- FAA Tower Registration Number
- Presence of excess building and tower space to accommodate possible duplicate system elements during relocation
- Call sign(s) and frequencies in operation at the site
- System type (Single-Site, Simulcast, Back-up, Voted, etc.)
- If Simulcast, how is this site linked to the other sites?
- Repeaters:
  - Quantity
  - For Each
    - Manufacturer
    - Type/Model #:
    - Output (watts)
- Receive Antennas:
  - Quantity
  - For Each
    - Manufacturer
    - Type/Model #
    - Voted Receiver? (If yes, please provide detailed description)
- Transmit Antennas:
  - Quantity
  - ForEach:
    - Manufacturer
    - Type/Model #
- Combiners:
  - Quantity
  - Foreach:
    - Manufacturer
    - Type/Model #
    - # of cavities
    - Frequencies used
- Controller type
- Controller model #
- Control/home channels
- Control channel rotation scheme (if applicable)
- Other companies or agencies with units capable of operating on this site
  - organization name
  - Number of units programmed for site
  - Connection type to other organization's console, if any
- Any other information not specifically requested above which may affect the cost or logistics of retuning for this site on this site (accessibility, power supply, co-tenants, etc.)

- Total number of programmed mobile data terminals (MDTs), divided into active units and spare units (your agency)

- Manufacturer
- Modelnumber

d. Console Information:

- Quantity of console stations

e. Mutual Aid Information: (If agency owns and maintains any mutual aid system or channels on its licensed frequencies)

- For each site:
  - Site name
  - FAA Tower Registration Number
  - Presence of excess building and tower space to accommodate possible duplicate system elements during relocation
  - Call sign(s) and frequencies in operation at the site
  - Repeaters:
    - Quantity
    - ForEach
      - Manufacturer
      - Type/Model #:
      - Output (watts)
  - Receive Antennas:
    - Quantity
    - ForEach:
      - Manufacturer
      - Type/Model #
      - Voted Receiver? (If yes, please provide detailed description)
  - Transmit Antennas:
    - Quantity
    - ForEach:
      - Manufacturer
      - Type/Model #
  - Combiners:
    - Quantity
    - Foreach:
      - Manufacturer
      - Type/Model #
      - # of cavities
      - Frequencies used
  - Any other information not specifically requested above which may affect the cost or logistics of retuning for this site on this site (accessibility, power supply, co-tenants, etc.)

f. Any additional information not listed above about any aspect of the system(s) for which information is being provided that is critical to planning the costs and logistics of system relocation, including any funded near-term upgrade plans.

C. Regional Plan Updates: Incumbent Migration Planning: Negotiations,

(1) For Regions prioritized 1-14 - Within eight months following the effective date of this Order (the "Regional Plan Revision Deadline"), the 800 MHz Regional Planning Committees in Regions prioritized 1-14 shall meet and either reconfirm the transfer of the current NPSPAC regional channel plan ("Regional Plan") to the New NPSPAC Block, or shall complete any necessary or desired revisions to the plan, consistent with existing FCC rules for revising NPSPAC plans; provided, however, that any such changes cannot impact public safety licenses outside of the Current NPSPAC block (The "Revised Regional Plans"). The frequencies assigned to each NPSPAC Licensee by the Regional Planning Committee in the New NPSPAC Block are deemed comparable frequencies for the purposes of this Order. All amendments to any Regional Plan between the Phase II Completion Date and the earlier of (i) the Regional Plan Revision Deadline, and (ii) delivery of the applicable Revised Regional Plan to the FCC must be coordinated with the RCC, and should be implemented with respect to the New NPSPAC Block. Within 60 days of the adoption of a Revised Regional Plan, the Phase II Planning Committee shall complete coordination with the Regional Planning Committee and all affected Incumbent Licensees in the development of a regional migration plan for relocation of all Incumbent NPSPAC Licensees to the New NPSPAC Block, and relocation of Nextel from the New NPSPAC Block to the Current NPSPAC Block (the "Regional Migration Plan"). Upon completion of each Regional Migration Plan, the RCC's Phase II Planning Committee shall certify to Commission. The Regional Migration Plan shall address, ***inter*** *alia*, (i) The order of commencement of reprogramming among the various licensees in the Region; considering factors such as population, geography, system size and complexity, interoperability, and the contemporaneous relocation of current public safety licenses in the Guard Band (ii) the reprogramming of any mutual aid or regional use frequencies; (iii) the timing of Nextel's termination of network operations on New NPSPAC Block; (iv) the timing of Nextel's commencement of operations on the Current NPSPAC Block. Certification of each Regional Migration Plan shall commence a nine-month mandatory negotiation period between Nextel and each incumbent licensee concerning relocation timing, reimburseable costs and detailed procedures specific to each licensee to implement relocation without significant disruption to public safety communications services. Once an incumbent licensee and Nextel have reached agreement on a relocation plan, the RCC will prepare and file the necessary license applications with the Commission on behalf of the affected licensees. Applications involving public safety incumbents shall be filed by the RCC (or the relevant applicant) with a certified public safety coordinator, which will complete a final review and submit the application to the FCC. Public safety coordinators are required to submit such applications to the FCC within seven

days of receipt by the public safety coordinator. Because the Revised Regional Plans will have been previously certified, individual applications shall be considered "pre-coordinated" by the Commission, but it is expected that individual applications may be subject to 30-day public notice in accordance with FCC rules. If Nextel and an incumbent licensee cannot complete a relocation agreement within the first four months of the mandatory negotiation period, they are required to seek the mediation assistance of the Regional Planning Committee. If no agreement is reached at the end of the mandatory nine-month negotiation period, either party may initiate a "baseball-type" arbitration process, as described in Section II(F).

(2) For Regions prioritized 15-55 - Within sixteen months following the effective date of this Order (the "Regional Plan Revision Deadline"), the 800 MHz Regional Planning Committees in Regions prioritized 15-55 shall meet and either reconfirm the transfer of the current NPSPAC regional channel plan ("Regional Plan") to the New NPSPAC Block, or shall complete any necessary or desired revisions to the plan, consistent with existing FCC rules for revising NPSPAC plans; provided, however, that any such changes cannot impact public safety licenses outside of the Current NPSPAC block (The "Revised Regional Plans"). The frequencies assigned to each NPSPAC Licensee by the Regional Planning Committee in the New NPSPAC Block are deemed comparable frequencies for the purposes of this Order. All amendments to any Regional Plan between the Phase II Completion Date and the earlier of (i) the Regional Plan Revision Deadline, and (ii) delivery of the applicable Revised Regional Plan to the FCC must be coordinated with the RCC, and should be implemented with respect to the New NPSPAC Block. Within 60 days of the adoption of a Revised Regional Plan, the Phase II Planning Committee shall complete coordination with the Regional Planning Committee and all affected Incumbent Licensees in the development of a regional migration plan for relocation of all Incumbent NPSPAC Licensees to the New NPSPAC Block, and relocation of Nextel from the New NPSPAC Block to the Current NPSPAC Block (the "Regional Migration Plan"). Upon completion of each Regional Migration Plan, the RCC's Phase II Planning Committee shall certify to Commission. The Regional Migration Plan shall address, ***inter alia,*** (i) The order of commencement of reprogramming among the various licensees in the Region; considering factors such as population, geography, system size and complexity, interoperability, and the contemporaneous relocation of current public safety licenses in the Guard Band (ii) the reprogramming of any mutual aid or regional use frequencies; (iii) the timing of Nextel's termination of network operations on New NPSPAC Block; (iv) the timing of Nextel's commencement of operations on the Current NPSPAC Block. Certification of each Regional Migration Plan shall commence a thirteen-month mandatory negotiation period between Nextel and each incumbent licensee concerning relocation timing, reimburseable costs and detailed procedures specific to each licensee to implement relocation without significant disruption to public safety communications services. Once an incumbent licensee and Nextel have reached agreement on a relocation plan, the RCC will prepare and file the necessary license applications with the Commission on behalf of the affected

licensees. Applications involving public safety incumbents shall be filed by the RCC (or the relevant applicant) with a certified public safety coordinator, which will complete a final review and submit the application to the FCC. Public safety coordinators are required to submit such applications to the FCC within seven days of receipt by the public safety coordinator. Because the Revised Regional Plans will have been previously certified, individual applications shall be considered "pre-coordinated" by the Commission, but it is expected that individual applications may be subject to 30-day public notice in accordance with FCC rules. If Nextel and an incumbent licensee cannot complete a relocation agreement within the first six months of the mandatory negotiation period, they are required to seek the mediation assistance of the Regional Planning Committee. If no agreement is reached at the end of the mandatory ten-month negotiation period, either party may initiate a "baseball-type'' arbitration process, as described in Section II.(F).

D. Relocation Negotiations. During the respective mandatory negotiation period, Nextel must provide a complete relocation offer, including: (i) proposed replacement frequencies in accordance with the Regional Migration Plan; (ii) costs to be reimbursed by the Relocation Fund; (iii) the timing of relocation in accordance with the Regional Migration Plan; (iv) proposed relocation agreement containing other standard terms and conditions; and (iv) a plan for each relocating licensee designed to prevent significant disruption of its operations, especially communications relating to the protection of life, health, and property to each Incumbent Licensee who has provided Relocation Information, with a copy to the RCC (the "Relocation Proposal"). All parties shall respond in a timely and reasonable fashion to all relocation proposals, requests for meetings, and other correspondence or communication relating to negotiation. The parties shall not be obligated to commence actual relocation in any NPSPAC Planning Region until each Incumbent Licensee in the Planning Region has executed a relocation agreement. However, relocation may commence earlier by mutual agreement of the Phase II Planning Committee and the affected Licensee(s).

E. Binding Arbitration. If the parties cannot complete a relocation agreement within nine (9) months of the commencement of the mandatory negotiation period for Regions prioritized 1-14, and within six months for Regions prioritized **15-55,** Nextel and the Incumbent licensee shall seek the mediation assistance of the Regional Planning Committee or the Phase II Planning Committee. If the parties cannot complete a relocation agreement within the mandatory negotiation period, either party may initiate arbitration. Arbitration shall be conducted by a panel established by the Relocation Coordination Committee to review relocation proposals in a "Major League Baseball''-style arbitration: Nextel and the Incumbent Licensee will each present a single, best-and-final relocation proposal to the panel, which based on the relative merits must choose one of the two proposals and present its findings in a reasoned opinion. The decision of the panel shall be binding, provided, however, that any decision or portion of a decision of the arbitration panel with respect to whether replacement frequencies

meet the definition of comparable facilities set forth in this Order may be appealed to the Commission. The Commission will give great weight to the decision of the arbitration panel in the consideration of any such appeal, and shall expedite the adjudication of any such appeal to the greatest extent allowed by law. The parties shall execute the relocation agreement within ten (10) days following the final arbitration decision. Should a Incumbent NPSPAC Licensee be subject to state, municipal or other laws and regulations limiting their participation in binding arbitration, the parties shall be directed to undertake all best efforts to reconcile any unresolved cost and/or timing issues consistent with applicable state and local requirements, including non-binding arbitration subject to review and reversal by the FCC.

F. Costs: All direct, reasonable costs for NPSPAC Licensees shall be subject to payment or reimbursement through the Relocation Fund. Upon completion of all relocation agreements in a NPSPAC Region, the Regional Planning Committee shall send written notice to the Relocation Fund reserving monies equal to the aggregate relocation costs for all Incumbent Licensees the Planning Region. The Relocation Fund Administrator shall allocate and guarantee availability of those funds for that Region. Reimbursable costs shall be similar to those in WT Docket No. 93-144.

G. Failure to Comply. Any Incumbent NPSPAC Licensee who has not provided the requested information within the deadlines shall be subject to fines levied by the FCC to be deposited in the Relocation Fund. Any prioritized Region 1-14 Incumbent NPSPAC Licensee which has not executed a relocation agreement within 24 months following the date of the relevant Regional Relocation Notice or vacated its original frequencies within thirty-three **(33)** months following the effective date of the Order shall be issued a new license by the FCC for the replacement frequencies set forth in the applicable Regional Migration Plan, and given thirty days to relocate, combined with either **(i)** involuntary license cancellation by the FCC; or (ii) permanent modification of the subject license by the Commission to secondary status. Any prioritized Region 15-55 Incumbent NPSPAC Licensee which has not executed a relocation agreement within 31 months following the effective date of the Order or vacated its original frequencies within forty-two (42) months following the effective date of the Order shall be issued a new license by the FCC for the replacement frequencies set forth in the applicable Regional Migration Plan, and given thirty days to relocate, combined with either (i) involuntary license cancellation by the FCC; or (ii) permanent modification of the subject license by the Commission to secondary status. Should an Incumbent NPSPAC Licensee be unable to vacate its original frequencies within the deadlines established herein due to circumstances beyond its control and has exhibited best efforts to meet any applicable deadline, the Incumbent NPSPAC Licensee may seek an extension of the relocation period.

APPENDIX D

REALIGNMENT TIMELINE

800 MHZ CONSENSUS PLAN REALIGNMENT TIMELINE

Realianment Timescale	Phase I - Relocation of Channel 1-120 Incumbents .EA Licensees and Large Regional Operators	Phase I- Relocatlon of Channel 1-120 Incumbents. Regions 1-14	Phase I - Relocation of Channel 1-120 Incumbents - Regions 15-55	Phase II - Relocation of NPSPAC and Guard Band Public Safety LIcensees - Regions 1-14	Phase II - Relocation of NPSPAC and Guar Band Public Safety Licensees - Regions 15-55
5 Days From Order			Public Notice To supply Information		
45 Days From Order	System Information Provided to RCC	System Information Provided to RCC	System Information Provided to RCC	Notification by Public Safety in if they desire to relocate out of the Guard Band	Notification by Publi Safety in if they desire to relocate ou of the Guard Band
60 Days From Order		Deadline for Incumbents wishing to relocate to 900 MHz to notify RCC	Deadline for Incumbents wishing to relocate to 900 MHz to notify RCC	Public Notice To supply Information	
90 Days From Order	Frequency Plan Completed by RCC- Mandatory Negotiation Period Begins				
120 Days From Order		Frequency Plan Completed by RCC- Mandatory Negotiation Period Begins		System Information Provided to RCC	
180 Days From Order			Frequency Plan Completed by RCC- Mandatory Negotiation Period Begins		
8 months	Mediation Assistance Available	Mediation Assistance Available		Revised Regional plan Due	
9 Months					Public Notice To supply Information
10 Months			Mediation Assistance Available	Regional Migration Plan Due-Mandatory Negotiation Period Begins	

800 MHZ CONSENSUS PLAN REALIGNMENT TIMELINE

12 Months	Mandatory Negotiation Period Ends- Arbitration Requests				System Information Provided to RCC
13 Months		Mandatory Negotiation Period Ends- Voluntary Arbitration requests			
14 Months	Physical Retune Begins		Arbitration Requests	Mediation Assistance Available	
15 Months		Physical Retune Begins			
16 Months					Revised Regional plan Due
18 Months					Regional Migration Plan Due-Mandatory Negotiation Period Begins
19 Months			Mandatory Negotiation Period Ends		
21 Months			Physical Retune Begins		
22 Months				Mandatory Negotiation Period Ends- Arbitration Requests	
23 Months	Physical Retune Completed				
24 Months		Physical Retune Completed		Physical Retune Begins	Mediation Assistance Available
26 Months					Arbitration Requests
30 Months					
31 Months					Mandatory Negotiation Period Ends
33 Months			Physical Retune Completed	Physical Retune Completed	Physical Retune Begins
36 Months					
42 Months					Physical Retune Completed

APPENDIX E

SAMPLE REALIGNMENT PRIORITIZATION

FOR

55 NPSPAC REGIONS

Sample Prioritization for 55 NPSPAC Regions

Priority	REGION	Region Name	Pops
1	5	California-South	18269095
2	7	Colorado	3294394
3	8	Metro NY	19483873
4	3	Arizona	3665228
5	6	California-North	11490926
6	43	Washington	4866692
7	35	Oregon	2842321
8	9	Florida	12937926
9	20	DC	6900863
10	54	Metro Chicago	13034245
11	19	New England	11257791
12	33	Ohio	10847115
13	28	New Jersey-Philadelphia	9861035
14	21	Michigan	7744110
15	31	North Carolina	6628637
16	10	Georgia	6478216
17	40	Texas-Dallas	5163389
18	24	Missouri	5117073
19	39	Tennessee	4877185
20	36	Western Pennsylvania	4770714
21	51	Texas-Houston	4715445
22	42	Virginia	4655241
23	22	Minnesota	4375099
24	14	Indiana	4313234
25	18	Louisiana	4219973
26	1	Alabama	4040587
27	17	Kentucky	3685296
28	13	Illinois	3639770
29	37	South Carolina	3486703
30	30	New York-Albany	3261682
31	34	Oklahoma	3145585
32	53	Texas-San Antonio	3138753
33	55	New York-Buffalo	2840302
34	15	Iowa	2776755
35	23	Mississippi	2573216
36	16	Kansas	2477574
37	45	Wisconsin	2430468
38	4	Arkansas	2350725
39	44	West Virginia	1793477
40	41	Utah	1722850
41	49	Texas-Austin	1582714

Sample Prioritization for 55 NPSPAC Regions

42	26	Nebraska	1578385
43	29	New Mexico	1515069
44	50	Texas-E1Paso	1440485
45	27	Nevada	1201833
46	11	Hawaii	1108229
47	12	Idaho	1006749
48	52	Texas-Lubbock	945724
49	25	Montana	799065
50	38	South Dakota	696004
51	32	North Dakota	638800
52	2	Alaska	550043
53	46	Wyoming	453588
54	47	Puerto Rico	
55	48	US Virgin Islands	

APPENDIX F –

POLICIES AND PROCEDURES

FOR

POST-REALIGNMENT INTERFERENCE MITIGATION

POLICIES AND PROCEDURES FOR
POST-REALIGNMENT INTERFERENCE MITIGATION

1. Introduction.

a. Consensus Plan Interference Mitigation. The Consensus Plan would substantially eliminate the current incidence of CMRS – public safety interference in the 800 MHz band. As described in Nextel's September 23 comments,[1] the Consensus Plan will reduce the probability of current CMRS – public safety intermodulation interference by more than 90 percent for many current NPSPAC licensees, and by as much as 65 percent for public safety licensees in the non-cellular block remaining closest to the new cellular channel block. Interference issues related to out-of-band emissions ("OOBE") will be virtually eliminated outside of the new 800 MHz Guard Band.

b. Post-Realignment Rules. The Consensus Parties propose, therefore, that the Commission adopt the following policies and procedures to address the remaining incidents of CMRS – public safety interference upon completion of the Consensus Plan realignment in a NPSPAC Region? For purposes of these provisions, realignment will be considered complete when all public safety, B/ILT, and high-site SMR licensees in a Region are relocated as required by the Consensus Plan and Nextel is licensed for the 816-824/861-869 MHz block in that Region.

1.1 Interference Mitigation During Realignment: During the period from the adoption of the First Report and Order until realignment is completed all affected parties shall conform to the following procedures and actions set forth in the Best Practices Guide to mitigate CMRS – public safety interference. All licensees in the 800 MHz band operating low-site cellular systems are equally obligated to participate in responding to interference complaints and for mitigating their contribution to actual interference. Any licensee that does not receive the cooperation of CMRS licensees with sites within 5000 feet of the alleged area of interference are encouraged to use the FCC's informal complaint process to compel cooperation.

1.2 Definition of interference. Upon completion of 800 MHz realignment in a Region, CMRS – public safety interference will be defined as a reduction in the ratio of the desired signal to undesired signals and noise below a minimum recommended value.

1.2.1 Voice Systems. For voice systems, the minimum recommended C/I+N value for defining interference will be a C/I+N of 20 dB.

1.2.2 Non-Voice Systems. For non-voice public safety communications systems, the equipment manufacturer will supply the minimum recommended C/I+N value.

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[1] September 23, 2002 Comments of Nextel Communications, Inc. at page 6.

[2] These policies and procedures would also apply to interference between non-public safety noise limited systems in the non-cellular block and CMRS systems.

1.3 CMRS - Public Safety Interference Mechanisms. The two primary mechanisms creating interference from **800** MHz CMRS operations to noise-limited systems ("NLS") in the 851-861 MHz range are as follows:

a. ***An*** increase in the noise floor in end-user receiver equipment in a NLS due to OOBE from nearby CMRS transmitters. Post-realignment, the Consensus Plan requires that CMRS sites be designed with increased filtering -- which they will now be able to implement due to the realignment -- and which should virtually eliminate CMRS – public safety interference resulting from OOBE.

b. The formation of intermodulation products in NLS receivers originating from relatively strong off-frequency signals from nearby CMRS transmitters. Intermodulation products may result from insufficient receiver attenuation of the off-frequency CMRS signal, high individual or composite CMRS signal strength in the immediate area of interference (aggregate on-street CMRS signals above approximately -40 dBm are more likely to cause intermodulation products in 800 MHz public safety receivers), or various combination of these factors.

2. Rights and responsibilities. These policies and procedures will clarify the rights and responsibilities of various entities that will be operating in the 800 MHz spectrum after realignment is completed. The **800** MHz spectrum, for the purposes of this discussion, covers all users operating base stations transmitting in the range 851-895 MHz.

2.1 Rights. Upon the completion of realignment in a Region, all operators of base station transmitters in the range 851-859 MHz will have the following interference protections:

2.1.1. System Transmitting in the Ranee 851-859 MHz. Operators of base station transmitters in the range 851-859 MHz will be entitled to operate free from measurable interference, as defined in Section 1.2, caused by CMRS operations above 861 MHz.

a. Existing Systems. "Existing" public safety communications systems and other non-cellular block licensees, *i.e.*, those under construction or in operation as of the effective date of the Report and Order in this Docket, shall be protected from CMRS – public safety interference to a measured desired signal level of –98 dBm in the area of interference. The technique for making this measurement will be included in the revised Best Practices Guide in **3.0.**

b. New or Replacement Systems. Public safety systems and other non-cellular block licensees constructed after the effective date of the Report and Order herein, or systems replaced, modified or upgraded after that date, shall be protected from CMRS – public safety interference to a measured desired signal level of –95 dBm in the area of interference. The technique for making this measurement will be included in the revised Best Practices Guide in **3.0**

c. Reliability Considerations. For either "existing" systems and "new or replacement systems," the interference protection established here will be based on an area coverage probability of 95%. If the system in question was designed to a greater level of coverage probability, the operator will be entitled to operate free from

measurable interference at that higher level, provided that the system operator documents that the system was built to achieve a higher coverage probability.

d. Interference Protection Adiustment. If the public safety communications system or other non-cellular block licensee being evaluated was designed with a C/I+N requirement greater than 20 dB, the applicable interference threshold specified above will be adjusted on **a** dB for dB basis **as** required to meet the C/I+N requirement of the system (e.g. a system requiring a C/I+N of 35 dB would be required to deliver 15 dB more signal in the apparent interference area than a system requiring a 20 dB C/I+N).

2.1.2 Systems Transmitting in the Range 859-861 MHz. Operators of non-cellular base station transmitters in the range 859-861 MHz (the 800 MHz Guard Band) will be entitled to operate free of CMRS – public safety interference to the same extent as set forth in Section 2.1.1, for licensees operating between 851-859 MHz; ***except that,*** the interference protection thresholds will increase as the frequency of the desired signal rises from 859 to 861 MHz. The interference thresholds will rise linearly from 0 dB at 859 MHz to 6 dB at 859.5 MHz, and to 33 dB at 860.5 MHz and for all frequencies between 860.5 and 861.0 MHz.

2.1.3. CMRS Operator's Resoonse Obligation. In the event a public safety or other non-cellular communications operator reasonably believes, based on generally accepted engineering analysis, that it is experiencing CMRS – public safety interference at a specific location or locations, all potentially interfering CMRS licensees within 5,000 feet of the interference area are required to cooperate fully with the public safety operator to respond to, test, analyze and determine the cause of the reported interference. Specific response requirements are detailed further in Section **3,** herein.

2.1.3 System Transmitting in the Range 861-895 MHz. Upon an allegation that the licensee is causing, in whole or in part, CMRS – public safety interference at 800 MHz, the licensee of an interference-limited system in the range 861-895 MHz will be entitled to a timely determination of responsibility for interference contribution utilizing a standardized, repeatable analysis with calibrated test equipment and based on the definition of interference in Section 1.1, as measured at the location of interference.

2.2 800 MHz Licensee Responsibilities. All parties operating base station transmitters in the range 851-895 MHz have responsibilities as part of the continued granting of their licenses, and the continued granting of type acceptance for equipment manufacturers.

2.2.1 Protection of data. All parties to any interference analysis or mitigation shall treat any and all data exchanged as part of an interference analysis or mitigation action **as** covered by a non-disclosure agreement, regardless of whether a non-disclosure agreement has been signed by the parties.

2.2.2 Systems Transmitting in the Range 851-861 MHz. All licensees/operators of noise-limited systems shall, as a condition of the continued authorization of their licenses, comply with the following responsibilities:

a. If a licensee initiates a CMRS – public safety interference complaint, the licensee shall participate in the analysis of the complaint and shall provide to the other entities information about the system being interfered with, in accordance with the response times and procedures established in Section 3.0, below.

b. The complaining licensee shall ensure that its system that is being interfered with is current with regard to maintenance and service bulletins from the equipment manufacturer. This does not mean that the equipment must be the latest generation available from the manufacturer; a system is deemed to be current if the system and its components are up-to-date per manufacturer service or maintenance bulletins regarding the system, its hardware and software, including both the infrastructure and the subscriber units.

c. If, as a result of analysis conducted per Section 3.0, it is established that the system being interfered with does not meet the required minimum desired signal levels, as defined in Sections 2.1.1 and 2.1.2, for systems operating below 861 MHz, the system being interfered with shall be modified to operate in accordance with these signal requirements in the area of the purported interference. A CMRS operator is not required to make any adjustments or modifications to its communications system to mitigate the complained-of interference, unless the complaining system is operating in accordance with the applicable required minimum signal levels in the area of purported interference.

1. Although CMRS licensees are not required to modify their systems if the NLS does not meet the required signal levels established herein, the Consensus Parties encourage CMRS operators to assist public safety licensees in providing reliable life safety communications services to the extent that such assistance does not degrade CMRS service capacity or quality, is of a temporary or interim nature, or is otherwise acceptable to the CMRS licensee.

d. NLS licensees shall design new system and/or replacement or upgraded systems for the range 851-861 MHz using the thresholds in Sections 2.1.1 and 2.1.2, depending on where the system transmitting frequencies are assigned.

2.2.3 Operators transmitting in the range 861-895 MHz. As a condition of the continued authorization of their licenses, all operators transmitting in the range 861-895 MHz shall have the following responsibilities:

a. The operator shall maintain an organization to respond to interference complaints according to response times and procedures in Section 3.0. This organization shall maintain (1) staff, (2) equipment, **(3)** budget, and (4) authority to (a) respond to complaints, (b) carry out analysis in conjunction with complainants and other entities, and (c) mitigate interference where the analysis indicates that the operator is a contributor. The operator shall certify to the FCC that this organization is in place and shall specify how the operator can be notified of an interference complaint within 60 days of the effective date of the Report and Order.

b. If the operator is identified as a potential contributor to an interference complaint, respond to the complaint according to response times and procedures in Section 3.0.

c. To the extent that mitigation of interference requires reduction in on-street power by more than one operator, all operators shall reduce power equally.

2.2.4 Equipment manufacturers. Within nine months the effective date of the Report and Order herein, each 800 MHz equipment manufacturer shall establish a standard, repeatable method for assessing interference to existing non-voice equipment developed by them and designed for use in the 851-861 MHz range. Manufacturers shall include in all new system designs, and provide to the licensee, the necessary processes and measurements to analyze the performance of the system as it is affected by potential interferors.

3.0 Resolving Interference.

a. Revised Best Practices Guide. The Consensus Parties recommend that the Commission direct the formation of a working group composed of representatives of all affected CMRS carriers, public safety licensees, private wireless and **H-SMR** licensees, equipment manufacturers, 800 MHz system designers and 800 MHz frequency coordinators. The Commission would charge the working group with responsibility for developing, publishing and submitting to the Commission, within one year of its initiation, a revised Best Practices Guide for Mitigating CMRS – public safety interference at 800 MHz. The working group would operate through consensus procedures. The Revised Best Practices Guide should establish procedures for notification, analysis, and mitigation of interference by entities operating below 861 MHz after realignment is completed. These procedures should address, at a minimum the: (a) steps to be followed and the timelines to be supported, (b) requirements for equipment calibration, (c) requirements for documentation, (d) obligations of all parties to participate in good faith, (e) obligations of all contributors to an interference problem to contribute both time and resources to the solution and to provide the specific data necessary to conclusive analysis and interference mitigation, and (f) provisions to prohibit frivolous complaints and complaints made in bad faith.

b. Measurement Criteria. To facilitate implementation of the post-realignment interference protections set forth herein, the Consensus Parties also recommend that the revised Best Practices Guide define the specific measurement procedures and statistical analysis to be applied to any interference complaint. These techniques must be traceable to standard statistical and propagation-prediction techniques already in use by all system designers in the 851-895 MHz range. The Revised Best Practices Guide should contain provisions to assure that measurement procedures are applied equally to all signals involved in any interference complaint; standard statistical methodology should also be set forth and required to be applied to all measurements to arrive at the weighted measurements for the desired signal and all potential interferors.

3.1 Initial notification. A licensee in the 851-861 MHz range seeking the participation of licensees in the 861-895 MHz range in evaluating an alleged interference occurrence shall post a

standard interference complaint to an e-mail box operated jointly by the operators above 861 MHz. This complaint shall contain (a) the specific geographical location where the interference is occurring in terms of latitude and longitude, (b) the FCC license information for the offended party, and (c) the offended party's point of contact ("POC") for technical information.

3.2 Initial response. All operators above 861 MHz shall respond to the complaint within two business days and shall indicate whether they have equipment operating within 5000 feet of the location of the alleged interference. This equipment may be either cell site equipment or repeaters.

3.3 On-site analysis. The complaining entity's technical POC shall contact the potential contributors and arrange for an on-site analysis to take place within five business days (or later, at the discretion of the complaining entity). All potential contributors to the interference shall support the analysis effort. On the agreed-on day the complaining entity's technical POC and the POCs from the potential contributors shall conduct the analysis according to the previously-defined procedures as established in the Revised Best Practices Guide.

3.5 Mitigation steps. When the analysis results show that (a) the system being interfered with meets the minimum signal level requirements of Sections 2.1.1 and 2.1.2 and (b) the potential contributors are interfering with the system in question, the contributors to the interference shall correct the interference per industry-standard mitigation techniques. The Revised Best Practices Guide will reflect the current state of industry knowledge. **If** the analysis shows that a suspected contributor is not part of an interference problem, the suspected contributor will be relieved of responsibility for correcting interference at that site. If the analysis shows that a suspected contributor is causing interference, that entity shall contribute to resolving the interference. The resolution of the interference shall be documented and copies provided to each contributor and the complaining agency.

3.6 Division of responsibility for mitigation. Contributors shall divide responsibility for mitigating interference according to procedures developed in the Revised Best Practices Guide.

3.7 Active management. If mitigation of interference at a site requires that contributors make changes which are easily reversed (*e.g.*, changing of transmitter frequencies to avoid intermodulation ("IM) product formation on a particular frequency, or a reduction in on-street power) then the contributor making the change shall coordinate both with the other contributors and the complaining entity before making further changes to the site.

3.8 Interference from equipment not belonging to CMRS providers. If the interference is found to be caused by something other than the equipment belonging to a CMRS provider (e.g. a bi-directional amplifier ["BDA"] installed by a 3rd party), the owner of the equipment shall be responsible for mitigating the interference.

4.0 Equipment and System Standards. For long-term interference mitigation, the Consensus Parties propose that the Commission adopt the following testing and receiver quality standards:

4.1 Receiver Testing Standards. Specifications for, and evaluations of, public safety land mobile receivers are currently based on TIA standards. These standards are designed to evaluate the receiver at signal levels very close to the receiver noise floor. These standards were adequate where receivers would not be exposed in normal operation to any signals that rose far above the noise floor. The RF environment has changed, however. **As** the Commission stated in its Notice of Proposed Rulemaking,[3] on-street signal levels from CMRS and other operators can approach or even exceed –30 dBm, both in the spectrum allocation for which the receiver was designed ***and*** in adjacent allocations.

To account for this change in the RF environment, receiver testing standards shall be expanded to address at least the following:

a. Standardized, precise, repeatable definition of receiver overload, and a test to determine the composite RF level where this takes place.

b. Change in characterization of all interference rejection specifications to address adjacent-channel interferers having (a) discrete constant-amplitude sidebands, (b) essentially constant-amplitude spectral energy distribution across the adjacent channel, rather than discrete sidebands, (c) discrete sidebands with amplitude variations of no less than 10 dB, and (d) constant spectral energy distribution across the adjacent channel with an amplitude variation of no less than 10 dB.

c. Characterization of 3rd-order IM product growth as contributor signals rise to at least –25 dBm per contributor in 5 dB steps.

d. Characterization of 5th-order IM product growth as contributor signals rise to at least –25 dBm per contributor in 5 dB steps

e. Characterization of front-end filter responses to signals in adjacent allocations. This characterization should be a curve rather than a single number. For 800 MHz receivers, the characterization should extend upward from the top of the public-safety allocation to no less than 940 MHz. For 700 MHz receivers, the characterization should extend downward by a similar amount. If the characterization changes with temperature, curves should be provided for no less than 3 equally-spaced points across the temperature spectrum for which the radio is rated.

The Consensus Parties recommend that the Commission's amend its Rules to establish the dates by which (a) manufacturers shall be required to satisfy these characterization standards, and (b) the penalties to be imposed on manufacturers for failing to provide this information

4.1.1 Receiver quality standards. For long-term interference mitigation, the Consensus Parties propose that the Commission adopt the following receiver quality standards:

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3 *NPRM* at para. 77

a. Receivers that meet the existing TIA Class A receiver specifications will receive full protection down to a desired signal level as outlined in Sections 2.1.1 and 52.1.2

b. Any receiver, whether existing or new, whose specifications fail to meet the Class A receiver specifications will be protected to a higher desired signal level than that outlined in Section 2.1.1and Section 2.1.2. The amount of increase above the level indicated in Sections 2.1.1 and Section 2.1.2 will vary depending on the interference mechanism in question and will be determined by the amount of desired signal increase necessary to restore the receiver in question to the same C/I+N ratio as a Class A receiver in the same interference environment.

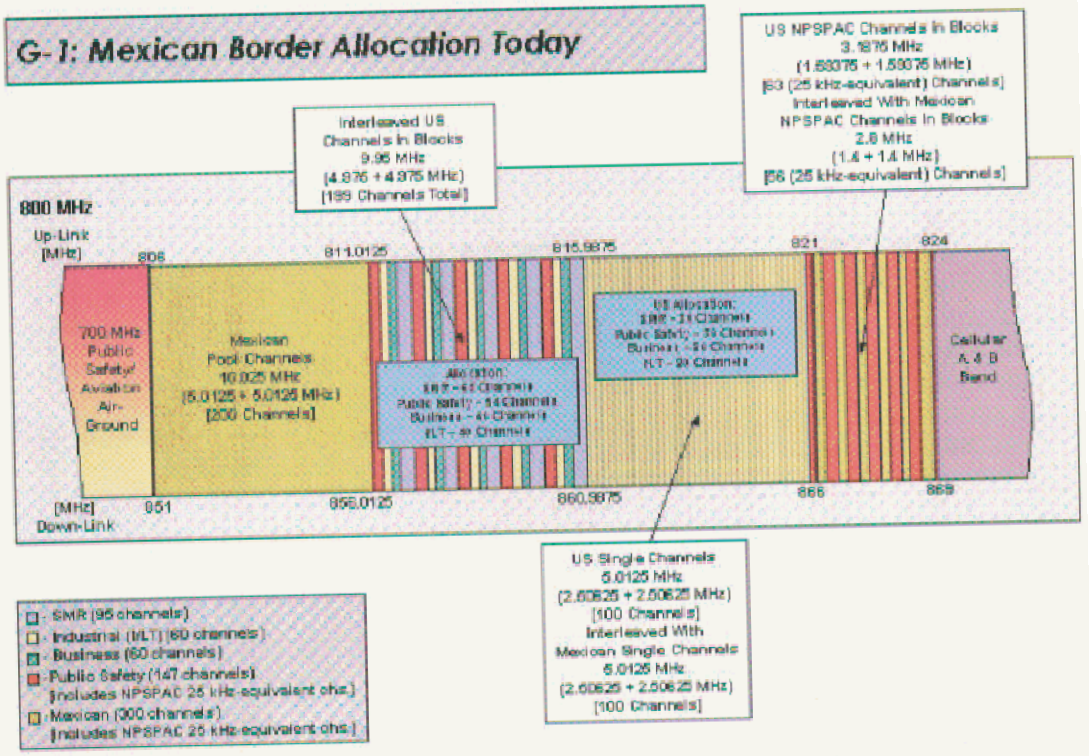
c. Since the post-rebanding environment, unlike the current environment, sets the stage for receivers serving users in the 851-861 MHz range to be designed to filter out signals in adjacent allocations, and since such filtering will greatly lessen the likelihood that public safety receivers will experience interference from stronger signals in adjacent allocations, the Consensus Parties recommend that the FCC establish through regulation a requirement for rejection of signals in adjacent allocations with numerical targets and schedules for implementation. This regulatory target and schedule should be established after consultation with manufacturers *and industry* ***experts,*** but should set the expectation that (a) the rejection provided by current 800 MHz-only receivers is insufficient and will not be acceptable and (b) any receiver whose measured rejection of adjacent-allocation signals is worse than that provided by 800 MHz-only receivers will receive less consideration for interference protection than that provided herein, with specifics determined on a case-by-case basis by the difference in performance between the receiver in question and current 800 MHz-only receivers.

4.1.2 Out-of-band emissions (OOBE) for base station transmitters in the 861-895 MHz band. The Consensus Parties recommend that the Commission amend its rules to require (a) all base station transmitters and associated combining equipment operating between 861-895 MHz suppress OOBE noise by no less than 43 + 10 log (P) dBc, where P is average transmitter power in watts, at the edges of the spectrum allocation for the transmitter in question and (b) the OOBE noise allowed in (a) be further reduced by (1) no less than 15 dB at 860.0 MHz, (2) no less than 30 dB at 859.5 MHz, and **(3)** no less than 45 dB on all frequencies between 851 and 859 MHz. The FCC should also clarify the measurement bandwidth for the OOBE measurement.

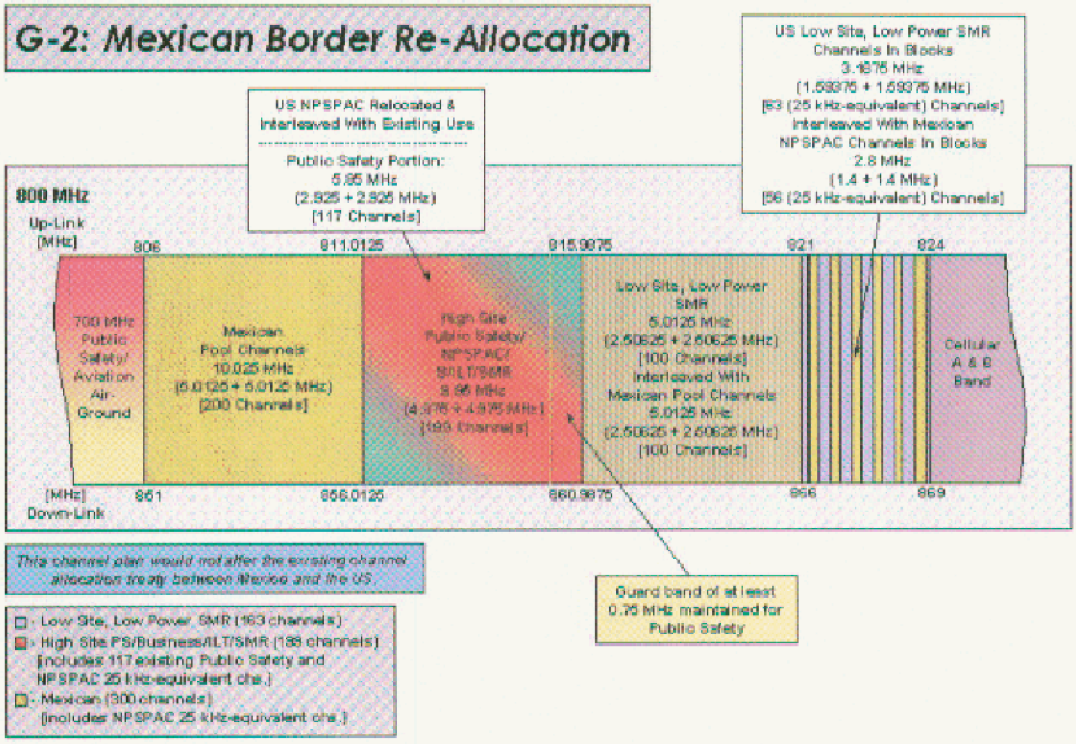
4.1.3 Requirement to consider current RF environment. The Consensus Parties recommend that the Commission amend its rules to require that (a) new RF communications hardware systems and system designs using licensed spectrum in the 851-861 MHz range must account for the existence of wireless communications systems in adjacent allocations that may use interference-limited network architectures with relatively strong composite on-street signal strengths expected for such deployments, and that systems to be operated in the 851-861 MHz range shall be designed to operate successfully in the presence of such deployments. The Consensus Parties further recommend that the Commission, as part of this regulation activity, and in conjunction with the receiver quality changes in 4.1.1c, solicit comment from equipment manufacturers, system designers, and system operators on methods, transition schedules, and necessary rule changes (e.g., modifying the 40 dBu contour limit) to achieve this regulatory requirement,

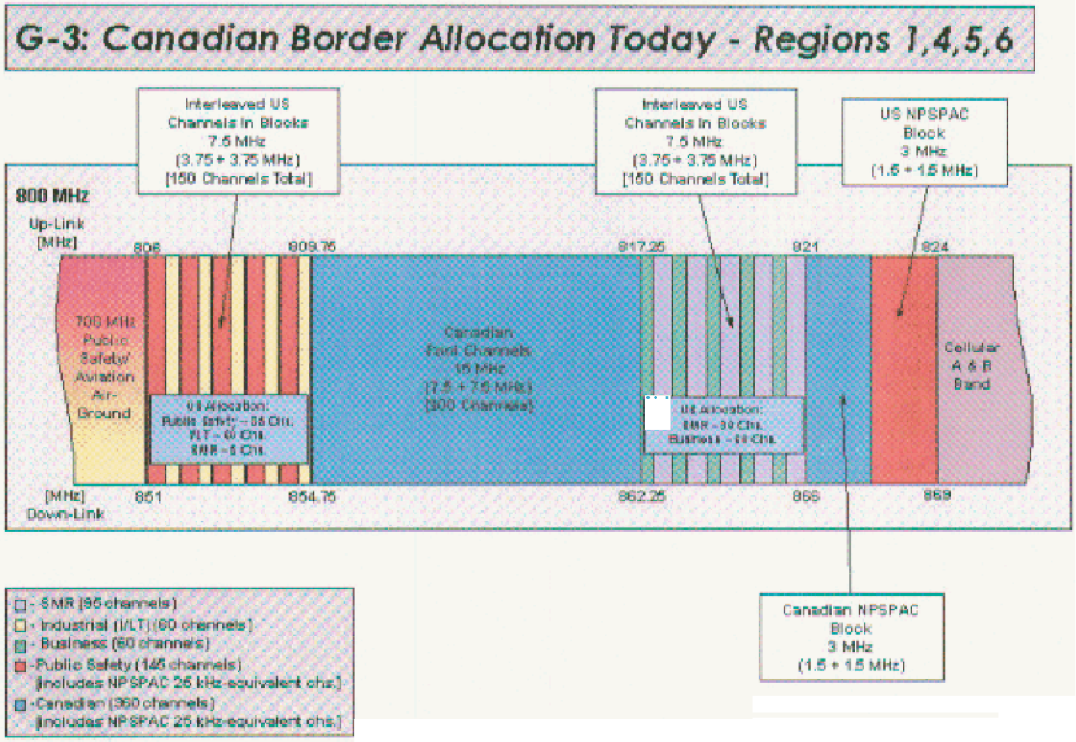
bearing in mind that the changes made must be the minimum necessary to achieve the regulatory goal, without forcing existing operators in the 851-861 MHz allocation to implement interference-limited designs themselves. The intent of this recommendation is to require equipment manufacturers, system designers, and system operators to take full advantage of the potential for enhancing interference rejection afforded by the removal of the interleaving between noise-limited and interference-limited operations in the 851-861 MHz range while not requiring operators in that range to switch to interference-limited designs themselves.

a. Bi-Directional Amplifiers ("BDAs"). The Commission should modify Section 90.219 of its Rules to permit additional flexibility in the use of BDAs to solve localized coverage problems in light of the deinterleaving of the 851 – 861 MHz spectrum.


G-1: Mexican Border Allocation Today
US NPSPAC Channels In Blocks
3.1875 MHz
(1.59375 + 1.59375 MHz)
[63 (25 kHz-equivalent) Channels]
Interleaved With Mexican
NPSPAC Channels In Blocks
2.8 MHz
(1.4 + 1.4 MHz)
[56 (25 kHz-equivalent) Channels]
Interleaved US
Channels In Blocks
9.95 MHz
(4.975 + 4.975 MHz)
[199 Channels Total]
800 MHz
Up-Link
[MHz]
806
811.0125
815.9875
821
824
700 MHz
Public
Safety/
Aviation
Air-
Ground
Mexican
Pool Channels
10.025 MHz
(5.0125 + 5.0125 MHz)
[200 Channels]
US Allocation:
Public Safety - 56 Channels
Business - 56 Channels
Cellular
A & B
Band
[MHz]
Down-Link
851
866.0125
860.9875
866
869
US Single Channels
5.0125 MHz
(2.50625 + 2.50625 MHz)
[100 Channels]
Interleaved With
Mexican Single Channels
5.0125 MHz
(2.50625 + 2.50625 MHz)
[100 Channels]
- SMR (95 channels)
- Industrial (I/LT) (60 channels)
- Business (60 channels)
- Public Safety (147 channels)
Includes NPSPAC 25 kHz-equivalent chs.)
- Mexican (300 channels)
Includes NPSPAC 25 kHz-equivalent chs.)

APPENDIX G
BORDER REGION REALIGNMENT PLAN




G-3: Canadian Border Allocation Today - Regions 1,4,5,6
Interleaved US Channels in Blocks 7.5 MHz (3.75 + 3.75 MHz) [150 Channels Total]
Interleaved US Channels in Blocks 7.5 MHz (3.75 + 3.75 MHz) [150 Channels Total]
US NPSPAC Block 3 MHz (1.5 + 1.5 MHz)
800 MHz
Up-Link [MHz]
806
809.75
817.25
821
824
700 MHz Public Safety/ Aviation Air-Ground
Canadian Paired Channels 15 MHz (7.5 + 7.5 MHz) [300 Channels]
Cellular A & B Band
[MHz] Down-Link
851
854.75
862.25
866
869
Canadian NPSPAC Block 3 MHz (1.5 + 1.5 MHz)
- SMR (85 channels)
- Industrial (I/LT) (60 channels)
- Business (60 channels)
- Public Safety (145 channels) [includes NPSPAC 25 kHz-equivalent chs.]
- Canadian (300 channels) [includes NPSPAC 25 kHz-equivalent chs.]

APPENDIX G
BORDER REGION REALIGNMENT PLAN