls included in the accuracy calculation increases. Importantly, the new proposal recognizes that there will be some small percentage of counties that will have terrain that prevents carriers from meeting these increased accuracy levels. This exclusion for terrain, such as heavily forested areas, acknowledges the technical limitations of current technology and does not penalize carriers for those exceptionally challenging cases.

One of the significant benefits of the compromise will be the extensive testing required at the local level. Over the next two years, Sprint will be required to collect sufficient data points to assess the performance of the system for each of the more than 2,100 counties Sprint currently serves. Sprint has already begun the development and deployment of an automated system that will generate more granular information regarding the operation of its 911 location technology. This multi-year, multi-million dollar effort will provide public safety and the FCC a more precise understanding of 911 location accuracy.

In addition, the compromise will ensure that carriers continue efforts to optimize current technology. Sprint has conducted exhaustive audits of its Base Station Almanac (“BSA”), an important variable in the calculation of location when satellite information is not available. Sprint has continued to update and improve the software that operates its Mobile Positioning Center and Position Determining Equipment (“MPC/PDE”). And new handsets are being equipped with more sensitive receivers that will allow them to “hear” more satellite signals in

² See, e.g., *Sprint Nextel Corporation Ex Parte Presentation*, PS Docket 07-114, August 21, 2008, p. 8.

more environments. Sprint is hopeful that these efforts will continue to improve overall performance of its network.

In addition, Sprint is actively engaged with both existing and new vendors in assessing the performance of potential next generation location technologies and migration to IP based 911 services. As recently as April of this year, Sprint issued a Request for Proposals seeking vendor plans for network consolidation and progression to the i3 standard established by NENA and the Emergency Services Interconnection Forum (“ESIF”). Sprint has also conducted trials with alternative location vendors and has been actively assessing new technologies as they are developed and proposed.

Finally, as reflected in the proposal, Sprint remains committed to working with public safety on the issue of indoor wireless 911 testing. Given the constraints of satellite technology, this issue will continue to be challenging. However, Sprint stands ready to participate in an appropriate industry forum to discuss these issues. Accordingly, Sprint urges the Commission to adopt the E911 Compromise Proposal.

Pursuant to Section 1.1206 of the Commission’s rules, this letter is being electronically filed with your office. Please let me know if you have any questions regarding this filing.

Respectfully submitted,

/s/ Charles W. McKee
Charles W. McKee
Director, Government Affairs
Sprint Nextel Corporation