

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

In the Matter of )  
 )  
Improving Public Safety ) WT Docket No. 02-55  
Communications in the 800 MHz Band )  
 )  
New 800 MHz Band Plan for U.S. – )  
Canada )  
Border Region )

**REPLY COMMENTS OF SPRINT NEXTEL CORPORATION**

Sprint Nextel Corporation (“Sprint Nextel”) hereby files these reply comments in response to the Public Safety and Homeland Security Bureau’s (“Bureau”) Further Notice of Proposed Rulemaking (“FNPRM”) which proposes a series of revisions to the 800 MHz band plans in the U.S. – Canada border regions to accommodate 800 MHz band reconfiguration.

*800 MHz Band Plans.* Sprint Nextel’s comments generally supported the Bureau’s proposed band plans to provide a minimally disruptive band reconfiguration process while ensuring *all* relocating licensees receive comparable spectrum assignments.<sup>1</sup> Other commenting parties similarly supported these objectives. The Enterprise Wireless Alliance (“EWA”), representing a broad alliance of business enterprise users, service providers, radio dealers and technology manufactures operating private and commercial

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<sup>1</sup> Comments of Sprint Nextel (“Sprint Nextel Comments”) at page 4.

800 MHz systems in the Canadian Border Regions, supports the basic precept that all relocating licensees must receive comparable facilities and comparable spectrum assignments as the primary principle on which the 800 MHz band reconfiguration decision was based.<sup>2</sup> Boeing agreed that the Commission must not depart from this fundamental commitment.<sup>3</sup> The Association of Public-Safety Officials-International, Inc. (“APCO”), International Association of Chiefs of Police (“IACP”) and International Association of Fire Chiefs, Inc. (“IAFC”) in jointly filed comments also supports the Commission’s basic plan for the Border Regions and the principle that all licensees receive “comparable frequency assignments.”<sup>4</sup> Sprint Nextel agrees with EWA that this principle cannot be compromised by the Commission in adopting new band plans for the border regions.<sup>5</sup>

Various parties agreed with Sprint Nextel that there are inherent difficulties in formulating revised band plans for the border regions, given the “challenging” spectrum environment<sup>6</sup>, “admittedly greater potential

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<sup>2</sup> Comments of the Enterprise Wireless Alliance (“EWA Comments”) at page 5.

<sup>3</sup> Comments of Boeing (“Boeing Comments”) at page 2.

<sup>4</sup> Comments of APCO, IACP and IAFC (“Public Safety Comments”) at page 2.

<sup>5</sup> EWA Comments at page 5.

<sup>6</sup> Comments of Smart-Link (“Smart-Link Comments”) at page 3.

complexities”<sup>7</sup>and the general “shortage of frequencies”<sup>8</sup> caused by the current allocation of spectrum between the United States and Canada.

Despite the obvious challenges posed by these complex and unique spectrum environments, certain parties either oppose the Bureau’s band plan entirely or present proposals that ignore the basic principle in this proceeding that *all* relocating licensees receive comparable spectrum. Sprint Nextel vigorously opposes any band plan that is inconsistent with the above-stated basic principle of the Commission’s reconfiguration of the 800 MHz band. The proposed U.S.–Canada band plans must provide that all parties -- public safety, B/ILT, SMR and Sprint Nextel -- have access to the same amount of spectrum on which they currently operate. Cavalier suggestions that Sprint Nextel simply surrender additional channels or be moved entirely to 900 MHz channels are unacceptable and cannot be supported.

Consumers Energy filing continues its long streak of comments in this proceeding opposing 800 MHz band reconfiguration in any form.<sup>9</sup> Under

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<sup>7</sup> Boeing Comments at page 1.

<sup>8</sup> Comments of Region 33 (Ohio) (“Ohio Comments”) at page 2.

<sup>9</sup> *See e.g.*, Comments of Consumers Energy dated May 6, 2002; Reply Comments of Consumers Energy dated August 7, 2002; Comments of Consumers Energy dated September 23, 2002; Comments of Consumers Energy dated February 10, 2003; Reply Comments of Consumers Energy dated February 25, 2003; Joint *ex parte* of Consumers Energy, Cinergy, Entergy, AEP and UTC, dated January 14, 2004. *See also ex parte* letter dated May 29, 2003 from the “Balanced Users Coalition” which listed Consumers Energy as a member.

Consumers latest proposal, Consumers would clearly stand to benefit by taking 800 MHz spectrum directly from Sprint Nextel (at no cost) that it would not be able to obtain otherwise even though it chose not to purchase this same spectrum on the secondary market despite being one of the “nation’s largest electric and natural gas utilities.”<sup>10</sup> Removing licensees from the 800 MHz band, however, was not the method the Commission chose to resolve interference concerns in adopting 800 MHz band reconfiguration. Instead the Commission adopted a process that was intended to be fair to all incumbent licensees – all licensees that were required to be retuned receive comparable spectrum assignments and comparable facilities, including Sprint Nextel, as part of a phased transition to a new 800 MHz band. That methodology has worked for over 1000 licensees that have already had their systems retuned, including other major utilities. That same methodology will work in the border areas as well.

Sprint Nextel agrees with EWA that the new band plans must reflect *current* spectrum utilization and that the Commission not seek to recreate the original pool allocations.<sup>11</sup> The proposed band plans follow that approach

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<sup>10</sup> Comments of Consumers Energy (“Consumers Comments”) dated December 3, 2007 at page 2.

<sup>11</sup> EWA Comments at page 5; *See also* Comments of the State of Michigan (“Michigan Comments”) at page 7 (“Irrespective of the pool allocations designated among various user categories when this spectrum was first made available, inter-category sharing opportunities and marketplace activities have made these original allocations meaningless for purposes of achieving that objective. The Commission must work with the user environment as it now finds it.”).

by providing sufficient spectrum “slots” for all incumbent licensees that must be retuned to the non-public safety block. Sprint Nextel opposes approaches, however, that would set an amount of spectrum for a particular pool prior to the necessary determinations of specific channel assignments.<sup>12</sup>

***Interleaved Spectrum Environment.*** Sprint Nextel agrees with various commenting parties that retaining an interleaved spectrum environment in the non-public safety portion of the new border band plans is not optimal. Sprint Nextel would prefer to have all of its 800 MHz spectrum assets converted to a block of contiguous 800 MHz spectrum, as it will eventually be in the non-border U.S. The realities are, however, that given the limited spectrum available in the border areas it may be difficult to achieve the same level of clean “separation” as exists in the non-border U.S given combiner spacing issues.<sup>13</sup> Sprint Nextel does agree that non-ESMR and ESMR

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<sup>12</sup> For example, in the Appendix to the Michigan Comments, Michigan proposes that 87 channels be set aside for B/ILT use in the non-public safety block. It appears that Michigan is merely taking the 90 “pool” channels already assigned in that portion of the 800 MHz band and redesignating them for non-ESMR use. What Michigan apparently fails to recognize is that Sprint Nextel already owns and operates a significant portion of those 90 “pool” channels through secondary market transactions made over the past decade.

<sup>13</sup> If non-ESMR parties were willing to accept spectrum assignments that provide less spectral separation it may make retuning licensees into a consolidated block of non-ESMR spectrum easier, however, reduced separation may lead to combiner concerns and reduced coverage capabilities. In light of this, it appears that a more reasonable solution is to accept some small level of interleaving in the non-public safety block if it will ensure that all licensees receive comparable facilities to those that operate today even if

operations be separated into separate blocks to the *greatest extent possible* and believes that this can be achieved by retuning non-ESMR incumbents to the lowest portion of the non-public safety spectrum block. As Sprint Nextel indicated in its initial comments, a voluntary relocation scheme for existing incumbents who may be currently located in the upper-end of non-public safety block to a lower channel assignment should be an option for those licensees wishing to move, if sufficient spectrum remains available after the mandatory retunes of incumbent licensees from the bottom of the 800 MHz band.<sup>14</sup> EWA supported this flexible approach because it believed the benefits of avoiding the obligation to retune some incumbents outweighed the risks of experiencing potential interference, especially given Sprint Nextel's track record in responding to interference complaints in the cases that do occur.<sup>15</sup>

**Interference Mitigation.** Because it is highly unlikely that non-ESMR and ESMR operations can be completely separated in the upper non-public safety portion of the band, Sprint Nextel and EWA both recommend retaining the current "interim standards" and signal level thresholds of -85 dBm (portables) or -88 dBm (mobiles) applicable today for non-cellularized systems

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there is a slightly higher possibility of interference in the non-public safety spectrum block at the top of the 800 MHz band.

<sup>14</sup> Sprint Nextel Comments at page 6.

<sup>15</sup> EWA Comments at pages 6-7.

during band reconfiguration in the event there is interference post-band reconfiguration in the border areas.<sup>16</sup> The “interim standards” are an effective and achievable means of protecting non-cellularized land mobile licensees. All other 800 MHz interference protection requirements, including the CTIA website reporting requirements and CMRS carriers’ mitigation requirements, would and should remain.

The Commission should also reject requests by Smart-Link to impose the non-border “final” band reconfiguration interference rules in the border areas.<sup>17</sup> The unique spectrum environment presented by the border areas requires that the Commission retain the existing “interim” interference requirements as part of the permanent solution in the border areas. The shortage of spectrum in the border puts operational constraints on all licensees in the development and deployment of their systems. There is less likelihood of clean separation between non-ESMR and ESMR operations. There is a lack of available spectrum to create a guard band and there are no public safety licensees in the non-public safety spectrum block, with the possible exception of Region 3. The interim interference standards are designed for these circumstances. The “final” interference rules were designed for the reconfigured 800 MHz band with substantial spectral

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<sup>16</sup> EWA Comments at page 7; Sprint Nextel Comments at page 7.

<sup>17</sup> Smart-Link Comments at page 3.

separation between ESMR and public safety systems and therefore are unworkable in the proposed border area channel plans.

The Commission should also reject suggestions to adopt guard bands in the 800 MHz band border areas as a method to prevent interference.<sup>18</sup> First, as discussed throughout these comments there is not sufficient spectral “room” to create guard bands even if the Commission could completely separate non-ESMR from ESMR operations. The significant spectrum limitations in the border areas, including the already spectrum capacity constrained operations of all parties makes creation of a guard band impossible without compromising the comparable spectrum principle. Second, Sprint Nextel recognizes that it will have an ongoing obligation to mitigate interference should cases arise during band reconfiguration or post-band reconfiguration and is committed to doing so. EWA appropriately recognizes Sprint Nextel’s extensive track record in avoiding and mitigating interference should it occur.<sup>19</sup> Recognizing these unique spectral limitations and Sprint Nextel’s already existing obligations to cure interference, the Commission should do as it did in the case of the southeastern United States and adopt 800 MHz border band plans without guard bands.<sup>20</sup>

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<sup>18</sup> Comments of NPSPAC Region 43 (“NPSPAC Region 43 Comments”) at page 4; Boeing Comments at page 8.

<sup>19</sup> EWA Comments at pages 6-7.

<sup>20</sup> *See* Improving Public Safety Communications in the 800 MHz band, *Report and Order* (2004) (elimination of Guard band in southeastern U.S.)

*Access to Mutual Aid Channels.* The scope of the Bureau's proposal to allow U.S. primary mutual aid channels to remain available to Canadian licensees post reconfiguration remains unclear. The State of Michigan assumes it would still be able to use these Canadian mutual aid channels even if the surrounding NPSPAC band is reassigned to Sprint Nextel's ESMR operations.<sup>21</sup> Sprint Nextel stated in its comments that if the Bureau requires U.S. primary mutual aid channels "be kept clear and protected," for Canadian primary uses, it will interrupt Sprint Nextel's contiguous spectrum in the former NPSPAC channel block and violate the "value-for-value" proposition that is a key tenet of the 800 MHz proceeding. Accordingly, the Commission should provide further guidance on its intentions prior to

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and *Memorandum Opinion and Order* at paragraphs 46-49 (2005) (reduction in Expansion Band in Atlanta). Sprint Nextel recognizes that it may need to modify its operations on Canadian primary spectrum that it shares with TELUS in the spectrum immediately adjacent to the new public safety allocation that will be located at the bottom of the 800 MHz band. As Sprint Nextel noted at page 5 of its Comments, once band reconfiguration is completed, it will revisit its sharing agreement with TELUS to attempt to rationalize its operations on the Canadian primary channels to attempt to separate itself from public safety operations.

<sup>21</sup> Michigan Comments at page 16.

adoption of any rules so that all parties have a clearer understanding of the potential use and restrictions that may be placed upon these channels.<sup>22</sup>

**Reimbursement of Costs for Reviews of 800 MHz Band Plans.**

NPSPAC Region 43 and Boeing, request that Sprint Nextel pay for the costs incurred by licensees analyzing the border region band plans.<sup>23</sup> This was an issue not raised by the Commission's Further Notice. These proposed additional costs, however, are not directly related to the specific reconfiguration of licensees' 800 MHz systems and thus are not within the scope of the costs Sprint Nextel is responsible for reimbursing specified in the Commission's orders in this proceeding. The issues raised in the Further Notice are ones of general spectrum policy and should not be reimbursable expenses.

**Special Coordination Procedures and Waivers.**

Sprint Nextel's Comments stressed the need for continued sharing of Canadian primary spectrum on a non-interference basis pursuant to existing waivers or Special Coordination Procedures ("SCP") between Canada and the U.S.<sup>24</sup> This is an

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<sup>22</sup> Sprint Nextel indicated in its Comments that it would not object to power flux density restrictions in its use of the former NPSPAC mutual aid channels, if those channels must remain usable for Canadian public safety licensees on the Canadian side of the border. *See* Sprint Nextel's Comments at page 8.

<sup>23</sup> NPSPAC Region 43 Comments at page 9; Boeing Comments at page 13.

<sup>24</sup> Sprint Nextel Comments at pages 2-5.

issue of paramount concern to Sprint Nextel given Sprint Nextel's extensive reliance on these channels to provide wireless services to its subscribers and to provide access to spectrum for its roaming partner, TELUS, in Canada.

Boeing fully supports U.S. operators continuing to have access to Canadian primary channels for all 800 MHz licensees including Sprint Nextel.<sup>25</sup> Boeing requests that Sprint Nextel's use of Canadian channels be "shifted into channel groupings" that would provide non-ESMRs protection against interference including proposed use of distinct guard bands within the Canadian allocation.<sup>26</sup> As Sprint Nextel has noted above, creation of guard bands will be impossible in the spectrum constrained environment of the borders. This is further complicated in the Canadian primary allocation, because Sprint Nextel's access to these channels is dictated by the channels that TELUS owns and makes available for sharing. As Sprint Nextel indicated in footnote 20 above, post band reconfiguration Sprint Nextel and TELUS will attempt to consolidate use of the SCP channels to the higher end of the Canadian primary allocation, but distinct blocks of spectrum use and creation of guard bands will likely be unachievable. Because all U.S. licensees that use Canadian primary channels on a secondary basis already have an obligation to correct interference to primary U.S. licensees no further operational restrictions are warranted.

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<sup>25</sup> Boeing Comments at page 9.

<sup>26</sup> Boeing Comments at pages 10-11.

*Conclusion.* Most parties are generally supportive of the Commission's general principles and, the proposed band plans. All parties also share a common desire to move forward in reconfiguring the 800 MHz band in the U.S. – Canada borders. Given the extremely challenging spectrum environment created by the international allocation between the two countries, and the critical communications services operators in each border region provide, the Commission should verify that the proposed band plans will work in practice and adopt the best “workable” band plan solution that will allow band reconfiguration to move forward even if the final border area band plans are not “perfect” from all perspectives.

Respectfully submitted,

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