

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

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

To: The Commission

**COMMENTS
OF THE
ENTERPRISE WIRELESS ALLIANCE**

The Enterprise Wireless Alliance (“EWA” or the “Alliance”), in accordance with Section 1.415 of the Federal Communications Commission (“FCC” or “Commission”) rules and regulations, respectfully submits its comments in the above-entitled proceeding.¹ The *FNPRM* proposes an 800 MHz band plan in the U.S. – Canada border region in furtherance of the FCC’s efforts to effect a reconfiguration of the band to eliminate harmful interference to public safety and other land mobile systems operating on those frequencies.²

EWA generally supports the FCC’s proposals with respect to 800 MHz reconfiguration within the Canadian Border Regions as detailed herein. Moreover, the Alliance considers it essential that this matter be resolved expeditiously so that incumbents operating in the Border Regions do not fall even further behind their counterparts in the rest of the country in completing what has proven to be the complex, time-consuming and sometimes difficult process of reconfiguring their systems to a different part of the 800 MHz band.

¹ *Further Notice of Proposed Rule Making*, WT Docket No. 02-55, 22 FCC Rcd 19266 (2007) (“*FNPRM*”).

² *Id.* at ¶ 3.

I. INTRODUCTION

EWA represents a broad alliance of business enterprise users, service providers, radio dealers and technology manufacturers. A number of its members operate 800 MHz private internal or commercial systems at transmitter sites located in Canadian Border Regions. For purposes of 800 MHz reconfiguration, the Transition Administrator (“TA”) designated by the FCC to facilitate that process has designated those geographic areas as Wave 4.³

While 800 MHz incumbents in the rest of the nation have had an established band plan since August 2004, and many EWA members already have completed the reconfiguration process, Wave 4 incumbents with facilities located within the Border Regions are still on hold. The use of 800 MHz spectrum in those areas is governed by a treaty between the U.S. and Canada. It was not possible for the U.S. to develop a reconfiguration plan in the Border Regions until it negotiated a mutually acceptable arrangement with Canada.

Thus, licensees in the Border Regions have not known even if, much less when, they will be required to relocate their systems to other 800 MHz channels because that needed to be determined by the Canadian Border Region band plan adopted by the FCC. The non-public safety entities operating at 800 MHz in those areas include a limited number of relatively small commercial operators and large, even Fortune 500, companies such as The Boeing Company, Continental Airlines, Federal Express, Chrysler Corporation, Ford Motor Company, ConocoPhillips, and Northwest Airlines.⁴ The uncertainty of their situation has made other communications planning decisions difficult and unquestionably has led to delays in system upgrades and other potential investments in technology. For incumbents with systems located

³ Wave 4 also encompasses the region along the U.S. – Mexican border, as well as the geographic areas immediately adjacent to both the Canadian and Mexican Border Regions.

⁴ There are very few small Industrial/Business licensees remaining on this spectrum. As discussed below, most such licensees have assigned their spectrum to larger entities over the past decades.

both within and outside of these Regions, it has meant that their reconfiguration responsibilities will extend over years, diverting personnel resources that otherwise could be assigned to economically productive activities.

For all these reasons, EWA is pleased that the Commission is in a position to propose a band plan, at least for the Canadian Border Regions. It is time to resolve this issue so that these licensees can complete the reconfiguration process and focus their full attention on their primary responsibilities – running some of major enterprise engines that drive the American economy.

II. DISCUSSION

The instant *FNPRM* is the result of an agreement reached by the FCC and Industry Canada in July 2007. In the *FNPRM*, the Commission describes the essential ingredients of that agreement as follows:

- The current allocation of 800 MHz primary spectrum between the U.S. and Canada set forth in Arrangement F will be maintained, although minor revisions to Arrangement F may be necessary.
- The U.S. will proceed with developing an 800 MHz rebanding band plan for the U.S. based on the current allocation of primary spectrum.
- Upon finalization of the U.S. band plan and after the 800 MHz Transition Administrator has issued frequency assignments to border area licensees, the U.S. and Canada will discuss minor revisions to Arrangement F.
- Issues to be discussed will include: 1) whether certain Canadian facilities that have been authorized on U.S. primary spectrum under Specialized Coordination Procedures (SCP) can be grandfathered, and 2) seeking to avoid any adverse impact on Canadian radio operations that will support the 2010 Vancouver Olympics.⁵

Of more particular interest to EWA members, the *FNPRM* also summarizes the elements contained in the proposed band plan and seeks comment with respect to certain of those elements:

⁵ *Id.* at ¶ 5.

- All relocating licensees will receive comparable spectrum assignments as defined in prior Commission orders in this proceeding.⁶
- Non-public safety (B/ILT and SMR) systems in the lowest block of U.S. primary spectrum will relocate to spectrum higher in the band.
- NPSPAC systems will relocate from the top portion of the band to the lowest portion of the band, so that they are assigned channels that are also used for new NPSPAC operations in non-border areas.
- As in non-border areas, spectrum that is vacated by Sprint Nextel Corporation (Sprint) and that is not required for relocation of incumbent licensees will be made exclusively available to public safety entities for three years after the completion of rebanding in each region, and to both public safety and critical infrastructure entities in the fourth and fifth years.⁷
- To the extent feasible, existing non-NPSPAC public safety systems will remain in the lowest 800 MHz block, though some may have to retune to different channels within the block to accommodate relocation of NPSPAC systems. This may create technical issues because non-NPSPAC public safety systems operate on channels with 25 kHz spacing, while NPSPAC systems operate on 12.5 kHz spaced channels and are subject to tighter emission masks. We therefore seek comment on channelization alternatives for accommodating both NPSPAC and non-NPSPAC public safety systems in the same spectrum block. Are special technical rules needed to reduce the possibility of interference between non-NPSPAC and NPSPAC public safety licensees? Should we permit non-NPSPAC licensees to operate on 12.5 kHz spaced channels if they satisfy the relevant emission mask requirements?
- Mutual aid channels with 25 kHz spacing will be included in the new band plan to match the mutual aid channels in the non-border NPSPAC band plan. In addition, existing cross-border mutual aid channels in the former NPSPAC band that fall on U.S. primary spectrum will be maintained so that they can continue to be used for mutual aid on the Canadian side of the border. These channels will be kept clear and protected from ESMR operations in the border regions.
- In the upper portion of the band, we seek to separate non-ESMR systems (high-site B/ILT and SMR) from ESMR systems to the extent feasible. However, due to the limited amount of U.S. primary spectrum available in the border regions, some interleaving of ESMR and non-ESMR systems may be necessary to provide non-ESMR systems with sufficient internal spacing of their channels to enable them to make effective use of combiners. We seek comment on the degree to which the border area band plan should accommodate such interleaving. We also seek comment on whether other

⁶ See 47 C.F.R. § 90.677(f).

⁷ See *Report and Order*, WT Docket No. 02-55, 19 FCC Rcd 14969 at ¶ 23 (2004) (“800 MHz Order”).

technical rules are required to mitigate potential interference between ESMR and non-ESMR systems.

- The dividing line between Regions 2 and 3 will align with the Pennsylvania-Ohio border (at 80° 30' WL) as defined in the 1990 Arrangement between the U.S. and Canada covering NPSPAC operations in the 800 MHz band.⁸

Many of these issues relate primarily or exclusively to public safety operations in the band. Nonetheless, because of the inter-mingling of Industrial/Business/SMR and public safety spectrum usage in these areas of spectrum scarcity, Commission decisions with respect to purely public safety matters may have an impact on the band plan for Industrial/Business/SMR users as well.

EWA, of course, supports the proposition that all relocating licensees must receive comparable facilities, including comparable spectrum. That is the precept on which the 800 MHz reconfiguration decision was based; it cannot be compromised if the FCC is to keep faith with incumbents in the band. The Alliance recognizes that developing a plan that satisfies that objective, while also meeting other important goals such as maintaining consistent NPSPAC allocations for the Border Regions and the rest of the country, is complicated in Regions where there never has been adequate spectrum to meet user communications requirements. Nonetheless, it is the first and a non-negotiable predicate against which any proposed band plan must be measured. EWA is pleased to see that the Commission identified spectrum comparability in its rightful place at the very top of the list of key elements in its band plan.

EWA also accepts the FCC's corollary determination that the band plan must reflect current spectrum utilization and not seek to recreate the original pool allocations. Decades of inter-category sharing among Industrial/Business and public safety users, as well as the individual assignment and acquisition activities of FCC licensees, have resulted in the

⁸ *FNPRM* at ¶ 7 (certain footnotes omitted).

reformulation of those original allocations, in accordance with the regulatory environment adopted by the FCC. It would not be possible to revert to the earlier allocation plan without disenfranchising licensees that are entitled to comparable facilities in the reconfiguration process. The Commission must work with the user environment as it exists today and ensure that those incumbents are treated appropriately, consistent with the rules established for the 800 MHz reconfiguration process.

EWA has given considerable thought to the implications of interleaving high-site Industrial/Business/SMR systems with those of ESMR operators that deploy cellular architecture networks. That mixture of systems was a primary cause of the interference that prompted the FCC to reconfigure this band. However, relocating a system to provide greater spectrum separation from ESMR and cellular operations is far from painless even if all costs are assumed by Sprint Nextel Corporation (“Sprint Nextel”) pursuant to the 800 MHz Order. For commercial SMRs, it requires cajoling customers to permit access to their radios and can trigger their decision to choose a different communications option. SMRs who have been required to reconfigure their systems uniformly report at least some loss of customers because of that obligation. Enterprise users do not face that problem, but managing and implementing a major modification of an 800 MHz system demands substantial commitments of personnel and other resources. Even if Sprint Nextel reimburses the cost of their activities, those individuals cannot perform other functions while engaged in reconfiguration work – a loss of productivity for which there is no compensation.

The Alliance has carefully considered these competing concerns and has reviewed the ULS database of Industrial/Business/SMR users in the Border Regions. It also has weighed Sprint Nextel’s generally positive track record of working with individual licensees in taking

steps to avoid interference at the outset and to correcting it promptly should interference nonetheless occur. EWA members such as Boeing have reported that they have been able to work effectively with Sprint Nextel on arrangements that permit compatible co-existence. Since there are only a relatively small number of such licensees remaining in this band, and since most are companies of substantial size with the ability to negotiate a mutually satisfactory agreement should one be required, EWA has concluded that the benefits of avoiding an obligation to relocate outweigh the risks of experiencing intractable interference problems. Of course this would not preclude an individual licensee from negotiating a frequency exchange with Sprint Nextel, provided it complied with FCC requirements. It would, however, free Industrial/Business/SMR users from the obligation to relocate when they determine that remaining on their current frequencies would best serve their interests. Assuming the band plan includes the interleaving of such systems as recommended herein, the FCC is correct that it will need to adopt appropriate technical rules to mitigate potential interference.

EWA recommends that the FCC adopt the current “interim standards” as the measure for entitlement to protection against interference for all non-cellular 800 MHz incumbents.⁹ That standard, whereby non-cellular systems must have signal strength threshold levels of -85 dBm (portable) or -88 dBm (mobile) to be entitled to full interference protection, has been used throughout the 800 MHz reconfiguration process while non-cellular and cellular architecture systems continue to be interleaved in this band, although, to date, it has been applicable only to public safety systems. While the protection provided under the “interim standards” is not equal to that which will be available in the post-reconfiguration world outside border areas where it is

⁹ See, *Supplemental Order and Order on Reconsideration*, WT Docket No. 02-55, 19 FCC Rcd 25120 at ¶¶ 38-42 (2004).

possible to separate these two disparate system types within the band,¹⁰ it represents a reasonable approach to addressing interference problems that might arise on interleaved spectrum. It is consistent with practices and procedures for interference abatement that have been proposed to the FCC in the course of this proceeding and has a track record of producing acceptable results.

¹¹ Of course, as noted above, EWA expects Sprint Nextel to continue its practice of coordinating and cooperating with other users in the band so as to avoid, if possible, and, if not, to abate promptly any interference that might arise.

One issue raised in the *FNPRM* is troubling to EWA. The FCC has indicated that ongoing discussions with Canada will include consideration of “whether certain Canadian facilities that have been authorized on U.S. primary spectrum under Specialized Coordination Procedures (SCP) can be grandfathered...”¹² If, as EWA believes, the proposal is to allow such licensees to convert their status to one that is entitled to some level of protection from subsequent U.S. applicants, then the Alliance is in adamant opposition. There is insufficient spectrum in the Canadian Border Regions to accommodate even existing, much less future, U.S. requirements. The Commission should not take any action that would give Canadian licensees effectively “veto” authority over prospective U.S. applicants seeking to operate on U.S. primary spectrum. To do so would be to take a good neighbor policy too far, particularly as there is no suggestion that Industrial/Business/SMR licensees in the U.S. would enjoy reciprocal rights on Canadian primary spectrum.

¹⁰ See 47 C.F.R. §§ 90.672-90.675.

¹¹ See Avoiding Interference Between Public Safety Wireless Communications Systems and Commercial Wireless Communications Systems at 800 MHz, a Best Practices Guide, December 2000. See, also, Letter dated May 30, 2003, from Mary E. Brooner, Motorola, Inc. (“Motorola”), to Marlene H. Dortch, FCC, WT Docket No. 02-55 and Letter dated June 20, 2003, from Steve B. Sharkey, Director Spectrum Standards Strategy, Motorola, to James D. Schlichting, Esq., FCC, WT Docket No. 02-55.

¹² *Id.* at ¶ 5.

III. CONCLUSION

It is important that the FCC proceed as promptly as possible to resolve the issues raised in this proceeding so that 800 MHz incumbents in the Canadian Border Regions are able to move forward with plans affecting their communications systems, including, but not limited to, plans involving the reconfiguration process. The *FNPRM* provides a framework for the adoption of rules that will address the complex issues that arise in areas of relative spectrum scarcity. EWA intends to work with its members, the FCC and all stakeholders to help in moving this process forward.

Respectfully submitted,

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