

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

In the Matter of)
)
Sprint Nextel Petition to Allow Wideband)
Operations in 800 MHz Enhanced Specialized) WT Docket No. 11-110
Mobile Radio Service Bands)

To: Chief, Wireless Telecommunications Bureau

**COMMENTS
OF THE
ENTERPRISE WIRELESS ALLIANCE**

The Enterprise Wireless Alliance (“EWA” or “Alliance”), in accordance with Section 1.415 of the Federal Communications Commission (“FCC” or “Commission”) rules, respectfully submits its comments in the above-entitled proceeding.¹ This matter involves a request from Sprint Nextel Corporation (“Sprint Nextel”) that the Commission issue a Declaratory Ruling affirming that the FCC rules permit greater than 25 kHz bandwidth operations in the 800 MHz Enhanced Specialized Mobile Radio Service (“ESMR”) band (817-824/862-869 MHz).² In its Petition, Sprint Nextel states that allowing deployment of 3G Code Division Multiple Access (“CDMA”) technology in this band “will result in improved coverage, increased capacity and increased broadband data speeds for Sprint Nextel’s current and future subscribers.”³ Alternatively, Sprint Nextel asks that its filing be treated as a Petition for Rulemaking to permit ESMR operators to deploy technologies with greater than 25 kHz bandwidth capability.

¹ *Wireless Telecommunications Bureau Seeks Comment on Petition from Sprint Nextel to Allow Wideband Operations in 800 MHz Enhanced Specialized Mobile Radio Service Bands*, WT Docket No. 11-110, Public Notice, DA 11-1152 (rel. June 30, 2011) (“Public Notice”).

² Request for Declaratory Ruling that the Commission’s Rules Authorize Greater than 25 kHz Bandwidth Operations in the 817-824/862-869 MHz Band, filed June 3, 2011 (“Petition”).

³ Petition at 3.

For the reasons discussed below, EWA urges the FCC to issue a Declaratory Ruling consistent with the Petition, provided that the Commission has satisfied itself that these technologies can be implemented without increasing the possibility of interference to other 800 MHz licensees. If that question requires further investigation, then the Alliance recommends that the FCC adopt Sprint Nextel's alternative suggestion and initiate a rulemaking proceeding to examine this issue.

I INTRODUCTION

EWA is a national trade association representing business enterprises, wireless sales and service providers, hardware and software system vendors and technology manufacturers. The Alliance has consistently supported FCC rule interpretations and rule changes that promote the more effective, efficient use of the nation's limited spectrum resources. For example, it recently petitioned the FCC to permit the licensing of full-power, 12.5 kHz offset channels in the 800 MHz band between 854-861/809-816 MHz so that additional systems could be deployed in this band.⁴ The Alliance is also supporting the FCC's efforts to migrate Part 90 systems in the 150-174 MHz and 421-512 MHz bands to 12.5 kHz or narrower technology.⁵ Thus, EWA has a presumption in favor of approving technology upgrades that will enable users to enjoy improved capabilities.

Additionally, however, the Alliance is sensitive to the complications that can arise when disparate technologies are allowed to operate in close spectral proximity. Many of the Alliance's

⁴ See *Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau Seek Comment on the Petition by Enterprise Wireless Alliance Requesting the Creation of New, Full Power, Interstitial 12.5 kHz Channels in the 800 MHz Band*, Public Notice, DA No. 09-2183, rel. Oct. 8, 2009.

⁵ See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, WT Docket No. 99-87, RM-9332, 18 FCC Rcd 3034 (2003) ("*Second R&O*"); Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Third Memorandum Opinion and Order, Third Further Notice of Proposed Rule Making and Order*, WT Docket No. 99-87, RM-9332, 19 FCC Rcd 25045 (2004) ("*Third MO&O*"); Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Order*, WT Docket No. 99-87, RM-9332, 25 FCC Rcd 8861 (2010) ("*Narrowbanding Waiver Order*"); see also 47 C.F.R. §§ 90.203(j), 90.209(b).

members operate systems in the 800 MHz band or manufacture, sell, service or maintain equipment that is used in that band. Some members have been relocated to different 800 MHz frequencies as part of the ongoing 800 MHz rebanding proceeding, a proceeding necessitated by allowing incompatible technologies to operate in too close proximity.⁶ Others are radio service shops that have worked with licensees, including business enterprise, commercial and public safety entities, whose systems were subject to the rebanding requirements. Thus, before granting the Petition, the FCC's technical experts must confirm with a high degree of confidence that the ruling sought by Sprint Nextel will not increase the likelihood of interference in this already beleaguered and critical band.

II THE FCC RULES GOVERNING PERMISSIBLE BANDWIDTH IN THE ESMR BAND MUST BE CLARIFIED.

EWA agrees with Sprint Nextel that the text of the Commission's decision to create the "upper 200" 800 MHz geographic channel blocks that now comprise the ESMR band clearly evidences an intention to permit broadband operation on those channels. The FCC described the genesis of this rule change as follows:

In the CMRS Third Report and Order, we determined that assigning contiguous spectrum, where feasible, is likely to enhance the competitive potential of geographic area SMR providers. We indicated our belief that contiguous spectrum is essential to the competitive viability of a wide-area SMR system because it permits use of spread spectrum and other broadband technologies that are available to other CMRS providers but unavailable to systems operating on non-contiguous spectrum.⁷

The Commission supported its decision to adopt wide-area, geographic licensing in the 800 MHz band with the following explanation:

⁶ See Improving Public Safety Communications in the 800 MHz Band, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order*, WT Docket No. 02-55, 19 FCC Rcd 14969 (2004) ("800 MHz Rebanding Order").

⁷ Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, *First Report and Order, Eighth Report and Order, and Second Further Notice of Proposed Rule Making*, PR Docket No. 93-144, 11 FCC Rcd 1463 at ¶ 9 (1995) ("800 MHz SMR Order").

We conclude that a portion of 800 MHz SMR spectrum should be designated for wide-area licensing. Notably, the commenters in the CMRS proceeding contended that wide-area SMR systems need contiguous spectrum to obtain flexibility to implement advanced technologies and thereby compete effectively with other CMRS providers, such as cellular and broadband PCS systems.⁸

Specifically, the FCC stated:

...we believe that contiguous spectrum is an essential component of the wide area licensing proposal we adopt today because it will give licensees the flexibility to use technologies that can operate on either contiguous or non-contiguous spectrum. Significantly, licensees' technological options are considerably more limited under a predefined channelization plan.⁹

The FCC in this same proceeding adopted FCC Rule Section 90.691. As described in the Petition, this rule applies exclusively to geographic area SMR licenses, including ESMR licenses, and applies the out-of-band emission restrictions only to the "outer" channels in such an authorization.¹⁰ The Commission explained its decision in this way:

We conclude that out-of-band emission rules should apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbents. We believe that these channels alone have the potential to affect operations outside of the EA licensee's authorized bandwidth.¹¹

Based on these statements, it is EWA's belief that the FCC intended in its 1995 decision to permit deployment of broadband technologies on what now is classified as ESMR spectrum. Given that decision, it also seems likely that the apparent discrepancy between Rule Sections 90.691 and 90.209, as assumed in the Petition, was inadvertent and that the FCC intended to allow greater than 25 kHz bandwidth operations on that spectrum at that time.

However, the FCC and the industry now have the benefit of 15 years of additional experience with increasingly congested spectrum and the interference issues that can arise even

⁸ *Id.* at ¶ 13.

⁹ *Id.* at ¶ 14.

¹⁰ See 47 CFR 90.691. The rule also applies to spectrum "adjacent to interior channels used by incumbent licensees" in the event that the spectrum authorized pursuant to an EA license was not entirely cleared of such licensees.

¹¹ 800 MHz SMR Order at ¶ 101.

when all licensees are operating in compliance with the rules and their authorizations. Rule Section 90.691 governs adjacent channel interference, but does not address either intermodulation or OOB interference, which were described by the FCC as “[t]he predominant types of interference encountered by public safety and other 800 MHz non-cellular systems....,”¹² interference problems that triggered the lengthy and complex 800 MHz rebanding process. These problems certainly had not been anticipated when the FCC approved the deployment of cellular architecture systems in the 800 MHz band. Their resolution has consumed and continues to consume very substantial public and private resources, a lesson that the Commission and the industry would ignore only at their peril.

This is not to suggest that Nextel and other ESMR licensees should be precluded from implementing CDMA or other broadband technologies in the ESMR band. The Alliance believes that the public interest might be well-served by permitting the deployment of these more advanced technologies in this spectrum. But the FCC first must assure itself that the decision it reached in 1995 is supported by sound technical judgment based on current expertise and will not have unanticipated, injurious consequences.¹³ If the Commission has reached that conclusion already and is satisfied that it has examined this issue thoroughly, then EWA supports the issuance of a Declaratory Ruling based on the record cited above. On the other hand, if the FCC believes that it needs additional input before reaching a final technical conclusion, then, as suggested by Sprint Nextel, the Commission should initiate a rulemaking proceeding to address this question.

¹² 800 MHz Rebanding Order at ¶ 89.

¹³ More recently, the waiver granted to LightSquared has generated considerable controversy because of interference from that system to GPS equipment operating in an adjacent band. *See* LightSquared Subsidiary LLC, *Order and Authorization*, SAT-MOD-20101118-00239, Call Sign: S2358, DA 11-133 (rel. Jan. 26, 2011). While parties disagree about whether LightSquared or GPS users bear a greater responsibility for the interference, its magnitude and seriousness seemingly were unanticipated by the Commission.

During the pendency of whatever procedural route the Commission pursues, Sprint Nextel is bound to comply with the Commission's existing interference prevention and mitigation rules regardless of the technology that it deploys.¹⁴ Absent a waiver, clarification or a modification of the rule, Sprint Nextel should continue to be bound by FCC Rule Section 90.209 and not deploy a technology inconsistent with that requirement

III CONCLUSION

Integrating more advanced technologies into existing spectrum allocations requires careful analysis to ensure that their benefits are made available to the public without compromising the operation of incumbent systems. EWA supports Sprint Nextel's intention to bring enhancements to its customers by migrating to CDMA technology provided the Commission is confident that doing so will not increase the interference potential for other 800 MHz licensees.

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August 1, 2011

¹⁴ See 47 CFR 90.674.

CERTIFICATE OF SERVICE

I, Linda J. Evans, with the law firm of Lukas, Nace Gutierrez and Sachs, LLP, hereby certify that I have, on this 1st day of August, 2011 caused to be mailed, first-class, postage prepaid, a copy of the foregoing Comments to the following:

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