licensees and public safety planners to take into account variances in public safety spectrum needs on a local and/or regional basis. Public safety users may not need to inhabit this spectrum immediately throughout the nation; incumbents could remain in those locations (*e.g.*, rural or less populated areas) until public safety users need the spectrum. In addition, some B/ILT and high-site SMRs may use system designs or technologies that can co-exist with primary public safety use on a secondary, non-interference basis. Thus, the approach recommended herein would allow B/ILT and high-site SMR incumbents in the 806/816 – 851/861 block to evaluate local spectrum demand requirements and the realities of secondary status in that venue versus moving to new assignments at 700 MHz or 900 MHz. Incumbents could choose to take advantage of guaranteed replacement assignments on a first-come, first-served basis, or "take their chances" on future relocation spectrum availability.[58]

B/ILT Special Frequency Coordinator. The FCC should also create a separate B/ILT Realignment Frequency Coordinator (the "B/ILT Special Coordinator") to identify specific channel assignments for voluntary relocations by B/ILT licensees and high-site traditional SMR systems in the reallocated 4 MHz of former SMR channels at 900 MHz and the 700 MHz former guard band. Specifically, the B/ILT Special Coordinator would be responsible for: (1) identifying specific channel assignments for traditional "noise-limited" SMR and B/ILT licenses voluntarily relocating from the lower 800 MHz channels to the new 700 MHz or 900 MHz co-primary B/ILT and high-site SMR channel block; (2) verifying that the new assignments will reduce or eliminate the potential for CMRS – public safety interference while ensuring that relocated licensees receive new licenses that are geographically and spectrally equal to or better than their original licenses; and (3) assisting incumbents that must be relocated with carrying out

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[58] Some of these incumbents may choose over time to take service from commercial

their retuning obligations. Using a first-come, first-served licensing approach will encourage incumbent licensees to take advantage of this newly available spectrum and thereby facilitate voluntary relocation from the new public safety block, particularly in metropolitan areas where public safety licensees will have the most urgent need for this additional spectrum.

The B/ILT Special Coordinator should include representation from the B/ILT and SMR certified Frequency Coordinators: AMTA, the Industrial Telecommunications Association ("ITA"), the Personal Communications Industry Association ("PCIA") and the Utilities Telecommunications Council ("UTC"). The B/ILT Special Coordinator would perform essentially the same functions for its constituency as the Public Safety Special Coordinator performs for public safety: identifying new channel locations for the incumbents being relocated, working with those individual incumbents to account for local propagation anomalies and special terrain factors, or facilitating other refinements or modifications required to complete the relocations.

Advanced Technology B/ILT Systems. The Commission should consider requiring the B/ILT Special Coordinator to designate a portion of the new 900 MHz traditional SMR/B/ILT channel block for advanced technology B/ILT private systems. Some B/ILT licensees have acquired and operate advanced, multiple-site, frequency reuse communications systems using the same network architecture as CMRS systems.[59] The FCC should examine whether the Special Coordinator should designate certain frequencies at 900 MHz for the development of such

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providers and "surrender" their secondary channel assignments.

[59] For example, some utility companies are implementing high power, high site iDEN systems, to obtain more capacity and robust in-building coverage. These systems and high-site, high power traditional analog SMR and B/ILT system designs should be able to coexist with little or no special planning or frequency coordination. Alternatively, the Special Coordinator should create set-aside spectrum for these types of systems, or the FCC should impose operating requirements or other limiting parameters to ensure compatibility.

systems to prevent creating at 900 MHz the type of mixed and interleaved spectrum licensing that has created interference problems in the 800 MHz band.

Channel Bandwidth at 900 MHz. The Commission should examine whether to retain the current 12.5 kHz channel bandwidth at 900 MHz. It could require all migrating B/ILT and analog SMRs to use 12.5 kHz equipment in the 900 MHz band, or it could permit the Special Coordinators to assign two adjacent channels to a licensee for every one 800 MHz channel to permit the licensee to continue to use 25 kHz equipment. The Commission would need to address whether it should take a different approach in relocating analog SMR systems, analog noise-limited B/ILT systems, or digital, frequency-reuse B/ILT relocatees. Incumbents being relocated should be encouraged to make the most efficient use of this spectrum, either by FCC requirements or by steps taken by the Special Coordinator.

Utility Company Licensees. Utility companies licensed on the 800 MHz B/ILT channels would be accommodated by relocation to the former 900 MHz SMR channels or former 700 MHz Guard band channels. The 900 MHz channels are already interleaved with 5 MHz of 900 MHz spectrum allocated for private, internal use B/ILT systems; accordingly, this reallocation would create a 10 MHz block for B/ILT licensees, including utilities, as well as the remaining analog, traditional SMR systems. This reallocation of 900 MHz channels for co-primary B/ILT and traditional SMR services, coupled with the 4 MHz of 700 MHz guard band spectrum Nextel is making available, offers more spectrum than these licensees have available today at 800 MHz. This relocation would permit utility company licensees to expand their systems in the future, particularly those that provide communications for critical utility services. Comments recently filed in response to a request by the National Telecommunications and Information Administration ("NTIA") point out that energy and water companies, in particular, have special

spectrum needs that closely parallel those of public safety entities.[60] In light of this, the Commission should consider whether to reserve certain channels in the new 900 MHz B/ILT and high-site SMR spectrum block for the internal communications needs of critical infrastructure utility companies, such as water, gas, or electric utilities.[61]

F. Implementation Timetable

Given the risk that disruption of life safety communications creates for the well being of public safety personnel and the citizens they serve, the public interest requires that the 800 MHz realignment be completed as rapidly as practicable.[62] It will not be possible, however, to retune all of the land mobile community at once. The following reallocation/retuning implementation plan balances these two considerations:

- The following rule changes should be effective upon Commission adoption of a Report and Order implementing the 800 MHz realignment plan: (1) reallocation of the 2020/2025 – 2170/2175 MHz MSS spectrum to terrestrial mobile communications, and, as part of the spectrum swap, assignment (licensing) of this spectrum to Nextel through a nationwide license; (2) redesignation of the 762/764 – 792/794 MHz Guard band channels, and the 896/901 – 935/940 MHz SMR channels, to co-primary B/ILT and high-site SMR use; (3) establishment of the new 20 MHz Public Safety block at 806/816 – 851/861 MHz with a transition period to relocate all affected CMRS and public safety licensees, and with all incumbent B/ILT and high-

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60 *See* Department of Commerce, National Telecommunications and Information Administration, *Request for Comment on Energy, Water and Railroad Service Providers' Spectrum Use Study*, 66 FR 18447 (2001). NTIA has been directed by Congress to prepare a report by December 21, 2001 on the spectrum needs of these entities, and, six months after NTIA's report has been released the Commission similarly has been directed by Congress to submit and report on the actions that could be taken by the Commission to address the needs identified by NTIA.

61 The B/ILT Special Coordinator could set-aside part of the 900 MHz channel block for critical infrastructure radio communications systems used by public utility operators. Such systems could include wireless communications to dispatch service and maintenance personnel and help control, monitor and maintain generating systems, electric grids, gas pipelines, water distribution systems and similar critical utility operations.

62 Under these circumstances, a voluntary negotiating period in which to reach agreement on a retuning proposal could delay substantially the solution and thus would not be in the public interest.

site SMR licensees in this spectrum converted to secondary status; and (4) establishment of the new advanced technology SMR block at 816/824 – 861/869 MHz and assignment (licensing) of the 821/824 – 866/869 portion of it to Nextel.[63]

- With the assistance of the Public Safety Special Coordinator, incumbent public safety NPSPAC licensees (821/824 – 866/869 MHz) would begin moving to the new 806/816 – 851/861 MHz public safety channel block as incumbents relocate in the priority order discussed below. At the same time, analog SMRs and B/ILT licensees in channels 1- 400 would commence voluntary relocation to the 900 MHz or 700 MHz bands, with the assistance of the B/ILT Special Coordinator, to clear channels 1 - 400 for ongoing public safety relocations.

- Once the NPSPAC channels are cleared, Nextel would complete relocating its remaining operations on channels 1 – 400 to the former NPSPAC channels or the upper 200 channels.

The 800 MHz realignment and associated licensee relocations should be completed within 36 months of the effective date of a Report and Order adopting the realignment plan. The following relocation schedule gives priority first to relocations necessary to mitigate acute unresolved interference, and second to retuning licensees in areas most likely to experience CMRS – public safety interference:

- For markets with acute, unresolved CMRS – public safety interference, channel swaps and retuning should be completed within 12 months of the effective date of the Report and Order;

- Channel swaps and retuning would be completed in all remaining top 30 Economic Areas ("EAs") within 24 months;

- Channel swaps and retuning should be completed in the top 80 EAs within 30 months;

- All remaining relocations and swaps completed within 36 months of Commission adoption of a Report and Order regarding the 800 MHz realignment plan.

If at any time CMRS – public safety interference in any market cannot be satisfactorily controlled using short-term corrective measures (*e.g.*, lower power, higher antenna height,

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[63] As discussed previously, Nextel already holds nearly all of the incumbent EA and site-by-site licenses in the current 816/821 – 861/866 MHz portion of the new advanced SMR block

modified frequency use at the problem site), the public safety licensee should have the right to request that the Public Safety Special Coordinator advance the retuning of that entity and/or market. The Commission should empower the Public Safety Special Coordinator to require that any such retuning project be completed within nine months or sooner, if practicable.[64]

VII. LEGAL AUTHORITY

The Commission's authority to assign and reallocate spectrum and to relocate incumbent licensees derives from several provisions of the Act, including sections 4(i), 303(c), 303(f), 303(r), and 316.[65] These same provisions also authorize the Commission to convert non-relocating incumbents from primary to secondary status when necessary to advance the public interest. As discussed below, the Commission has exercised both types of authority in the past, and would face no legal obstacles to exercising such authority under the proposed 800 MHz realignment plan.

A. Authority to Mandate Incumbent Relocation

On numerous occasions, the Commission has exercised its authority to require incumbent licensees to relocate to different parts of the spectrum when necessary to advance the public interest. For example, in 1965, the Commission reallocated Business Radio Service spectrum "as a matter of sound spectrum planning."[66] In that case, the Commission required that private community antenna television systems ("CATV") relocate, at their own expense, from the

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and would retain these licenses.

[64] The Public Safety Special Coordinator would notify the B/ILT Special Coordinator so that any necessary moves of B/ILT and analog SMR stations could be completed to permit the relocations necessary to eliminate the interference.

[65] 47 U.S.C. §§ 4(i), 303(c), 303(f), 303(r), and 316.

[66] Amendment of the Commission's Rules Relative to the Licensing of Microwave Radio Stations Used to Relay Television Signals to Community Antenna Television Systems, *First*

spectrum allocated for Business Radio users to an adjacent band. Finding that CATV spectrum needs were growing,[67] the Commission sought to accommodate future CATV needs by reallocating spectrum and dedicating it to CATV use, with the *quid pro quo* that existing licensees relocate themselves to the newly-allocated part of the band.

More recently, in the Emerging Technologies proceeding, the Commission reallocated 220 MHz of spectrum in the 1.85 to 2.20 GHz band from private and common carrier fixed microwave use to use by "emerging technologies."[68] While existing public safety fixed microwave licensees were initially allowed to remain in the band on a co-primary basis,[69] the Commission reconsidered that decision and, on its own motion, determined that all microwave incumbents, including public safety users, would be required to relocate.[70] This decision was upheld by the United States Court of Appeals for the D.C. Circuit. The court stated that the Commission's finding that "it is in the public interest to subject all incumbent . . . fixed microwave facilities, including public safety licensees, to mandatory relocation" adequately articulated a reasoned analysis, based on the record, to require the relocation.[71]

Report and Order and Further Notice of Proposed Rulemaking, 1 FCC 2d 897, ¶ 32 ("*1965 Reallocation Order*").

67 *1965 Reallocation Order* ¶ 35.

68 Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, *First Report and Order and Third Notice of Proposed Rule Making*, 7 FCC Rcd 6886, ¶ 1 (1992) ("*Emerging Technologies Order*"). Ultimately the Commission allocated this spectrum for PCS.

69 *Id.* ¶ 26.

70 Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, *Memorandum Opinion and Order*, 9 FCC Rcd. 1943, ¶ 34 (1994).

71 *Association of Public Safety Communications Officials-International, Inc. v. FCC*, 76 F.3d 395, 400 (D.C. Cir. 1996).

The Commission's authority to relocate public safety and digital SMR incumbents in the 800 MHz band is not diminished by the fact that portions of this spectrum were licensed through competitive bidding under Section 309(j) of the Act.[72] Indeed, as section 309(j) itself makes clear, Congress intended licenses assigned by auction to be regulated no differently from licenses assigned by other means:

> Nothing in this subsection, or in the use of competitive bidding, shall—
>
> (A) alter spectrum allocation criteria and procedures established by the other provisions of this Act; [or]
>
> . . .
>
> (C) diminish the authority of the Commission under the other provisions of this Act to regulate or reclaim spectrum licenses; [or]
>
> (D) be construed to convey any rights, including any expectation of renewal of a license, that differ from the rights that apply to other licenses within the same service that were not issued pursuant to this subsection[.][73]

Because the Commission's authority to regulate and reclaim spectrum extends to all licensees, including those that acquired licenses through competitive bidding, the Commission is fully empowered to require incumbents in the 800 MHz band to relocate as needed to further the public interest.

The Commission also has authority to convert hold-over incumbent licensees to secondary status. Specifically, the Commission has previously granted incumbent licensees the option of either retaining their existing licensed channels on a secondary, non-interference basis

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[72] 47 U.S.C. § 309(j).

[73] 47 U.S.C. § 309(j)(6). *See also* Applications of TV Active, LLC et al. for Consent to the Assignment of Licenses in the 218-219 MHz Service, *Order on Reconsideration*, DA 01-2503, FCC File No. 0000334630, 2001 WL 1312891, ¶ 21, n.70 (Oct. 26, 2001) ("Section 309(j)(6)(C) and (D) of the Communications Act, 47 U.S.C. §§ 309(j)(6)(C)-(D), makes clear that the use of competitive bidding in spectrum allocation does not diminish the Commission's authority to regulate spectrum licenses.").

or voluntarily relocating their operations on a preferential basis during an accommodation period.[74] The Commission thus possesses the legal authority to grant this same option to incumbent B/ILT and traditional high-site SMR licensees currently operating in the 800 MHz band.

B. The Ashbacker Doctrine and Section 309(j) Are Not Implicated by the 800 MHz Realignment Plan

The proposed 800 MHz realignment plan is fully consistent with administrative law due process requirements, including the *Ashbacker* doctrine,[75] as well as the competitive bidding provisions set forth in section 309(j) of the Act.[76] The plan would entail the reallocation of certain spectrum bands and modifications of existing licenses pursuant to section 316 of the Act.[77] Pursuant to the plan, incumbent licensees would effectively "swap" spectrum, trading their current channel assignments for alternative assignments to eliminate the underlying causes of CMRS - public safety interference and allocate additional spectrum to public safety communications.[78] Because these swaps of *already-occupied* frequencies would not require the

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[74] *See, e.g.*, Establishment of a Spectrum Utilization Policy for the Fixed and Mobile Services' Use of Certain Bands between 947 MHz and 40 GHz, *First Report and Order*, Gen. Docket No. 82-334, 54 Rad. Reg. 2d (P & F) 1001 (1983) (12 GHz incumbent Operational Fixed Service licensees given option of retaining their existing licensed facilities on a secondary basis to Direct Broadcast Satellite Service, or relocating their operations on a preferential basis during a five-year accommodation period) (citing, *inter alia*, sections 4(i), 303(c), and 303(r) of the Act).

[75] *Ashbacker Radio Corp. v. FCC,* 326 U.S. 327 (1945) ("*Ashbacker*").

[76] 47 U.S.C. § 309(j).

[77] 47 U.S.C. § 316(a)(1) ("Any station license or construction permit may be modified by the Commission either for a limited time or for the duration of the term thereof, if, in the judgment of the Commission such action will promote the public interest").

[78] Commercial users would swap their current licenses in return for alternative spectrum licenses providing comparable replacement spectrum in order to help eliminate interference to 800 MHz public safety communications systems. For example, Nextel would swap a total of 16 MHz on which it holds licenses today – 8 MHz from 800 MHz and 4 MHz each from 700 MHz

Commission to issue any licenses to new licensees or for new services, and because the Commission may permissibly limit eligibility for spectrum licenses when doing so serves the public interest, the proposed plan would not trigger either the *Ashbacker* doctrine or section 309(j).

Ashbacker Doctrine. In *Ashbacker*, the Supreme Court held that, if two bona fide applications for an open frequency are mutually exclusive, they are entitled to a comparative hearing.[79] *Ashbacker* is only triggered when an "open" frequency is being assigned, and the U.S. Court of Appeals for the D.C. Circuit has held that "*Ashbacker* does not compel the Commission to hold comparative hearings in order to approve channel exchanges[.]"[80]

In light of this holding, in previous situations where licensees have exchanged their current licenses for equivalent licenses using a different frequency, the Commission has concluded that section 316 of the Act authorizes such modifications.[81] The proposed 800 MHz realignment plan contemplates precisely this kind of license exchange. Accordingly, with respect to all the spectrum that would be effectively "swapped" under the proposed plan, the *Ashbacker* doctrine would not impair the Commission's authority, pursuant to section 316 of the

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and 900 MHz – and will receive 16 MHz in return – 10 MHz from 2.1 GHz MSS and 6 MHz from the 821/824 – 866/869 NPSPAC channels. B/ILT licensees would likewise swap their 800 MHz licenses for comparable 700 MHz or 900 MHz licenses to facilitate the interference-resolving 800 MHz spectrum realignment, while public safety licensees in the NPSPAC channels are simply exchanging those licenses for comparable spectrum rights in the new consolidated 806/816 – 851/861 MHz public safety channel block.

79 *Ashbacker*, 326 U.S. at 332.

80 *Rainbow Broadcasting Co. v. FCC*, 949 F.2d 405, 410 (D.C. Cir. 1991). *See also* Amendment of Section 73.606(b), Table of Allotments, Television Broadcast Stations and Section 73,622(b), Table of Allotments, Digital Television Broadcast Stations (Buffalo, New York), *Report and Order,* 14 FCC Rcd. 11856, ¶ 12 (1999) ("*Channel Swap Order*") ("in the case of channel exchanges, the rule of *Ashbacker* does not apply because the channels are occupied").

81 *See, e.g. Channel Swap Order.*

Act, to relocate incumbent licensees to different spectrum assignments to resolve the CMRS – public safety interference issues described above.

The *Ashbacker* doctrine likewise does not preclude the Commission from allocating additional spectrum to public safety services and, to make this possible, assigning 10 MHz of reallocated MSS spectrum to Nextel in exchange for spectrum Nextel would surrender as part of the realignment plan. As a long line of precedents demonstrates, *Ashbacker* does not prevent the FCC from "promulgat[ing] rules limiting eligibility to apply for a channel when such action promotes the public interest, convenience and necessity."[82] Thus, because of the important public interest goals it would advance, the Commission would be free to promulgate rules that would effectively make Nextel the only eligible licensee of the 2020/2025 and 2170/2175 MHz portion of the MSS band.

As the commercial licensee most interleaved with and adjacent to public safety licensees, Nextel is directly affected by any realignment plan that creates the separate public safety and commercial spectrum blocks necessary to mitigate 800 MHz CMRS – public safety interference. Nextel's cooperation in voluntarily relocating from the new public safety block, and voluntarily making spectrum available to relocate B/ILT and high-site SMR licensees from the public safety block, is an essential element of the realignment plan. The Commission has full authority to earmark and assign to Nextel the replacement channels necessary to make Nextel whole in this

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[82] Amendment of the Commission's Rules to Permit FM Channel and Class Modifications by Application, *Report and Order*, 8 FCC Rcd. 4735, ¶ 16 (1993) (citing *U.S. v. Storer Broadcasting Co.*, 351 U.S. 192 (1956)). *See also Aeronautical Radio, Inc. v. FCC*, 928 F.2d 428, 439 (D.C. Cir. 1991) (the FCC may reject, without a hearing, applications that do not meet valid eligibility requirements); Amendment of the Commission's Rules Regarding Modification of FM Broadcast Licenses to Higher Class Co-channel or Adjacent Channels, *Report and Order*, 60 Rad. Reg. 2d (P & F) 114, ¶ 17 (1986) ("The Commission can promulgate rules limiting eligibility to apply for a newly allotted channel in circumstances where, in its determination, such action promotes the public interest, convenience and necessity.").

spectrum swap and make implementing the 800 MHz realignment plan possible. The realignment plan, in turn, will mitigate the problem of CMRS-Public Safety interference while making additional spectrum available for public safety communications.

Section 309(j). Section 309(j) of the Act authorizes the Commission to award "initial" spectrum licenses through the use of a competitive bidding system.[83] Section 309(j) exempts from competitive bidding applications for public safety spectrum.[84] The assignment of spectrum licenses to public safety services under an 800 MHz band realignment plan and the allocation of additional spectrum to public safety consequently would thus not trigger the section 309(j) competitive bidding procedures.

Section 309(j) would likewise not be implicated by the proposed reallocation and redesignation of the 800 MHz spectrum used by private radio and SMR licensees. Instead of applying for "initial license[s]" under section 309(j)(1), these licensees would merely receive licenses for replacement spectrum in exchange for the spectrum licenses they will surrender as part of the realignment plan. Accordingly, the reallocation proposal would not trigger the competitive bidding requirements of section 309(j).

This analysis is consistent with other cases in which the Commission has relocated wireless licensees from one frequency block to another comparable block without triggering section 309(j)'s competitive bidding requirements for initial licenses. The Commission recently held, for instance, that section 309(j) was not a valid basis for granting a Petition for

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[83] *See* 47 U.S.C. § 309(j)(1) ("If, consistent with the obligations described in paragraph (6)(E), mutually exclusive applications are accepted for any initial license or construction permit, then, except as provided in paragraph (2), the Commission shall grant the license or permit to a qualified applicant through a system of competitive bidding that meets the requirements of this subsection.").

[84] 47 U.S.C. § 309(j)(2)(A).

Reconsideration of an earlier order mandating the relocation of Digital Electronic Message Service ("DEMS") licensees:

> Because its actions [to relocate DEMS licensees to new spectrum] were license modifications under authority of Section 316, and did not involve the grant of initial licenses, the Commission was not authorized under Section 309(j) of the Act to use auction procedures. Those auction procedures may only be used to select from among mutually exclusive applications for initial licenses. Accordingly, petitioners' reliance on Section 309(j) of the Act is misplaced.[85]

Like the relocated DEMS licensees, the incumbents affected by the proposed plan would be relocated under authority of section 316 of the Act, and not section 309(j).

VIII. MOBILE SATELLITE SERVICE CONSIDERATIONS

A. Effect on Pending MSS Rulemakings

To implement effectively the realignment of the 800 MHz Land Mobile Radio band and allocate additional spectrum to public safety, it will be necessary to reallocate the 2020/2025 and 2170/2175 MHz bands to terrestrial mobile services, and to assign that spectrum to Nextel in exchange for spectrum relinquished by Nextel for reassignment to public safety communications services, B/ILT licensees and high-site SMR licensees. The Commission has already proposed, in a separate pending rulemaking ("*Advanced Wireless Services Proceeding*"), to reallocate a portion of the MSS spectrum in the 1990-2025 MHz and 2165-2200 MHz bands to support the introduction of new advanced mobile and fixed terrestrial wireless services (advanced wireless services), including third generation (3G) and future generations of wireless systems.[86] In that

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[85] Amendment of the Commission's Rules to Relocate the Digital Electronic Message Service from the 18 GHz Band to the 24 GHz Band and to Allocate the 24 GHz Band for Fixed Service, *Memorandum Opinion and Order*, 13 FCC Rcd. 15147, ¶ 59 (1998) (citations omitted).

[86] *See* Amendment of Part 2 of the Commissions Rules to Allocate Spectrum Below 3 GHz for Mobile-and Fixed Services to Support the Introduction of New Advanced Wireless Services,

proceeding, the Commission requested comments on various spectrum reallocation options that were intended to preserve sufficient spectrum for 2 GHz MSS operations and, at the same time, make available some of the 2 GHz MSS spectrum for advanced wireless services.

For the reasons discussed herein, the Commission should reallocate the 2020/2025 and 2170-2175 MHz MSS frequency bands on a primary basis to terrestrial advanced mobile services. It should assign these frequency bands to Nextel in return for Nextel's swapping certain 700, 800 and 900 MHz spectrum for public safety purposes. These actions will serve the public interest by resolving CMRS – public safety interference in the 800 MHz band, addressing critical spectrum needs of the public safety services, and affording Nextel replacement spectrum for its use in providing terrestrial mobile services.

B. Relocation of Incumbent Broadcast Auxiliary Service and Fixed Service Licensees in the 2020/2025 and 2170/2175 MHz Bands

The MSS spectrum in the 2020/2025 MHz and 2170/2175 MHz bands that would be reallocated to terrestrial mobile services and assigned to Nextel as part of the 800 MHz realignment plan is currently used by Broadcast Auxiliary ("BAS") and Fixed Service ("FS") licensees, who also operate in other parts of the MSS band. In the Commission's proceeding to allocate 2 GHz spectrum to MSS, it adopted a plan to relocate BAS and FS licensees operating on this spectrum to other spectrum bands.[87] The current BAS relocation plan consists of a complex, two-phase, market-staggered approach that would relocate gradually incumbent BAS licensees over many years as MSS systems became operational. Incumbent FS licensees would

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Including Third Generation Wireless Systems, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, ET Docket No. 00-258 (Aug. 20, 2001) ("*2 GHz MO&O and FNPRM*").

[87] *See Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile Satellite Service,* Second Report and Order and Second Memorandum Opinion and Order, ET Docket No. 95018, 15 FCC Rcd. 12315, 12326-27 (2000).

be relocated to the extent they received harmful interference from MSS, but would not be required to relocate if they could successfully share spectrum with MSS. Under the plan the Commission adopted, MSS licensees would compensate incumbent BAS and FS licensees for the costs incurred in relocating.

As described above, the Commission has recently sought comment in its *Advanced Wireless Services Proceeding* on whether to reallocate some portions of the MSS band to advanced terrestrial wireless services. In doing so, it recognized that the current phased relocation of BAS might not be practical if such a reallocation plan were adopted because advanced wireless services would be deployed faster than MSS operations. It consequently sought comment on (1) how the current BAS and FS relocation plan would have to be modified to accommodate a reallocation of spectrum for terrestrial wireless use; (2) what the relocation responsibilities of new MSS and terrestrial wireless entrants would be; and (3) whether new MSS and terrestrial wireless entrants would share the relocation costs on a pro rata basis.[88]

The Commission will need to address the same issues with respect to the 2020/2025 MHz and 2170/2175 MHz bands that would be reallocated and assigned to Nextel under an 800 MHz realignment plan. In doing so, the Commission should ensure that the different users of the MSS band share BAS and FS relocation costs on an equitable basis. It should also seek to expedite the current BAS and FS relocation process, at least with respect to the 2020/2025 MHz and 2170/2175 MHz bands, in order to implement the 800 MHz realignment plan under the timetable described above. Because of the urgent need to resolve CMRS – public safety interference in the 800 MHz band and to allocate additional spectrum to public safety, the Commission should give priority to adopting a modified BAS and FS relocation plan for the 2020/2025 MHz and

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[88] *2 GHz MO&O and FNPRM* at ¶¶ 32-34.

2170/2175 MHz bands so that these bands can be cleared in an expeditious manner. Relocation issues involving other portions of the MSS band should be deferred to the extent practicable for consideration in the Commission's pending *Advanced Wireless Services Proceeding*.

IX. CONCLUSION

Given the critically important life-safety services supported by public safety communications systems, the Commission should implement remedial actions promptly. Commercial-public safety radio interference will increase unless the shared, mixed and interleaved licensing of the 800 MHz land mobile radio band is realigned and commercial licensees and public safety communications licensees are relocated to different, separate channel blocks.

Public safety communicators also urgently need additional spectrum. This White Paper sets forth a comprehensive plan to address these critical matters in an expeditious, effective manner. The Commission should move rapidly to adopt a Notice of Proposed Rulemaking in substantial accord with the 800 MHz realignment plan discussed herein, so that it can receive the comments, suggestions and ideas of all interested parties and, so informed, enact the rule changes needed to mitigate CMRS – public safety interference at 800 MHz while protecting the fundamental interests of all affected licensees, and at the same time double the near-term spectrum available at 800 MHz for public safety communications systems.

Respectfully submitted,

NEXTEL COMMUNICATIONS, INC.

By

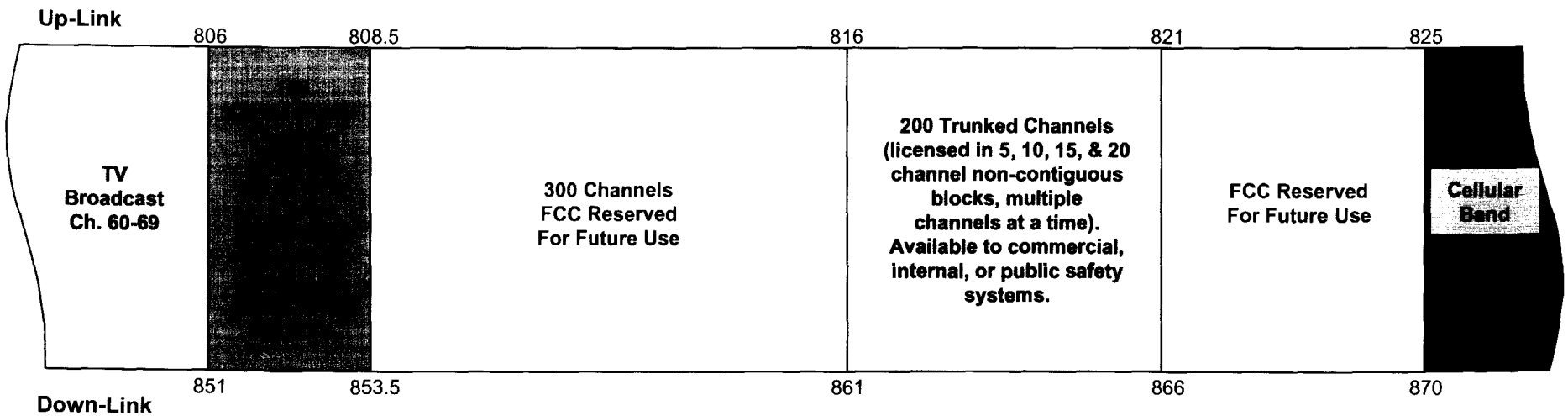
Robert S. Foosaner
Senior Vice President – Government
Affairs and Chief Regulatory Officer

November 21, 2001

Exhibit A

FCC Spectrum Allocation of 800 MHz Band * - 1974

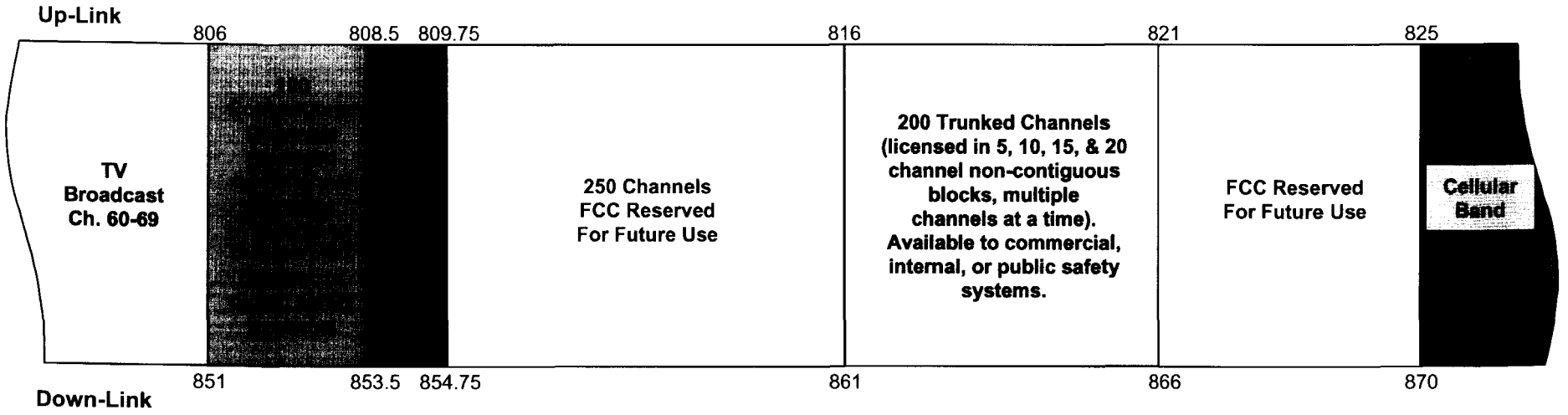
* - Allocation for US zone (different in Mexican and Canadian border regions)



1974 - FCC's initial allocation of land mobile radio services at 800 MHz and initial cellular allocations.
Land mobile allocations were technology-based, not service-based.
A simple 70-mile co-channel separation rule adopted to prevent interference.
Applicants choose between conventional and trunked channels on a "first-come, first-served" basis.

FCC Spectrum Allocation of 800 MHz Band * - 1978

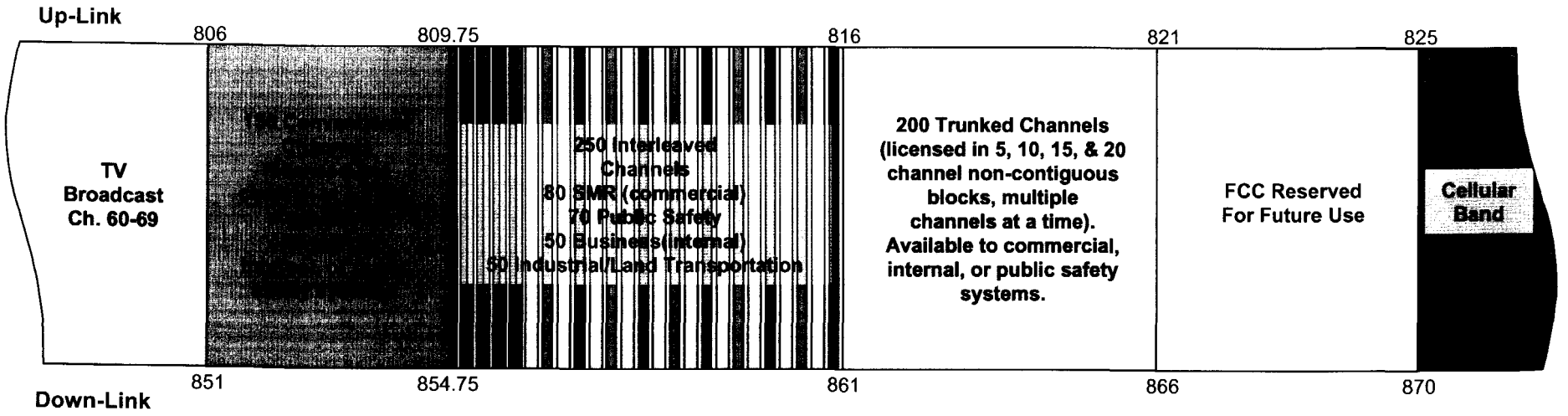
* - Allocation for US zone (different in Mexican and Canadian border regions)



1978 - Major market depletion caused the FCC to release 50 reserved channels for conventional use. Waiting lists developed for trunked channels.

FCC Spectrum Allocation of 800 MHz Band * - 1982

* - Allocation for US zone (different in Mexican and Canadian border regions)



1982 - FCC released 250 channels.

FCC released based on service categories not technology-selection.

80 SMR channels, 70 Public Safety channels, 50 Business channels, and 50 I/LT channels.

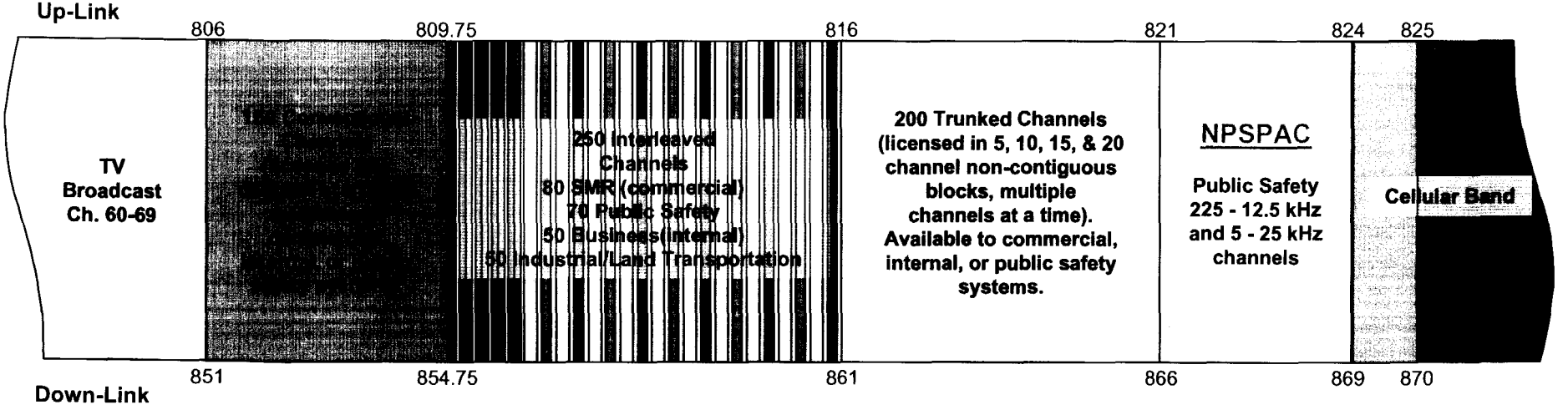
Applicants allowed to choose conventional or trunked uses.

Channels interleaved, non-contiguous.

Intercategory sharing permitted for B/ILT and Public Safety applicants under certain conditions.

FCC Spectrum Allocation of 800 MHz Band * - 1986

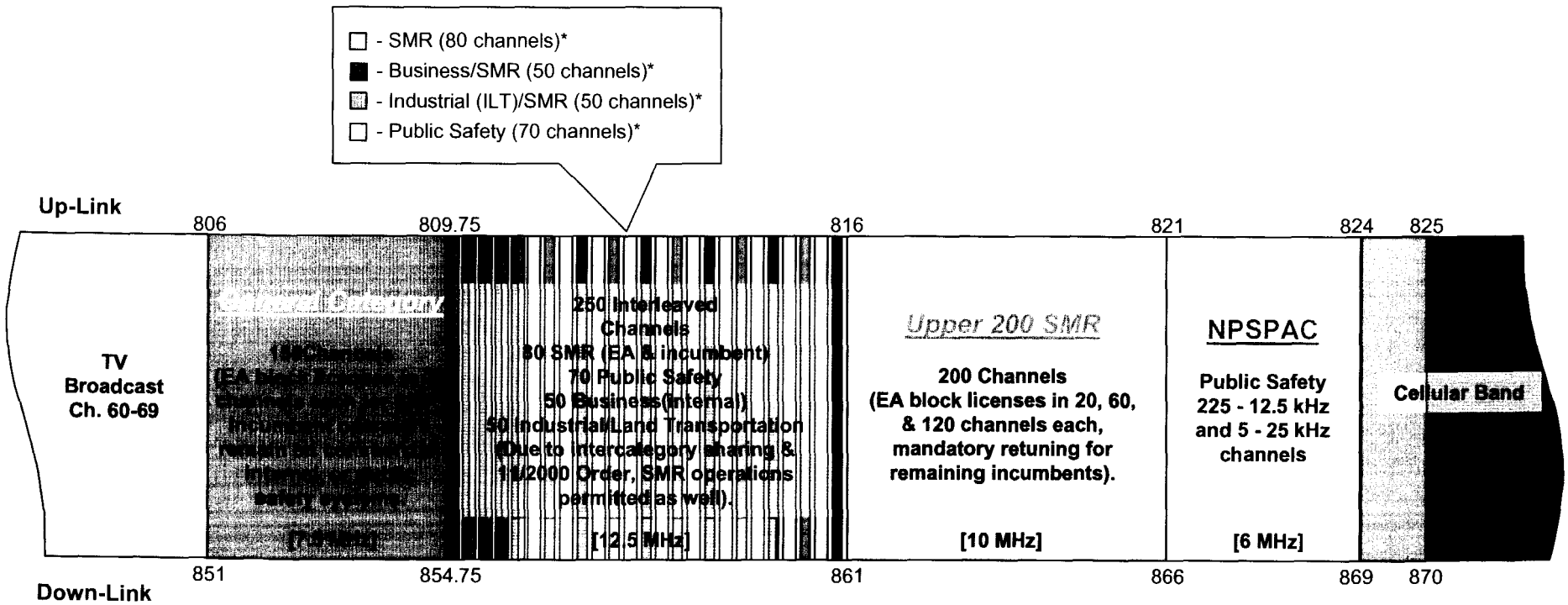
* - Allocation for US zone (different in Mexican and Canadian border regions)



1986 - Release of 6 MHz of Public Safety channels (NPSPAC) at 821-824 and 866-869 MHz.
Additional 5 MHz of SMR, 2.5 MHz of Business, and 2.5 MHz of I/LT allocated in the 900 MHz band (896-901/935-940 MHz).
Additional Cellular band spectrum was allocated.

FCC Spectrum Allocation of 800 MHz Band * - Today

* - Allocation for US zone (different in Mexican and Canadian border regions)

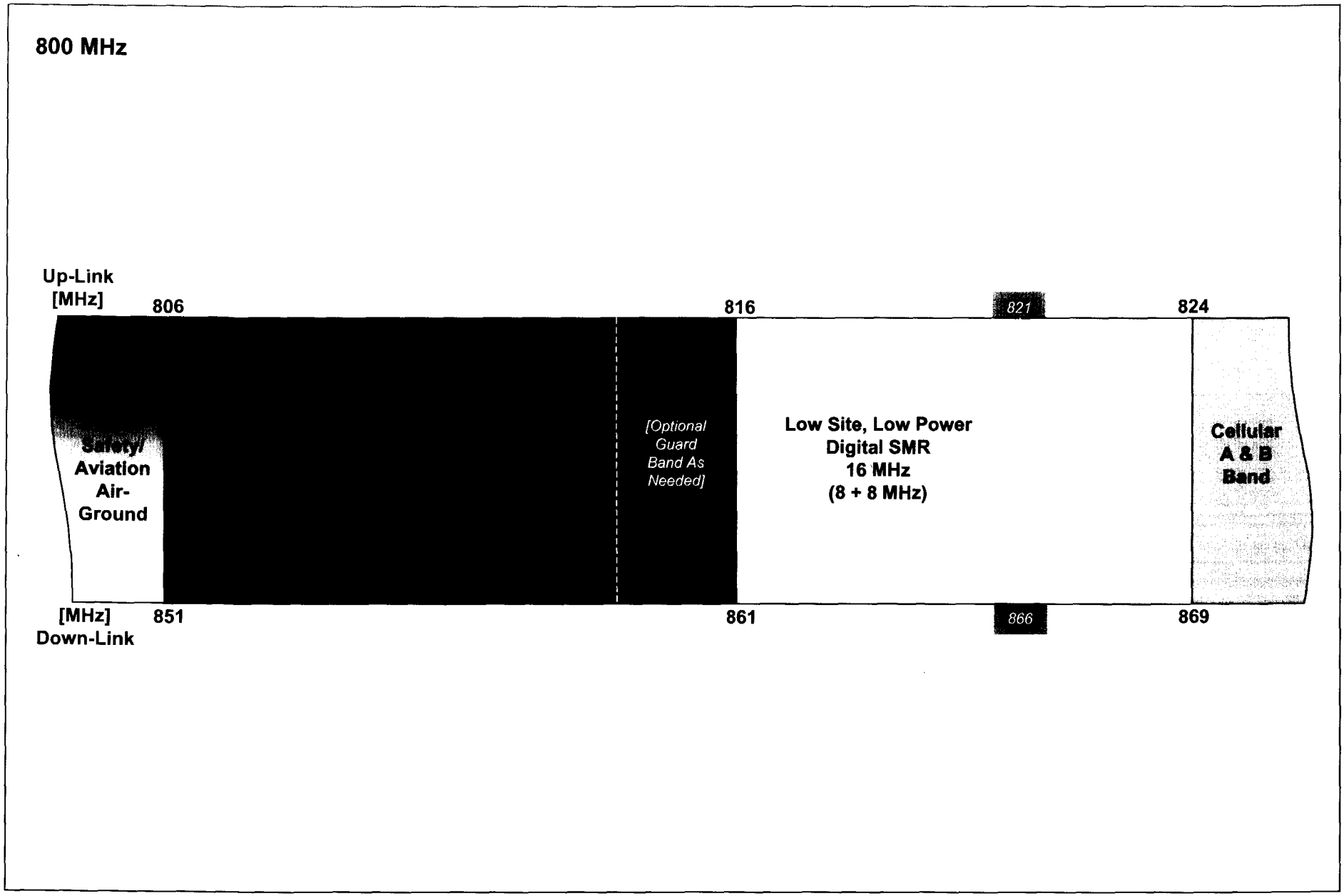
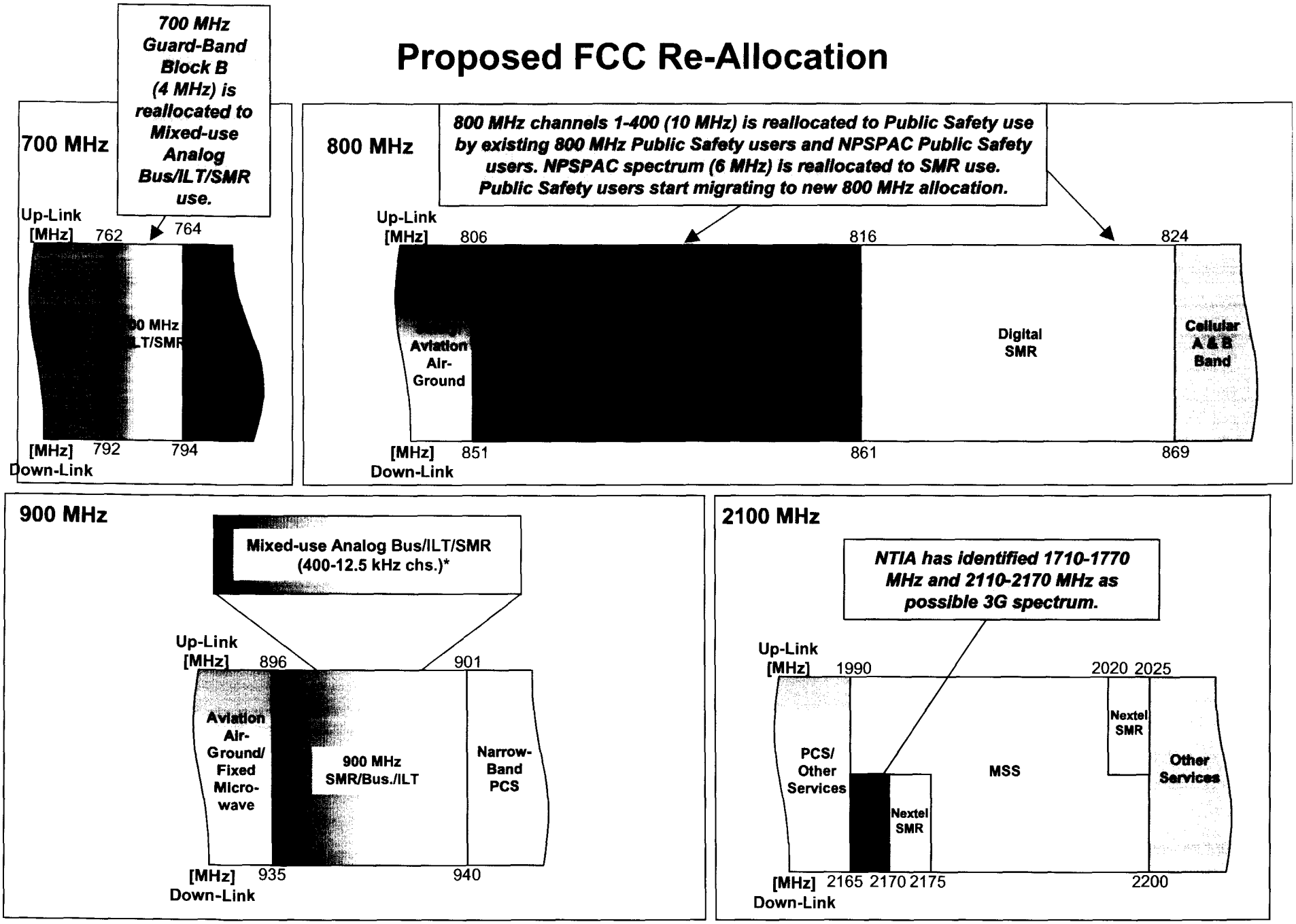


SMR/Bus/ILT and Public Safety incumbents operate conventional and trunked systems.
EA Auction winners authorized over-layed 25 channel contiguous blocks (SMR only).
Interleaved Area (including Middle 80 SMR)
SMR, Bus/ILT and Public Safety incumbents operate conventional and trunked systems.
SMR use on Bus/ILT spectrum is approximately 50% of Business channels and 67% of ILT channels.
EA Auction winners authorized on 16 five-channel non-contiguous blocks (SMR only).

Three block licenses (20, 60 and 120 channels each) per EA with rights to relocate incumbents.
Nextel predominant licensee of EA spectrum and has relocated or cleared over 95% of spectrum.

Exhibit B

Proposed FCC Re-Allocation



Proposed FCC Re-Allocation