



8000 MHz

Rebanding Update

WHERE WE'VE BEEN & WHERE WE ARE

BY MARK PALLANS

In November 2001, at an FCC meeting in Brooklyn, N.Y., Chief Harlan McEwen made a presentation about some newly discovered interference to public safety radio systems in the 800 MHz band. From that disclosure, the FCC's "rebanding order" was developed in 2004 and released as WT Docket 02-55.

The FCC's actions in this matter were unprecedented in the communications industry. In short, a licensee was specifically being named as the cause of a significant interference issue and was to pay all those affected the costs for remediation of the problem.

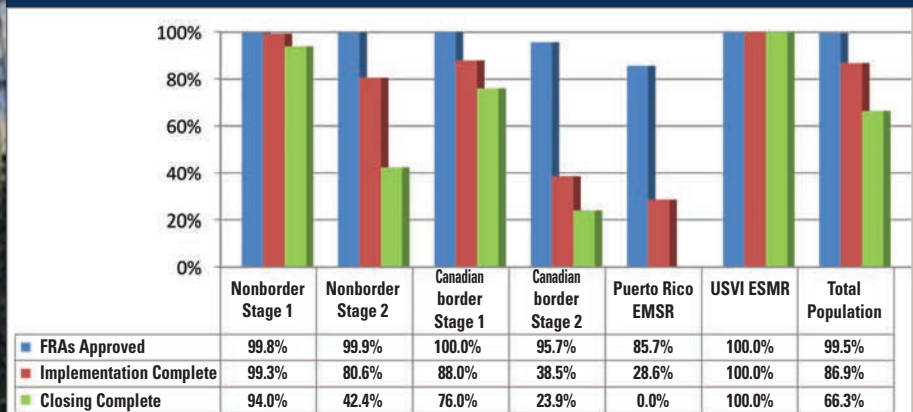
The Order stated that Nextel (before it was purchased and became Sprint Nextel) would pay the costs of moving all public safety licensees from the NPSPAC band of 866–868 MHz to a new piece of the spectrum from 851–854 MHz. The intention was to move the public safety licensees away from the Sprint Nextel systems located above 868 MHz. That would eliminate the interference generated by Nextel's digital technology. *Highlights:*

- The Order created a definition of "unacceptable interference," specifically for this issue;
- It assigned the responsibility for mitigation to any system operator identified as creating the interference;
- Public safety users were required to notify commercial users of any interference to their systems;
- The frequency bands of 806–815 MHz and 851–860 MHz were for use only by non-cellular type systems (i.e., analog radio systems);
- The Order designated 806–809/851–854 MHz as public safety only spectrum;
- It created a new band segment for the commercial carriers with a guard band to separate them from the public safety and business users and moved Sprint Nextel frequencies to a new band segment;
- It created the "Transition Administrator" organization to oversee the rebanding process;
- It required that the entire rebanding process be completed within 36 months of the date when the FCC's Public Notice was published;
- It required Nextel to fully fund the cost of relocation of all 800 MHz band public safety systems and other 800 MHz band incumbents to their new assignments;
- It required that the reassigned spectrum provide comparable facilities; and
- It created four master rebanding regions based on the NPSPAC Region Planning Committee structure.

Other agreements were made with Nextel as part of the agreement for it to pay the rebanding costs. The order also contained many technical criteria relating to interference levels and degrees of protection provided to public safety.

Today, eight years after the FCC order was drafted, the rebanding process is continuing. It was clear early on that the 36-month window for rebanding would not be met. Most affected agencies have gone through the process with two major exceptions.

Agreements with Canada took several years to develop, and any agencies using 800 MHz near the Canadian border are just now starting their projects. It wasn't until Aug. 1,



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2011, that the FCC and Industry Canada (the Canadian equivalent of the FCC) agreed on a rebanding plan for what is called the “Canadian Border Regions.”

Simplified, the Canadian Border Region is the area within 100 km of the Canadian border affecting all of the continental United States and Alaska. Just this past August, the FCC announced several waivers for entities that were requesting extensions of their rebanding time schedules.

Complicating the issue of rebanding along the Canadian border is the fact that, unlike the balance of the nation, border licensees cannot just shift their frequencies down by 15 MHz but rather must search out available and compatible frequencies in their geographic areas.

Agreements with Mexico took considerably longer. It wasn't until June 2012 that the FCC and the Mexican government reached a protocol for rebanding. On Aug. 17, 2012, a day before the APCO International Conference & Expo began in Minneapolis, the FCC released its Notice of Proposed Rulemaking (NPRM) that outlined the new band plan for the Mexican border region. It's just now that agencies along the Southwest border have been able to begin their rebanding process.

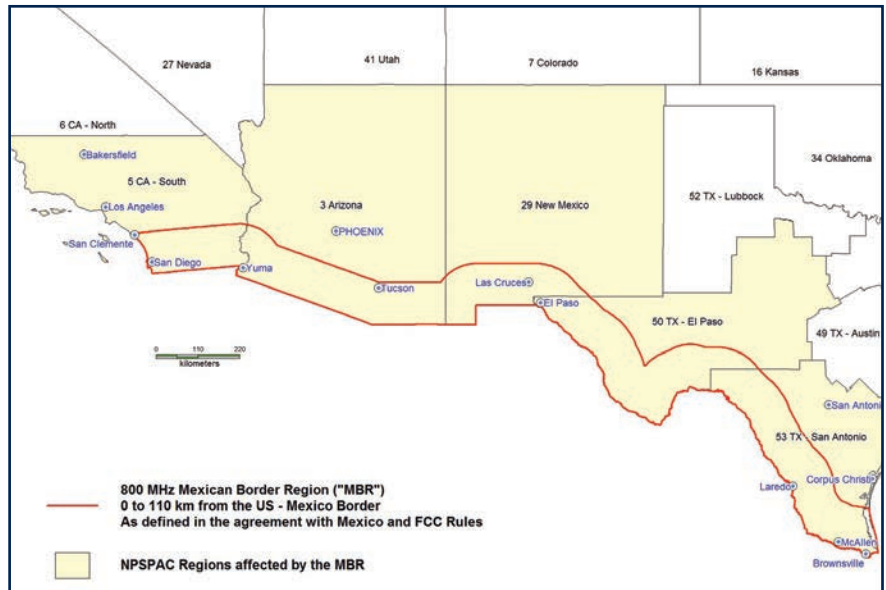
Once the clock started ticking on these entities they had to abide by a mandated timeline. Already some agencies are filing requests for extensions of time to complete their rebanding processes. During the planning phases, dates extending into 2009 were set as deadlines for planning. Several agencies are still in the negotiation phases.

For this article, we contacted the Transition Administrator organization to get the latest update on both the overall rebanding program and the latest information regarding the Canadian and Mexican border issues. APCO's AFC Department and the National Regional Planning Council (NRPC) were also contacted.

APCO AFC is the frequency coordinator that handles licensing between the end users and the Federal Communication Commission. The NRPC is a volunteer organization made up of the Regional Planning chairpersons for all of the FCC regions that coordinate 800 MHz NPSPAC channels, as well as the 700 MHz band.

Who is the Transition Administrator?

The 800 MHz Transition Administrator



LLC is the administrator for the reconfiguration of the 800 MHz band mandated by the FCC. The TA has contracted with Deloitte Consulting LLP, Squire Sanders (US) LLP and Baseline Wireless Services LLC to perform the duties of the TA. Among its duties, the TA establishes reconfiguration guidelines, specifies replacement channels, reviews reconfiguration cost estimates, monitors payment of reconfiguration costs, manages the relocation schedule, facilitates issue resolution, and administers the alternative dispute resolution process.

Our questions to the TA and their responses follow.

What is the status of the rebanding for the Mexican Border Region?

On June 8, 2012, the FCC announced that the U.S and Mexico had signed an amended protocol for sharing spectrum in the 800 MHz band along the U.S.-Mexico border, which would pave the way for the reconfiguration of licensees along the border. On Aug. 17, 2012, the FCC released the Fourth Further Notice of Proposed Rulemaking seeking comment on proposals for establishing and implementing the reconfigured 800 MHz Band Plan along the U.S.-Mexico border. Comments on the NPRM were due on October 1, 2012 and reply comments must be filed with the FCC on or before October 15, 2012.

What regions and states are affected?

The affected NPSPAC Regions are Region 5: Southern California, Region

3: Arizona, Region 29: New Mexico, Region 50: Texas - El Paso, and Region 53: Texas - San Antonio. The map above shows these regions.

When can licensees start their FRA process with Sprint Nextel? Are there likely to be any PFA requests?

The FCC has encouraged Mexican border licensees that anticipate a need for planning for the reconfiguration of their systems to engage in planning activities to the extent that they are not frequency dependent and would not result in unnecessary duplication of costs. The TA encourages large licensees in particular to get an early start on their planning activities.

Licensees should identify and contact vendors and consultants to assist with reconfiguration. Licensees may conduct the following non-frequency dependent activities: conducting subscriber unit inventory, conducting infrastructure inventory, engaging in non-frequency specific engineering and implementation planning, and defining their interoperability environment.

If a licensee requires funding to conduct planning activities, it should submit a Request for Planning Funding (RPPF) and negotiate a PFA with Sprint Nextel. Licensees may submit an RPPF prior to receiving replacement frequencies. At this time, the TA has approved 12 PFAs for Mexican border licensees.

The TA encourages licensees to review information on the TA's website (www.800TA.org) regarding the

reconfiguration process. The TA will continually update information regarding reconfiguration of the Mexico border region and licensees, and their vendors should periodically check the TA's website for additional information.

Do you envision any unusual hurdles for these licensees as opposed to the non-border rebanding agencies?

Until the FCC releases its Report and Order establishing the final band plan, it would be speculative to assess potential hurdles.

Is there an estimated timeline for the border areas to complete rebanding?

In the NPRM, the FCC proposed a 30-month transition period for reconfiguration in the Mexico border region.

I have heard comments about the potential for interference with/by Mexican licensees. Is that a possibility?

In the event that interference arises, the protocol between the U.S. and Mexico that was signed in June 2012 provides that the

FCC and the Secretariat of Communications and Transportation of the United Mexican States each will "take appropriate measures to eliminate any harmful interference" caused by stations within its own territory to stations in the other country. See Protocol Between the Department of State of the United States of America and the Secretariat of Communications and Transportation of the United Mexican States Concerning the Allotment, Assignment and Use of the 806–824/851–869 MHz and 896–901/935–940 MHz Bands for Terrestrial Non-Broadcasting Radio-communication Services Along the Common Border (June 8, 2012).

What is the status of the rest of the rebanding program? How many agencies have completed rebanding? How many are in process, and how many have not started (if any)?

The chart on p. 37 shows the percentage of FRAs that have been approved by the TA, the percentage of FRAs for which implementation is complete, and the percentage of FRAs for which the closing process is

complete for each stage of the reconfiguration program as of June 30, 2012.

Nearly all licensees in the program, except for those in the Mexico border region, have completed FRA negotiations. Physical retuning was complete for 86.9% of FRAs, except for those in the Mexico border region, as of June 30, 2012.

CONCLUSION

Although much has been accomplished by those agencies required to reband, much work remains, particularly in the Canadian and Mexican border regions. But the major obstacles have now been removed. **||PSC||**

MARK PALLANS is an electrical engineer with a 35-year background in public safety. He formerly was the telecommunications manager for the city of Fort Lauderdale, Fla., after he retired as a senior communications engineer for Miami-Dade County and the Miami-Dade Police Department. He currently operates Pallans Associates, a communications consulting firm specializing in local governments. He is a Life Member of APCO and a Fellow of the Radio Club of America.

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CDE EXAM #31817: 800 MHZ REBANDING UPDATE

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|--|---|
| <p>1. Who was responsible for the cost of rebanding effort?</p> <ul style="list-style-type: none">a. Each agencyb. The FCCc. Sprint Nexteld. None of the above <p>2. What does TA stand for?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>3. What was FCC's initial time frame for the completion of 800 MHz rebanding?</p> <ul style="list-style-type: none">a. 18 monthsb. 36 monthsc. 5 yearsd. 10 years <p>4. How many master regions (i.e., waves) did FCC establish?</p> <ul style="list-style-type: none">a. 1b. 3c. 4d. 6 <p>5. Define Canadian Border Region?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> | <p>6. Which states are in the Mexican Border Region?</p> <ul style="list-style-type: none">a. Texas, California, Arizona and New Mexicob. Utah, Colorado, California and Louisianac. Hawaii, California, Arizona and New Mexicod. Arizona, New Mexico, Texas and Nevada <p>7. Define Request for Planning Funding?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>8. What is the estimated timeline for border regions to complete rebanding?</p> <ul style="list-style-type: none">a. 12 monthsb. 30 monthsc. 2 yearsd. 4 years <p>9. What is the percentage of FRAs approved in non-border area stage 1?</p> <ul style="list-style-type: none">a. 67.2%b. 87.3%c. 99.8%d. 100% <p>10. What is the percentage of RFAs approved in non-border areas stage 2?</p> <ul style="list-style-type: none">a. 69.2%b. 87.9%c. 99.9%d. None of the above |
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