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

| | | |
|---|---|---|
| In the Matter of | ) | |
| | ) | |
| Improving Public Safety Communications | ) | |
| in the 800 MHz Band | ) | WT Docket 02-55 |
| | ) | |
| Consolidating the 900 MHz Industrial/Land | ) | |
| Transportation and Business Pool Channels | ) | |

# COMMENTS OF THE CITY AND COUNTY OF SAN DIEGO


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ITS ATTORNEYS


February 10, 2003

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## SUMMARY

The plan set forth in the Consensus Parties Supplement simply will not work in the San Diego area of the Mexican border without re-negotiation of existing bilateral agreements and/or much greater relocation out of 800 MHz for SMR and B/ILT licensees. The channels available to public safety in the heartland are reduced by 50% on the Mexican border. There are not enough frequency pairs to go around. Creating a 2 MHz guard band from Nextel spectrum, to match the 2 MHz protection afforded in the heartland plan, would partly cure the channel deficiency. Removing the frequency offset in the border area would also help, but that again would depend on bilateral re-negotiation.

Two actions need to occur in parallel, and quickly. First, APCO and other responsible frequency coordinators should explain precisely how the CP plan will work. Our analysis says it will not. Second, the FCC and the State Department should begin to develop a plan for bilateral re-negotiation that will make uniform the quantity and quality of Mexican border spectrum in comparison with the realigned heartland.

The technical proposals in Appendix F lack clarity and even-handedness. They ask public safety to bear more than its share of interference mitigation that must continue before, during and after realignment. References to out of band emissions and intermodulation products leave out a third primary mechanism for commercial interference to public safety systems -- high-powered transmitters at low commercial sites. There is no mention of commercial power reduction in the Appendix. Instead, the virtually exclusive focus is on improving public safety signal levels and portable receivers. There is insufficient discussion of how NPSPAC licensees

will be completely and satisfactorily re-coordinated, given the different bandwidths and channel spacing in the spectrum proposed for them.

Based on the needs of the San Diego jurisdictions alone, an $850 million contribution by Nextel to relocation/retuning expenses -- $700 million of that to public safety -- may not be enough. The Supplement's answer is unsatisfactory: That no relocation or retuning need begin without a demonstration of money in hand to cover the costs. This only avoids an unfunded liability; it does not address the public safety interference problems that have caused the need to relocate and retune in the first place. San Diego City and County endorse the fuller discussion of funding found in the contemporaneous Comments of the Public Safety Improvement Coalition, to which they belong.

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COMMENTS OF THE CITY
AND COUNTY OF SAN DIEGO

The City of San Diego (CITY) and the County of San Diego (COUNTY) hereby comment on the Supplement filed December 24, 2002 in the captioned proceeding by the self-styled "Consensus Parties."[1] ("CP") The City and County represent all public safety radio users (law enforcement, fire and EMS) in the San Diego Region with the exception of the Port of San Diego and National City.[2] For primary public safety communications, the City 800 MHz network has over 6600 users and the County 800 MHz Regional Communications System ("RCS") has over 9,000 users. In addition, the City network provides communications for over 16,000 total users and the RCS provides communications for over 17,000 total users.

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[1] The City and County are members of two coalitions commenting separately today, the Border Area Coalition and the Public Safety Improvement Coalition. Earlier, the County joined Imperial County in filing on behalf of their RCS (Comments of May 6, 2002) and the City filed Reply Comments August 7, 2002.

[2] See Agency Listings, Attachments 1 and 2 reflecting City and County agencies served.

Background

In a prior submission, the City noted that, under the original CP plan, the San Diego region and other Mexican border jurisdictions would be able to use only half of the spectrum proposed to be reassigned to public safety. San Diego insisted that the border communities be given access to the same quantity of spectrum available to heartland (non-border) jurisdictions. The City also suggested that if restrictions were to be imposed on public safety use of "cellular-like" architectures at 800 MHz, there must be a clear migration path to 700 MHz spectrum. This migration must include assured freedom from broadcast TV interference (notably Channel 69) and completion of any necessary bilateral agreement negotiations with Mexico. (Reply Comments, 2-5)

For its part, the County also called for additional spectrum in the border regions "to compensate for Mexican and Canadian bilateral agreements that give 50% of existing bandwidth to those countries." (Comments, 2) In addition, the County questioned the ability of local public safety agencies to transition in the near term to 6.25 kHz channel spacing and doubted that the $500 million contribution to relocation and retuning offered by Nextel would suffice for all the tasks involved. The County suggested "a permanent, renewable source of funding for public safety agencies." (Comments, 4)

The CP Supplement

*A Shortage of Channels*. The CP Supplement adds considerable detail to the plan for border areas, but does not and cannot, in its present form, mitigate the sheer channel shortages on the Mexican border. Nothing short of bilateral agreement re-negotiation or greater reassignment of B/ILT and SMR licensees will gain the needed public safety spectrum. The spreadsheet at Attachment 3 illustrates current channel occupancies and availability in the realigned 856-861 segment, of which 2.925 MHz would belong to public safety. (Supplement, App. G, Slide G-2)

A total of 91 public safety channels in the San Diego County/Mexican Border Area would require reallocation under the CP plan.[3] Allowing for the three-fourths MHz guard band at the high end,[4] there are 118 channels in the 856-860.25 range not currently being used by public safety. However, we estimate that only 55-60 of these could be re-coordinated for use in San Diego City and County once Nextel and the other incumbents depart.[5] This leaves a gap of 31-36 channels.[6]

The following table illustrates the San Diego/Mexican Border Area Allocations pre and post- alignment based upon the CP plan:

**Proposed San Diego/Mexican Border Area Allocations**

| | Current | Proposed | Net |
|---|---|---|---|
| **Public Safety** | **84** | **117** | **Gain 33** |
| **NPSPAC** | **63 - 25KHz equiv** | **0** | **Loss 63** |
| **B/ILT/SMR** | **215** | **82** | **Loss 133** |
| **CMRS** | **0** | **163** | **Gain 163** |
| **TOTALS** | **362** | **362** | **No Change** |

[3] This leaves out 10 channels San Diego County seeks to coordinate for Imperial County in the RCS. (note 1, *supra*)

[4] In the heartland, a quasi-guard band at 859-861 would be available for B/ILT and SMR systems considered unlikely to cause interference to public safety. (Supplement, 10)

[5] A number of public safety, B/ILT and conventional SMR licensees just north of the border area use high sites at Santiago, Modjeska and Elsinore (Exhibit A) that would, in our calculations, preclude coordination for San Diego County of about half the 118 available channels.

[6] Attachments 3 and 4 analyze the current 800 MHz channel assignments within and outside the 70-mile border zone.

The next table illustrates the San Diego/Mexican Border Area Allocations related to current channel usage:

**San Diego/Mexican Border Area Channel Current Usage**

| | Current | Proposed | Net |
|---|---|---|---|
| **Public Safety** | **80** | **117** | **Gain 37** |
| **NPSPAC** | **60 US channels<br>47 Mexican channels** | **0** | **Loss 107** |
| **B/ILT/SMR** | **62** | **82** | **Gain 20** |
| **CMRS** | **157** | **163** | **Gain 6** |
| **TOTALS** | **406** | **362** | **Loss 44** |

As can be seen from these tables, insufficient spectrum will be provided to Public Safety in San Diego as a result of the CP.[7]

*Curing the Deficit*. The public safety channel deficit could be made up if Nextel were required to provide a 2 MHz Guard Band, as they are in all non-border areas, and be restricted from operating between 861 and 863 MHz in the Mexican border area. This would replicate the 2 MHz protected area for heartland public safety at 859-861. (Note 4, *supra*) With such a safeguard in place, 30 additional channels (the proposed 0.75 MHz Guard Band out of public safety's allocation) could be considered for public safety use up to 861 MHz. Another 15-20

[7] We rate proposed NPSPAC channels as zero in both tables. Appendix G's Slide G-2 shows a pool of 117 channels for the Mexican Border Re-Allocation. It does not provide any breakdown of NPSPAC vs. conventional public safety channels. Presumably, some of this allocation would be NPSPAC. However, based on the current Mexican bilateral agreement, there is no provision for 12.5 kHz channels in this frequency block - nor is there anything that allows for a mixed use of 25 kHz channels and 12.5 kHz channels within the same block or allocations.

channels could be gained by eliminating the frequency offset in the Mexican border area.[8] This is because a transmitter operating just north of the 110-kilometer northern boundary of the border area often eliminates from consideration channels on each side of the offset frequency.

*Further Relocations and License Changes*. Following are expected impacts unless new channels could be found to fill the gap between needed and available channels in San Diego County:

- All users that could cause co-channel or adjacent channel interference that currently operate on Santiago, Modjeska and Elsinore would have to be relocated to other spectrum
- Users that could cause co-channel or adjacent channel interference would need to be licensed in a secondary status, with the provision that they would not interfere with public safety operations
- All B/ILT licensees in Orange and Riverside Counties would have to be relocated to different spectrum in order to provide enough channels in the San Diego County/Mexican Border Area
- Orange County public safety users would have to be relocated to create enough channels in the San Diego County/Mexican Border Area

Forced relocation of non-public safety users should be a last resort. It would be far better to encourage voluntary moves to other spectrum, perhaps by premium channel inducements at 900 MHz. (Supplement, 13; see also, 10, n.15)

*Interim Steps*. We don't consider our re-coordination calculations to be the last word on channel availability in San Diego City and County. We welcome, and would expect, APCO and other checks on our analysis. We recommend:

[8] Presumably requiring Mexican bilateral agreement re-negotiation. Alternatively, our proposed protection zone at 861-863 MHz could be slightly reduced to permit more than the 30 new channels. There are other good reasons for revising the bilateral agreements, including national uniformity for NPSPAC channels, but the process will take time.

- A detailed analysis to be conducted by APCO and others responsible for frequency coordination of the Southern California/Mexican Border Area. They need to show us how this will work, since we don't think it will.

- The analysis should show the possible impacts and mitigation strategies needed to address public safety interference to the San Diego County/Mexican Border Area from sites on Santiago, Modjeska and Elsinore Peaks.

- The State Department should begin to develop a plan that will enable them to successfully renegotiate the current 800 MHz bilateral agreement with Mexico. Negotiations should focus on removing the offset channel requirement, coordinating mutual aid channels and providing additional 800 MHz spectrum through frequency exchange of VHF and/or other spectrum that could be seen as more desirable by Mexico in the Border Area.

Appendix F

The City and County have conducted a thorough review of Appendix F in relation to the technical merits and the ability of public safety agencies to utilize the standards and procedures presented. There are some sections that require clarification and we are providing them as follows.

*Section 1.b.* We are unsure about the intended effective date of the technical proposals in Appendix F. Section 1.b is captioned "Post-Alignment Rules" and that is reinforced by the opening sentence of Section 1.2 and by the first sentence of Section 2. Thus, we are puzzled by Section 1.l, captioned "Interference Mitigation During Realignment." This subsection refers to "the following procedures and actions set forth in the Best Practices Guide." To be the best of our knowledge, Appendix F contains much more than is found in the current Best Practices Guide.

We ask the CP to clarify what they are proposing for mitigation of commercial interference to public safety systems during the protracted period between adoption of any order in this proceeding and completion of any regional realignment. The clarification should cover

the possibility of additional interference resulting from adding frequencies as the City and County networks continue to grow during realignment. We see no reason why post-realignment procedures should not apply beforehand, especially since the funding cap still leaves uncertain the entire completion of realignment.[9]

*Section 1.2.2.* Does this mean each manufacturer of non-voice equipment can set is own minimum recommended interference standard? We look to a day of more choice in public safety equipment and expect manufacturers will build to a single reasonable standard.

*Section 1.3*. This section omits a third primary mechanism, high-powered transmitters at low commercial sites. There is no mention of commercial power reduction in Appendix F, despite the Commission's call for comment on the tradeoffs among commercial and public safety signal levels, public safety receiver discrimination, number of public safety base stations, and other factors.[10] This is a serious omission, and it cannot be answered simply by promises that commercial providers will reduce power upon complaint, after the fact. We are looking for thresholds and presumptions that will shorten the protracted and exhausting case-by-case remediation that has characterized regulatory practice for too long.

*Section 2.1.1.* We understand that some current networks are designed to operate at a -103 dBm signal level. The -98 dBm standard would not be reasonable for those operators. Requiring public safety to design and build new networks with a minimum -95dBm signal level means that these networks are going to be more costly to build. It is also setting up a "power war." What is more practical and beneficial to public safety is if the CMRS-type systems were

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[9] Funding is discussed further below.

[10] Notice of Proposed Rulemaking, FCC 02-81, released March 15, 2002, ¶77). ("The corollary to the interference solution [of more robust public safety signals] is that interference -- particularly overload interference -- could be mitigated if the signal of the CMRS station were reduced.")

required to reduce their power levels.[11] Otherwise, public safety noise-limited architecture will need to be modified to provide for a "cellular-like" design to meet these requirements.

*Section 2.1.2.* Since U.S. public safety systems on the Mexican border could operate as high as 860.9875 MHz under existing bilateral agreements, they could be required to provide a desired signal level of -62 dBm before having a valid complaint of interference. That would be both infeasible and discriminatory. Public safety trunked radio systems using the spectrum above 859 MHz would be required to increase signal levels in a coverage area for some of the channels used in the trunk pool. System design for these networks does not typically provide for the ability to use additional transmitter sites for only some of the necessary channels. No equipment exists that we know of that could provide the necessary levels from existing sites, and it would be very difficult to design public safety systems to provide for the necessary additional sites on a portion of the networks channels.

Signal levels required in the spectrum from 859.00 to 861.00 would dictate many more transmitting sites. These sites would need to be placed closer to the intended coverage area and built in the same interference limited design as current "cellular-like architecture." These additional sites would most likely cause additional interference to adjacent spectrum users.

*Section 2.2.1* Protection of data. Why is this being proposed? It contradicts Section 3.1, which states that a complaining agency will post e-mail concerning the interference.

*Section 2.2.1a* This section is vague and should outline what information is required to perform the analysis.

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[11] The City and County are part of the Border Area Coalition filing separately today. We associate ourselves with the discussion of power reduction found in those Comments.

*Section 2.2.2b* This is not feasible for public safety agencies. Who will determine what is current? The majority of maintenance and service bulletins have little or nothing to do with interference or impacts to interference. We do not believe there are any public safety organization today that do this.

What additional cost would be incurred by public safety users to maintain this current equipment status? How can public safety users be protected from having to replace or upgrade equipment when interference occurs by no fault of theirs? Many modifications are presented to equipment users over the life of the equipment that are not performed due to the cost burden on taxpayers and lack of need. This rule would force public safety system operators to perform these modifications before an interference complaint would be acted upon. The CMRS operator should be required to perform system upgrades or modifications to insure that the least amount of transmitter noise possible is being emitted. Where does Appendix F state any CMRS requirement to perform these upgrades?

The primary purpose for a public safety communications network is to provide necessary, lifesaving response to the public in a fiscally responsible manner. Citizens deserve and demand this first and foremost – and it should stand by itself and before the interests of any business or other similar venture.

*Section 2.2.2c* "The system being interfered with shall be modified to operate in accordance with these signal requirements in the area of purported interference." Who will pay the cost for these modifications?

*Section 2.2.2c* After all of the discussion about solving public safety interference, this section states that CMRS operators will assist public safety as long as "assistance does not degrade CMRS service capacity or quality, is of a temporary or interim nature, or is otherwise

acceptable to the CMRS licensee." This language must be clarified to insure that it in no way absolves CMRS providers from mitigating harmful interference to non-CMRS systems. The Commission should carefully study the proposals contained in Appendix F and develop technical standards for mitigating interference that are applicable for all users of the 800 MHz band – including CMRS system operators.

*Section 2.2.4* Equipment Manufacturers. See our comment at Section 1.2.2 about setting standards for non-voice systems.

*Section 3.1* See our comment at 2.2.1 concerning confidentiality/non-disclosure agreements.

*Section 3.2* This seems excessive. There is a real possibility that all operating cellular/CMRS carriers are located within that one-mile radius. You could also have a situation where other public safety agencies are involved**.** In most cases, the interference is due to a site in close proximity – within a couple of blocks.

*Section 3.3* Why make all carriers do this? Is the time frame of 5 business days practical? Since we can usually pinpoint the cause of interference, why make non-interfering parties participate in this exercise? The requirement should be for the parties identified as most likely to be causing the interference to respond and meet with the affected parties.

*Section 4.1.2* Refer to page 43 of the Supplement. There is a mismatch in the figures at the two places in the Supplement. Specifications for 861-895 MHz transmitter out-of-band emissions ("OOBE") should be adjusted in border areas to better protect non-guard-band spectrum users between 859 and about 860.25.

*General Concerns.* What are the long term costs to taxpayers supporting public safety systems when those systems are required to use higher-specification radios on networks required

to provide higher signal levels? Multi-channel networks will be required to use higher-specification combiner systems and possibly modify towers for more antennas to fit into the new public safety allocation.

NPSPAC channels in Mexican border areas will need to be moved down to 856-860 and mesh with existing public safety channels. This will require a complete re-coordination of NPSPAC users. The new co-channel users from our neighboring area to the north will not be NPSPAC users and thus will likely not be public safety -- making coordination and efficient channel use more difficult. In addition, NPSPAC channel spacing at 12.5 kHz with reduced bandwidth will be mixed with neighboring 25 kHz full bandwidth channels. Is this technically feasible and prudent for public safety networks? Is there equipment available to accommodate this mixed use – especially in trunked radio systems?

NPSPAC channels are currently allocated as 12.5 kHz channels, and have been given individual channel numbers for each 12.5 slot. The rest of the 800 band does not have these channel numbers every 12.5 kHz. In Motorola trunked radio systems, how will these new channels be programmed into existing equipment? In our area, radios and their systems use the splinter channel designation to allow us to program radios to the offset channels. This is a global system configuration parameter. All channels in a given system use the offset channels. Other systems can be programmed in the same radio to use the standard channels but cannot simultaneously access the offset channels within the same system.

If NPSPAC is moved down the 800 band to a new allocation, how will trunked equipment be programmed to utilize the existing NPSPAC band plan in that new allocation? This would also be a problem in the Motorola Smartnet or Motorola Smartzone system controller, since signaling sent to radios relies on the ability to send a channel number to the

radio, and the radio is programmed to know that it is a splinter (offset channel) or standard frequency configuration.

Adequacy of Funding

The City owns and operates a 20-channel, seven simulcast site Motorola Smartnet Type II trunked analog voice network that began operation in 1992 with a taxpayer expectation of a 15-year useful life. The network is designed for portable coverage and same frequency simulcast over an area of approximately 400 square miles. There are approximately 16,000 users on the network at this time. Based upon our research, we estimate that the following equipment is incapable of being upgraded to allow programming to the re-designated channels under the proposed CP rebanding plan. Below is a cost analysis for the equipment that will need to be replaced to make this rebanding work:

**Types and numbers of radios in operation today that do not provide for flashport upgrade[12]**

| Radio type | Quantity | Replacement Cost per Radio | Total Replacement Cost |
|---|---|---|---|
| GTX | 96 | $1300 | $124,800 |
| LCS2000 | 200 | $1100 | $220,000 |
| LTS2000 | 262 | $1300 | $340,600 |
| MAXTRAC | 377 | $1400 | $527,800 |
| MTX820 | 444 | $1300 | $577,200 |
| SABER SI | 1711 | $3700 | $6,330,700 |
| SPECTRA | 1689 | $3200 | $5,404,800 |
| STX | 4 | $2000 | $8,000 |
| VISAR | 380 | $1300 | $494,000 |
| **GRAND TOTAL** | **5,163** | **N/A** | **$14,027,900** |

The City has begun the planning process for replacing their current radio infrastructure and their consultant estimates the total cost of network replacement to be between $60 and $70 million. No funding has been identified for this replacement.

Despite the addition of $350 million to the original $500 million proposed for contribution by Nextel,[13] we are not convinced that even the new amount is sufficient to accomplish all the tasks that will draw upon it. The County's suggestion for a "permanent, renewable source of funding" may still be required to backstop the private contribution. Although a given region surely may choose not to begin the process of relocation and/or retuning if funds are not available, this only avoids an unfunded liability. It does not meet the objective of

[12] "Flashport upgrade" means changing the radio's firmware. If the change cannot be made, the radio must be replaced.

[13] Made with the so far unrealized hope that other commercial sources of interference would contribute funding as well.

relocation/returning to eliminate or mitigate interference. The City and County hold firm to the principle that taxpayers supporting public safety systems should not bear any costs associated with 800 MHz rebanding that primarily benefits commercial enterprises.

We also have questions about the rate of deposit and security for Nextel's escrow of funds. Rather than repeat them here, we incorporate by reference the funding comments filed today by the Public Safety Improvement Coalition ("PSIC"), to which we belong.

## CONCLUSION

For the reasons discussed above, we ask that the Commission not adopt the CP solution as supplemented until our numerous concerns and questions -- many shared with the Border Area Coalition and the Public Safety Improvement Coalition -- are carefully considered. Even if Mexican re-negotiation cannot be accomplished prior to the adoption of new rules, its necessity should be acknowledged. Until bilateral agreement revision or some other mechanism evens out 800 MHz channel availability in the heartland and the border regions, we may need temporarily to be grandfathered or otherwise specially exempted from the heartland's realignments.

Respectfully submitted,

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ITS ATTORNEY

February 10, 2003

ATTACHMENT 1

## City of San Diego 800 MHz Network Agencies

**City of San Diego- Public Safety**
Police Department
Fire Department
Emergency Medical Services
Lifeguard
Parks Department – Park Rangers
Rural Metro

**Additional Public Safety**
San Diego Unified School District Police
San Diego Community College District Police
Poway Fire Department

**Trauma Network**
UCSD Medical Center
Sharp Memorial Hospital
Mercy Hospital
Scripps Chula Vista
Scripps La Jolla
Grossmont Hospital
Palomar Medical Center

**City of San Diego – Non-Public Safety**
Building Inspection Department
Neighborhood Code Compliance Department
Water Department
Parking Enforcement
Parks and Recreation Department
Qualcomm Stadium
Metropolitan Waste Water Department
San Diego Unified School District
Information Technology & Communications Department
General Services Department

**Additional Non-Public Safety**

Unified School District Transportation Department
Unified School District Food Services
Unified School District Administrative Services
Unified School District Maintenance Services
Unified School District Landscaping Services

**Mutual Aid Public Safety**
San Diego County Sheriffs Department
Chula Vista Police
Chula Vista Fire/ EMS
Coronado Police
Coronado Fire/ EMS
La Mesa Police
La Mesa Fire/ EMS
Escondido Police
Escondido Fire/ EMS
National City Police
South Bay Fire District
East County Fire District
Ramona Fire
Rancho Santa Fe Fire
Imperial Beach Fire/ EMS
Lemon Grove Fire/ EMS
Santee Fire/ EMS
El Cajon Fire/ EMS
Del Mar Fire
Encinitas Fire
Mercy Air
San Diego Unified Port District Police
University of California- San Diego
San Diego State University
Secret Service
FBI
Border Patrol

ATTACHMENT 2

**Regional Communications System Agencies**

San diego joint filing
- rcs a...

ATTACHMENT 3

San diego joint filing - attac...

ATTACHMENT 4

**San Diego /Mexican Border Area Realignment**

The analysis of the use of the proposed 800 MHz rebanding proposal by the Consensus Group shows the following consequences for the San Diego /Mexican Border Area:

Based on current channel allocations and frequency coordination today, there are not enough channels available to make this work in San Diego. Currently, the number of NPSPAC channels coordinated between the Mexican Border and the 70 mile line are 60 US NPSPAC channels used in a primary status and 47 Mexican NPSPAC channels used in a protected secondary status in the US.

The number of wide area, high site Public Safety channels coordinated at 860.25 – 866.00 is 25. (10 for San Diego City and 15 for San Diego County). San Diego County also needs to coordinate 10 additional channels for Imperial County. There is an additional six channels that have limited coverage and would be easier to identify new channels to coordinate with existing users to the north (Orange and Riverside Counties). All of these channels will also need to be relocated in the 856.00 – 870.25 frequency allocation.

The total number of Public Safety channels for the San Diego/Mexican Border Area that need new US frequency allocations in the proposed spectrum is 91. (101 if you add in Imperial County channels)

When you analyze the proposed frequency spectrum for the San Diego/Mexican Border Area, the number of channels in the 856.00 – 860.25 range, there are 118 channels that are not currently being used by Public Safety. However, usage of these channels in the San Diego area will have to be coordinated with existing Public Safety, B/ILT and SMR users to the north of the 70 mile line. Many of the channels available have current sites located and operating on high sites such as Santiago, Modjeska and Elsinore that will make it difficult to coordinate their usage in San Diego.

Analysis of the available 118 channels that could be re-coordinated for use in San Diego shows that 55-60 could be re-coordinated for use in San Diego once Nextel and non-public safety users leave this allocation. That leaves a gap of 31-36 channels.

The San Diego/Mexican Border Area is not being given the same consideration for a guard band that the rest of the US is being given. If there is a need for 2 MHz of guard band elsewhere, why is only 0.75 MHz being proposed for the San Diego/Mexican Border Area? Shouldn't Public Safety agencies in the border area be afforded the same protection as the rest of the US?

The spectrum allocation for Nextel should be reduced in the San Diego/Mexican Border Area to provide this protection. Nextel should not use channels below 863.00 – allowing for a 2 MHz guard band from 861.00 – 863.00. This would provide an additional 30 channels that could be considered for Public Safety usage up to 861.00.
It is estimated that an additional 15-20 channels could be gained by eliminating the frequency offset in the San Diego/Mexican Border Area. This offset requires San Diego/Mexican Border

Area users to coordinate with two co-channels to the north. Any transmitter operating just north of the 110 kM line is likely to eliminate offset channels on both sides from consideration.

In conclusion, in order to make this plan work in San Diego, the following would most likely need to occur:

- All users that could cause co-channel or adjacent channel interference that currently have sites operating on Santiago, Modjeska and/or Elsinore would have to be relocated to other spectrum.
- Users that could cause co-channel or adjacent channel interference would need to be licensed in a secondary status with the provision that they would not interfere with Public Safety operations.
- All B/ILT in Orange and Riverside Counties would have to be relocated to different spectrum in order to provide enough channels that can make this work in the San Diego/Mexican Border Area.
- Orange County Public Safety users would have to be relocated to make enough channels available to make this work in the San Diego/Mexican Border Area.
- Nextel would need to provide additional spectrum up to 863.00 MHz in order to provide sufficient channels and guard band protection.

Interim Steps:

- A detailed analysis would need to be conducted by APCO and others responsible for frequency coordination of the Southern California/Mexican Border Area. They need to show us how this will work, since we don't think it will.

- A detailed analysis should be conducted showing the possible impacts and mitigation strategies needed to address public safety interference to San Diego/Mexican Border Area from sites on Santiago, Modjeska and Elsinore.

- Nextel should be required to work on eliminating interference to Public Safety systems.

- The State Department should begin to develop a plan that will enable them to successfully renegotiate the current 800 MHz treaty with Mexico – negotiations should focus on getting rid of the offset channel allocations, coordinating mutual aid channels and providing additional 800 MHz spectrum through frequency exchange of VHF and/or other spectrum that could be seen as more desirable by Mexico in the Border Area.

Further analysis should be conducted and solutions provided that encourage non-Public Safety users of the affected 800 MHz band to relocate to other bands such as the 900 MHz spectrum proposed – Nextel should pay for this study and any proposed solutions.