

Before the
 Federal Communications Commission
 WASHINGTON, D.C. 20554

In the Matter of)
)
 Improving Public Safety Communications in the) WT Docket 02-55
 800 MHz Band)
)
 New 800 MHz Band Plan for U.S. – Mexico)
 Sharing Zone)
)
)

FIFTH REPORT AND ORDER

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By the Chief, Public Safety and Homeland Security Bureau:

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I. INTRODUCTION

1. On June 8, 2012, the United States and Mexico signed an agreement modifying the international allocation of 800 MHz spectrum in the U.S.-Mexico border region (Amended Protocol),¹ which enables the U.S. to proceed with 800 MHz band reconfiguration along the border. By this *Fifth Report and Order*, the Public Safety and Homeland Security Bureau (Bureau), on delegated authority, adopts a reconfigured channel plan for the 800 MHz band along the U.S.-Mexico border based on the allocation plan in the Amended Protocol. We also establish a 30-month transition period for licensees to complete rebanding in the National Public Safety Planning Advisory Committee (NPSPAC) Regions bordering Mexico.

II. BACKGROUND

2. Prior to signing the Amended Protocol, the U.S. and Mexico operated along their common border in the 800 MHz band pursuant to a bilateral protocol signed in 1994 (1994 Protocol),² which assigns access to spectrum between the two countries in a “Sharing Zone” consisting of the region extending 110 kilometers from the border into both countries.³ The 1994 Protocol divides access to 800 MHz spectrum in the Sharing Zone evenly, with each country having primary access to 50 percent of the channels in the band.⁴ Within the Sharing Zone, licensees may operate freely on channels designated as primary to their own country, subject to certain power and antenna height limits.⁵ Licensees may also operate in the Sharing Zone on channels primary to the other country so long as they do not exceed specified signal strength limits at and beyond the border.⁶ Because of the limits on signal strength, such licensees are generally only able to operate low-powered systems on the other country’s primary spectrum within the Sharing Zone. Beyond the Sharing Zone, however, licensees in each country operate in the 800 MHz band without restriction.⁷

3. In July 2004, the Commission adopted the *800 MHz Report and Order*, which reconfigured the 800 MHz band in the U.S. to eliminate interference to public safety and other land

¹ 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 Radiocommunication Services Along the Common Border (June 8, 2012) (Amended Protocol).

² See Protocol Concerning the Use of the 806-824/851-869 and 896-901/935-940 MHz Band for Land Mobile Services Along the Common Border (June 16, 1994) (1994 Protocol).

³ 1994 Protocol at Article I, ¶ 1. The Sharing Zone is displayed in Appendix B, *infra*.

⁴ 1994 Protocol, Appendix A and B. See also 47 C.F.R. § 90.619(a) (2004).

⁵ *Id.* at Article III, ¶ 3. See also 47 C.F.R. § 90.619(a)(2), Table 1C (2004).

⁶ *Id.* at Article III, ¶ 4. See also 47 C.F.R. § 90.619(a)(2) (2004).

⁷ *Id.* at Article III, ¶ 6.

mobile communication systems operating in the band.⁸ The Commission, however, deferred adopting band reconfiguration plans for the border areas, noting that “implementing the band plan in areas of the United States bordering Mexico and Canada will require modifications to international agreements for use of the 800 MHz band in the border areas.”⁹ The Commission stated that “[t]he details of the border band plans will be determined in our ongoing discussions with the Mexican and Canadian governments.”¹⁰ The Commission also recognized that these international negotiations could cause rebanding in the border regions to take longer than rebanding in non-border regions.¹¹

4. Following adoption of the *800 MHz Report and Order*, U.S. and Mexico representatives initiated negotiations to amend the 1994 Protocol to accommodate 800 MHz band reconfiguration by U.S. licensees in the border region. The negotiations focused on modifying the 1994 Protocol in a manner that would enable NPSPAC licensees in the Sharing Zone to relocate to the 806-809/851-854 MHz band – which the 1994 Protocol allocated on a primary basis to Mexico.¹² In June 2012, these negotiations culminated in the signing of the Amended Protocol, which reapportions spectrum in the Sharing Zone between the U.S. and Mexico as follows:¹³

- The U.S. and Mexico each continue to have primary access to an equal number of channels in the 800 MHz band.¹⁴
- U.S. licensees have primary access to the lowest 6.25 x 6.25 megahertz paired block of spectrum (806-812.25/851-857.25 MHz).¹⁵
- Mexican licensees have primary access to the 6.25 x 6.25 megahertz paired block of spectrum immediately above the U.S. primary block (812.25-818.5/857.25-863.5 MHz).¹⁶
- U.S. and Mexican licensees may operate on channels in the other country’s primary spectrum provided they do not exceed the specified maximum signal strength at any point at or beyond the border.¹⁷
- U.S. and Mexican licensees share co-primary access to the uppermost 5.5 x 5.5 megahertz paired spectrum block (818.5-824/863.5-869 MHz).¹⁸

⁸ See Improving Public Safety Communications in the 800 MHz Band, *Report and Order*, WT Docket No. 02-55, 19 FCC Rcd 14969 (2004) (*800 MHz Report and Order*).

⁹ *Id.* at 14985-14986 ¶ 25.

¹⁰ *Id.* at 15063 ¶ 176.

¹¹ *Id.* at ¶ 176 n.471, 15125 ¶ 332.

¹² See *infra* Appendix C-1 and C-2.

¹³ See *infra* Appendix C-3.

¹⁴ Amended Protocol at Article I, ¶ 1.

¹⁵ *Id.* at Appendix II, Tables III and IV.

¹⁶ *Id.*

¹⁷ *Id.* at Article III, ¶ 4.

- Antenna height limits in the Sharing Zone are based on antenna height above average terrain on standard radials in the direction of the common border while maximum power limits apply only in the direction of the common border.¹⁹

5. The spectrum reapportionment under the Amended Protocol will require some incumbent operators in the Mexican portion of the Sharing Zone to relocate out of spectrum that is being converted from Mexico primary to U.S. primary status. These Mexican operators will relocate to 800 MHz channels primary to Mexico under the Amended Protocol or to channels outside the 800 MHz band.²⁰ In some instances, these relocations will need to be coordinated with relocations on the U.S. side to ensure an orderly transition. The Amended Protocol provides for a joint U.S. – Mexico task force to coordinate transition of incumbent licensees on both sides of the border to new channels consistent with the band plan specified in the Amended Protocol.²¹ In addition, Sprint and NII Holdings, Inc., the parent company of NII Holdings, Inc., have committed to cover the reasonable relocation costs of Mexican incumbents.²²

6. On August 17, 2012, the Bureau issued a *Fourth Further Notice of Proposed Rulemaking (Fourth FNPRM)* seeking comment on establishing and implementing a reconfigured 800 MHz channel plan for the NPSPAC regions bordering Mexico.²³ We received seven comments and four reply comments.²⁴

III. DISCUSSION

A. Post-Rebanding Domestic Channel Plan

7. With adoption of the Amended Protocol, the Bureau may now implement band reconfiguration (also known as rebanding) in the NPSPAC regions bordering Mexico, *i.e.*, Southern

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¹⁸ U.S. and Mexican licensees operating in the co-primary portion of the band will be permitted to operate up to a signal strength level at the border of -107 dBW/m² but may exceed this level if all counterpart operators agree to a higher level. *Id.* at Article III, ¶ 6.

¹⁹ *Id.* at Article III, ¶ 3, Table I. Licensees will retune to replacement channels at their existing power and antenna height. Licensees making modifications after rebanding, however, will need to comply with the power and antenna height limits listed in the Amended 800 MHz Protocol which, in most cases, are more flexible than limits in the previous agreement.

²⁰ Mexico is considering relocating the majority of Mexican incumbents to the 400 MHz band.

²¹ Amended Protocol at Article V.

²² *Id.* (stating “...the Administrations shall ensure that operators or related corporate entities operating in the co-primary allotment cover all such reasonable costs of incumbent operators in Mexico that are associated with the transition to comparable facilities on the replacement channels and that are consistent with understandings agreed to by the Task Force.”). *See also* Letter from James B. Goldstein, Director – Spectrum, Sprint Nextel, to Ambassador Philip L. Verveer, Deputy Assistant Secretary of State, United States Coordinator for International Communications and Information Policy, US Department of State (June 8, 2010).

²³ Improving Public Safety Communications in the 800 MHz Band, New 800 MHz Band Plan for U.S. – Mexico Sharing Zone, *Fourth Further Notice of Proposed Rulemaking*, WT Docket No. 02-55, 27 FCC Rcd at 9563 (2012) (*Fourth FNPRM*).

²⁴ Parties filing comments and reply comments are listed in Appendix E.

California (NPSPAC Region 5), Arizona (NPSPAC Region 3), New Mexico (NPSPAC Region 29), Texas – El Paso (NPSPAC Region 50) and Texas – San Antonio (NPSPAC Region 53).²⁵

8. The 800 MHz band in the U.S. consists of channels designated for various pool categories interleaved throughout the band. The pool categories include the General Category,²⁶ the Public Safety Pool,²⁷ the NPSPAC band,²⁸ the Business and Industrial Land Transportation (B/ILT) Pool²⁹ and the Specialized Mobile Radio (SMR) Pool.³⁰ In the *800 MHz Report and Order*, the Commission concluded that the underlying cause of the ongoing interference being encountered by public safety and other “high site” licensees was a “fundamentally incompatible mix of two types of communications systems: cellular-architecture multi-cell systems—used by ESMR and cellular telephone licensees—and high-site non-cellular systems—used by public safety, private wireless, and some SMR licensees.”³¹ Thus, by reconfiguring the band, the Commission addresses the root cause of the interference by “separating generally incompatible technologies.”³²

9. With this goal in mind, the Bureau proposed in the *Fourth FNPRM* a post-rebanding channel plan for licensees operating within the Sharing Zone in all the NPSPAC Regions bordering Mexico (*i.e.*, within 110 kilometers of the border with Mexico) based upon the terms of the Amended Protocol.³³ It also proposed a unique post-rebanding channel plan for licensees operating north of the Sharing Zone in NPSPAC Region 5 as well as the standard U.S. domestic post-rebanding channel plan for licensees operating north of the Sharing Zone in the remaining NPSPAC regions bordering Mexico.³⁴ The Bureau also proposed a universal change to the manner in which channels are assigned in the Sharing Zone—specifically, the *Fourth FNPRM* proposed to use standard channel centers for licensees in the Sharing Zone, rather than continuing to provide that those licensees would operate with offset channel centers.³⁵

10. As with channel plans previously adopted for non-border regions and the Canada border region, our goal is to reconfigure licensees within the band in a manner which separates—to the greatest extent possible—public safety and other non-cellular licensees from licensees in the band that employ

²⁵ The Commission delegated authority to the Bureau in 2007 to propose and adopt border area band plans once the United States reached the required agreements with Canada and Mexico. Improving Public Safety Communications in the 800 MHz Band, *Second Memorandum Opinion and Order*, WT Docket No. 02-55, 22 FCC Rcd 10467, 10494-95 (2007) (*800 MHz Second Memorandum Opinion and Order*).

²⁶ 47 C.F.R. § 90.615. All entities are eligible for licensing in the General Category. *Id.*

²⁷ 47 C.F.R. § 90.617(a)(2).

²⁸ 47 C.F.R. § 90.617(a)(1).

²⁹ 47 C.F.R. § 90.617(b).

³⁰ 47 C.F.R. § 90.617(d). SMR licensees who employ an 800 MHz cellular system are considered Enhanced Specialized Mobile Radio (ESMR) licensees. *See* 47 C.F.R. § 90.7.

³¹ *800 MHz Report and Order*, 19 FCC Rcd 14972 ¶ 2 (footnote omitted).

³² *Id.* at 14973 ¶ 3.

³³ *Fourth FNPRM*, 27 FCC Rcd at 9568-69 ¶¶ 15-18.

³⁴ *Id.* at 9569-71 ¶¶ 19-24.

³⁵ *Id.* at 9567-68 ¶¶ 10-14.

cellular technology.³⁶ Below we address the Bureau's various proposals from the *Fourth FNPRM* and adopt a post-rebanding channel plan for each NPSPAC region bordering Mexico.

11. As it did in the non-border and Canadian border NPSPAC regions, the 800 MHz Transition Administrator (TA) will designate post-rebanding replacement channels for licensees based upon the channel plan we adopt here.³⁷

12. Licensees along the U.S.-Mexico border will benefit from the post-rebanding channel plan because it accomplishes the Commission's goal for 800 MHz band reconfiguration, *i.e.* resolving an ongoing interference problem by separating incompatible technologies. Licensees also benefit because we harmonize the channel plan for Mexico border licensees with the channel plan used by licensees throughout the rest of the U.S. and preserve the ability for public safety licensees operating in the Sharing Zone to interoperate with counterpart licensees both inside and outside of the Sharing Zone.

13. Finally, adoption of a post-rebanding channel plan creates no additional costs for licensees along the U.S.-Mexico border because Sprint is responsible for paying the minimum cost necessary to accomplish rebanding in a reasonable, prudent, and timely manner.³⁸

1. Standard Channel Centers for Licensees in Sharing Zone

14. *Background.* In the *Fourth FNPRM*, the Bureau proposed a universal change to the manner in which channels are assigned to licensees in the Sharing Zone.³⁹ The Bureau explained, as illustrated below, that certain licensees in the Sharing Zone operate with channel centers offset 12.5 kilohertz lower in frequency than channel centers used by licensees throughout the rest of the U.S.⁴⁰

³⁶ *Id.* at 9566 ¶ 7.

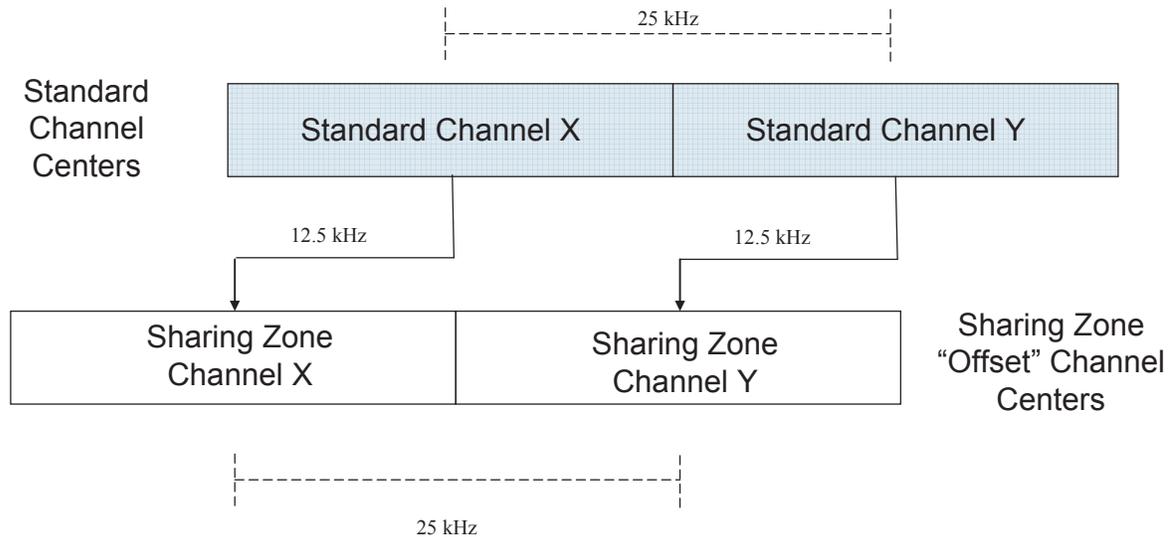
³⁷ *800 MHz Report and Order*, 19 FCC Rcd 15074 ¶ 198. For the limited purpose of band reconfiguration, inter-category sharing is permitted in order to give the TA maximum flexibility in assigning replacement channels to licensees. *See* 47 C.F.R. § 90.677.

³⁸ *Id.* *See also* Improving Public Safety Communications in the 800 MHz Band, *Memorandum Opinion and Order*, 22 FCC Rcd 9818 (2007).

³⁹ *Fourth FNPRM*, 27 FCC Rcd at 9567-68 ¶¶ 10-14.

⁴⁰ *Id.* at 9567 ¶ 10.

Figure 1 – Offset Channels In Sharing Zone



15. The Bureau explained that the Commission, in 1981, first considered adopting offset channel centers in the Sharing Zone in Southern California to limit co-channel interference between licensees in San Diego County (which operate within the Sharing Zone) and adjacent licensees operating outside the Sharing Zone in Los Angeles and Orange Counties.⁴¹ It noted, however, that, in June of 1982, the United States signed a frequency sharing agreement with Mexico which altered the Commission’s original 1981 “Southern California” proposal and required licensees throughout the entire Sharing Zone to operate using offset channel centers.⁴² As a result, most U.S. licensees in the Sharing Zone operate on offset channels regardless of where they are located along the border.

16. In the *Fourth FNPRM*, the Bureau revisited that approach and proposed adopting standard channel centers for licensees operating in the Sharing Zone.⁴³ It noted that changes to the 800

⁴¹ *Id.* at 9567-68 ¶ 11. See also Amendment of Part 90 of the Commission’s Rules to Release Spectrum in the 806-866 MHz Bands and Adopt Rules and Regulations Which Govern Their Use, *Further Notice of Proposed Rule Making*, Docket 79-191, 46 F.R. 37927, 37931 ¶ 19 (1981).

⁴² *Fourth FNPRM*, 27 FCC Rcd at 9567-68 ¶ 11. The 1982 agreement was a precursor agreement to the 1994 Protocol. See Agreement Between the United States of America Government and the Government of the United Mexican States Concerning Land Mobile Service Along the Common Border (June 18, 1982). See also Amendment of Part 90 of the Commission’s Rules to Release Spectrum in the 806-866 MHz Bands and Adopt Rules and Regulations Which Govern Their Use, *Second Report and Order*, 90 FCC 2d 1281, 1318-19 ¶¶ 185-186 (1982).

⁴³ *Fourth FNPRM*, 27 FCC Rcd at 9568 ¶ 12.

MHz band plan in the Amended Protocol provide new flexibility to eliminate offset channel centers.⁴⁴ The Bureau also concluded that inefficiencies created by use of offset channels in the Sharing Zone outweighed their benefit.⁴⁵ Finally, the Bureau recognized that some licensees outside the Sharing Zone in the five NPSCAC regions bordering Mexico also operate on offset channels, and the *Fourth FNPRM* proposed to move those licensees to standard channel centers.⁴⁶

17. Commenting parties overwhelmingly support eliminating offset channels.⁴⁷ The City of San Diego states “[c]hannel offsets between the Sharing Zone and areas north of this zone have created difficulties to licensing within the region as all frequencies are considered co-channel to two frequencies in the adjacent areas.”⁴⁸ The Border Area Licensees state that “use of offsets has been a source of considerable confusion in licensing for decades.”⁴⁹ Sprint states that “[w]hile this unique channel plan served its purpose for many years, it also added a layer of complexity to spectrum planning and spectrum use that can be eliminated through the new 800 MHz band allocation between the U.S. and Mexico.”⁵⁰

18. Only one commenting party supports retaining offset channels in the Sharing Zone. Peak Relay states that “[t]he use of offset channels in the Sharing Zone [has] served to minimize at least a major sub-set of the problems at very little cost ... to licensees.”⁵¹ Nonetheless, Peak Relay acknowledges that “the use of the offset channels in not an optimal solution, since for every channel there are (sic) a total of 7 kilohertz of signal overlap between a ‘main channel’ and its two associated offset channels.”⁵²

19. *Decision.* We eliminate offset channels in the Sharing Zone and adopt the post-rebanding channel plan for the Sharing Zone described below using standard channel centers as proposed in the *Fourth FNPRM*. We also eliminate offset channels outside the Sharing Zone in the five NPSPAC regions bordering Mexico. Consequently, we instruct the TA to designate post-rebanding replacement channels with standard channel centers for all licensees in the Sharing Zone and outside the Sharing Zone in the five NPSPAC regions bordering Mexico.⁵³

⁴⁴ *Id.*

⁴⁵ *Id.* at 9568 ¶ 13.

⁴⁶ *Id.* at 9568 ¶ 14.

⁴⁷ Comments of the City of San Diego, WT Docket 02-55 (filed Sep 27, 2012) at 2-3 (City of San Diego Comments); Comments of Sprint Nextel Corporation, WT Docket 02-55 (filed Oct 1, 2012) at 4 (Sprint Comments); Comments of the 800 MHz Public Safety Border Area Licensees, WT Docket 02-55 (filed Oct 2, 2012) at 7 (Border Area Licensees Comments); Comments of the San Diego County Sheriff’s Department, WT Docket 02-55 (filed Oct 15, 2012) at 3 (San Diego County Sheriff Comments).

⁴⁸ City of San Diego Comments at 2.

⁴⁹ Border Area Licensees Comments at 7.

⁵⁰ Sprint Comments at 4.

⁵¹ Comments of Peak Relay, Inc., WT Docket 02-55 (filed Oct 10, 2012) at 6 (emphasis in original) (Peak Relay Comments).

⁵² *Id.* at 8.

⁵³ There are also a limited number of licensees that operate on channels with standard channel centers within the Sharing Zone. We will retune these licensees if they are ineligible to operate on one or more of their current frequencies under the revised band plan (e.g., if their current channel(s) falls in the ESMR band), if their current (continued....)

20. The Bureau noted in the *Fourth FNPRM* that changes to the spectrum plan in the Amended Protocol provide us with new flexibility to resolve spectrum congestion issues in Southern California without needing to assign licensees to offset channels in the Sharing Zone.⁵⁴ As described in more detail below, we make maximum use in Los Angeles and Orange Counties of the 812.25-818.5/857.25-863.5 MHz channels, which are newly established as primary to Mexico in the Sharing Zone under the Amended Protocol. These channels are sparsely used in San Diego County but may be used without restriction north of the Sharing Zone. In this manner, we can assign all licensees in Southern California to channels with standard channel centers without creating co-channel conflicts.

21. Moreover, we agree with commenting parties that describe how operation on offset channels in the Sharing Zone results in inefficient use of spectrum.⁵⁵ For example, Figure 1 above depicts visually the bandwidth overlap that exists between an 800 MHz channel with a standard channel center and an 800 MHz channel with a center frequency offset 12.5 kilohertz lower in frequency.⁵⁶ Because of this bandwidth overlap, the Bureau has always considered—for licensing purposes—that each “offset” channel in the Sharing Zone has a co-channel relationship to both the upper and lower adjacent-standard channel outside the Sharing Zone.⁵⁷

22. Consequently, each licensee operating today in the Sharing Zone on an offset channel must maintain co-channel separation to (or obtain a concurrence letter from) licensees operating outside the Sharing Zone on the standard channel above and below their offset channel.⁵⁸ This scenario works in reverse for licensees operating on standard channels near the edge of (but outside) the Sharing Zone. Thus, licensees along the U.S.-Mexico border will benefit from our decision to eliminate offset channels in the Sharing Zone because it will result in a more efficient harmonized channeling plan whereby licensees need only maintain co-channel separation to incumbent licensees operating on the same standard channel. Licensees also benefit from our decision to eliminate offset channels because they no longer will need to program an additional set of “offset” or “standard” channels into their radios in order to interoperate across the northern edge of the Sharing Zone as described by the Bureau in the *Fourth FNPRM*.⁵⁹

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channel(s) falls in the new Mexico primary allotment and the licensee’s current facilities fail to meet signal strength restrictions at or beyond the border, or if one or more of their frequencies is needed to accommodate another reconfiguring licensee.

⁵⁴ *Fourth FNPRM*, 27 FCC Rcd at 9568 ¶ 12. See also Amended Protocol at Appendix II.

⁵⁵ See City of San Diego Comments at 2; Border Area Licensees Comments at 7 and Sprint Comments at 4.

⁵⁶ The authorized bandwidth for an 800 MHz channel is 20 kHz. See 47 C.F.R. § 90.209(b)(5). Consequently, two channels offset in frequency by 12.5 kHz as depicted in Figure 1 results in 7.5 kHz of authorized bandwidth overlap.

⁵⁷ The channel plan in the NPSPAC segment of the band specifies 25 kHz bandwidth channels spaced every 12.5 kHz. See 47 C.F.R. § 90.613. Licensees operating in the NPSPAC segment of the band must, however, use equipment which complies with a stricter emission mask than equipment approved to operate outside the NPSPAC segment of the band. See 47 C.F.R. § 90.210. The stricter emission mask permits NPSPAC licensees to operate adjacent-channels with less geographic separation.

⁵⁸ Licensees must generally maintain a geographic separation of 113 kilometers from co-channel stations unless they satisfy the technical criteria specified in the short-spacing separation table. See 47 C.F.R. § 90.621(b). Applicants may seek to operate at distances less than those specified in the short-spacing separation table provided they obtain a concurrence letter from each short-spaced co-channel licensee. See 47 C.F.R. § 90.621(b)(5).

⁵⁹ *Fourth FNPRM*, 27 FCC Rcd at 9568 ¶ 13

23. We disagree with Peak Relay's proposal to maintain offset channels in the Sharing Zone to alleviate, at least in part, what it describes as the "seemingly-intractable" deficiency of channels in Southern California.⁶⁰ Peak Relay proposes maintaining offset channels in the Sharing Zone but resolving the bandwidth overlap by establishing a schedule for "narrowbanding."⁶¹ Narrowbanding 800 MHz licensees along the U.S.-Mexico border, however, would not only further complicate public safety interoperability, it is an unnecessary measure because the flexibility afforded by the Amended Protocol allows us to assign channels in Southern California in a manner which avoids co-channel conflicts.

24. Finally, our decision to eliminate offset channels in the Sharing Zone and outside the Sharing Zone in the five NPSPAC regions bordering Mexico creates no additional costs for incumbent licensees because, as noted above, Sprint will pay the reasonable costs of retuning licensees from offset channels to comparable facilities on channels with standard channel centers.⁶²

2. Channel Plan for Sharing Zone

25. *Background.* In the *Fourth FNPRM*, the Bureau proposed a post-rebanding channel plan for the Sharing Zone based upon the terms of the Amended Protocol.⁶³ The Bureau proposed assigning channels on U.S. primary spectrum in the lower segment of the band (806-812.25/851-857.25 MHz) to the NPSPAC band, Public Safety Pool, and General Category.⁶⁴ Channels on Mexico primary spectrum in the middle segment of the band (812.25-818.5/857.25-863.5 MHz) would be assigned to the General Category.⁶⁵ Under the Bureau's proposal, an ESMR-dividing line would be established at 818.5/863.5 MHz and U.S.-Mexico co-primary spectrum in the upper segment of the band (818.5-824/863.5-869 MHz) would be assigned to the SMR Pool for use by licensees operating high-density cellular systems.⁶⁶

26. Parties who commented on a channel plan for the Sharing Zone generally support the Bureau's proposal.⁶⁷ The City of Laredo states that it supports the proposed channel plan because it "accomplishes the primary goal of 800 MHz band reconfiguration -- eventual separation of public safety and compatible non-cellular licensees from licensees that deploy cellularized technology in and adjacent to the 800 MHz band."⁶⁸

27. Peak Relay, however, expresses concern that no pool channels are allocated for the B/ILT or SMR categories in the Sharing Zone and questions if the Bureau's intent is to relocate licensees in these categories to the 900 MHz band.⁶⁹ Sprint suggests that the Bureau lower the ESMR-dividing line in

⁶⁰ Peak Relay Comments at 8.

⁶¹ *Id.* at 12.

⁶² *See supra* ¶ 13.

⁶³ *Fourth FNPRM*, 27 FCC Rcd at 9568-69 ¶¶ 15-18.

⁶⁴ *Id.* at 9568-69 ¶¶ 15-16.

⁶⁵ *Id.* at 9569 ¶¶ 17.

⁶⁶ *Id.* at 9569 ¶¶ 18.

⁶⁷ San Diego County Sheriff Comments at 3-4; Border Area Licensees Comments at 7; Sprint Comments at 1; Reply Comments of the City of Laredo, Texas, WT Docket 02-55 (filed Oct 10, 2012) at 2 (Laredo Reply Comments).

⁶⁸ Laredo Reply Comments at 2.

⁶⁹ Peak Relay Comments at 10.

the Sharing Zone to 817/862 MHz to align it with the EMSR-dividing line north of the Sharing Zone.⁷⁰ Under Sprint's proposal, the Mexico primary channels above this line would be assigned to the ESMR category rather than to the General Category.⁷¹

28. *Decision.* For the Sharing Zone, we adopt the channel plan proposed in the *Fourth FNPRM* with the adjustment to the ESMR-dividing line proposed by Sprint as depicted in Appendix C-4 (*i.e.*, we set the ESMR-dividing line at 817/862 MHz).⁷² Furthermore, we emphasize that we will not require any licensee in the Sharing Zone to relocate out of the 800 MHz band. All licensees will be provided with comparable facilities on post-rebanding replacement channels within the band.

29. Under the terms of the Amended Protocol, the 806-809/851-854 MHz band segment is primary to licensees in the U.S.⁷³ We therefore establish post-rebanding NPSPAC channels in this band segment in the Sharing Zone consistent with the post-rebanding NPSPAC band throughout the rest of the U.S.⁷⁴ Thus, in the Sharing Zone, the NPSPAC band will consist of 225 channels (with 12.5 kHz spacing) and five mutual aid channels (with 25 kHz spacing).⁷⁵ Incumbent NPSPAC licensees in the Sharing Zone will generally relocate to a spectral position 15 megahertz lower in frequency from their current location in the band to the new NPSPAC band.⁷⁶

30. As proposed in the *Fourth FNPRM*,⁷⁷ we also assign the 85 U.S. primary channels immediately above the NPSPAC band to the Public Safety Pool.⁷⁸ In this manner, the number of pool channels available to public safety eligible entities will remain the same after band reconfiguration as before band reconfiguration.⁷⁹ Furthermore, as proposed in the *Fourth FNPRM*,⁸⁰ we assign the remaining 45 channels in the U.S. primary band segment at 809-812.25/854-857.25 MHz to the General Category. B/ILT and SMR licensees operating non-cellular systems will generally retune to these channels.⁸¹ We assign these channels to the General Category rather than divide them between the B/ILT and SMR Pool categories because the number of licensees in either category will vary along the border. Therefore, the General Category provides the most flexibility to accommodate incumbent licensees and allows licensees from any of the pool categories to add these channels to their systems for future use. In

⁷⁰ Sprint Comments at 5-6.

⁷¹ *Id.*

⁷² *See infra* Appendix C-4.

⁷³ *See* Amended Protocol at Appendix II.

⁷⁴ *See* § 90.619(a)(5)(i) in Appendix D, *infra*.

⁷⁵ *Id.*

⁷⁶ Some repacking of NPSPAC licensees may be needed, including relocating certain licensees from pool channels, if necessary, or to Mexico primary channels if the licensee is currently operating on Mexico primary NPSPAC channels.

⁷⁷ *Fourth FNPRM*, 27 FCC Rcd at 9569 ¶ 16.

⁷⁸ *See* § 90.619(a)(5)(ii) in Appendix D, *infra*.

⁷⁹ *See infra* Appendix C-4.

⁸⁰ *Fourth FNPRM*, 27 FCC Rcd at 9569 ¶ 16.

⁸¹ *See* § 90.619(a)(5)(iii) in Appendix D, *infra*.

addition, as requested by Sprint,⁸² we clarify that the TA may designate replacement channels for licensees in the Sharing Zone on any of the 130 U.S. primary channels above the NPSPAC band without regard to pool eligibility in order to accommodate individual licensee co-channel separation or combiner channel spacing requirements.⁸³

31. We assign the first 190 channels in the Mexican primary segment of the band at 812.25-818.5/857.25-863.5 MHz to the General Category and the remaining 60 channels to the SMR Pool.⁸⁴ We deviate from our original proposal to assign all these Mexico primary channels to the General Category⁸⁵ in order to adjust the ESMR-dividing line as detailed below. Licensees in the Sharing Zone may operate on these channels subject to the signal strength limits at and beyond the border allowed by the Amended Protocol.⁸⁶ Licensees operating today on Mexico primary channels in the Sharing Zone will retune to the first 190 channels if there are no U.S. primary channels available to accommodate them.⁸⁷

32. Finally, we establish the ESMR-dividing line at 817/862 MHz and assign all channels above this line to the SMR Pool for use by licensees operating high-density cellular systems including the 60 Mexico primary channels noted above as well as all the U.S.-Mexico co-primary channels.⁸⁸ We deviate from our original proposal, which was to draw the ESMR dividing line at 818.5/863.5 MHz,⁸⁹ and align the ESMR-dividing line in the Sharing Zone with the ESMR-dividing line for the majority of the U.S. We make this change because Sprint has made the case that it can operate on Mexico primary channels through “cooperative business agreements”⁹⁰ with NII Holdings, Inc. and because we agree with Sprint that only ESMR licensees should operate on the Mexico primary channels in the 817-818.5/862-863.5 MHz band segment due to “the 800 MHz ESMR band channel allocation north of the Sharing Zone.”⁹¹

3. Channel Plan for NPSPAC Region 5 (Southern California)

33. *Background.* In the *Fourth FNPRM*, the Bureau proposed a unique post-rebanding channel plan for licensees operating north of the Sharing Zone in NPSPAC Region 5.⁹² The proposed

⁸² Sprint Comments at 5.

⁸³ See *supra* n. 37. See also *Fourth FNPRM*, 27 FCC Rcd at 9569 n. 33.

⁸⁴ See §§ 90.619(a)(5)(iii) and (iv) in Appendix D, *infra*.

⁸⁵ *Fourth FNPRM*, 27 FCC Rcd at 9569 ¶ 17.

⁸⁶ See Amended Protocol at Article III, ¶ 4. See also *supra* n.18.

⁸⁷ See San Diego County Sheriff Comments at 7.

⁸⁸ See § 90.619(a)(5)(iv) in Appendix D, *infra*.

⁸⁹ *Fourth FNPRM*, 27 FCC Rcd at 9569 ¶ 18.

⁹⁰ Sprint Comments at 7.

⁹¹ Sprint Comments at 5-6.

⁹² *Fourth FNPRM*, 27 FCC Rcd at 9569-70 ¶¶ 19-23. NPSPAC Region 5 includes the following counties in California: Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Ventura.

Region 5 channel plan is identical to the post-rebanding channel plan used in non-border regions except that there is no Expansion or Guard Band in the 815-817/860-862 MHz segment of the band.⁹³

34. The Bureau explained how Region 5 encompasses Southern California with the southern portion of the region—approximately one-third of the region’s total geographic area—included in the Sharing Zone while the remaining two-thirds of the region lies outside the Sharing Zone, including most of Los Angeles and Orange Counties.⁹⁴ Because Region 5 is the most congested public safety region along the U.S.-Mexico border, the Bureau concluded that the Expansion and Guard Bands should be eliminated to provide spectrum adequate to accommodate the large number of non-ESMR incumbents operating within the region north of the Sharing Zone.⁹⁵ The Bureau explained that its proposal maximizes use outside the Sharing Zone in Region 5 of channels that are primary to Mexico inside the Sharing Zone, thus avoiding co-channel conflicts within the region while accommodating all incumbent licensees on post-rebanding replacement channels.⁹⁶

35. Sprint supports the proposed NPSPAC Region 5 channel plan. It states that elimination of the Expansion and Guard Bands in areas north of the Sharing Zone in Region 5 “is necessary to ensure that no U.S. incumbent licensee loses spectrum and to ensure that there is enough 800 MHz replacement spectrum to implement 800 MHz reconfiguration, given the serious spectrum congestion in Southern California.”⁹⁷

36. Several parties, however, oppose eliminating the Guard Band in Region 5.⁹⁸ The Border Area Licensees argue that since Sprint is converting to broadband technology “it is inappropriate at this time to place commercial broadband services so close to public safety operations without actual evidence that interference will not occur.”⁹⁹ The Orange County Sheriff contends that a guard band is necessary and “that receiving reconfigured channels in the 861-862 MHz segment is contrary to the frequency isolation and spacing objectives of *800 MHz Reconfiguration Report and Order*.”¹⁰⁰ The Orange County

⁹³ *Fourth FNPRM*, 27 FCC Rcd at 9569-70 ¶ 19. Public Safety licensees are generally retuned to channels below the Expansion Band (815-816/860-861 MHz) unless they willingly chose to remain. *See 800 MHz Report and Order*, 19 FCC Rcd 15053 ¶ 154. Furthermore, no licensee may be involuntarily retuned to the Guard Band (816-817/861-862 MHz) and any licensee choosing to relocate to the Guard Band must operate with increased minimum median received power levels in order to be eligible for protection from unacceptable interference. *See 800 MHz Report and Order*, 19 FCC Rcd 15054-55 ¶¶ 157-158.

⁹⁴ *Fourth FNPRM*, 27 FCC Rcd at 9569-70 ¶ 19. In NPSPAC Region 5, the Sharing Zone encompasses San Diego and Imperial Counties, the southern portions of Orange and Riverside Counties and portions of Santa Catalina Island and all of San Clemente Island, both of which are part of Los Angeles County. The remaining counties and portions of counties in NPSPAC Region 5 are outside of the Sharing Zone.

⁹⁵ *Fourth FNPRM*, 27 FCC Rcd at 9569-70 ¶ 19.

⁹⁶ *Id.*

⁹⁷ Sprint Comments at 2

⁹⁸ Border Area Licensees at 7; Comments of Orange County Sheriff’s Department, WT Docket 02-55 (filed Oct 1, 2012) at 3 (Orange County Sheriff’s Comments); Reply Comments of Orange County Sheriff’s Department, WT Docket 02-55 (filed Oct 15, 2012) at 1 (Orange County Sheriff’s Reply Comments).

⁹⁹ Border Area Licensees at 11.

¹⁰⁰ Orange County Sheriff’s Comments at 3.

Sheriff also suggests that the Bureau consider moving ESMR operations higher in the band to accommodate the large number of non-ESMR incumbents while still providing a guard band.¹⁰¹

37. *Decision.* For licensees operating north of the Sharing Zone in NPSPAC Region 5, we adopt the channel plan proposed in the *Fourth FNPRM*, which is depicted in Appendix C-5.¹⁰² We decline to establish an Expansion or Guard Band in Region 5, but remind all ESMR licensees, including Sprint, that the Commission's rules strictly obligate all ESMR licensees to abate interference to non-cellular licensees in the 800 MHz band.¹⁰³ This interference abatement obligation applies regardless of whether it restricts use of channels in the lower portion of the ESMR band.

38. Under our channel plan, we establish post-rebanding NPSPAC channels in the 806-809/851-854 MHz segment of the band consistent with the Sharing Zone and all other regions in the U.S.¹⁰⁴ NPSPAC licensees operating north of the Sharing Zone in Region 5 will generally relocate 15 megahertz lower in frequency from their current location in the band to the new NPSPAC band.¹⁰⁵

39. We assign the 320 channels above the new NPSPAC band in the 809-817/854-862 MHz band segment to the General Category, Public Safety, B/ILT and SMR Pools consistent with the post-rebanding channel plan for the rest of the U.S as we proposed in the *Fourth FNPRM*.¹⁰⁶ All licensees from these categories operating north of the Sharing Zone in Region 5 will relocate to these replacement channels. Furthermore, we establish an ESMR dividing line at 817/862 MHz and assign the remaining 280 channels to the SMR Pool for use by licensees operating high-density cellular systems.¹⁰⁷

40. Because the 130 channels immediately above the NPSPAC band (809-812.25/854.0-857.25 MHz) will likely be unavailable in the portion of Region 5 outside the Sharing Zone due to co-channel spacing requirements necessary to accommodate intensive use by incumbent licensees inside the Sharing Zone, we eliminate the Expansion and Guard Bands for licensees operating north of the Sharing Zone in Region 5. As explained in the *Fourth FNPRM*,¹⁰⁸ Region 5 licensees operating outside the Sharing Zone have unrestricted access to channels designated as primary to Mexico in the Sharing Zone (812.25-817/857.25-862 MHz).¹⁰⁹ Consequently, by lifting restrictions on the TA's ability to assign

¹⁰¹ Orange County Sheriff's Reply Comments at 1-2.

¹⁰² See *infra* Appendix C-5.

¹⁰³ See 47 C.F.R. § 90.673(a) ("Any licensee who, knowingly or unknowingly, directly or indirectly, causes or contributes to causing unacceptable interference to a non-cellular licensee in the 800 MHz band, as defined in this chapter, shall be strictly accountable to abate the interference, with full cooperation and utmost diligence, in the shortest time practicable.").

¹⁰⁴ *Fourth FNPRM*, 27 FCC Rcd at 9570 ¶ 20. See also 47 C.F.R. § 90.617(a)(1) (specifying channels available in the NPSPAC band).

¹⁰⁵ *Fourth FNPRM*, 27 FCC Rcd at 9570 ¶ 20.

¹⁰⁶ *Id.* at 9569 ¶ 19 and 9592, Appendix C-5. See also 47 C.F.R. §§ 90.615, 90.617(a), (b) and (d) (specifying channels available in the General Category, Public Safety, B/ILT and SMR Pools).

¹⁰⁷ *Fourth FNPRM*, 27 FCC Rcd at 9569 ¶ 19 and 9592, Appendix C-5. See also 47 C.F.R. § 90.617(e) (specifying channels available in the SMR Pool for licensees operating high-density cellular systems).

¹⁰⁸ *Fourth FNPRM*, 27 FCC Rcd at 9570 ¶ 20.

¹⁰⁹ *Fourth FNPRM*, 27 FCC Rcd at 9570 ¶ 20. The minimum separation between co-channel systems is typically 113 kilometers unless licensees satisfy the requirements of a short-spacing table, in which case, co-channel systems (continued....)

licensees to replacement channels in the 815-817/860-862 MHz band segment we make additional channel capacity available below the ESMR dividing line to compensate for the 130 channels that likely will be unavailable.¹¹⁰

41. Thus, under our decision, Region 5 public safety, B/ILT and non-cellular SMR licensees north of the Sharing Zone will re-tune to replacement channels in the interleaved segment of the band including channels in the 815-817/860-862 MHz segment of the band (Expansion and Guard Bands in non-border regions). Furthermore, Region 5 public safety licensees currently operating in the 815-816/860-861 MHz band segment (Expansion Band for non-border) will generally remain on these channels rather than re-tune to channels lower in the band.

42. Nonetheless, as explained in the *Fourth FNPRM*, Region 5 licensees assigned to replacement channels in the 815-817/860-862 MHz band segment will receive full protection against unacceptable interference from licensees operating cellular systems above 817/862 MHz.¹¹¹ In addition, licensees assigned channels in the 816-817/861-862 MHz band segment (the Guard Band in non-border regions) will not be required to operate with increased median received power levels in order to qualify for protection from unacceptable interference.¹¹² Furthermore, we instruct the TA to designate replacement channels in Region 5 in a manner which maximizes to the extent possible the spectral separation between public safety licensees and the ESMR segment of the band.

43. We acknowledge the concern expressed by some commenting parties about eliminating the Guard Band in Region 5.¹¹³ We note, however, the Commission and the Bureau have consistently taken similar action when establishing a post-rebanding channel plan for areas of the country where spectrum congestion is an issue. For instance, the Commission eliminated the Guard Band and reduced the Expansion Band to 0.5 MHz in the Atlanta, Georgia market in order to accommodate both Southern LINC and Sprint in an expanded ESMR band.¹¹⁴ Furthermore, the Bureau eliminated both the Expansion and Guard Bands along the entire Canada border stating “[b]ecause of the limited amount of U.S. primary spectrum available in the Canadian border regions, we do not create an Expansion Band or Guard Band in Regions 1-6.”¹¹⁵

44. The same approach we took along the Canada border is essential here if we are to accommodate all licensees in Region 5 with comparable spectrum within the band. As noted above, we will only be able to provide all non-ESMR licensees in the region with comparable facilities on

(Continued from previous page) _____

may be spaced as close as 88 kilometers. Furthermore, some mountain top sites in Southern California require a greater co-channel separation than 113 kilometers. *See* 47 C.F.R. § 90.621(b).

¹¹⁰ We note that certain licensees operating north of the Sharing Zone in NPSPAC Region 5, which would otherwise not need to reband under the standard non-border Band Plan, will be required to retune to channels higher in the band in order to clear channels for licensees located in the Sharing Zone.

¹¹¹ *Fourth FNPRM*, 27 FCC Rcd at 9570 ¶ 22. *See also* 47 C.F.R. § 90.672.

¹¹² *Fourth FNPRM*, 27 FCC Rcd at 9570 ¶ 22. *See also* 47 C.F.R. § 90.617(k).

¹¹³ Border Area Licensees at 7; Orange County Sheriff’s Comments at 3; Orange County Sheriff’s Reply Comments at 1.

¹¹⁴ *See* Improving Public Safety Communications in the 800 MHz Band, *Memorandum Opinion and Order*, WT Docket No. 02-55, 20 FCC Rcd 16035-36 ¶¶ 46-48 (WTB 2005).

¹¹⁵ *See* Improving Public Safety Communications in the 800 MHz Band, *Second Report and Order*, WT Docket 02-55, 23 FCC Rcd 7605, 7613 ¶18 (PSHSB 2008).

replacement channels below the ESMR line at 817/862 MHz by lifting restrictions on the TA's ability to designate replacement channels for licensees in the 815-817/860-862 MHz band segment (the Expansion and Guard Bands in the non-border areas). Absent the lifting of these restrictions, we would be unable to accommodate all Region 5 non-ESMR incumbent licensees below the ESMR line.

45. Finally, we continue to place strict responsibility on Sprint to manage its network in a manner that avoids causing unacceptable interference to licensees operating below the ESMR line in Region 5 despite the absence of an Expansion and Guard Band.¹¹⁶ Sprint may have to avoid using spectrum at the lower end of the ESMR band in Region 5 in order to fulfill its network management responsibility, thus creating a *de facto* guard band.¹¹⁷ We decline, however, to move the ESMR line higher in the band to create a Guard Band above 817/862 MHz as suggested by the Orange County Sheriff.¹¹⁸ When presented with a similar proposal for the Canada border, the Bureau stated that “mandating a *de lege* guard band [] by moving the ESMR line ... would run contrary to the *800 MHz Second Report and Order* and would represent an unnecessary and inefficient use of spectrum in an area in which U.S. spectrum is scarce.”¹¹⁹ We come to the same conclusion here.

4. Channel Plan for Remaining Border-Area NPSPAC Regions

46. *Background.* For the four remaining NPSPAC regions bordering Mexico other than Region 5, the *Fourth FNPRM* proposed the standard post-rebanding channel plan for licensees operating north of the Sharing Zone.¹²⁰ The proposed channel plan would be identical to the channel plan used by licensees in all non-border regions and would include both an Expansion Band and Guard Band.¹²¹ The Bureau stated that the standard channel plan could accommodate all licensees north of the Sharing Zone in these four regions because, unlike Region 5, these regions are not as heavily congested.¹²²

47. No commenting party opposes adoption of the standard post-rebanding channel plan for licensees operating north of the Sharing Zone in the remaining NPSPAC regions. Sprint states that for these regions it “does not oppose retention of the 800 MHz Expansion Band and 800 MHz Guard Band in the non-Sharing Zone.”¹²³ Nonetheless, Sprint suggests that public safety licensees no longer be presumptively relocated from the Expansion Band and, instead, would require each such licensee to make an “affirmative election” if it chooses to be retuned out of the Expansion Band.¹²⁴

48. The Border Area Licensees, however, oppose Sprint's proposal because they believe band reconfiguration could be complicated in these regions if the TA “assumes that such licensees are not

¹¹⁶ See 47 C.F.R. § 90.672.

¹¹⁷ See e.g. County of Genesee, New York and Sprint Nextel Corp., *Memorandum Opinion and Order*, WT Docket No. 02-55, 26 FCC Rcd 12772, 12781 ¶ 31 (PSHSB 2011) (*Genesee County MO&O*).

¹¹⁸ Orange County Sheriff's Reply Comments at 1-2.

¹¹⁹ *Genesee County MO&O*, 26 FCC Rcd 12781 ¶ 31.

¹²⁰ *Fourth FNPRM*, 27 FCC Rcd at 9571 ¶ 24.

¹²¹ *Id.*

¹²² *Id.*

¹²³ Sprint Comments at 3.

¹²⁴ *Id.*

moving” and makes no accommodation in frequency assignments for public safety licensees who chose to relocate from the Expansion Band.¹²⁵

49. *Decision.* We adopt the standard post-rebanding channel plan for licensees operating north of the Sharing Zone in NPSPAC Regions 3 (Arizona), 29 (New Mexico), 50 (Texas – El Paso) and 53 (Texas – San Antonio) as depicted in Appendix C-6.¹²⁶ We decline to adopt Sprint’s suggestion for the Expansion Band and will continue to presume that public safety licensees will relocate out of the Expansion Band unless they affirmatively choose to remain.

50. We establish post-rebanding NPSPAC channels in the 806-809/851-854 MHz segment of the band.¹²⁷ NPSPAC licensees operating north of the Sharing Zone in these regions will generally relocate 15 megahertz lower in frequency from their current location in the band to the new NPSPAC band.

51. As with all non-border regions, and as proposed in the *Fourth NPRM*, we assign the 320 channels above the new NPSPAC band in the 809-817/854-862 MHz band segment to the General Category, Public Safety, B/ILT and SMR Pools.¹²⁸ All non-ESMR licensees from these categories operating north of the Sharing Zone will relocate to these replacement channels.¹²⁹ We establish the Expansion Band in the 815-816/860-861 MHz band segment. As noted above, public safety licensees operating in the Expansion Band will re-tune to channels lower in the band unless they affirmatively choose to remain. We see no reason to change our policy regarding Expansion Band elections as suggested by Sprint and believe such a change at this stage of the band reconfiguration program would only create confusion for licensees who occupy the Expansion Band. Furthermore, we find Sprint’s proposal an untimely petition for reconsideration of the *800 MHz Report and Order*, which established the policy of relocating public safety licensees out of the Expansion Band unless they affirmatively elect to remain.¹³⁰

52. As proposed, we establish the Guard Band in the 816-817/861-862 MHz band segment. As with all non-border regions, no licensee will be involuntarily returned to the Guard Band and any licensee choosing to relocate to the Guard Band must operate with increased minimum median received power levels in order to be eligible for protection from unacceptable interference.¹³¹ Finally, as proposed, we establish the ESMR dividing line at 817/862 MHz and assign the remaining 280 channels to the SMR Pool for use by licensees operating high-density cellular systems.¹³²

¹²⁵ Border Area Licensees Reply Comments at 2.

¹²⁶ See *infra* Appendix C-6.

¹²⁷ See 47 C.F.R. § 90.617(a)(1).

¹²⁸ *Fourth FNPRM*, 27 FCC Rcd at 9571 ¶ 24 and 9593, Appendix C-6. See also 47 C.F.R. §§ 90.615, 90.617(a), (b) and (d) (specifying channels available in the General Category, Public Safety, B/ILT and SMR Pools).

¹²⁹ As with NPSPAC Region 5, certain licensees in these regions operating north of the Sharing Zone, which would otherwise not need to reband, will be required to retune to channels higher in the band in order to clear channels for licensees located in the Sharing Zone. See *supra* n. 110.

¹³⁰ *800 MHz Report and Order*, 19 FCC Rcd 15053 ¶ 154.

¹³¹ See 47 C.F.R. § 90.617(k).

¹³² See 47 C.F.R. § 90.617(e).

B. Implementation Issues

53. We now turn to the sequencing and timing of rebanding activity along the U.S.-Mexico border. The TA will designate replacement channels for licensees that must retune their systems according to the channel plans we adopt here.¹³³ As proposed, the transition period for rebanding along the U.S.-Mexico border will begin 60 days after the effective date of this *Fifth Report and Order*.¹³⁴ During the transition period, licensees will develop their reconfiguration plans, negotiate Frequency Reconfiguration Agreements (FRAs) with Sprint, and complete the rebanding process.

54. Rebanding in the NPSPAC regions bordering Mexico will proceed in stages and require close coordination with Mexican operators that must relocate under the Amended Protocol. In the *Fourth FNPRM*, the Bureau proposed a 30-month transition period for licensees along the border with Mexico to complete the rebanding process.¹³⁵ While Sprint supports this proposal, other commenters disagree and suggest that a longer transition period is needed due to particular challenges associated with rebanding in the border region.¹³⁶ As discussed in more detail below, we believe that these challenges can be addressed within a 30-month transition period, but we will also evaluate progress as of the 18th month of the transition period to determine whether additional time is needed based upon circumstances beyond licensees' control.

55. We direct the TA to develop and submit, within 60 days of the effective date of this *Fifth Report and Order*, a detailed reconfiguration timetable with milestones for completion of each stage of the reconfiguration process. This timetable should take into account variations in licensee characteristics, band plans, and other relevant factors. The timetable should enumerate the specific steps required in each NPSPAC region to implement both Stage 1 relocation of non-NPSPAC licensees and Stage 2 relocation of NPSPAC licensees.

1. Planning, Negotiation and Mediation

56. *Background.* The Bureau proposed an expedited timeline in the *Fourth FNPRM* for licensees to complete planning, negotiation, and, if necessary, mediation.¹³⁷ The Bureau stated that the experience gained in rebanding non-border regions and the Canada border region has enabled it and the TA to develop more efficient procedures for licensees to obtain planning funding, conduct planning,

¹³³ The TA will also provide replacement frequency assignments to those licensees adjacent to the Sharing Zone that have not previously been assigned frequencies due to their proximity to the Sharing Zone. For purposes of planning, negotiation, and implementation, these licensees are subject to the same rebanding deadlines set forth in this order that apply to licensees within the Sharing Zone.

¹³⁴ The Bureau will release a public notice announcing the official kick-off date. Furthermore, the filing freeze on new applications along the U.S.-Mexico border will remain in effect until the Bureau establishes a timeline for band reconfiguration and announces a date by which it can again begin accepting new applications. See Public Safety and Homeland Security Bureau Extends Voluntary 800 MHz Rebanding Negotiation Period for Wave 4 Border Area NPSPAC and Non-NPSPAC Licensees Along the U.S.-Mexico Border Pending Establishment of Negotiation Timetable, *Public Notice*, 27 FCC Rcd 7312 (2012).

¹³⁵ *Fourth FNPRM*, 27 FCC Rcd at 9571 ¶ 25.

¹³⁶ See Comments of Raymond L. Grimes, Telecommunications Consultant, WT Docket 02-55 (filed Sep 26, 2012) at 4 (Raymond Grimes Comments); Border Area Licensees Comments at 12-13; San Diego County Sheriff Comments at 5-6; Laredo Reply Comments at 2-3; Orange County Sheriff's Reply Comments at 2.

¹³⁷ *Fourth FNPRM*, 27 FCC Rcd at 9571 ¶ 26.

prepare cost estimates, and negotiate an FRA.¹³⁸ Consequently, the Bureau proposed requiring licensees to complete planning and submit a cost estimate to Sprint within 90 to 110 days¹³⁹ after which the parties would have 30 days to negotiate an FRA.¹⁴⁰

57. Several commenting parties express concern over the expedited timeline for planning, negotiation and mediation proposed by the Bureau.¹⁴¹ The City of San Diego states that “[t]he change from offset to non-offset frequencies and the possibility of multiple frequency exchanges due to the multi-step approach brings additional challenges to the City’s planning.”¹⁴² Therefore, the City of San Diego proposes “a period of at least 150 days” for planning and negotiating.¹⁴³ The Border Area Licensees opine that “the need for multiple retunes by some licensees” and “the size and complexity of 800 MHz systems in the Southwest” warrant “extending the planning deadlines by two months.”¹⁴⁴ Sprint, however, supports the Bureau’s proposal for rapid planning and negotiating.¹⁴⁵ Sprint argues that “[a]n up-front blanket adjustment for additional time to perform basic aspects of reconfiguration ... should not be granted prior to even starting band reconfiguration.”¹⁴⁶

58. *Decision.* We adopt the expedited timeline proposed in the *Fourth FNPRM* for planning, negotiation, and mediation periods. We believe many of the activities required for planning, such as equipment inventory, are not affected by the need for licensees to transition from offset to standard channels or to perform multi-step retunes and can, therefore, be accomplished within the expedited timeframe proposed in the *Fourth FNPRM*. Thus, we agree with Sprint that it is more appropriate to adopt the expedited timeline for planning, negotiation and mediation rather than extend deadlines for all licensees including those who need no additional time. As discussed in more detail below, licensees such as the City of San Diego and the Border Area Licensees that operate complex systems may seek an extension of planning time from the Bureau if the need arises and good cause is shown.¹⁴⁷ The Bureau, through the TA, will monitor each licensee’s progress during the planning, negotiation and mediation phases. Furthermore, licensees should promptly respond to TA communications and requests for information throughout the reconfiguration process.

59. Consequently, as discussed in the *Fourth FNPRM*,¹⁴⁸ within 60 days of the effective date of this *Fifth Report and Order* each border area licensee that intends to negotiate a Planning Funding Agreement (PFA) with Sprint must submit a Request for Planning Funding (RFPF) to Sprint, after which

¹³⁸ *Id.*

¹³⁹ The time by which licensees must complete planning and submit a cost estimate to Sprint varies from 90-110 days as a function of the number of radios in the licensee’s system. *See infra* ¶ 61.

¹⁴⁰ *Fourth FNPRM*, 27 FCC Rcd at 9571-72 ¶¶ 29-30.

¹⁴¹ City of San Diego Comments at 4; Border Area Licensees Comments at 13; San Diego County Sheriff Comments at 4-5; Orange County Sheriff’s Reply Comments at 2.

¹⁴² City of San Diego Comments at 4.

¹⁴³ *Id.*

¹⁴⁴ Border Area Licensees Comments at 12-13.

¹⁴⁵ Sprint Comments at 6.

¹⁴⁶ Sprint Reply Comments at 6.

¹⁴⁷ *See* 47 C.F.R. § 1.3.

¹⁴⁸ *Fourth FNPRM*, 27 FCC Rcd at 9571 ¶ 27.

the parties will have 30 days from the date of submittal of the RFPF to negotiate a PFA.¹⁴⁹ Some licensees with already-negotiated PFAs may need to amend them to complete the planning process after the channel plan for the U.S.-Mexico border becomes effective. In this instance, licensees must submit a Change Notice within 60 days of the effective date of this *Fifth Report and Order*, after which the parties will have 30 days from the date of submittal of the Change Notice to negotiate a PFA Amendment.

60. PFA and PFA Amendment negotiations will be monitored by a TA mediator, but without instituting mediation. If, however, parties are unable to negotiate a PFA or PFA Amendment within the 30 days noted above, the parties must participate in mediation for 20 working days.¹⁵⁰ If mediation is unsuccessful, at the end of the 20-day mediation period the TA mediator will refer disputed issues to the Bureau for *de novo* review within 10 days after the close of the mediation period.

61. Upon TA approval of a PFA or PFA Amendment (or an equivalent starting date designated by the TA in its reconfiguration timetable for licensees without a PFA), the licensee must complete planning and submit a cost estimate to Sprint within 90 to 110 days, depending on the number of mobile/portable radio units in the licensee's system. Licensees with up to 5,000 units will have 90 days to complete planning and submit a cost estimate. Licensees with 5,001-10,000 units will have 100 days to complete planning and submit a cost estimate. Finally, licensees with more than 10,000 units will have 110 days to complete planning and submit a cost estimate. If the TA has not designated replacement channels for a licensee by the date the TA approves its PFA or PFA Amendment (or the planning starting date designated by the TA for licensees without a PFA), the 90 to 110 day planning period will run from the date the licensee receives its replacement channel assignments. A licensee may petition the Bureau for additional time for planning, but any such petition must (a) explain why more time is necessary, (b) demonstrate that the licensee has exercised diligence in the time already allotted (*e.g.*, commencing planning promptly after TA approval of its PFA, promptly reviewing statements of work prepared by its vendors, and completing planning tasks on schedule), and (c) set a firm schedule for planning completion.

62. Following the completion of planning and a licensee's submission of a cost estimate to Sprint, parties will have 30 days to negotiate an FRA. A TA mediator will monitor the negotiations but mediation will not begin. If, however, parties are unable to negotiate an FRA within 30 days, they must participate in mediation for 20 working days.¹⁵¹ If mediation is unsuccessful, at the end of the 20-day mediation period, the TA mediator will refer disputed issues to the Bureau for *de novo* review within 10 days after the close of the mediation period.¹⁵²

¹⁴⁹ Licensees are encouraged to begin preparing for reconfiguration prior to the start of the transition period and need not wait until the deadline to submit an RFPF. Licensees can undertake the following activities prior to receiving proposed replacement frequencies from the TA: submitting a Point of Contact Form to the TA, reviewing and updating their license information in the Universal Licensing System (ULS) database, identifying and contacting vendors to assist with reconfiguration, conducting subscriber unit inventory, conducting infrastructure inventory, engaging in non-frequency-specific engineering and implementation planning, and defining their interoperability environment. If licensees require funding to conduct early planning activities, they should submit an RFPF and negotiate a PFA with Sprint. Licensees may submit an RFPF prior to receiving proposed replacement frequencies from the TA. Additional information about these activities is available on the TA's website (<http://www.800TA.org>) and in the TA's Reconfiguration Handbook, which is available at http://www.800ta.org/content/resources/Reconfiguration_Handbook.pdf.

¹⁵⁰ The TA will specify the beginning of the 20-day mediation period.

¹⁵¹ *Id.*

¹⁵² We note that even with this expedited timeline, a licensee with more than 10,000 mobile/portable units will have 110 days to complete planning and an additional 30 days to negotiate an FRA with Sprint. Therefore, the total time (continued....)

63. As proposed in the *Fourth FNPRM*,¹⁵³ any licensee along the U.S.-Mexico border seeking a system upgrade (whereby the licensee upgrades its system, Sprint pays the licensee the lesser of the amount that it otherwise would have paid for rebanding to comparable facilities or the cost of the upgrade, and the licensee pays the additional cost of the upgraded system from its own funds) should notify the TA and Sprint, in writing, no later than the due date for submission of the licensee's cost estimate. The notice must describe the nature of the proposed upgrade, the cost, the source of funds, and the implementation schedule. If a licensee negotiates with Sprint for an upgrade, the TA will review the upgrade proposal pursuant to its upgrade policy, giving it close scrutiny to determine, *inter alia*, that the upgrade will not lengthen the licensee's rebanding schedule and that any incremental funding needed to accomplish the upgrade is demonstrably available. The upgrade proposal is subject to TA approval. Licensees contemplating an upgrade should consult the TA's upgrade policy.¹⁵⁴

2. Rebanding Implementation Timetable

64. *Background.* The Bureau noted in the *Fourth FNPRM* that—after planning, negotiation, and, if necessary, mediation—licensees along the U.S.-Mexico border would have approximately 22 to 23 months to implement retuning of their systems to replacement channels designated by the TA within the 30-month transition timetable the Bureau proposed.¹⁵⁵ The Bureau sought comment on its proposed implementation timetable and requested any commenting party proposing a longer period of time to specify the particular circumstances along the U.S.-Mexico border that warrant a longer period of time for implementation.¹⁵⁶

65. The majority of commenting parties believe a 30-month transition timetable is overly optimistic.¹⁵⁷ The Border Area Licensees suggest the relocation deadline should be extended six months due to “the additional difficulties” facing licensees in the Sharing Zone including “the need for coordination amongst Southwest licensees (who goes first?) as well as the need to wait for Mexican licensees to reconfigure.”¹⁵⁸ The San Diego County Sheriff foresees delays caused by the requirement that some licensees “amend leases for radio sites that are not owned by the licensee in order to revise the frequencies listed” and notes that sites belonging to the Department of Defense require a “lengthy frequency study process.”¹⁵⁹ Raymond Grimes posits there may be significant delay in either lining up qualified service providers to perform work or obtaining replacement equipment due to the large number of incumbent licensees who will be “suddenly competing for available services and products.”¹⁶⁰

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for a licensee of this size to complete planning and negotiate an FRA is 140 days which is only 10 days less than the 150 day time period suggested by the City of San Diego. *See* City of San Diego Comments at 4.

¹⁵³ *Fourth FNPRM*, 27 FCC Rcd at 9572 ¶ 31.

¹⁵⁴ The TA's upgrade policy is available in the TA's Reconfiguration Handbook. *See* Reconfiguration Handbook release 4.0 (Jan. 19, 2011), at 81-84, available at http://www.800ta.org/content/resources/Reconfiguration_Handbook.pdf.

¹⁵⁵ *Fourth FNPRM*, 27 FCC Rcd at 9572 ¶ 32.

¹⁵⁶ *Id.*

¹⁵⁷ Raymond Grimes Comments at 4; Border Area Licensees Comments at 12-13; San Diego County Sheriff Comments at 5-6; Laredo Reply Comments at 2-3; Orange County Sheriff's Reply Comments at 2.

¹⁵⁸ Border Area Licensees Comments at 12-13.

¹⁵⁹ San Diego County Sheriff Comments at 5-6.

¹⁶⁰ Raymond Grimes Comments at 4.

66. Sprint, however, supports the Bureau's 30-month timeline, arguing that any licensee needing additional time to complete a given activity has "the opportunity to demonstrate to the Bureau on a specific case-by-case basis why additional time is warranted, why the baseline time was not enough to accomplish the task required and, most importantly, what steps the licensee has taken in the time it had and would take to reach completion if any extension is granted."¹⁶¹

67. *Decision.* We adopt our proposed 30-month implementation timetable for licensees to complete band reconfiguration along the border with Mexico, but modify our proposal to allow for future re-evaluation of the timetable as rebanding progresses. We believe that a 30-month timetable strikes the proper balance between providing licensees with sufficient time to implement rebanding while establishing a baseline deadline for timely completion of the program. However, as noted above, rebanding on the U.S. side of the border will need to be coordinated with relocations by Mexican licensees to ensure an orderly transition.¹⁶² It is our expectation that Mexican licensees will relocate in a timely manner, in light of U.S.-Mexico agreement in the Amended Protocol and the commitments made by Sprint and NII to pay the reasonable costs of such relocations. Nonetheless, because we cannot be certain of the timing of Mexican relocations, we will analyze the progress of rebanding no later than the 18th month of the transition to determine whether additional time is needed. In addition, as we have in the non-border regions and the Canadian Border Region, we will entertain requests for waiver from licensees that are unable to complete rebanding within the transition period based on the particulars of their individual situation.

3. Stages and Steps for Completing Rebanding

68. *Background.* The Bureau proposed a two-stage approach to rebanding along the U.S.-Mexico border in the *Fourth FNPRM*.¹⁶³ The Bureau explained that the two-stage approach would entail B/ILT, non-cellular SMR, and public safety licenses on pool channels retuning during Stage 1 while NPSPAC licensees would retune during Stage 2.¹⁶⁴ In proposing a staged approach, the Bureau noted that some U.S. licensees along the U.S.-Mexico border may have to retune their frequencies twice in order to complete the rebanding process because of the need to coordinate frequency re-tunes with incumbents in Mexico and to clear the 130 pool channels immediately above the new NPSPAC band within the Sharing Zone.¹⁶⁵

69. No commenting party specifically addressed the steps detailed by the Bureau in the *Fourth FNPRM* for completing rebanding in NPSPAC regions bordering Mexico. Raymond Grimes, however, notes that some U.S. licensees could experience delays in implementation if licensees in Mexico fail to vacate channels in a timely manner.¹⁶⁶

70. *Decision.* We adopt the two-stage approach to rebanding proposed in the *Fourth FNPRM*.¹⁶⁷ Below we detail the steps which will take place in each stage for licensees in the Sharing

¹⁶¹ Sprint Reply Comments at 6.

¹⁶² See *supra* ¶ 5.

¹⁶³ *Fourth FNPRM*, 27 FCC Rcd at 9573 ¶ 33.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.*

¹⁶⁶ Raymond Grimes Comments at 5-6.

¹⁶⁷ *Fourth FNPRM*, 27 FCC Rcd at 9573 ¶ 33.

Zone as well as licensees operating north of the Sharing Zone in each NPSPAC region.¹⁶⁸ The Bureau will monitor the progress of frequency retunes in Mexico through the 800 MHz Task Force to ensure that, when necessary, incumbent operators in Mexico vacate channels before U.S. licensees in the Sharing Zone retune to channels currently occupied in Mexico. Furthermore, the Bureau will work with the TA to minimize disruption to all licensees who reband. Nonetheless, as noted in the *Fourth FNPRM*,¹⁶⁹ some licensees may need to re-tune their frequencies twice during the rebanding process.¹⁷⁰ Sprint is obligated to pay the reasonable cost of any licensee undergoing multiple retunes.

71. Licensees are expected to participate in meetings held by the TA regarding reconfiguration in their region, including attending an Implementation Planning Session (IPS).

a. Sharing Zone

72. Transition to the post-rebanding channel plan in the Sharing Zone will require close coordination with licensees in Mexico and among U.S. licensees. When U.S. licensees in non-border regions implement rebanding, they typically retune to replacement channels vacated by Sprint. In the Sharing Zone, however, some licensees will be able to retune to replacement channels only after one or more Mexican licensees have vacated channels on the Mexican side of the border. Also, licensees converting from offset to standard channels may have to wait for clearing by more than one licensee on the U.S. side of the border.¹⁷¹ In many cases, the vacating licensee will be Sprint or Sprint's roaming partner in Mexico—NII Holdings, Inc. Below we detail the steps we envision will need to occur in Stages 1 and 2 within the Sharing Zone in order to transition to our proposed channel plan.¹⁷² The band segments we refer to in our description are depicted below in Figure 2.

¹⁶⁸ The process in the description is divided into geographical regions, however, in practice the processes will have to be coordinated across the noted regions. For instance, certain licensees in the Los Angeles and Orange County area will have to clear frequencies in the 854.0 to 857.25 MHz range before licensees in the San Diego area can move onto replacement frequencies in the Sharing Zone in that range. Certain steps will also be concurrent across NPSPAC regions. For instance Step 1A in the Sharing Zone should be done at the same time as Steps 1A, 1B and 1C in areas north of the Sharing Zone across all NPSPAC regions.

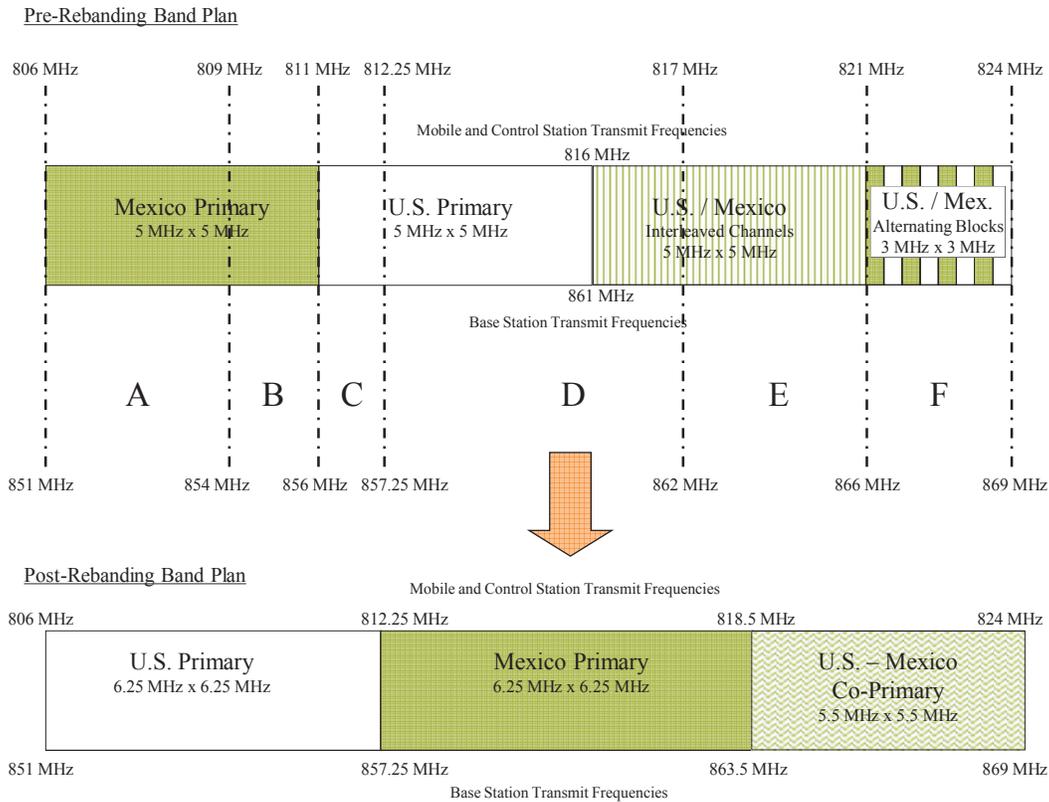
¹⁶⁹ *Fourth FNPRM*, 27 FCC Rcd at 9573 ¶ 33.

¹⁷⁰ This would be similar to Public Safety licensees in other regions that had to first clear channels 1-120 and then clear NPSPAC frequencies in a subsequent move.

¹⁷¹ To make available one replacement standard channel in the Sharing Zone, two offset channels must be cleared. For instance, for 856.1125 MHz to become available, it may be necessary to first clear offset channels 856.1000 MHz and 856.1250 MHz.

¹⁷² See *infra* Appendix C-4.

Figure 2 - Band Plan for Sharing Zone



Stage 1 – Non-NPSPAC Licensees in Sharing Zone

- Step 1A: Mexican licensees (other than NII Holdings, Inc.) in band segments A and B, above, retune to replacement channels in band segment D vacated by Sprint and NII Holdings, Inc.¹⁷³ Sprint and NII Holdings, Inc. may temporarily backfill the channels vacated in band segments A and B until they are needed for Step 1B.¹⁷⁴
- Step 1B: B/ILT, non-cellular SMR, and public safety licensees in band segment C retune from offset channels to replacement channels with standard channel centers in

¹⁷³ As noted above, some Mexican licensees may relocate out of the 800 MHz band rather than to replacement channels in the 800 MHz band. *See supra* n.20.

¹⁷⁴ By backfill, we mean Sprint or Nextel Mexico will temporarily operate on a channel vacated by a licensee retuning to a replacement channel. Backfilling is necessary in order for Sprint and Nextel Mexico to maintain capacity during the transition.

band segments B and C vacated by Sprint, NII Holdings, Inc., and other Mexican licensees relocated as part of Step 1A.¹⁷⁵

- Step 1C: B/ILT, non-cellular SMR, and public safety licensees in band segments D and E retune to replacement channels in band segments B and C vacated by Sprint, NII Holdings, Inc., and licensees retuning under Step 1B.¹⁷⁶ Licensees retune from offset channels to replacement channels with standard channel centers. Sprint and NII Holdings, Inc. may backfill the channels vacated in band segments D and E.
- Step 2A: Additional Mexican licensees (other than NII Holdings, Inc.) in band segments A and B retune to replacement channels in band segment D vacated by U.S. licensees in Step 1C.
- Step 2B: Additional B/ILT, non-cellular SMR, and public safety licensees in band segment C retune from “offset” channels to replacement channels with standard channel centers in band segments B and C vacated by Sprint, NII Holdings, Inc., and other Mexican licensees relocated as part of Step 2A.
- Step 2C: Additional B/ILT, non-cellular SMR, and public safety licensees in band segments D and E retune to replacement channels in band segments B and C vacated by Sprint, NII Holdings, Inc., and licensees retuning under Step 2B. Licensees retune from offset channels to replacement channels with standard channel centers.¹⁷⁷ Sprint and NII Holdings, Inc. may backfill the channels vacated in band segments D and E.

Stage 2 — NPSPAC Licensees in Sharing Zone

- Step 1: NPSPAC licensees in band segment F retune 15 megahertz lower in frequency to replacement channels in band segment A vacated by Sprint and NII Holdings, Inc. Sprint and NII Holdings, Inc. backfill the channels vacated in band segment F. Some repacking of NPSPAC licensees in band segment A may be necessary, including relocating certain licensees to pool frequencies in segments B and C, if necessary, or to Mexico primary channels if the licensee is currently operating on Mexico primary channels.
- Step 2: Any remaining Sprint and NII Holdings, Inc. stations in band segments A, B, C or D retune to replacement channels in band segments E and F.

¹⁷⁵ It will also be necessary to clear any blocking U.S. licensees north of the Sharing Zone currently occupying one of the 130 pool channels in segments B and C prior to undertaking Steps 1B and 1C. To the extent a licensee with frequencies in segment C also has frequencies in segments D and E, all their frequencies may be reconfigured at the same time if the replacement frequencies for the segments D and E frequencies are cleared and available.

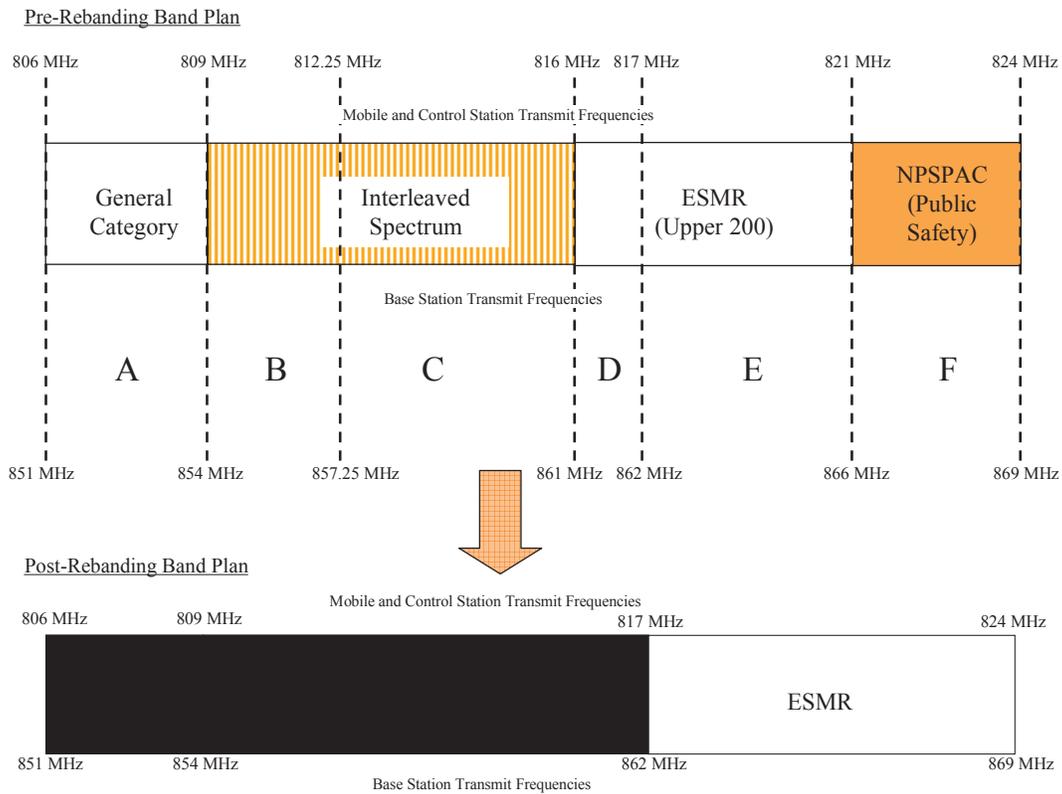
¹⁷⁶ Many Sharing Zone licensees will have frequencies involved in both Steps 1B and 1C, as well as 2A and 2B. Some licensees with frequencies in band segment C, which must retune as part of Step 1B, may have to move to an intermediate offset channel in another band segment temporarily in order to clear segment C, and then retune to their final non-offset channel as part of Step 1C.

¹⁷⁷ We anticipate that this will have to be a closely coordinated implementation process that may require licensee-by-licensee, and possibly frequency-by-frequency, implementation management. To the extent Steps 2A through 2C do not fully clear Sharing Zone band segments C and D, additional cycles may be necessary.

b. NPSPAC Region 5 (Outside the Sharing Zone)

73. As proposed in the *Fourth FNPRM*, below we detail the steps during Stages 1 and 2 for transition of Region 5 licensees operating outside the Sharing Zone.¹⁷⁸ The band segments we refer to in our description are depicted below in Figure 3.

Figure 3 – Band Plan for NPSPAC Region 5 North of Sharing Zone



Stage 1 – Non-NPSPAC Licensees in Region 5 Outside the Sharing Zone¹⁷⁹

- **Step 1A:** B/ILT, non-cellular SMR, and Public Safety licensees in band segment B retune to replacement channels in band segments C and D vacated by Sprint. Band segment D will only be used for Public Safety licensees if there are no available replacement frequencies in band segment C. The number of licensees that relocate in

¹⁷⁸ See *infra* Appendix C-5.

¹⁷⁹ Licensees in Region 5 outside the Sharing Zone will perform Steps 1A, 1B, and 1C concurrently to the extent feasible, depending on the availability of replacement channels and completion of FRA negotiations. We may also request licensees to voluntarily concur with temporary co-channel short spacing pursuant to Section 90.621(b)(5) of our rules in order to expedite implementation.

this step will be determined by the need for segment B channels in the Sharing Zone. Sprint may temporarily backfill the channels vacated in band segment B.

- Step 1B: B/ILT and non-cellular SMR licensees in band segment A retune to replacement channels in band segments C and D vacated by Sprint. Sprint may temporarily backfill the channels vacated in band segment A.
- Step 1C: Public safety licensees in band segment A generally retune to replacement channels in band segment C. Sprint may temporarily backfill the channels vacated in band segment A.¹⁸⁰

Stage 2 -- NPSPAC Licensees in Region 5 Outside the Sharing Zone

- Step 1: NPSPAC licensees in band segment F retune 15 megahertz lower in frequency to replacement channels in band segment A vacated by Sprint. Sprint backfills channels vacated in band segment F.
- Step 2: Any remaining Sprint stations in band segments A, B, C or D retune to replacement channels in band segment F.

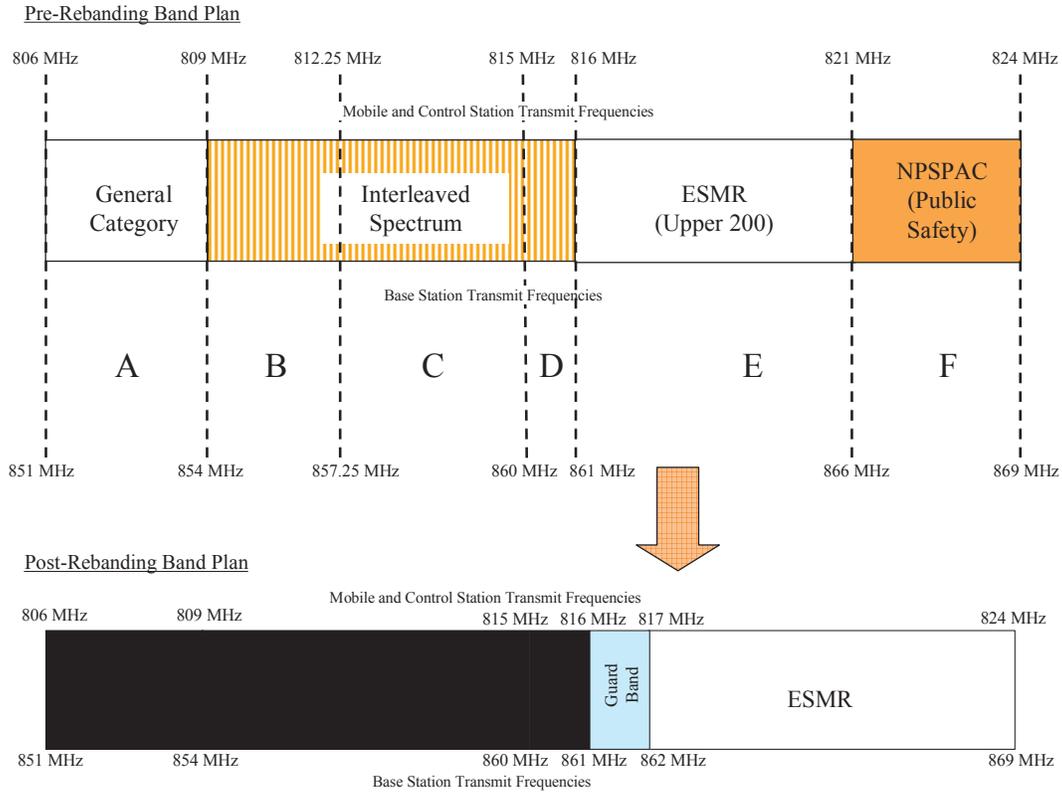
c. Remaining Mexican Border NPSPAC Regions (Outside the Sharing Zone)

74. As we proposed, in the remaining NPSPAC regions that border Mexico, we implement the standard post-rebanding channel plan for licensees located outside the Sharing Zone.¹⁸¹ In these regions, the rebanding implementation steps will be generally consistent with those described above for Region 5 outside the Sharing Zone. In these regions, however, Mexico stations will not be a factor, and licensees will retune to replacement channels vacated by Sprint or that are otherwise unoccupied. Below we detail the proposed steps during Stages 1 and 2 for transition of these licensees. The band segments we refer to in our description are depicted below in Figure 4.

¹⁸⁰ Licensees in the northernmost parts of Region 5, such as those in Kern or San Louis Obispo Counties, may also be reconfigured into band segment B.

¹⁸¹ See *infra* Appendix C-6.

Figure 4 – Band Plan for NPSPAC Regions 3, 29, 50 and 53 North of Sharing Zone



Stage 1 – Non-NPSPAC Licensees in Regions 3, 29, 50 and 53 Outside the Sharing Zone¹⁸²

- **Step 1A:** Some B/ILT and non-cellular SMR licensees in band segment B will retune to replacement frequencies in band segments C and D vacated by Sprint. Some Public Safety licensees in band segment B may retune to replacement channels in band segments C vacated by Sprint. The number of licensees that relocate in this step will be determined by the need for band segment B channels in the Sharing Zone.
- **Step 1B:** B/ILT and non-cellular SMR licensees in band segment A retune to replacement channels in band segments C and D vacated by Sprint. Sprint may temporarily backfill the channels vacated in band segment A.¹⁸³
- **Step 1C:** Public safety licensees in band segment A retune to replacement channels in band segment C vacated by Sprint. Sprint may temporarily backfill the channels vacated in band segment A.¹⁸⁴

¹⁸² Licensees in Regions 3, 29, 50 and 53 outside the Sharing Zone will perform Steps 1A, 1B and 1C concurrently to the extent feasible, depending on the availability of replacement channels and completion of FRA negotiations.

¹⁸³ *Id.*

Stage 2 – NPSPAC Licensees in Regions 3, 29, 50 and 53 Outside the Sharing Zone

- Step 1: NPSPAC licensees in band segment F retune 15 megahertz lower in frequency to replacement channels in band segment A vacated by Sprint. Sprint backfills channels vacated in band segment F.
- Step 2: Any remaining Sprint stations in band segments A, B, C or D retune to replacement channels in band segment F.

C. Additional Issues

1. Special Coordination Procedure Channels.

75. *Background.* Sprint currently operates on certain Mexico primary channels in the Sharing Zone pursuant to a Special Coordination Procedure (SCP).¹⁸⁵ Sprint's operation on these channels facilitates cross-border roaming with NII Holdings, Inc. The Bureau noted in the *Fourth FNPRM* that under the channel plan it proposed for the Sharing Zone, all Mexico primary channels would be below the proposed ESMR dividing line at 818.5/863.5 MHz.¹⁸⁶ Consequently, the Bureau sought comment on whether to require Sprint to vacate Mexican primary channels in the Sharing Zone.¹⁸⁷

76. The City of San Diego argues that "Sprint should not be given the ability to utilize Mexico primary spectrum lower than the spectrum allocated to it in the non border region."¹⁸⁸ Sprint states that it intends to continue its cooperative agreement with its roaming partner in Mexico and operate on Mexico primary spectrum below 818.5/863.5 MHz.¹⁸⁹

77. *Decision.* Our decision to amend our original channel plan proposal for the Sharing Zone and align the ESMR dividing line in the Sharing Zone with the ESMR dividing line in non-border regions at 817/862 MHz effectively moots this issue. Under the channel plan we adopt for the Sharing Zone, Sprint will be permitted to operate on Mexico primary channels above the ESMR dividing line at 817/862 MHz. Sprint states that it "does not object to this approach" provided that channels in the 817-818.5/862-863.5 MHz band segment are made exclusively available to Sprint.¹⁹⁰ This will be the case under our amended channel plan because channels in this band segment will be assigned to the SMR pool for use by licensees operating high-density cellular systems.¹⁹¹

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¹⁸⁴ Licensees in the northern parts of these NPSPAC regions more than 113 km from the Sharing Zone may also be reconfigured into band segment B.

¹⁸⁵ See Special Coordination Procedure for the Use of Certain Frequencies in the Bands 806-824 MHz and 851-869 MHz for Land Mobile Services (Nov. 2000). See also Letter from Donald Abelson, Chief, International Bureau, Federal Communications Commission, to Sr. Fernando Carrillo, Coordinator General, Commission Federal de Comunicaciones (Aug. 20, 2004).

¹⁸⁶ *Fourth FNPRM*, 27 FCC Rcd at 9579 ¶ 37.

¹⁸⁷ *Id.*

¹⁸⁸ City of San Diego Comments at 4-5.

¹⁸⁹ Sprint Reply Comments at 7.

¹⁹⁰ *Id.*

¹⁹¹ See *infra* Appendix C-4.

2. Vehicular Repeaters.

78. *Background.* Many licensees in the 800 MHz band use vehicular repeater stations (VRS) to extend radio coverage. VRS units, which typically are mounted inside public safety vehicles, extend or improve radio coverage from hand-held units to distant base station repeaters and are most frequently used to provide in-building coverage. For example, when a public safety official exits a vehicle to enter a building, he or she tunes a hand-held unit to transmit on the input frequency of the VRS unit, which then relays the signal to a distant repeater on a separate mobile frequency. VRS operations, however, require a relatively large spectral separation between their input and output frequencies. The Bureau sought comment in the *Fourth FNPRM* on whether or not the channel plan it proposed for the Mexico border region would provide licensees operating VRS units with the spectral separation necessary to continue VRS operations.¹⁹²

79. Raymond Grimes states that VRS units can effectively operate in the 700 MHz band, thus creating the necessary separation to channels in the 800 MHz band.¹⁹³ Raymond Grimes also notes that most “quality” public safety portable subscriber radios include 700 MHz frequencies making it “quite simple” to obtain portable radios capable of operating with VRS units.¹⁹⁴

80. *Decision.* Our experience in rebanding non-border 800 MHz systems has demonstrated that accommodating VRS systems has not been a frequent problem, and that problems that have arisen have successfully been handled on a case-by-case basis. Accordingly, we determine that we need make no adjustments to the channel plans we adopt here to accommodate VRS units.

3. Power Loss in Combiners.

81. *Background.* Due to the limited availability of channels in some areas under the Amended Protocol, it may be difficult to spectrally separate the replacement channels designated to some licensees. This reduced spectral separation could cause licensees that use combiners in their current systems to experience power loss in their combiners.¹⁹⁵ In the *Fourth FNPRM*, the Bureau proposed allowing such licensees to recover from Sprint the reasonable costs associated with mitigating the impact of reduced spectral separation on combiner power loss.¹⁹⁶ The Bureau noted that mitigation steps could include new combiners, related antenna system changes, tower work, and other associated costs, converting operations from standard pool channels to NPSPAC channels, or vice versa.¹⁹⁷

82. The City of San Diego suggests we consider specific licensee combiner requirements when assigning licensees to post-rebanding replacement channels, *e.g.*, if the frequencies designated by the TA result in excessive signal loss in the combiner.¹⁹⁸

¹⁹² *Fourth FNPRM*, 27 FCC 9579 ¶ 38.

¹⁹³ Raymond Grimes Comments at 7.

¹⁹⁴ *Id.*

¹⁹⁵ A combiner, as the name implies, feeds multiple transmitters into a single antenna. *See 800 MHz Report and Order*, Appendix D, 19 FCC Rcd 15203 at ¶ 6.

¹⁹⁶ *Fourth FNPRM*, 27 FCC Rcd at 9579-80 ¶ 39.

¹⁹⁷ *Id.*

¹⁹⁸ City of San Diego Comments at 3.

83. *Decision.* Licensees should analyze the replacement channels designated for them by the TA and identify any combiner issues created by a reduced spectral separation between channels as an early and integral part of their planning process. In such situations, licensees may request a different replacement channel, or if necessary, a lower-loss combiner. Sprint will be responsible for covering the reasonable costs associated with mitigating the impact of reduced spectral separation including new combiners, related antenna system changes, tower work, and other associated costs.

4. Licensees on Mexico Primary Channels.

84. *Background.* Some U.S. licensees currently operate in the Sharing Zone on channels primary to Mexico under the 1994 Protocol. In the *Fourth FNPRM*, the Bureau proposed instructing the TA to designate replacement channels for such licensees in the U.S. primary segment of the band under the Amended Protocol if such channels are available, or otherwise to designate Mexico primary channels.¹⁹⁹

85. The San Diego County Sheriff states that it successfully operates sites on Mexico primary channels where the signal level at the border does not exceed the limits listed in the Amended Protocol.²⁰⁰ Therefore, the San Diego County Sheriff suggests that continued use of Mexico primary channels at these locations may assist the TA in making channel designations for licensees in the Sharing Zone.²⁰¹

86. *Decision.* We adopt our proposal from the *Fourth FNPRM* and direct the TA to designate U.S. primary replacement channels, if such channels are available, for licensees currently operating on Mexico primary channels. Otherwise, the TA may designate Mexico primary channels for such licensees. We agree with the San Diego County Sheriff that providing the TA with this flexibility is important for preserving U.S. primary channels for licensees in the Sharing Zone that would otherwise be unable to meet the power limits at the border required for operation on channels primary to Mexico.

87. Finally, we note that any licensees operating on channels primary to Mexico are secondary to operations in Mexico²⁰² but will be eligible for protection from unacceptable interference from U.S. licensees as defined in Section 90.672 in the same manner as all other licensees in the band.²⁰³

D. Cost Benefit Analysis

88. We find that the benefits of our establishing and implementing a reconfigured 800 MHz channel plan along the U.S.-Mexico border outweigh any potential costs. This *Fifth Report and Order* is part of the FCC's rebanding effort to eliminate interference to public safety and other land mobile communication systems operating in the band by addressing its root cause and separating generally incompatible technologies.²⁰⁴ The homeland security obligations of the Nation's public safety agencies make it imperative that their communications systems are robust and highly reliable.²⁰⁵ The changes

¹⁹⁹ *Fourth FNPRM*, 27 FCC Rcd at 9579-80 ¶ 39.

²⁰⁰ San Diego County Sheriff Comments at 7.

²⁰¹ *Id.*

²⁰² Amended Protocol at Article III, ¶ 4d.

²⁰³ 47 C.F.R. § 90.672.

²⁰⁴ *See 800 MHz Report and Order*, 19 FCC Rcd at 14971-73 ¶¶ 1-3.

²⁰⁵ *Id.* at 14971 ¶ 1.

adopted herein will further that goal by separating—to the greatest extent possible—public safety and other non-cellular licensees from licensees in the band that employ cellular technology. Furthermore, Sprint, the major commercial provider in the band, will benefit from the changes proposed herein by obtaining contiguous spectrum at the end of the program on which it will be able to transition to advanced wireless technologies.²⁰⁶ Moreover, the relocation costs are further justified in this case because, with respect to the relocating incumbents, Sprint will be responsible for paying the minimum cost necessary to accomplish rebanding in a reasonable, prudent, and timely manner, and, with respect to Sprint itself, Sprint has received equitable compensation for the costs it will incur in the form of spectrum rights to the 1.9 GHz band.²⁰⁷ We therefore conclude that the benefits of the rule changes adopted herein significantly outweigh the costs of reconfiguring the 800 MHz band.

IV. PROCEDURAL MATTERS

A. Regulatory Flexibility Analysis

89. Pursuant to the Regulatory Flexibility Act of 1980,²⁰⁸ as amended, the Bureau's Final Regulatory Flexibility Analysis in this Order is attached as Appendix A.

B. Paperwork Reduction Act of 1995 Analysis

90. *Paperwork Reduction Act of 1995*. This document contains no new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13.²⁰⁹

C. Materials in Accessible Formats

91. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to FCC504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

V. ORDERING CLAUSES

92. Accordingly, IT IS ORDERED, pursuant to Sections 4(i), 303(b), 316, and 332 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(b), 316, 332, that this *Fifth Report and Order* IS ADOPTED.

93. IT IS FURTHER ORDERED that the amendments of the Commission's Rules set forth in Appendix D ARE ADOPTED, effective sixty days from the date of publication in the Federal Register.

94. IT IS FURTHER ORDERED that the Final Regulatory Flexibility required by Section 604 of the Regulatory Flexibility Act, 5 U.S.C. § 604, and as set forth in Appendix A herein is ADOPTED.

²⁰⁶ See Improving Spectrum Efficiency Through Flexible Channel Spacing and Bandwidth Utilization for Economic Area-based 800 MHz Specialized Mobile Radio Licensees, *Report and Order*, 27 FCC Rcd 6489 (2012).

²⁰⁷ See *800 MHz Report and Order*, 19 FCC Rcd 15080-15125 ¶¶ 210-332.

²⁰⁸ See 5 U.S.C. § 604.

²⁰⁹ See OMB Control No. 3060-1080 for Improving Public Safety Communications in the 800 MHz Band (exp. September 30, 2014).

95. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Fifth Report and Order*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

96. This action is taken under delegated authority pursuant to Sections 0.191 and 0.392 of the Commission's rules, 47 C.F.R. §§ 0.191, 0.392 and pursuant to the *Second Memorandum Opinion and Order* in this proceeding, delegating authority to the chief of the Public Safety and Homeland Security Bureau to adopt band plans as necessary to conform to international agreements.²¹⁰

FEDERAL COMMUNICATIONS COMMISSION

David S. Turetsky
Chief, Public Safety and Homeland Security Bureau

²¹⁰ Improving Public Safety Communications in the 800 MHz Band, *Second Memorandum Opinion and Order*, 22 FCC Red 10467, 10494 (2007).

APPENDIX A

Final Regulatory Flexibility Analysis

97. As required by the Regulatory Flexibility Act (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated into the *Fourth Further Notice of Proposed Rule Making (Fourth FNPRM)* of this proceeding. The Bureau sought written public comment on the IRFA. The RFA²¹¹ requires that an agency prepare a regulatory flexibility analysis for notice-and-comment rulemaking proceedings, unless the agency certifies that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.”²¹² The RFA generally defines “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”²¹³ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.²¹⁴ A “small business concern” is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).²¹⁵ The present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

A. Need for, and Objectives of, the Proposed Rules

98. In the *Fifth Report and Order*, we adopt a channel plan for reconfiguring the 800 MHz band along the U.S.-Mexico border. The channel plan we adopt in the *Fifth Report and Order* will be incorporated into the Commission’s rules and is needed to implement and complete the Commission’s band reconfiguration program along the U.S.-Mexico border. The Commission ordered reconfiguration of the 800 MHz band to address an ongoing nationwide problem of interference created by a fundamentally incompatible mix of technologies in the band.²¹⁶ The Commission determined to resolve the interference by reconfiguring the band to spectrally separate incompatible technologies.²¹⁷ The Commission delegated authority to the Bureau in May 2007 to propose and adopt a channel plan for implementing band reconfiguration along the U.S.-Mexico border.²¹⁸ The band plan we adopt in the *Fifth*

²¹¹ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et seq.*, has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

²¹² See 5 U.S.C. § 605(b).

²¹³ 5 U.S.C. § 601(6).

²¹⁴ 5 U.S.C. § 601(3) (incorporating by reference the definition of “small business concern” in Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.”

²¹⁵ 15 U.S.C. § 632.

²¹⁶ See *Improving Public Safety Communications in the 800 MHz Band, Report and Order*, WT Docket No. 02-55, 19 FCC Rcd 14969 (2004) (*800 MHz Report and Order*).

²¹⁷ *Id.* at 14872-73 ¶¶ 2-3.

²¹⁸ *Improving Public Safety Communications in the 800 MHz Band, Second Memorandum Opinion and Order*, WT Docket No. 02-55, 22 FCC Rcd 10467, 10494-95 (2007) (*800 MHz Second Memorandum Opinion and Order*).

Report and Order will separate incompatible technologies along the U.S.-Mexico border and thus resolve the ongoing interference problem in that region.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

99. There were no comments filed that specifically addressed the rules and policies proposed in the IRFA.

C. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

100. The RFA directs agencies to provide a description of and an estimate of the number of small entities to which the rules will apply.²¹⁹ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."²²⁰ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.²²¹ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.²²² Below, we provide an estimate of the number of small entities to which the rules the adopted in this *Fifth Report and Order* will apply.

101. *Private Land Mobile Radio Licensees (PLMR)*. PLMR systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by entities of all sizes operating in all U.S. business and public sector categories, and are often used in support of the licensee's primary (non-telecommunications) operations. For the purpose of determining whether a licensee of a PLMR system is a small entity as defined by the SBA, we use the broad census category, Wireless Telecommunications Carriers (except Satellite). This definition provides that a small entity is any such entity employing no more than 1,500 persons.²²³ The Commission does not require PLMR licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many PLMR licensees constitute small entities under this definition. We note that PLMR licensees generally use the licensed facilities in support of other business and governmental activities, and therefore, it would also be helpful to assess PLMR licensees under the standards applied to the particular industry subsector to which the licensee belongs.²²⁴

²¹⁹ 5 U.S.C. § 604(a)(4).

²²⁰ 5 U.S.C. § 601(6).

²²¹ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

²²² Small Business Act, 15 U.S.C. § 632 (1996).

²²³ See 13 C.F.R. §121.201, NAICS code 517210.

²²⁴ See generally 13 C.F.R. §121.201.

102. As of March 2013, there were approximately 250 PLMR licensees operating in the PLMR band between 806-824/851-869 MHz along the U.S. - Mexico border.²²⁵

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

103. The *Fifth Report and Order* does not adopt a rule that will entail additional reporting, recordkeeping, and/or third-party consultation or other compliance efforts beyond those already approved for this proceeding.²²⁶

E. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered

104. The RFA requires an agency to describe the steps it has taken to minimize the significant economic impact on small entities consistent with the stated objectives of applicable statutes, including the agency's reasoning for not adopting significant alternatives to the rules adopted.²²⁷

105. The *Fifth Report and Order* creates no significant economic impact on small entities because Sprint Nextel Corporation will pay all reasonable costs associated with retuning incumbent licensees to the post-reconfiguration channel plan adopted by the Bureau. Further, once the channel plan adopted in the *Fifth Report and Order* is implemented, PLMR licensees will no longer be subject to on-going interference in the band and will therefore save costs that would otherwise be associated with resolving interference.

B. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

106. None.

²²⁵ This estimate was provided by the 800 MHz Transition Administrator (TA). The TA is an independent party charged with overseeing reconfiguration of the 800 MHz band. *See* Wireless Telecommunications Bureau Concurs with Search Committee Selection of a Transition Administrator, *Public Notice*, WT Docket No. 02-55, 19 FCC Rcd 21923 (2004). *See also* <http://www.800ta.org/>.

²²⁶ *See* OMB Control No. 3060-1080 for Improving Public Safety Communications in the 800 MHz Band (exp. September 30, 2014).

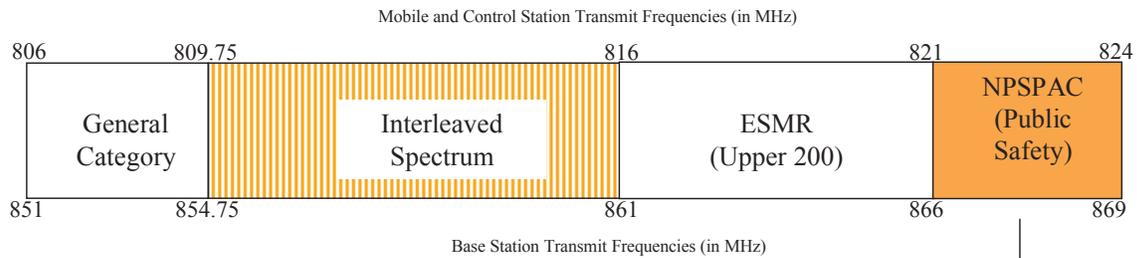
²²⁷ 5 U.S.C. § 604(a)(6).

APPENDIX B

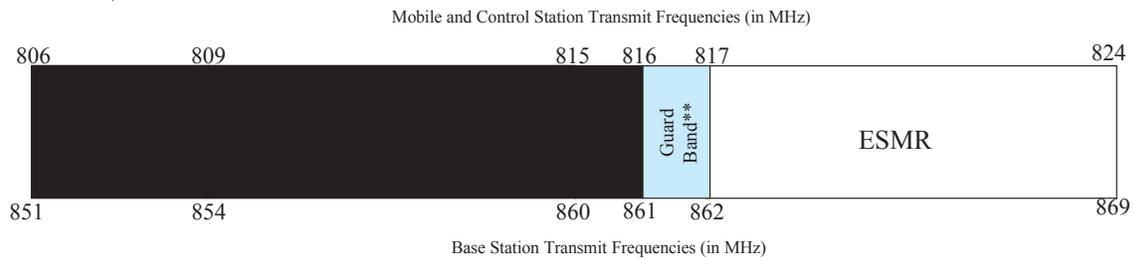
U.S. – Mexico Sharing Zone

APPENDIX C-1

Pre-Rebanding Channel Plan



Post-Rebanding Channel Plan

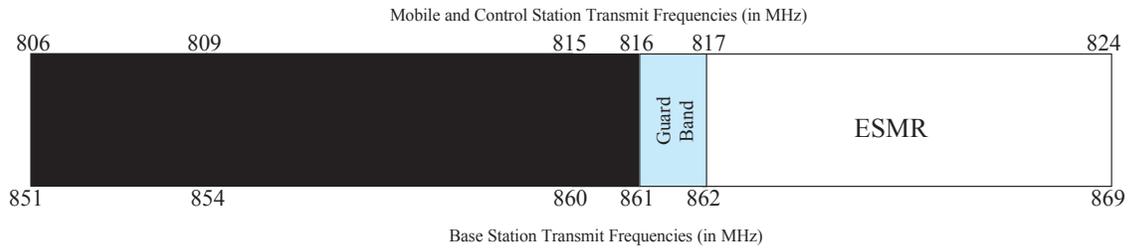


* No public safety licensee will be required to remain in or relocate to the Expansion Band; although it may do so if it so chooses.

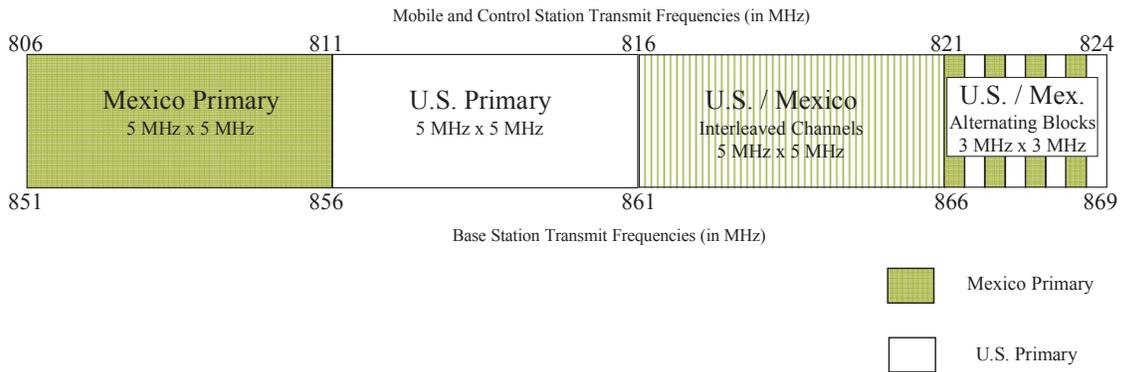
** No public safety or CII licensee may be involuntary relocated to the Guard Band.

APPENDIX C-2

**Post-Rebanding Channel Plan
(non-border)**

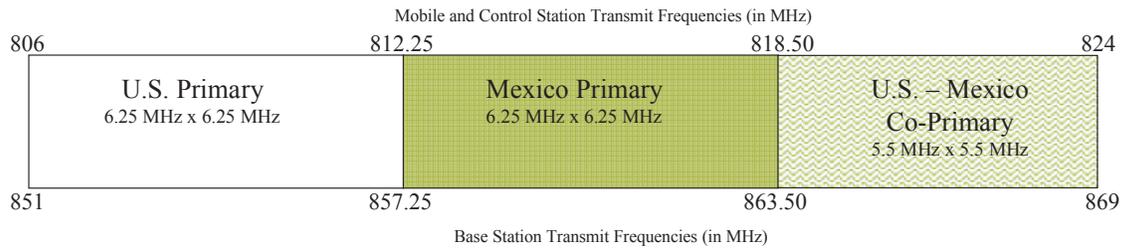


**Previous Distribution of Primary Spectrum in Sharing Zone
(Based on 800 MHz Protocol)**



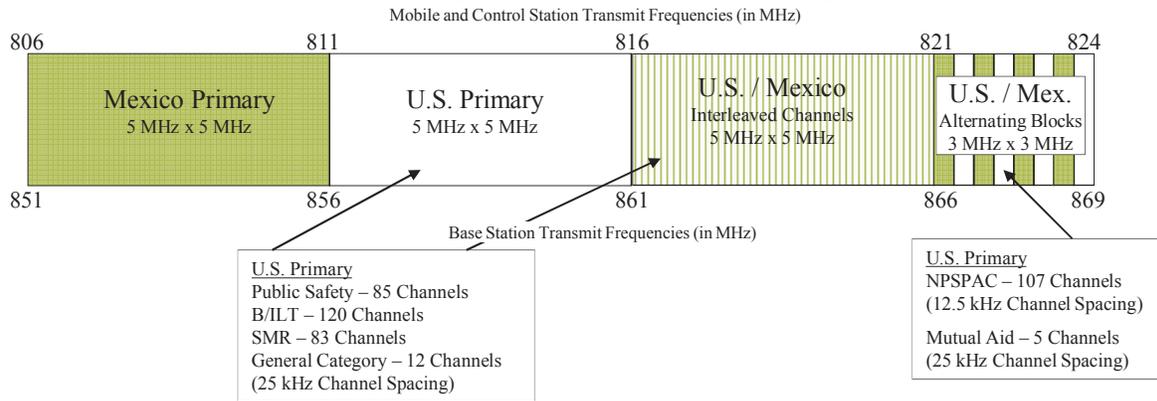
APPENDIX C-3

**Updated Distribution of Primary Spectrum in Sharing Zone
(Based on Updated 800 MHz Protocol)**

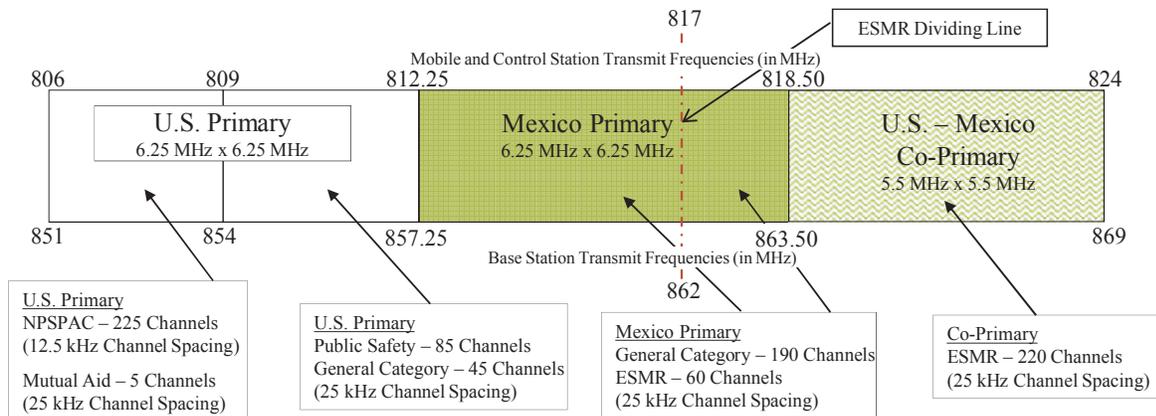


APPENDIX C-4

Pre-Rebanding Channel Plan in Sharing Zone

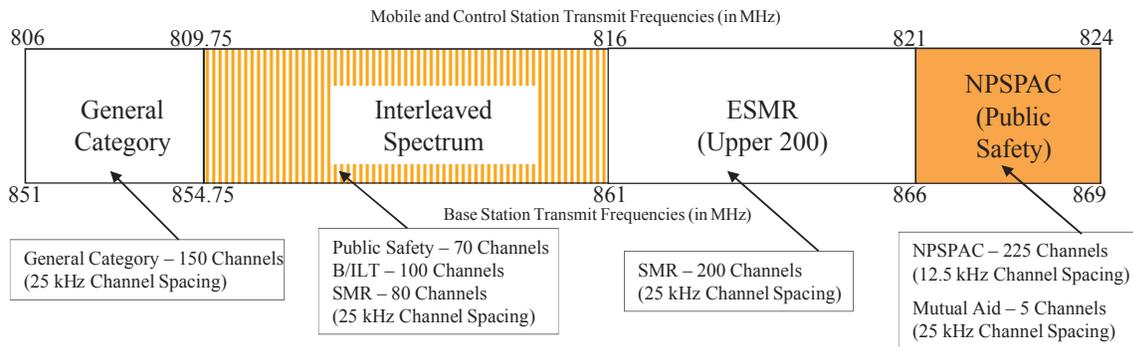


Post-Rebanding Channel Plan in Sharing Zone

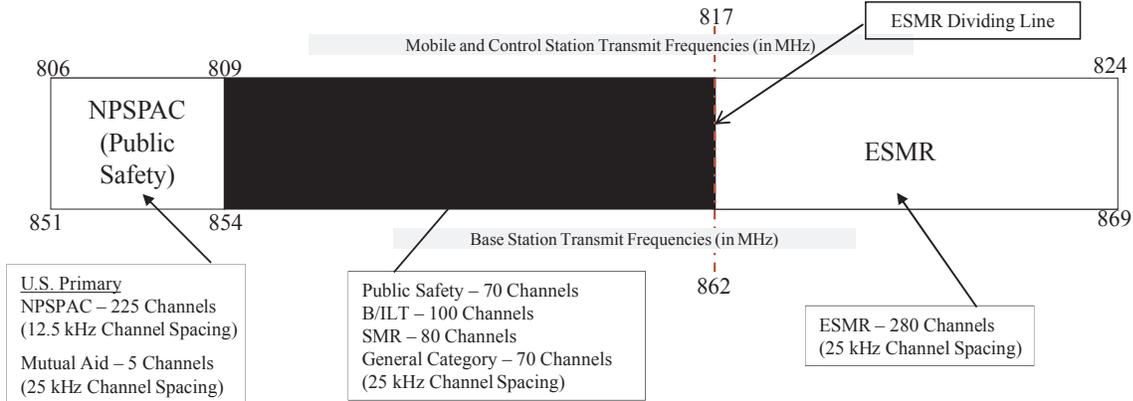


APPENDIX C-5

**Pre-Rebanding Channel Plan
(Non - Border)**

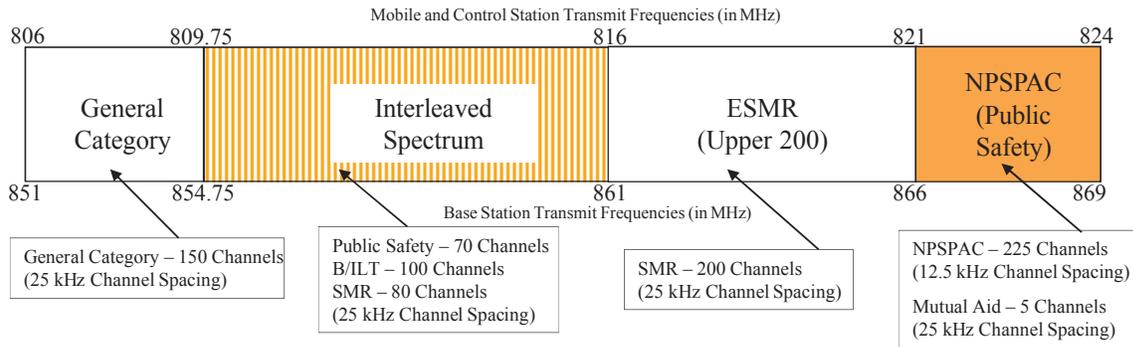


**Post-Rebanding Channel Plan - NPSPAC Region 5
(North of Sharing Zone)**

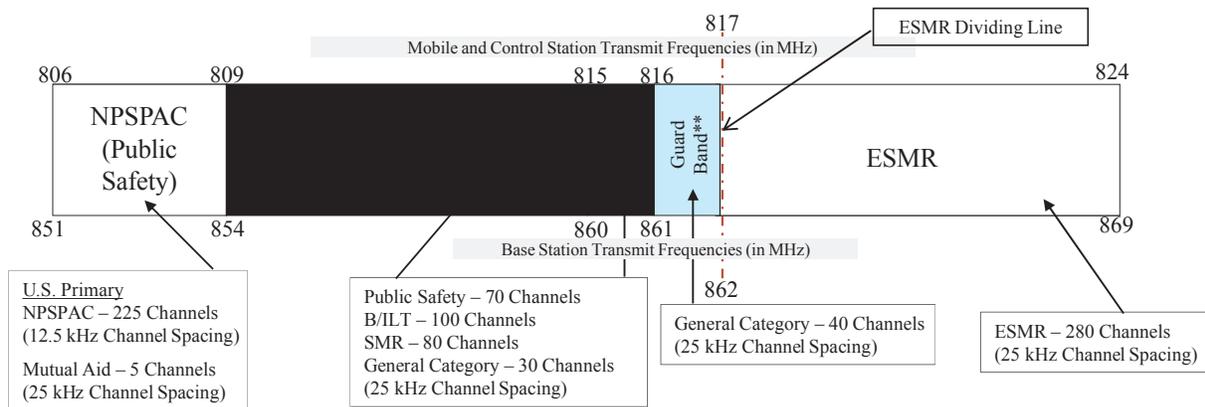


APPENDIX C-6

**Pre-Rebanding Channel Plan
(Non – Border)**



**Post-Rebanding Channel Plan – NPSPAC Region 3, 29, 50 and 53
(North of Sharing Zone)**



* No public safety licensee will be required to remain in or relocate to the Expansion Band; although it may do so if it so chooses.

** No public safety or CII licensee may be involuntary relocated to the Guard Band.

APPENDIX D

Final Rules

PART 90 – PRIVATE LAND MOBILE RADIO SERVICES

The authority citation for Part 90 continues to read as follows:

AUTHORITY: 4(i), 11, 303(g), 303(r), and 302(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7).

Section 90.619(a) is modified to read as follows:

§ 90.619 Operations within the U.S./Mexico and U.S./Canada border areas.

* * * * *

(a) *Use of frequencies in 800 MHz band in Mexico border region.* All operations in the 806–824/851–869 MHz band within 110 km (68.35 miles) of the U.S./Mexico border (“Sharing Zone”) shall be in accordance with international agreements between the U.S. and Mexico.

(1) The U.S. and Mexico divide primary access to channels in the Sharing Zone as indicated in Table A1 below.

Table A1 – U.S. and Mexico Primary Channels in Sharing Zone

Channels	Primary Access
1-360	U.S.
361-610	Mexico
611-830	U.S.-Mexico Co-Primary

(2) Stations authorized on U.S. primary channels in the Sharing Zone are subject to the effective radiated power (ERP) and antenna height limits listed below in Table A2.

Table A2 – Limits on Effective Radiated Power (ERP) and Antenna Height

Average of the Antenna Height Above Average Terrain on Standard Radials in the Direction of the Common Border (Meters) ¹	Maximum ERP in Any Direction Toward the Common Border per 25 kHz (Watts)
0 to 503	500
Above 503 to 609	350
Above 609 to 762	200
Above 762 to 914	140
Above 914 to 1066	100
Above 1066 to 1219	75
Above 1219 to 1371	70
Above 1371 to 1523	65
Above 1523	5

¹ Standard radials are 0°, 45°, 90°, 135°, 180°, 225°, 270° and 315° to True North. The height above average terrain on any standard radial is based upon the average terrain elevation above mean sea level.

(3) Stations may be authorized on channels primary to Mexico in the Sharing Zone provided the maximum power flux density (PFD) at any point at or beyond the border does not exceed -107 db(W/m²) per 25 kHz of bandwidth. Licensees may exceed this value only if all potentially affected counterpart operators in the other country agree to a higher PFD level.

(4) Stations authorized on U.S.-Mexico co-primary channels in the Sharing Zone are permitted to exceed a maximum power flux density (PFD) of -107 db(W/m²) per 25 kHz of bandwidth at any point at or beyond the border only if all potentially affected counterpart operators of 800 MHz high density cellular systems, as defined in § 90.7, agree.

(5) Channels in the Sharing Zone are available for licensing as indicated in Table A3 below.

Table A3 – Eligibility Requirements for Channels in Sharing Zone

Channels	Eligibility Requirements
1-230	Report and Order of Gen. Docket No. 87-112
231-315	Public Safety Pool

316-550	General Category
551-830	Special Mobilized Radio for 800 MHz High Density Cellular

(i) Channels 1-230 are available to applicants eligible in the Public Safety Category. The assignment of these channels will be done in accordance with the policies defined in the Report and Order of Gen. Docket No. 87-112 (See § 90.16). The following channels are available only for mutual aid purposes as defined in Gen. Docket No. 87-112: channels 1, 39, 77, 115, 153. 800 MHz high density cellular systems as defined in § 90.7 are prohibited on these channels.

(ii) Channels 231-315 are available to applicants eligible in the Public Safety Category which consists of licensees eligible in the Public Safety Pool of subpart B of this part. 800 MHz high density cellular systems as defined in § 90.7 are prohibited on these channels.

(iii) Channels 316-550 are available in the General Category. All entities are eligible for licensing on these channels. 800 MHz high density cellular systems as defined in § 90.7 are prohibited on these channels.

(iv) Channels 551-830 are available to applicants eligible in the SMR category—which consists of Specialized Mobile Radio (SMR) stations and eligible end users. ESMR licensees who employ 800 MHz high density cellular systems, as defined in § 90.7, are permitted to operate on these channels.

(6) Stations located outside the Sharing Zone (i.e. greater than 110 km from the border) are subject to the channel eligibility requirements and provisions listed in §§ 90.615 and 90.617 except that stations in the following counties are exempt from the requirements of paragraph (k) of § 90.617:

California: San Luis Obispo, Kern, San Bernardino, Santa Barbara, Ventura, Los Angeles, Orange and Riverside.

APPENDIX E**List of Commenting Parties****Comments**

San Diego County Sheriff's Department
Orange County Sheriff's Department
800 MHz Public Safety Border Licensees
Sprint Nextel Corporation
Peak Relay Inc.
City of San Diego
Raymond L. Grimes

Reply Comments

The 800 MHz Public Safety Border Area Licensees
Sprint Nextel Corporation
Orange County Sheriff's Department
City of Laredo, Texas