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May 1, 2012

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Re: Written Ex Parte Presentation, WT Docket No. 12-64, WT Docket No. 11-110

Dear Ms. Dortch:

The comments filed in this proceeding overwhelmingly support the Commission's proposal to eliminate outdated legacy channel spacing and bandwidth limitations for Economic Area ("EA")-based 800 MHz band Enhanced Specialized Mobile Radio ("ESMR") service licensees.<sup>1</sup> Sprint Nextel hereby elaborates on its previously filed Comments and Reply Comments in response to Comments of the Enterprise Wireless Alliance, the Association of Public-Safety Communications Officials-International, Inc., and the Joint Commenters.

The Enterprise Wireless Alliance ("EWA") supported increased bandwidth flexibility for 800 MHz ESMR band licensees,<sup>2</sup> while also requesting that the Commission clarify how such flexibility will be implemented in the U.S. – Canada border area where the channels included in the ESMR channel block vary from region to region.<sup>3</sup>

Sprint Nextel submits that the proposed rule changes do not change the fact that larger than 25 kHz channels should still be implemented within the ESMR channel allocations in the various U.S. - Canadian Border Regions. An ESMR band licensee operating in a given border area, regardless of technology or permissible bandwidth, must take these different ESMR channel allocations into account in deploying commercial wireless networks.<sup>4</sup> Permitting larger

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<sup>1</sup> *Improving Spectrum Efficiency Through Flexible Channel Spacing and Bandwidth Utilization for Economic Area-based 800 MHz Specialized Mobile Radio Licensees*, WT Docket No. 12-64, Notice of Proposed Rulemaking, FCC 12-25 (rel. March 9, 2012) (*Notice*).

<sup>2</sup> EWA Comments at page 4.

<sup>3</sup> EWA Comments at pages 3-4. EWA also points out that the ESMR channel allocations vary among the border area and non-border area of the Canadian border regions.

<sup>4</sup> For example, the ESMR band segment is at 862 – 869 MHz in the non-border areas of the United States in the states that are adjacent to Canada (such as North Dakota and Minnesota). In the 140 km area immediately along the common U.S. – Canada border (the "Border Areas") the ESMR band segment will be different in each NPSPAC Region. In North Dakota (NPSPAC

than 25 kHz bandwidths does not change the ESMR category channel allocations in the U.S. – Canadian Border Regions, nor change the interference protection requirements applicable to public safety and other non-ESMR land mobile licensees in-and-adjacent to the Border Region.<sup>5</sup>

The Association of Public-Safety Communications Officials-International, Inc. (“APCO”) supported permitting an ESMR band operator to deploy wider bandwidth technologies both in those areas that have completed 800 MHz band reconfiguration (ESMR band segment 862 - 869 MHz) as well as in the 862 - 866 MHz channel block in Regions that are still transitioning to the new band plan.<sup>6</sup> APCO appears to suggest that an ESMR licensee initiating greater than 25 kHz channel commercial operations in or adjacent to the U.S. – Mexico Border Area provide a 30-day notice to all public safety licensees in the border area even if the ESMR operator is only deploying in the adjacent non-border area. In Sprint Nextel’s Reply Comments, Sprint Nextel did not oppose this suggestion.

APCO provides an illustrative example in which it suggests that Sprint Nextel would be required to send a notice of its wider bandwidth ESMR operations for the entire Region 5 (Southern California) NPSPAC Region even if it were only initiating such operations outside the portion of Region 5 that falls within the U.S. – Mexican Border Area (as defined in the Commission’s rules). Sprint Nextel respectfully submits that the Commission’s 30-day notice proposal already encompasses that outcome. The Commission’s notice proposal would require an ESMR band operator to provide notice to all public safety licensees within a NPSPAC Region and within a 70-mile area around the boundary of the NPSPAC Region.

Applying the proposed rule to APCO’s Southern California example, an ESMR licensee implementing larger bandwidth operations in the Los Angeles area would send the proposed 30-day notice to all of the Region 5 public safety licensees (including all public safety licensees in San Diego), as well as public safety licensees well into neighboring Arizona, Nevada and Northern California NPSPAC Region 6 (because they all border NPSPAC Region 5). Thus, it appears that the Commission’s proposed notice requirement already includes the scope of notice APCO recommends.

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Region 32), the ESMR band segment will likely be 864.5375 – 869 MHz. In neighboring Minnesota (NPSPAC Region 22), the ESMR band segment in the U.S. – Canada border area will likely be 863.8625 – 869 MHz. As the ESMR band licensee for these two adjacent Regions, Sprint Nextel understands that its operations in the ESMR band in one region would have to provide sufficient distance separation from any neighboring co-channel usage in the non-ESMR portion of the 800 MHz band through adherence to the co-channel distance separation rules in section 90.621(b) of the Commission’s Rules.

<sup>5</sup> See Section 90.621(b) of the Commission’s rules.

<sup>6</sup> In those areas where 800 MHz band reconfiguration is incomplete, an ESMR band operator seeking to deploy wider bandwidth technology would be restricted to operating wider bandwidth only in the ESMR sub-band segment of 862 – 866 MHz.

A group of nine public safety licensees (“Joint Commenters”) filed joint comments expressing overall support for the proposals in the *Notice*; while requesting additional information concerning Sprint Nextel’s statements on the record herein that it “has imposed extremely tight out-of-band emissions (OOBE) filtering requirements on base station vendors for frequencies below 861 MHz.”<sup>7</sup>

Sprint Nextel has maximum incentive to ensure that the reconfigured 800 MHz band plan virtually eliminates the risk of 800 MHz interference caused by incompatible technologies operating in an interleaved or adjacent spectrum environment. The technical and operational knowledge and experience Sprint Nextel has gained over the past ten years of investigating and mitigating 800 MHz interference provides an empirical basis for specifying stringent technical specifications for CDMA and other wider bandwidth 800 MHz equipment. These specifications will ensure that wider bandwidth operations present no greater risk of interference to 800 MHz public safety and other non-ESMR operations than would have existed post-band reconfiguration with Sprint Nextel’s existing iDEN technology.

In its August 16, 2011 Reply Comments in WT Docket 11-110, Sprint Nextel provided a detailed description of its OOBE base station emissions mask requirements for 800 MHz ESMR deployments as well as statements from each of its three equipment vendors (Ericsson, Samsung and Alcatel – Lucent) affirming that Sprint Nextel’s base stations are being designed to meet that mask. The emissions mask includes the result of transmitter filtering, and all transmitters will include the filtering necessary to meet the OOBE emissions mask.<sup>8</sup> Based on this detailed assessment and measurement of existing iDEN transmitters, as well as new 800 MHz CDMA transmitters, Sprint Nextel is confident that the risk of interference to public safety or other non-ESMR 800 MHz operators from Sprint Nextel’s planned 800 MHz broadband operations will be the same or less than it is in the iDEN environment.

In any case, the Commission’s Part 90 interference rules are very clear: non-ESMR licensees (public safety and non-public safety) are entitled to interference protection from commercial ESMR channel operations assuming the non-ESMR systems meet minimum performance thresholds, as specified in Section 90.672 of the Commission’s rules. The Commission’s proposed rule changes to permit wider bandwidth technologies in the 800 MHz ESMR band do not change these basic requirements and are fully consistent with the Commission’s intent in encouraging aggregation of contiguous 800 MHz band spectrum.

The comment and reply cycle of this proceeding are now complete and demonstrate overwhelming support for the Commission’s proposed rule changes. Sprint Nextel hereby

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<sup>7</sup> Joint Comments of Public Safety Licensees (“Joint Comments”).

<sup>8</sup> Contrary to the statements of the Joint Commenters, no separate specifications are needed for the filtering itself. Indeed, while the filtering of different base station transmitters may differ, what is important is that the entire transmitter, including the filtering, allows the transmitter to meet the OOBE emissions mask. This mask is significantly more stringent than the Commission’s emission mask specified in Section 90.691 of the Commission’s Rules, as well as the 3GPP2 emission mask for CDMA transmissions.

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requests expedited adoption of final rules eliminating the outdated legacy channel spacing and bandwidth limitations in the 800 MHz ESMR band.

Pursuant to Section 1.1206(b) of the Commissions's Rules, Sprint Nextel hereby files this ex parte letter into the docket of the above-referenced proceedings.

Sincerely,

[/s/ James B. Goldstein](#)

James B. Goldstein  
Director – Spectrum  
Sprint Nextel Corporation