

NPSPAC Region 43 Regional Planning Committee

c/o Steve Taylor, Chair  
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March 21, 2007

His Excellency David A. Gross  
Ambassador  
United States Coordinator for International Communications  
Department of State  
Washington, D.C. 20520

The Honorable Kevin J. Martin  
Chairman  
Federal Communications Commission  
Washington, D.C. 20554

Reference: *Wireless Telecommunications Bureau Docket WT-02-55; Region 43 August 14, 2006 rebanding letter*

Dear Ambassador Gross and Chairman Martin:

This follow up to our August 14, 2006 letter is a brief review of events since then and includes our recommended band plan for US-Canada Border Areas 4, 5 and 7. Our major concerns last August were:

- The potential for public safety communications being degraded during and after rebanding. This remains a major concern. If recommendations of the attached plan are adopted by the FCC and State Department, public safety agencies in Region 43 are cautiously optimistic that rebanding to equivalent operation is achievable.
- No public information was available to conclude that negotiating modified border area plans was progressing in a manner that matches the rebanding timeline or that negotiations were progressing. From a regional or statewide public safety perspective, nothing to date has changed to indicate progress is being made. Worse, additional delays were imposed by extending the Wave 4 Phase 1 Freeze in December and extending the Wave 4 Phase 2 deadlines in January. Postponing deadlines frequently and imposing license freezes indefinitely creates operational and financial environments where existing public safety systems cannot be improved, planning for new systems is in limbo and interoperability, a national priority, is set back. The "Interoperable Emergency Communications Act" (S. 385) as reported out by the U.S. Senate Committee on Commerce, Science, and Transportation on February 13, 2007 includes reporting requirements. We are hopeful this will finally provide current information to users, planners and managers of these critical wireless systems. We applaud this effort and look forward to receiving current information.
- Regional Planning Committees were not being engaged to discuss band planning for their respective Border Areas. This has improved dramatically. With direct encouragement from the FCC, Region 43, working in concert with the Transition Administrator, Sprint-Nextel and APCO, has engaged in productive discussions, identified critical issues and created a recommended plan. We are very encouraged by this turnaround.

*Region 43 Rebanding Plan*

Last August we proposed to create and submit a Region 43 rebanding plan for your review. Key aspects of this proposal included:

- Minimum operational disturbance to existing critical systems;
- Comparable cost to the current approach;
- Equivalent public safety and private B/ILT spectrum with equivalent co-channel loading;
- Protected adjacent channel relationships within each relocated band segment;
- Avoidance of United States primary licensees locating to Canadian primary channel assignments;

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- Maintenance of existing United States-Canada primary and secondary status with minimal impact on treaty issues between the United States and Canada.

We said we would ask Sprint-Nextel to fund development of the plan through a change order to an existing Request for Planning Funding submitted by the Snohomish Emergency Radio System.

Sprint-Nextel subsequently proposed an alternative approach, which Region 43 accepted, in which they would work with the Region 43 Rebanding Subcommittee to develop a plan and fund the supporting work through RFPF agreements with individual licensees. We are very pleased with the spirit of cooperation that Sprint-Nextel, the Sprint-Nextel Public Safety Advisory Board and the Transition Administrator all extended to Region 43. We thank them for their commitment and wish to clearly indicate the plan would not be in its current state of development without their efforts. Key elements of the recommended plan developed by this group for your consideration are attached to this letter.

#### *Licensing Freezes*

We stated in the August letter that as an interim measure to allow vital and critically needed radio system planning, licensing and system implementation efforts, we would respectfully file a request to remove the licensing freeze in the Wave 4 areas of Washington State. This request would have asked the FCC to:

- Immediately lift the freeze on Wave 4 non-NPSPAC channel licensing activities until border sharing band plans are developed and adopted by Commission action and treaties modified;
- Hold the freeze on NPSPAC channel licensing activities in abeyance until border sharing band plans were developed, adopted by Commission action and treaties modified (This freeze has since then come into effect and all licensing activities without waiver requests are effectively halted.).

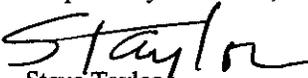
#### *Request for Removal of Licensing Freezes*

Through this letter, Region 43 respectfully asks the Commission to remove licensing freezes on all NPSPAC and non-NPSPAC channels on April 1, 2007 if final band plans affecting Canadian border areas are not in place by March 30, 2007. Our recommended plan does not change United States or Canadian definitions of primary and secondary frequencies, therefore, we further ask that no additional licensing freezes are imposed unless it is demonstrated that rebanding could not occur otherwise.

The freezes obstruct interoperability and improvements to public safety communications systems, particularly now in border areas where special plans are being negotiated with the Canadian and Mexican governments. The freezes stall interoperability efforts, create unexpected public safety encumbrances and curtail vital mission critical operational improvements. In some cases, the FCC supports workarounds using Special Temporary Authorizations and waivers during freeze periods if a licensee demonstrates a compelling public interest to improve coverage or capacity. However, the use of STAs with no end date is troubling and it is not uncommon to receive an STA then lose the channel in the licensing process. In addition, some frequencies will be held in reserve until after rebanding.

In conclusion, on behalf of public safety agencies in NPSPAC Region 43—and non-public safety entities operating 800 MHz communication systems used by public safety agencies—we sincerely appreciate this opportunity to present the attached plan for your review. We will be happy to answer any questions you have and will appreciate receiving your comments.

Respectfully submitted,



Steve Taylor

Chair, NPSPAC Region 43 / 800 MHz

#### Attachments

cc: Senator Maria Cantwell  
Senator Patty Murray  
Mary Kruger, Sprint-Nextel  
Jim Broman, co-Chair Washington SIEC  
Representative Richard Larson  
Representative David Reichert  
David Buchanan, Transition Administrator  
Gary Robinson, co-Chair Washington SIEC

## **US-Canada Border Area 5 Band Plan proposed by NPSPAC Region 43**

### **851—854.7627 MHz**

These channels are currently assigned as interleaved channels to United States licensees on a primary basis. Non-public safety licensees in this range will be relocated to the 862.2626—866 MHz range. Note that Licensees in the United State primary portion of the current NPSPAC range, channel spaced at 12.5 KHz, will be moved into this range with 25 KHz spacing.

### **866.0375—867.4875 MHz**

A large number of public safety agencies in Region are currently licensed in this Canadian Primary NPSPAC range, operating on a “secondary to Canada” basis. These licensees will move (unlikely as a contiguous block) into “secondary to Canada” spectrum in the 854.7625—862.2625 MHz range and remain licensed as “secondary to Canada”. Note these Licensees, currently channel spaced at 12.5 KHz, will be moved into this range with 25 KHz spacing. Careful attention must be focused on this relocation because of existing licensees. Dependence on “broad principles” for post-rebanding interference protection is risky. The plan will not work in this range if licensees are relocated without provisions for adequate protection as described in the “Guard Bands and Geographic Separation” discussion below.

### **ICALL, ITAC 1-4**

Five mutual aid channels (ICALL, ITAC 1-4) for use by United States licensees will be established 15 MHz lower in the band than their current location, matching the rest of the United States. These will retain the same channel-to-channel spacing and will require relocation of any incumbent non-cellular licensees now on those channels.

The new ICALL, ITAC1 and ITAC2 mutual aid channels are currently occupied by public safety licensees. These public safety licensees will be relocated to vacated channels within the 851—852.5 MHz or 854—854.7625 MHz sub-bands.

The new NPSPAC segment 852.5—854 MHz will include the new ITAC3 and ITAC4 channels within it.

### **STATE OPS 1-5**

The five Washington State statewide NPSPAC mutual aid channels designated as STATE OPS 1-5 will move down 15 MHz, retaining the same channel-to-channel spacing and falling within the newly created NPSPAC segment 852.5—854 MHz. No incumbent relocations are required.

### **B/ILT Licensees related to public safety**

Several B/ILT licensees provide critical first responder functions throughout United States -Canada Region 5. These include American Medical Response (AMR) ambulance communications and The Boeing Company's fire response capability.

Boeing's 800 MHz systems provide communications internally for its own fire and security communications and externally to local government fire agencies responding to events within and adjacent to Boeing facilities. Local government public safety radios are cross-programmed for this purpose and regularly use the Boeing systems for critical operational communications. As such, Boeing systems are integrated within the public safety operational environment making it crucial that these systems are provided reasonable protections against harmful interference from cellular-architecture system operations.

These systems, with currently United States primary assignments in the 851—854.7875 MHz range, will likely be relocated to the interleaved United States primary 862.2625—866 MHz range.

Boeing also operates multiple systems using Canadian primary channels in the 854.7625—862.2625 MHz range. These systems will remain somewhere within this segment but will likely require relocation as specific decisions are made in this range. In all cases, these systems should be provided with equivalent protection against harmful interference as those for dedicated public safety systems.

### **Guard Bands and Geographic Separation**

Years of local experience, operations and engineering studies have shown the use of fixed guard bands of 1 MHz or greater is an effective strategy to mitigating the impact of cellular systems on non-cellular operations. The unique constraints on spectrum availability present in the Region 5 Border Area suggests that a more flexible approach,

including a mix of geographic and spectral separation, is required to achieve the desired results. Fixed guard bands, or alternatively, adequate combinations of frequency and geographic separation between non-cellular licensees and existing Sprint-Nextel sites in this band, must be identified and provided for in the plan. Sprint-Nextel and the parties involved in this plan have all agreed to follow these broad principles in establishing details of the final band plan.

### **Co and Adjacent Channel Assignments**

Co-channel and adjacent channel assignment recommendations and decisions shall be based on the lowest potential for interference between United States and Canadian operations. Regional coordination with Canadian authorities, including access to the Industry Canada public safety database currently unavailable to United States public safety licenses, will likely be required in order to minimize and manage interference issues.

### **Sprint-Nextel Vacated Channels**

Consistent with the non-Border Areas of the United States, channels vacated by Sprint-Nextel will be exclusively available to public safety for the first 3 years following Sprint-Nextel's completion of rebanding in the affected regions and for an additional 2 year period by both public safety and critical infrastructure industries (CII) licensees. Five years after the completion of rebanding in the affected regions, these channels will be available to all eligible licensees.

## **US-Canada Border Areas 4 and 7 Band Plan**

### **Region 4**

NPSPAC Region 43 supports the Great Lakes plan for US-Canada Border Area 4.

### **Region 7**

In US-Canada Border Area 7, NPSPAC Region 43 recommends that no United States ESMR service should be allowed below 862 MHz and that Sprint-Nextel may offer ESMR service on the Canadian Mutual Aid Channels

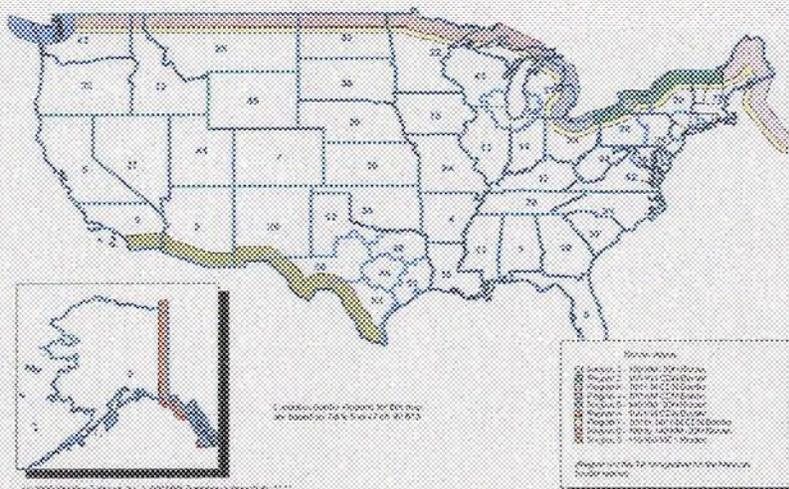
## US-Canada Border Area 5 Summary

The following summarizes recommendations of NPSPAC Region 43:

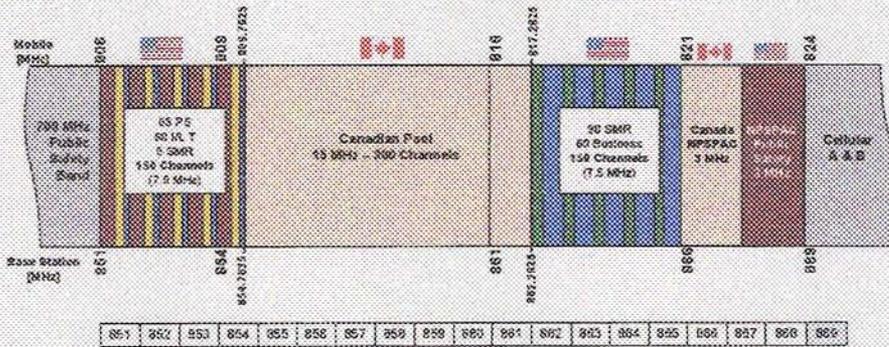
- These recommendations pertain only to Public Safety agencies and associated those non-Public Safety entities operating 800 MHz communication systems also used by Public Safety agencies in NPSPAC Region 43.
- There will be no change to Canadian Allocations.
- All NPSPAC Mutual Aid Channels should follow the general US and Canadian band plans. If those frequencies are currently occupied, they must be cleared. Sprint-Nextel should not offer service on Canadian Mutual Aid Channels along the border.
- The number of Business, I/LT and SMR channels, and their frequency locations and ratios, may differ after reconfiguration
- The proposals for the Canadian Border Regions will also affect assignments in the Canadian Border Region 7 territory directly below Region 4. In Region 7, we recommend that:
  - No US ESMR service should be allowed below 862 MHz
  - Sprint may offer ESMR service on Canadian Mutual Aid Channels

## FCC-Defined 800 MHz Border Areas

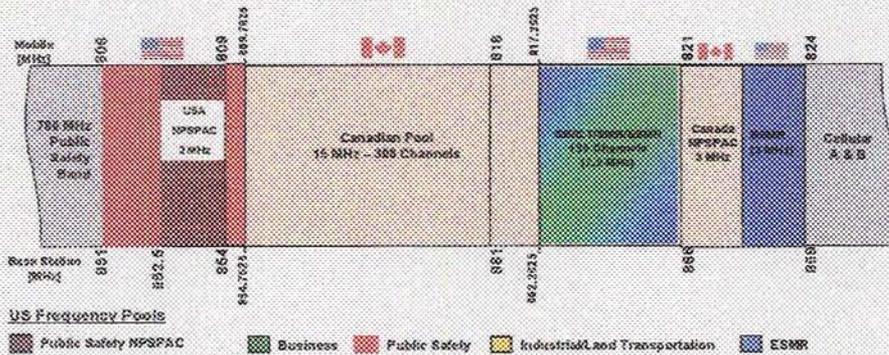
800 MHz Border Regions for non-NPSPAC channels  
(NPSPAC border regions vary slightly along the OH-PA border)



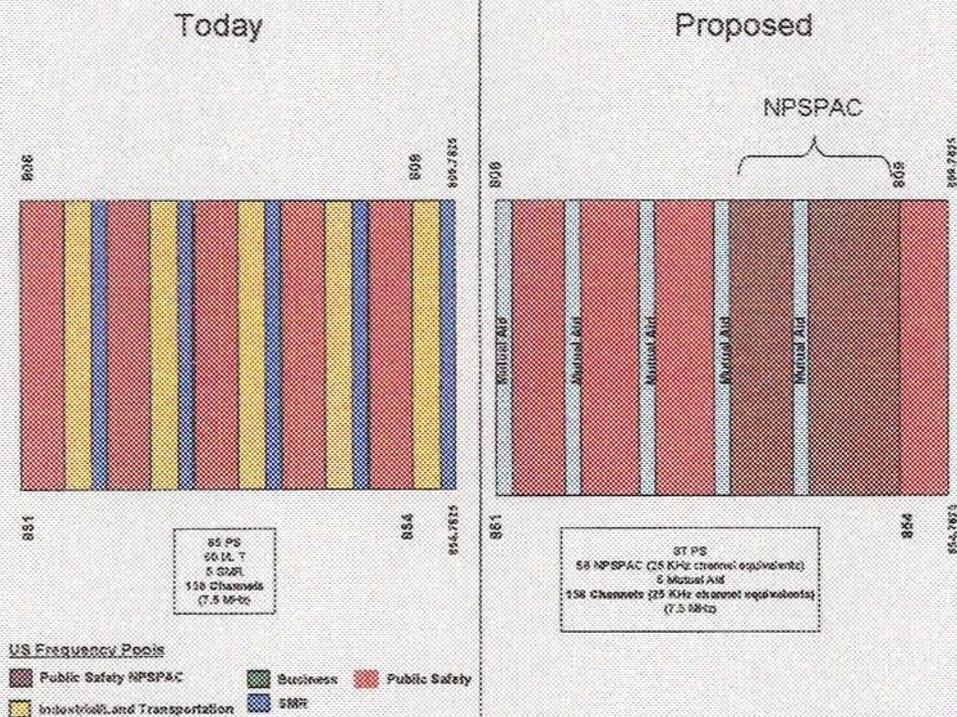
## Current Band Plan: Canadian Border Region 5



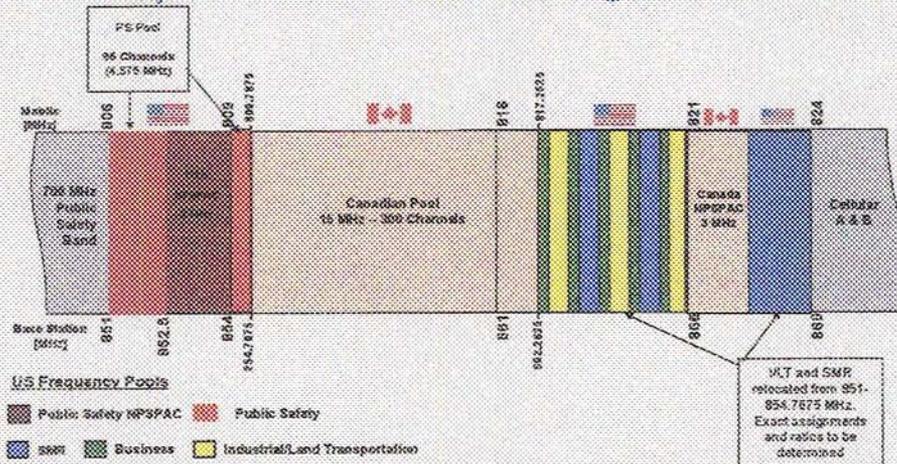
## Proposed New Band Plan: Canadian Border Region 5



- Notes:**
- Public safety licensees currently secondary to Canada in 866.0375 to 867.4675 move to 854.7625 to 862.2625 on a secondary basis to Canada.
  - All 5 mutual aid channels will go down 15 MHz to match the rest of the US for US licensees
  - Any channels that Sprint-Nextel vacates in the Canadian Pool should be available to Public Safety for the first 3 years followed by critical infrastructure and Public Safety for the next two years similar to rules for below the border.
  - Freqs 866.0125, 866.5125, 867.0125, 867.5125 and 868.0125 will remain mutual aid for Canadian use and unused by Sprint-Nextel in the Border Region.
  - Definition of harmful interference with Canada is needed
  - Separation of Sprint-Nextel and Public Safety operations in the Canadian pool needs refinement and flexibility.



### Proposed Canadian Border Region 4 Band Plan



- Notes:**
- No US ESMR operation secondary to Canada be allowed below 855.7875 to create a guard band for PS
  - Public safety licenses currently secondary to Canada in 866.000 to 867.500 move to 861.000 to 862.500 where there are no existing US Public Safety operations, or to 854.7875 to 861.000 on a secondary basis to Canada. Movement to the Canadian primary pool may require changes to the field strength allowable levels to match the current NPSPAC Band.