

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

In the Matter of)
)
Improving Public Safety Communications)
in the 800 MHz Band)
) WT Docket No. 02-55
Consolidating the 900 MHz Industrial/)
Land Transportation and Business Pool)
Channels)

**COMMENTS OF NEXTEL COMMUNICATIONS, INC.
AND NEXTEL PARTNERS INC.**

NEXTEL COMMUNICATIONS, INC.

NEXTEL PARTNERS INC.

Robert S. Foosaner
Senior Vice President and
Chief Regulatory Officer

Donald J. Manning
Vice President and General Counsel
4500 Carillon Point
Kirkland, WA 98033
(425) 576-3660

Leonard J. Kennedy
Senior Vice President and General Counsel

Lawrence R. Krevor
Vice President – Government Affairs

James B. Goldstein
Senior Attorney – Government Affairs

2001 Edmund Halley Drive
Reston, VA 20191
(703) 433-4141

Regina M. Keeney
Charles W. Logan
Stephen J. Berman
Lawler, Metzger & Milkman, LLC
2001 K Street, NW, Suite 802
Washington, DC 20006
(202) 777-7700
Counsel for Nextel Communications, Inc.

February 10, 2003

SUMMARY

The Consensus Plan sets forth the only detailed, practical, and sustainable means for improving public safety communications in the 800 MHz band and meeting all of the Commission's objectives in this proceeding. Not surprisingly, the Consensus Plan has been endorsed by a wide cross-section of public safety and private wireless organizations, and now enjoys the support of over 90 percent of 800 MHz Land Mobile Radio licensees.

As a result of the Consensus Parties' diligent efforts, and as detailed in their Supplemental Comments, every legitimate question concerning the Consensus Plan has now been addressed. The record in this proceeding demonstrates the following:

- *All* incumbent licensees required to relocate will be entitled to reimbursement, and, as demonstrated in Appendix A to the Supplemental Comments, Nextel's \$850 million commitment will be sufficient to fund all reasonable relocation costs.
- The Consensus Plan offers the only comprehensive and effective solution to 800 MHz band interference experienced by public safety and private wireless systems, especially with the additional interference-protection measures described in the Supplemental Comments.
- The Consensus Plan protects the rights of incumbent Business and Industrial/Land Transportation ("B/ILT") and high-site SMR ("H-SMR") licensees.
- The Consensus Parties provide a detailed, effective band realignment plan for each of the Mexican and Canadian border regions that will separate public safety and cellularized systems to the maximum extent feasible, consistent with the national realignment plan.
- The Consensus Plan can be expeditiously implemented within three and a half years with minimal disruption of incumbent licensee operations.

All licensees affected by 800 MHz band interference will benefit from the Consensus Plan, even the cellular carriers that have thus far made every effort to obstruct and delay the Plan's adoption. Contrary to their denials, cellular providers are significant

contributors to CMRS – public safety interference; implementing the Consensus Plan would relieve them of the burdens of *ad hoc* interference resolution and give them greater flexibility in operating their networks. Yet, no cellular licensee would have to either relocate or provide a single cent of funding for 800 MHz band incumbent relocation. Despite the prospect of this “free ride,” the cellular carriers and the Cellular Telecommunications and Internet Association (“CTIA”) remain opposed to the Consensus Plan, a stance that can only be seen as anti-competitive. Sadly, this private agenda continues to come at the expense of emergency first-responders and other public safety personnel.

Like the cellular carriers, Nextel’s competitor Southern LINC has opposed the Consensus Plan. Nonetheless, the Consensus Parties have crafted their proposal to address every legitimate concern raised by Southern LINC. In particular, the Consensus Plan will (i) permit Southern LINC to continue operations in the 800 MHz band with minimal channel relocations, (ii) provide Southern LINC with comparable replacement spectrum for any frequencies vacated at Channels 1-120, (iii) fully fund Southern LINC’s relocation costs, and (iv) grandfather Southern LINC’s system such that it can deploy both high-site and low-site cellularized architectures within its entire licensed footprint, as best meets its business strategy and customer needs. As a result, Southern LINC’s concerns in this proceeding are now moot.

As the Supplemental Comments again emphasize, the assignment to Nextel of replacement spectrum at 1910-1915/1990-1995 MHz is an essential element of the Consensus Plan. This Consensus Plan assignment would replace Nextel’s contribution of 10.5 MHz of spectrum in the 700, 800, and 900 MHz bands necessary for effectuating

800 MHz realignment. As indicated above, Nextel will also contribute up to \$850 million to fund the relocation of incumbent licensees, and will pay its own substantial relocation costs.

In reassigning 1910-1915/1990-1995 MHz to Nextel, the Commission should dismiss any concerns about interference to Personal Communications Services (“PCS”) licensees at 1930-1990 MHz. First, a 5 MHz reduction in the “duplexer gap” between the PCS mobile transmit and receive bands would not lead to harmful interference to PCS handsets at the 1930 MHz band edge. As Motorola and other leading equipment vendors agree, the redesign of duplexers installed into Nextel handsets operating at 1910-1915 MHz would offset this reduction. Second, Nextel’s CMRS operations at 1990-1995 MHz would merely constitute a 5 MHz extension of the PCS mobile receive band at 1930-1990 MHz, and no commenter has argued that those operations would pose any interference threat to existing PCS operations below 1990 MHz.

The issues raised in the Commission’s Notice of Proposed Rulemaking have been thoroughly explored in several rounds of comments. The Consensus Parties – representing a diverse group of licensees and interests – have crafted a comprehensive plan that will achieve *all* of the Commission’s goals in this proceeding. The Commission should further the public interest by adopting the Consensus Plan in its entirety as soon as possible.

TABLE OF CONTENTS

	Page
I. THE CONSENSUS PLAN WILL MINIMIZE DISRUPTION TO INCUMBENT B/ILT AND H-SMR LICENSEES AND COVER REQUIRED RELOCATION COSTS	4
II. THE COMMISSION SHOULD REJECT EFFORTS TO OBSTRUCT THE PUBLIC INTEREST BENEFITS PROVIDED BY THE CONSENSUS PLAN	5
A. The Commission Should Reject the Anti-Competitive Efforts of the Cellular Industry to Block the Consensus Plan	6
B. The Consensus Plan Accommodates Southern LINC's Concerns	11
III. THE CONSENSUS PLAN PROVIDES NEXTEL REPLACEMENT SPECTRUM TO EFFECTUATE REALIGNMENT	15
IV. NEXTEL'S USE OF THE 1910-1915/1990-1995 MHz BAND WILL NOT CAUSE INTERFERENCE TO PCS LICENSEES IN ADJACENT BANDS	17
V. CONCLUSION	19

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

In the Matter of)	
)	
Improving Public Safety Communications in the 800 MHz Band)	
)	WT Docket No. 02-55
Consolidating the 900 MHz Industrial/ Land Transportation and Business Pool Channels)	

**COMMENTS OF NEXTEL COMMUNICATIONS, INC.
AND NEXTEL PARTNERS INC.**

Nextel Communications, Inc. (“Nextel”) and Nextel Partners Inc. (“Nextel Partners”) respectfully submit these comments in support of the Supplemental Comments of the Consensus Parties filed in this proceeding on December 24, 2002 (“Supplemental Comments”).¹

The Consensus Plan was submitted to the Commission in Joint Reply Comments by the leading national public safety organizations, most of the leading national private wireless organizations, and Nextel (collectively, the “Consensus Parties”).² The

¹ By Public Notice dated January 3, 2003, the Commission invited comments on the Supplemental Comments. *See* Public Notice, “Wireless Telecommunications Bureau Seeks Comment on ‘Supplemental Comments of the Consensus Parties’ Filed in the 800 MHz Public Safety Interference Proceeding,” DA 03-19 (rel. Jan. 3, 2003).

² The Consensus Plan was submitted in the August 7, 2002, Joint Reply Comments of Aeronautical Radio, Inc. (“ARINC”), the American Mobile Telecommunications Association (“AMTA”), the American Petroleum Institute (“API”), the Association of American Railroads (“AAR”), the Association of Public Safety Communications Officials-International, Inc. (“APCO”), the Forest Industries Telecommunications (“FIT”), the Industrial Telecommunications Association, Inc. (“ITA”), the International Association of Chiefs of Police (“IACP”), the International Association of Fire Chiefs, Inc. (“IAFC”) and International Municipal Signal Association (“IMSA”), the Major Cities Chiefs Association (“MCC”), the Major County Sheriffs’ Association (“MCSA”), the National Sheriffs’ Association (“NSA”), Nextel, the Personal Communications

Commission sought public comment on the Consensus Plan in September 2002, and in response a number of parties filed comments raising various concerns. The Consensus Parties themselves also recognized the need to develop further a number of realignment processes, procedures and solutions. On December 24, 2002, the Consensus Parties filed their Supplemental Comments addressing all of these concerns and issues. As supplemented, the Consensus Plan for 800 MHz realignment resolves all of the concerns previously raised by the commenters including the following:

- *Reimbursing Relocation Costs.* All incumbent licensees required to relocate will be entitled to reimbursement. As demonstrated in Appendix A to the Supplemental Comments, Nextel's \$850 million funding commitment will be more than sufficient to fund these relocation costs. In fact, as documented in Appendix A, the total cost of relocating all incumbent licensees – both public safety incumbents *and* Business and Industrial/Land Transportation (“B/ILT”) and high-site SMR (“H-SMR”) incumbents – is expected to be \$828 million. Nextel's commitment consequently provides a \$22 million “cushion” to ensure the funding of incumbent relocation costs throughout the nation.
- *Remedying Interference.* The Consensus Plan offers the only comprehensive and effective solution to 800 MHz band interference. It will realign the band to separate cellular from non-cellularized systems, establish greater out-of-band emissions (“OOBE”) noise filtering by CMRS licensees, establish specific interference protection thresholds that will protect against any remaining intermodulation interference in the realigned band, and encourage receiver performance standards and future hardware system design options to take full advantage of the interference elimination opportunities made possible by band realignment.
- *Protecting Rights of Private Wireless Licensees.* The Consensus Plan protects the rights of incumbent B/ILT and H-SMR licensees. It minimizes

Industry Association (“PCIA”), and the Taxicab, Limousine and Paratransit Association (“TLPA”) (“Reply Comments of the Consensus Parties”). The National Stone, Sand and Gravel Association also subsequently endorsed the Consensus Plan; *see* Letter from Jeremy Denton, Industrial Telecommunications Association, and Jennifer Joy Wilson, National Stone, Sand and Gravel Association, to Marlene H. Dortch, Federal Communications Commission (Aug. 15, 2002). (Unless otherwise indicated, all comments and *ex parte* filings referenced herein were filed in WT Docket No. 02-55.)

the number of incumbent B/ILT and H-SMR licensees that will need to relocate, provides comparable replacement spectrum for licensees that will be required to relocate, covers the relocation costs of such licensees, and minimizes disruption to their operations.

- *Border Region Realignment.* The Consensus Parties provide a detailed band realignment plan for each of the Mexican and Canadian border regions that will separate public safety and cellular systems to the maximum extent feasible, consistent with the national realignment plan. No current primary border area licensee will lose any channels due to realignment, and secondary use of Mexican and Canadian channels in border areas is preserved.
- *Implementation.* The Consensus Plan can be expeditiously implemented within three and a half years with minimal disruption of incumbent licensee operations.

The Consensus Plan enjoys the support of over 90 percent of Land Mobile Radio band licensees affected by public safety interference and represents the only viable proposal that will achieve the Commission's goals of improving public safety communications in the 800 MHz band with minimal disruption to existing licensees, while making available additional near-term 800 MHz spectrum for public safety communications services.

Nextel is the fifth-largest wireless communications provider in the United States providing its unique combination of cellular, digital two-way radio (Direct Connect®), two-way messaging and mobile data services to over 10 million subscribers throughout the country. Nextel Partners is a publicly-traded, 800 MHz licensee affiliated with Nextel and serving over 800,000 subscribers in medium and smaller markets. This joint filing demonstrates Nextel Partners' commitment to participate in the system relocations, license swaps and associated actions and procedures involving its 800 MHz licenses necessary to effectuate the Consensus Plan for 800 MHz realignment. Accordingly, Nextel and Nextel Partners urge the Commission to expeditiously adopt the Consensus

Plan in its entirety, and take this opportunity to emphasize several elements of the Consensus Plan and address issues raised by various parties in this proceeding.

I. THE CONSENSUS PLAN WILL MINIMIZE DISRUPTION TO INCUMBENT B/ILT AND H-SMR LICENSEES AND COVER REQUIRED RELOCATION COSTS

The Consensus Plan incorporates a detailed set of realignment procedures to minimize disruption to *all* incumbent wireless licensees in the 800 MHz band. A primary goal of the Consensus Plan is to minimize the disruption not only for public safety entities, but also for private wireless communications services in the 800 MHz band. To achieve this goal, the Consensus Plan substantially minimizes the number of B/ILT and H-SMR licensees that would need to be relocated in comparison with some of the original realignment proposals herein.³

B/ILT and H-SMR licensees required to relocate will be reimbursed as provided in the Supplemental Comments. All B/ILT and H-SMR incumbents required to relocate from channels 1-120 (the new NPSPAC band) to other 800 MHz spectrum in the non-cellular band will be entitled to reimbursement. B/ILT and H-SMR incumbents voluntarily electing to relocate to the 900 MHz band would receive relocation compensation for the costs they would have incurred to relocate within the 800 MHz band (in accordance with the costs established for comparable 800 MHz relocations

³ Indeed, “[u]nder the Consensus Plan, over 70% of all high-site SMR and B/ILT incumbent licensees would not be relocated.” Supplemental Comments at 10. The Consensus Plan thus would require dramatically fewer H-SMR and B/ILT relocations than the realignment plan originally proposed in the White Paper Nextel filed with the Commission on November 21, 2001. The White Paper, at 8, proposed to encourage H-SMR and B/ILT incumbents to relocate to the 700 and 900 MHz bands as part of its plan to address CMRS – public safety interference and to allocate additional spectrum to public safety services.

involving the same equipment and system characteristics, less overhead charges), as well as double the amount of 800 MHz spectrum they had at 800 MHz.⁴

Moreover, as detailed in Appendix C to the Supplemental Comments, the Consensus Plan protects incumbent licensee rights by providing (1) comparable facilities for all incumbent licensees that will need to relocate; (2) an implementation schedule that will best minimize disruption of existing operations; (3) the opportunity for incumbent licensees to negotiate specific reimbursement and timing issues raised by their relocation; and (4) the right to arbitrate such issues if necessary.

II. THE COMMISSION SHOULD REJECT EFFORTS TO OBSTRUCT THE PUBLIC INTEREST BENEFITS PROVIDED BY THE CONSENSUS PLAN

Notwithstanding the fact that the Consensus Plan, as revised by the Supplemental Comments, provides a comprehensive framework for satisfying each of the Commission's goals in this proceeding, some parties may continue to object or seek delay. Although these efforts will no doubt be dressed up in a public policy guise, they should be seen for what they are: self-interested arguments in favor of an unacceptable status quo.

⁴ Incumbent B/ILT and H-SMR licensees voluntarily electing to relocate to the 900 MHz band would receive 900 MHz replacement spectrum on a "2 for 1" basis, with "1 for 1" replacement channels provided during Phase I of the relocation process, and the "2 for 1" bonus channels subsequently provided no later than six months after the completion of the Phase II relocation process for each NPSPAC Region. Alternatively, a licensee voluntarily relocating to the 900 MHz band could elect to receive its replacement channels and its "2 for 1" bonus channels all at once during Phase I, but would forego its right to relocation cost compensation if it did so.

A. The Commission Should Reject the Anti-Competitive Efforts of the Cellular Industry to Block the Consensus Plan

Throughout this proceeding, the cellular and PCS industry, led by CTIA, have opposed the efforts of the Consensus Parties to craft a solution consistent with the Commission's objectives herein. For example, the CMRS industry has distorted the technical record by repeatedly downplaying that cellular carriers are contributing to CMRS – public safety interference.⁵

As has been pointed out by the Consensus Parties,⁶ the March 2002 *APCO Project 39 Report*,⁷ Nextel,⁸ and other Commenters in this proceeding,⁹ cellular providers

⁵ See, e.g., Comments of Cingular/Alltel at 2-4 (May 6, 2002); Comments of United States Cellular at 3 (May 6, 2002); Comments of Verizon Wireless at 6-7 (May 6, 2002); Reply Comments of Cingular/Alltel at 8, 15 (Aug. 7, 2002); Further Comments of Alltel, Cingular, AT&T Wireless, Coupe Communications, Nokia, US Cellular, and Southern LINC (“CMRS Competitors”) at 11, n.37 (Sep. 23, 2002).

⁶ The Consensus Parties have stated that “interference is not being experienced solely from Nextel systems, but also from the cellular carriers.” Reply Comments of the Consensus Parties at 19.

⁷ See APCO Project 39 Status Report at 6 (Mar. 19, 2002) (attached to Comments of APCO Project 39 Technical Committee filed May 6, 2002) (“*APCO Project 39 Report*”) (“it is our firm belief that interference exists anywhere low-HAAT/high-power (or extreme downtilt) sites in the 800 MHz band are operating within the operational footprint of 800 MHz radio systems designed under noise-limited principles. We also believe this to not be a phenomenon isolated to Nextel sites in the footprint of public safety systems. Multiple public safety systems operating in the same geographic area could present the same challenge if their design philosophies differed, as could other commercial carriers.”).

⁸ As Nextel has previously described, Cellular A-band signals have been identified as contributing to CMRS – public safety interference in numerous instances nationwide, including, but not limited to: Anne Arundel County, Maryland; Baltimore County, Maryland; Denver, Colorado; Cherry Hills, Colorado; Sandy, Utah; Miami, Florida; suburban Philadelphia, Pennsylvania; Phoenix, Arizona; Maui, Hawaii; San Diego, California; Portland, Oregon; and Seattle, Washington. See Nextel Reply Comments at 45-46 (Aug. 7, 2002).

either by themselves or in combination with Nextel have been identified as responsible for a significant proportion of CMRS – public safety interference. In fact, the role of the cellular carriers in CMRS – public safety interference was confirmed last year in a study sponsored by the CMRS industry itself. CTIA retained Wireless Facilities, Inc. (“WFI”) to investigate and identify the causes of CMRS – public safety interference at 800 MHz.¹⁰ WFI’s February 2002 report showed cellular operations contributing to public safety interference in a number of markets around the U.S.

Independent third-party experts have confirmed the responsibility of cellular operators in causing incidents of CMRS – public safety interference. In Anne Arundel County, Maryland, Cingular’s continuing involvement in causing interference to the County’s 800 MHz public safety communications system is well documented.¹¹ In Phoenix, Arizona, LCC International, Inc. has produced a detailed report identifying – after comprehensive analysis – at least ten sites where either ALLTEL or Verizon Wireless are interfering with the Phoenix metropolitan public safety communications

⁹ See, e.g., Comments of UTC at 6 (May 6, 2002); Comments of New York State Office of Technology at 1 (May 6, 2002); Comments of the State of Florida at 1-2 (May 6, 2002); Comments of the County of Maui at 2 (May 6, 2002).

¹⁰ See *An Investigation of the 800MHz Band Interference between the Public Safety and CMRS Radio Systems*, Wireless Facilities, Inc., at 13-21 (Feb. 2002) (“*WFI Report*”) (attached as Appendix B to Nextel’s Comments of May 6, 2002).

¹¹ RCC Consultants, Inc., who filed comments in this proceeding, has investigated CMRS – public safety interference in Anne Arundel County, Maryland. In addition to RCC Consultants’ statements in this proceeding, ongoing interference in Anne Arundel County caused the County to pass an ordinance that requires all CMRS carriers to certify that they will not cause interference to the County public safety communications system. Cingular, and much of the rest of the CMRS industry, including Nextel, have opposed this ordinance on jurisdictional grounds – but the fact remains – Cingular is conclusively identified as an interference contributor in Anne Arundel County. See Comments of Anne Arundel County, WT Docket 02-100, at iii (filed June 10, 2002) (identifying Cingular as a source of interference to County’s public safety radio system).

system.¹² In Denver, Colorado, Pericle Communications Company, an RF consultant, is working with the City to identify the extent of AT&T Wireless's ("AWE's") involvement in causing CMRS – public safety interference.

Incidents of interference solely attributed to cellular operators continue to be reported. For example, last year in both Miami-Dade County (at Pro-Player Stadium) and Palm Beach County, Florida, AWE was identified as the sole contributor to CMRS – public safety interference after extensive testing ruled out other carriers. Similarly, in Essex County, New Jersey (Newark, NJ), Nextel completed its mitigation measures at a co-located site with AWE; however, interference to the County's police radio communications system continued until AWE turned off its site for testing purposes. Just this month, in Southfield, Michigan, the Michigan State Police have begun to investigate interference near the Detroit Zoo with Verizon Wireless.

Recent interference cases are not limited to cellular-only situations – co-locations or multiple-carrier situations are increasingly being reported. For example, Nextel's standard interference analysis procedures have identified multiple carrier interference in the vicinity of co-located base station sites in Oakland and Sacramento. In Baltimore County, Maryland; East Norriton, Pennsylvania; Horsham Township, Pennsylvania; Fairfax County, Virginia; and the New Jersey Turnpike, public safety systems have experienced interference caused by the co-located operations of Cingular Wireless and Nextel. In Centre County, Pennsylvania, CMRS – public safety interference is being created by the operations of Nextel Partners along with the operations of AWE.

¹² LCC International, Inc. has completed a detailed study of CMRS – public safety interference issues in Phoenix, Arizona.

Notwithstanding the documented contribution of cellular licensees to CMRS – public safety interference, the CMRS industry has failed to acknowledge the obvious benefits of the Consensus Plan. First, as Nextel has previously explained, the Consensus Plan’s proposed relocation of public safety licensees from the 821-824/866-869 MHz NPSPAC band which is currently adjacent to the cellular A-band to 806-809/851-854 MHz will virtually eliminate CMRS – public safety interference resulting solely from cellular transmissions.¹³ Intermodulation (“IM”) products generated solely by cellular A-band (824-835/869-880 MHz) and B-band operators (above 835/880 MHz) will be sufficiently attenuated by the existing front-end characteristics of public safety receivers that relocated NPSPAC systems will receive *no* interference exclusively from cellular signals.

The Consensus Plan realignment also dramatically decreases the probability of IM interference from combined Nextel and collocated cellular A-band/B-band transmissions. As described in Nextel’s Further Comments, such realignment will reduce the probability of IM interference at locations where NPSPAC public safety systems are currently experiencing interference by *as much as 94%, depending on the specific channels being used*.¹⁴ Thus, the Consensus Plan realignment in-and-of-itself will greatly reduce the likelihood of cellular operations contributing to interference to high-site public safety and private wireless systems at 806-814/851-859 MHz. Significantly, such realignment also sets the stage for the additional measures recommended by the Consensus Parties in their Supplemental Comments. If the Commission adopts the Consensus Parties’

¹³ Nextel Further Comments at 22-23 (Sep. 23, 2002).

¹⁴ *Id.* at 23.

recommended interference thresholds, receiver performance standards, and system designs,¹⁵ cellular operations will virtually cease to be a factor in interference to public safety and private wireless systems operating below 814/859 MHz.

Incredibly, the cellular carriers and their industry association continue to ignore the extraordinary benefits of the Consensus Plan for cellular carriers. The Consensus Plan will relieve all cellular licensees of the burdens of *ad hoc* interference mitigation, thereby enabling greater flexibility in operating their networks. In return, the Consensus Plan calls on these providers to do virtually nothing. No cellular licensee will be required to relocate its operations or to provide a single cent of funding for 800 MHz incumbent relocation. Indeed, with the Commission's implementation of the Consensus Plan, the cellular carriers will essentially "free ride" their way out of the CMRS – public safety interference problem.

Despite this opportunity, the CMRS industry continues to oppose this broad-based, cooperative and comprehensive solution to CMRS – public safety interference. CTIA and carriers such as Cingular, AT&T Wireless, and Verizon Wireless fail to

¹⁵ As described in the Supplemental Comments at 39-44, the Consensus Plan recommends that the Commission establish specific interference protection thresholds for non-cellular block licensees that for the first time provide real protection against any remaining intermodulation interference or interference from cellular out-of-band emissions. These new interference thresholds will allow all 800 MHz licensees to use the spectrum effectively, while requiring cellular licensees to remedy interference arising from their authorized operations, provided the non-cellularized system meets certain minimal operating parameters. New intermodulation and noise interference standards will protect non-cellularized licensees in the new 800 MHz Guard Band (channels 321–400), with adjustments to reflect the reduced separation between these licensees and the beginning of the cellular channel block (channel 401). The Consensus Plan also proposes new receiver performance standards and future hardware and system design options to take full advantage of the interference elimination opportunities made possible by separating incompatible noise-limited and interference-limited land mobile systems through 800 MHz realignment.

present any legitimate alternative, instead backing the unrealistic and unfunded proposal to relocate all 800 MHz public safety systems to the 700 MHz band. The CMRS industry's sustained opposition to the Consensus Plan can only be seen as an anti-competitive attempt to burden Nextel and other Land Mobile Radio band licensees with the continuing burden and disruption involved in managing increasing levels of interference caused by an outdated band plan. Sadly, this opposition comes at the expense of emergency first-responders and other public safety personnel, who continue to suffer delay in the improvement of their communications facilities. It is time for the Commission to act in the *public* interest, and reject the self-interested efforts of Nextel's competitors to delay effective action in this proceeding.

B. The Consensus Plan Accommodates Southern LINC's Concerns

In its initial comments in this proceeding, Southern LINC claimed that it “strongly supports the public safety community and believes that steps should be taken to address public safety interference.”¹⁶ Yet it has failed to propose an effective plan for doing so. Instead, it has called for “further study” to determine the causes of and cures for public safety interference,¹⁷ even though these issues have been thoroughly assessed, analyzed, documented, affirmed, and reaffirmed in this proceeding. It has opposed realignment of the 800 MHz band,¹⁸ even though separating cellular and non-cellularized systems into different channel blocks is an essential step to mitigate CMRS – public safety interference. It has proposed so-called “market-based,” technical mitigation

¹⁶ Southern LINC Comments at 1 (May 6, 2002).

¹⁷ Southern LINC Reply Comments at 5 (Aug. 7, 2002).

¹⁸ Southern LINC Comments at 14.

measures as a short-term solution to public safety interference,¹⁹ while failing to explain what this really means or how it would alleviate interference. It has proposed relocating all 800 MHz public safety licensees to the 700 MHz band as a “long-term solution,”²⁰ even though it offers no viable plan for obtaining the legislative action this would require, ignores that fact that incumbent broadcast television stations will occupy most of this band for years to come, and fails to provide a means of funding the enormous costs this proposal would impose on public safety operators – a much higher cost than implementing the Consensus Plan.

Not only has Southern LINC failed to put forth a viable plan of its own, it has consistently opposed the only plan proposed in this proceeding that will achieve the Commission’s public interest goals – the Consensus Plan. In comments it filed in September 2002, Southern LINC claimed that the Consensus Plan does not represent a true consensus, notwithstanding the fact that the Plan has been endorsed by a wide variety of public safety and private wireless organizations representing the overwhelming majority of affected licensees.²¹

The Supplemental Comments fully address Southern LINC’s concerns regarding its future operations. Although in prior comments Southern LINC sulked that “its concerns have been given little more than lip service by the groups that formulated the

¹⁹ *Id.* at 16-21.

²⁰ *Id.* at 27-30.

²¹ The Consensus Plan would thus seem to satisfy the definition of “consensus” that Southern LINC itself offers: “the judgment arrived at by most of those concerned.” Southern LINC Further Comments at 3 (Sep. 23, 2002).

[Consensus] Plan,”²² this is hardly the case. Representatives of the Consensus Parties met on a number of occasions with Southern LINC and organizations such as the American Mobile Telecommunications Association (“AMTA”) and the United Telecom Council (“UTC”) – Southern LINC is a leading member of each – to discuss Southern LINC’s concerns with the Consensus Plan. As the result, the Consensus Parties modified their proposal to more than accommodate Southern LINC’s concerns. Specifically, Southern LINC urged the Commission to take the following steps if it realigns the 800 MHz band:

- Southern LINC’s “ability to remain in the 800 MHz band must be ensured.”²³
- “Incumbent licensees must be reimbursed for forced relocations.”²⁴
- “Only parties that directly benefit from public safety licensees’ relocation should be required to reimburse their costs.”²⁵
- If Southern LINC is required to relocate, it should “be given channels comparable to the ones it is being forced to vacate,” and any such relocation must “recognize [Southern LINC’s] need for non-contiguous spectrum.”²⁶
- Southern LINC’s “entire system must be grandfathered such that it can continue to utilize, develop, and grow its cellularized system.”²⁷

The Consensus Plan includes each of these provisions. As detailed in the Supplemental Comments (at 44-46), only those Southern LINC operations currently using Channels 1-120 will be required to relocate, and these operations will be relocated

²² Southern LINC Further Comments at 2.

²³ Southern LINC Comments at 2.

²⁴ *Id.* at 3.

²⁵ *Id.*

²⁶ Southern LINC Further Comments at 12, 26.

²⁷ *Id.* at 12.

to comparable spectrum in the 800 MHz band.²⁸ Like any other incumbent, Southern LINC will be entitled to reimbursement for the resulting relocation costs. In addition, the Consensus Plan will grandfather *all* Southern LINC systems operating at 809-821/854-866 MHz within Southern LINC's entire licensed footprint in Alabama, Georgia, Mississippi, and Florida; Southern LINC would be able to both maintain its existing cellularized operations and establish new cellularized operations without seeking a waiver, provided it does not cause interference to public safety systems.²⁹ As the Consensus Parties stated, "[w]ith this approach, the Commission would ensure that Southern LINC will retain full capacity and functionality under the Consensus Plan consistent with its stated position in this proceeding."³⁰

²⁸ Although the Supplemental Comments, at 45 n.80, notes the potential benefits of relocating existing Southern LINC assignments in Channels 121-400 to the upper portion of the block, this is not required. Rather, the Relocation Coordination Committee "will coordinate with Southern to evaluate the benefits of these additional channel relocations on a market-by-market basis." *Id.*

²⁹ Southern LINC would be required to notify affected licensees before deploying new cellular operations and engage in pre-coordination to prevent interference to non-cellular licensees. It would also be responsible for immediately resolving harmful interference caused by such operations. As the Supplemental Comments state, "[s]ince Southern LINC has claimed that it will have no adverse impact on neighboring licensees, accepting such conditions should not be problematic." Supplemental Comments at 46 (citing Southern LINC Further Comments at 12). Nor are these conditions inconsistent with the "Best Practices Guide" or post-realignment coordination practices.

³⁰ Supplemental Comments at 46.

III. THE CONSENSUS PLAN PROVIDES NEXTEL REPLACEMENT SPECTRUM TO EFFECTUATE REALIGNMENT

Some parties have claimed that the Consensus Plan would give Nextel a “spectrum windfall.”³¹ This is simply not the case. The replacement spectrum Nextel would receive is essential to the effectiveness of the Consensus Plan and to make Nextel whole in return for its substantial spectral contributions to the Plan.

Nextel will contribute extremely valuable assets and resources as part of the Consensus Plan. It will relinquish 10.5 MHz of spectrum in the 700, 800, and 900 MHz bands, acquired at a cost of approximately \$2 billion, to provide replacement spectrum for relocating incumbent licensees in the 800 MHz band and to provide additional spectrum for public safety communications. As a result, public safety licensees, on average, will have an additional 6.5 MHz of spectrum. The Consensus Plan will also provide, on average, an additional 4 MHz of 900 MHz spectrum for B/ILT licensees as the result of Nextel’s relinquishing its licensed spectrum in this band, which is currently licensed to both Nextel and B/ILT licensees. This will eliminate the long-term potential for future interference in the 900 MHz band that could otherwise result from the interleaving of Nextel’s low-site CMRS systems and B/ILT high-site, non-cellularized systems – the same scenario that has resulted in interference in the 800 MHz band.

Nextel will also, as described above, contribute up to \$850 million toward incumbent relocation costs. Nextel has increased its commitment to fund these relocation costs in the absence of any commitment by A and B block cellular carriers to contribute

³¹ See, e.g., Further Comments of CMRS Competitors at 12-17; Further Comments of Southern LINC at 31 (Sep. 23, 2002); Comments of the Boeing Company at 5-6 (Sep. 23, 2002)

even though their operations cause CMRS – public safety interference. Nextel will fund its own relocation costs, which will be significantly greater than any other licensee. In fact, Nextel will be required to relocate its operations *twice* – first, by swapping out channel 1-120 incumbents to Nextel’s current assignments in channels 121-400, and, second, by relocating from channels 1-120 (the new NPSPAC block) to the then-vacated old NPSPAC channels at 821-824/866-869 MHz. Nextel also will contribute funds as part of the process of relocating Broadcast Auxiliary Service licensees and reimbursing UTAM upon the assignment to Nextel of the 1910-1915/1990-1995 MHz bands.³²

Nextel’s contribution is an essential element of achieving the Commission’s public interest goals in this proceeding: resolving CMRS – public interference, avoiding undue disruption of incumbent licensee operations, and allocating additional spectrum to public safety communications needs. By the same token, assigning Nextel 10 MHz of replacement spectrum is an essential element of the Consensus Plan. The Consensus Parties recognize this. As stated in the Supplemental Comments, the “Consensus Plan calls for Nextel to be made whole on a spectral basis by the Commission assigning

³² The Commission has recently reallocated 30 MHz of MSS spectrum, including the 1990-1995 MHz band, for fixed and mobile wireless services. FCC News Release, “FCC Reallocates Spectrum for New Wireless Services,” released Jan. 30, 2003 (announcing adoption of *Third Report and Order, Third Notice of Proposed Rulemaking, and Second Memorandum Opinion and Order* in ET Docket No. 00-258, FCC 03-16 (adopted Jan. 29, 2003). The Commission has also sought comment on reallocating the 1910-1920 MHz band, currently assigned to asynchronous unlicensed PCS “but at present is unused,” for other wireless services, including “to support the relocation of other wireless licensees.” *Id.* The 1910-1915/1990-1995 MHz bands are consequently available for assignment to Nextel as replacement spectrum as recommended in the Consensus Plan. As explained in section IV below, Nextel’s use of these bands would be fully compatible with licensed operations (including PCS) in adjacent bands.

Nextel, as part of the Report and Order in this proceeding, a nationwide license for 10 MHz of paired spectrum at 1910-1915/1990-1995 MHz for CMRS services.”³³

IV. NEXTEL’S USE OF THE 1910-1915/1990-1995 MHz BAND WILL NOT CAUSE INTERFERENCE TO PCS LICENSEES IN ADJACENT BANDS

A number of parties from the cellular and PCS industry have recently alleged that the 1.9 GHz reallocation proposals now being considered by the Commission in this and related proceedings – including the Consensus Plan’s proposed reassignment of the 1910-1915/1990-1995 MHz bands to Nextel – would result in interference to PCS licensees currently operating in the 1930-1990 MHz band.³⁴ Specifically, the CMRS industry claims that Nextel’s CMRS operations at 1910-1915 MHz would cause harmful interference to PCS handsets receiving base station signals above 1930 MHz.³⁵ In addition, they have argued that a decision in IB Docket No. 01-185 authorizing the

³³ Supplemental Comments at 13. On October 15, 2002, ICO Satellite Services G.P. (“ICO”) requested that the Commission designate spectrum at 1990-1993.88 MHz as the uplink frequency band for its licensed Mobile Satellite Service (“MSS”) system. Letter from Cheryl A. Tritt, Counsel to ICO Satellite Services G.P., to Marlene H. Dortch, Federal Communications Commission, File No. 188-SAT-LOI-97; IBFS Nos. SAT-LOI-19970926-00163 *et al.* (Oct. 15, 2002) (“*ICO Letter*”). The Commission, however, has recently reallocated the 1990-2000 MHz, 2020-2025 MHz, and 2165-2180 MHz bands from MSS to fixed and mobile wireless services, *see supra*, note 32, a decision which necessarily must preclude ICO from operating at 1990-1993.88 MHz. This decision preserves the Commission’s ability to assign the 1990-1995 MHz band (along with the 1910-1915 MHz band) to Nextel as proposed in the Consensus Plan.

³⁴ *See, e.g.*, Letter from Donald C. Brittingham, Verizon Communications, to Marlene H. Dortch, Federal Communications Commission, IB Docket No. 01-185, ET Docket No. 00-258 (Jan. 6, 2003) (attaching written *ex parte* presentation on MSS/ATC operations and reallocation of 1910-1915 MHz (“*Verizon Ex Parte*”)); Letter from Diane J. Cornell, Cellular Telecommunications Industry Association, to Marlene Dortch, Federal Communications Commission, IB Docket No. 01-185, ET Docket No. 95-18, ET Docket No. 00-258 (Jan. 17, 2003) (attaching written *ex parte* presentation entitled “Interference Between ATC/MSS and PCS in the 1990-2025 MHz Band” (“*Cellular Ex Parte*”)).

³⁵ *Verizon Ex Parte* at 3-4.

Ancillary Terrestrial Components (“ATC”) of Mobile Satellite Service (“MSS”) systems at 1990-2025 MHz (or at 1995-2025 MHz if Nextel is licensed at 1990-1995 MHz) would cause interference to near or adjacent PCS operations below 1990 MHz.³⁶

The Commission, however, recently authorized MSS licensees to provide ATC operations under certain conditions notwithstanding the CMRS industry’s interference claims.³⁷ As Nextel explained in detail in an *ex parte* presentation in the MSS proceeding, the probability of such interference is very low.³⁸ Moreover, the Commission imposed stringent OOB limits on MSS/ATC operations, which will further minimize the potential for interference to PCS systems from MSS/ATC operations.³⁹ In any event, the CMRS industry’s arguments concerned MSS/ATC operations above 1990 MHz, not Nextel’s proposed operations at 1990-1995 MHz. Nextel’s CMRS operations at 1990-1995 MHz would in effect constitute a 5 MHz extension of the PCS mobile receive band at 1930-1990 MHz; the CMRS industry has not claimed, nor is there any suggestion in the record herein, that Nextel would pose any interference threat to existing PCS operations below 1990 MHz.

³⁶ *Verizon Ex Parte* at 2; *Cellular Ex Parte* at 1-4.

³⁷ FCC News Release, “Flexibility Granted for Mobile Satellite Services,” released Jan. 30, 2003 (“*MSS/ATC News Release*”) (announcing adoption of *Report and Order and Notice of Proposed Rulemaking* in IB Docket No. 01-185, FCC 03-15, adopted Jan. 29, 2003).

³⁸ *See Ex Parte Presentation*, “Nextel’s Response to Allegations of Potential Interference Between Prospective MSS/ATC Operations and PCS Operations in the 1.9 GHz Band, Nextel Communications, Inc., WT Docket No. 02-55, IB Docket No. 01-185, ET Docket No. 00-258 (Jan. 22, 2003), attached to Letters from Regina M. Keeney to Marlene H. Dortch, Federal Communications Commission (Jan. 23, 2003) (“*Nextel Ex Parte*”) (attached as Appendix A).

³⁹ *MSS/ATC News Release* at 2.

The Commission should also reject any claim that Nextel's operations at 1910-1915 MHz would cause harmful interference to licensees operating in adjacent bands. While the reallocation of the 1910-1915 MHz band from unlicensed PCS ("UPCS") to CMRS will reduce the "duplexer gap" between the PCS mobile transmit band (1850-1910 MHz) and PCS mobile receive band (1930-1990 MHz) from 20 MHz to 15 MHz, this will not cause harmful interference to mobile handsets at the 1930 MHz band edge. As explained in the *Nextel Ex Parte*, any increase in the probability of interference from a smaller duplex gap will be offset by the redesign of duplexers installed into Nextel handsets operating at 1910-1915 MHz.⁴⁰ Indeed, key vendors such as Motorola, Agilent, and Qualcomm all agree that a new duplexer design for these handsets will minimize the chance of interference to PCS phones operating above 1930 MHz.⁴¹

V. CONCLUSION

The Supplemental Comments address all of the significant issues regarding the Consensus Plan. The Commission consequently now has before it a comprehensive framework for effectively eliminating CMRS – public safety interference in the 800 MHz band, providing additional near-term spectrum for public safety communications, and minimizing disruption to existing licensees. Nextel filed its White Paper realignment proposal in November 2001 and the Commission issued its Notice of Proposed Rulemaking in this proceeding nearly a year ago. Since that time, all interested parties have had full opportunity to analyze and comment on the issues raised by realignment of the 800 MHz band. Representatives of the large majority of licensees that would be

⁴⁰ *Nextel Ex Parte* at 2-3.

⁴¹ *Id.* at 3.

affected by this realignment have worked together to propose the Consensus Plan, which offers the only viable plan for accomplishing the Commission's objectives in this proceeding. Nextel and Nextel Partners urge the Commission to act expeditiously and adopt this Plan in its entirety.

Respectfully submitted,

NEXTEL PARTNERS, INC.

NEXTEL COMMUNICATIONS, INC.

/s/ Donald J. Manning
Donald J. Manning
Vice President and General Counsel
4500 Carillon Point
Kirkland, WA 98033
(425) 576-3660

/s/ Robert S. Foosaner
Robert S. Foosaner
Senior Vice President and Chief Regulatory Officer

Leonard J. Kennedy
Senior Vice President and General Counsel

Lawrence R. Krevor
Vice President – Government Affairs

James B. Goldstein
Senior Attorney – Government Affairs

2001 Edmund Halley Drive
Reston, VA 20191
(703) 433-4141

Regina M. Keeney
Charles W. Logan
Stephen J. Berman
Lawler, Metzger & Milkman, LLC
2001 K Street, NW, Suite 802
Washington, DC 20006
(202) 777-7700
Counsel for Nextel Communications, Inc.

February 10, 2003

APPENDIX A



Ex Parte Presentation

Nextel's Response to Allegations of Potential Interference Between Prospective MSS/ATC Operations and PCS Operations in the 1.9 GHz Band

Nextel Communications, Inc.
January 22, 2003

WT Docket No. 02-55
IB Docket No. 01-185
ET Docket No. 00-258



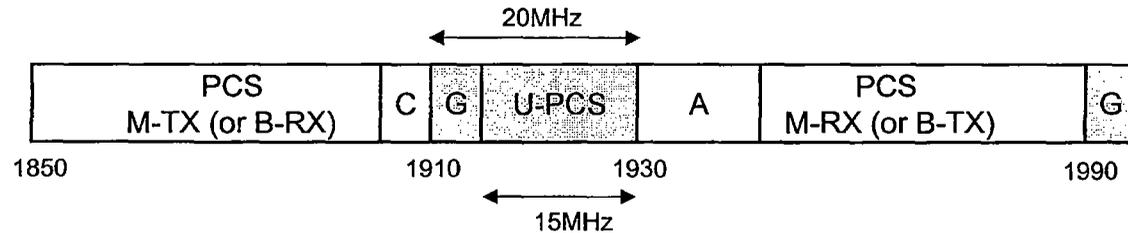
The Issues:

Possible Interference to PCS After Reallocations

- PCS providers have raised interference concerns with respect to: (1) the possible reallocation of 1910-1915 MHz from Unlicensed PCS (“UPCS”) to CMRS; and (2) the authorization of Ancillary Terrestrial Components (“ATC”) in the Mobile Satellite Service (“MSS”) at 1990-2025 MHz.
- **Issue 1** - Prospective G Block Mobile Transmit (1910 –1915 MHz) interference to PCS Mobile Receive (1930 –1990 MHz) due to 5 MHz reduction in duplexer gap.
 - Modified duplexer for G block licensee prevents problem.
- **Issue 2** – Potential for MSS/ATC Mobile Transmit (1990-2025 MHz) Interference to PCS Mobile Receive (1930-1990 MHz).
 - Nextel has asked that 1990-1995 MHz be reallocated to CMRS and assigned to Nextel.
 - Interference from MSS/ATC to PCS/Nextel is possible; however, the probability of subscribers actually experiencing interference is very low, given the combination of contributing factors necessary to produce interference.
 - Thus, MSS/ATC allocation can be adjacent to PCS/Nextel without a guard band. MSS and PCS operators can cooperate to avoid interference issues just as A, B, D and E Block PCS licensees do today.
 - A 15 MHz or larger guard band between MSS/ATC mobile transmit and PCS mobile receive is unnecessary.



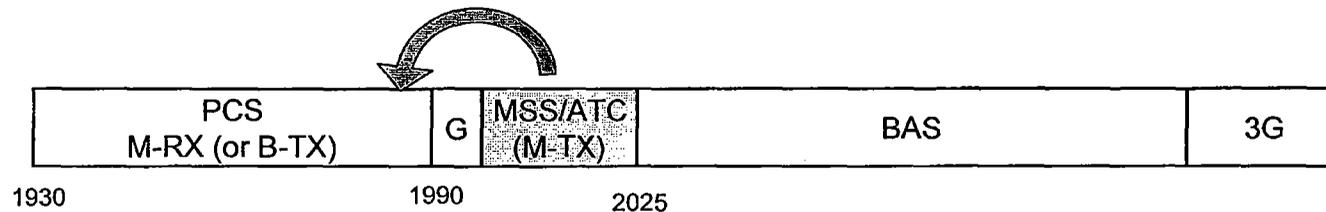
Issue 1 – Reallocation of Unlicensed PCS Spectrum to Nextel Will Not Increase Likelihood of Interference to PCS



- Under today's 1.9 GHz (1910-1915 MHz) band plan, there is 20 MHz of duplexer gap between PCS Transmit ("TX") and PCS Receive ("RX").
- This 20 MHz provides attenuation such that PCS mobile receive (M-RX) band is protected from PCS mobile transmit (M-TX) band.
- G Block (1910-1915 MHz) reallocation for CMRS (potentially to Nextel as part of the Consensus Plan for 800 MHz realignment) reduces the duplexer gap to 15 MHz.
- Loss of attenuation due to 5 MHz reduction in duplexer gap, if any, can be accommodated by redesigning G block duplexer such that no interference will occur.
- Existing PCS handsets cannot operate in G block and cannot cause interference to PCS M-RX.
- Several vendors agree: no interference to PCS mobile receive band if 1910-1915 MHz UPCS is reallocated to Nextel/CMRS:
 - Motorola: implementation of 15 MHz duplexer for PCS band is feasible with minimal cost/size/performance impact
 - Agilent: new duplexer design will achieve required attenuation within 15 MHz
 - Qualcomm: new duplexer design should eliminate potential for interference



Issue 2 – MSS Reallocation and Potential Interference to PCS



- PCS carriers claim that MSS/ATC mobile transmit (M-TX) (1990-2025 MHz) will interfere with PCS mobile receive M-RX (1990 MHz & below) and assert that 15-20 MHz Guard Band is required to protect PCS M-RX.
- Prospective G block (1990-1995 MHz) would be M-RX just like the adjacent PCS bands; PCS carriers confirm that there is no interference issue between prospective G block CMRS licensee and existing PCS M-RX operators.
- Interference from MSS M-TX to PCS M-RX is possible; however, Nextel disagrees that 15-20 MHz Guard Band is necessary to protect PCS M-RX.



Issue 2 – MSS Reallocation and Potential Interference to PCS: Probability of Interference from MSS/ATC to PCS/Nextel is Very Low

- Probability of required factors occurring at same time and causing interference is very low. Interference from proposed MSS/ATC mobile transmit at 1990-2025 MHz to PCS M-RX only occurs when:

- Both mobiles (PCS and MSS/ATC) are very close to each other
- Both mobiles are making calls
- Desired signal for PCS mobile is very weak
- MSS/ATC mobile transmitting at its maximum power

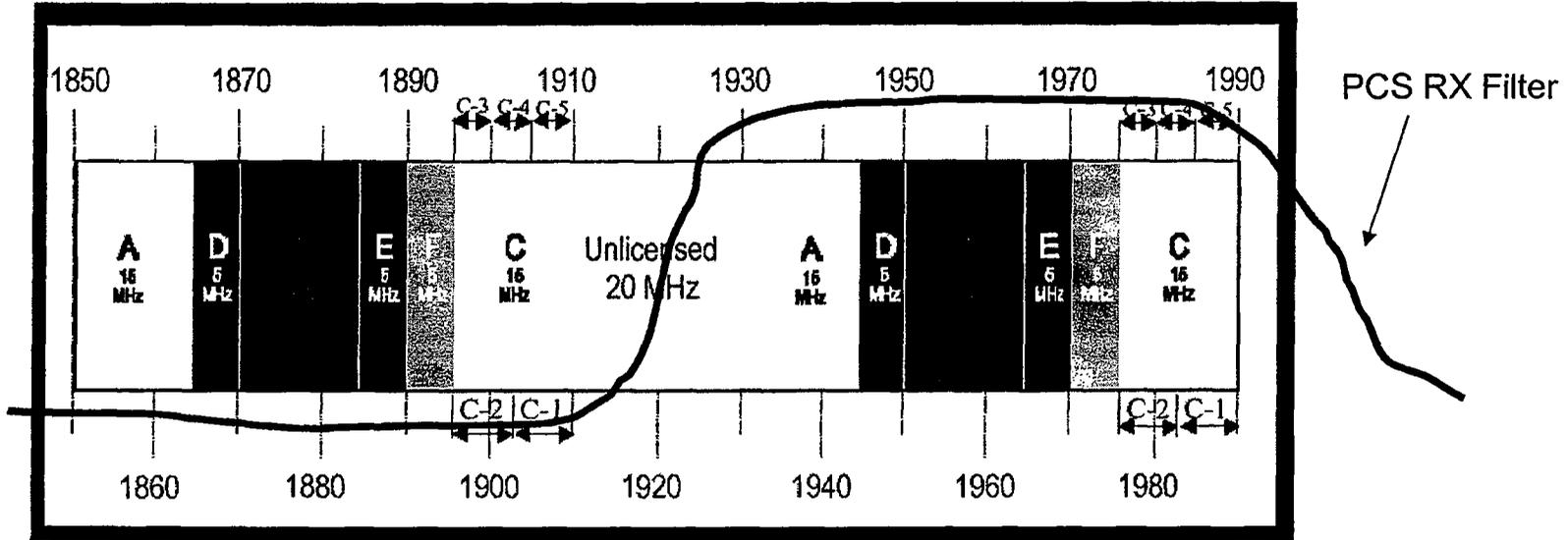
- In dense urban areas, where the probability of the first two factors occurring at the same time is highest, the street level signal strength of PCS B-TX (mobile receive) will be relatively high (robust) due to the large number of PCS cell sites in such areas. At the same time, MSS/ATC M-TX should be operating at relatively lower power levels in this environment because of similar terrestrial base station site infrastructure for urban ATC.

- In suburban/rural areas, where on-street signal strength is relatively lower, the probability of having two mobiles within a few feet and making calls at the same time is very low. Even if this happens, need significant disparity in PCS and MSS/ATC signal strength to trigger PCS mobile interference.

- PCS operators routinely work together to prevent PCS BS-TX to PCS MS-RX interference cases through coordination; PCS and ATC can do the same.



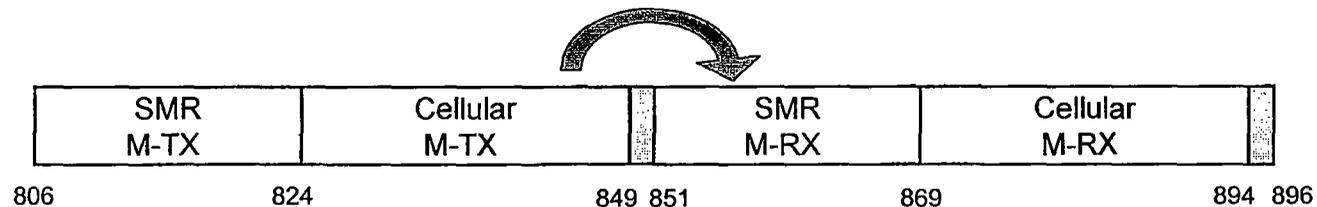
**Issue 2 – MSS Reallocation and Potential Interference to PCS:
If PCS assertions Were Correct, Extensive Interference Would Be Occurring Today
Between Adjacent PCS Systems**



- Because PCS mobile receive handset filter is over 60 MHz wide, D Block PCS mobiles receive base station transmit signals from all PCS operators in a market. In dense urban areas such as New York City, where transmitter towers are less than 50 ft high, D Block PCS mobiles, for example, should experience severe interference from PCS base station signals -- particularly from A and B Block operators.
- *Notwithstanding the above, D block mobiles do not experience significant interference from other PCS carriers. As discussed above, probability is very low of all necessary interference factors occurring in the same place and at the same time.*



Issue 2 – MSS Reallocation and Potential Interference to PCS: A Similar Band Plan Exists at 800 MHz with No Interference



- There is a near-identical band allocation at 800 MHz where cellular M-TX is adjacent to the Land Mobile Radio Band (SMR) M-RX with 2 MHz of Air-to-Ground systems acting as a *de facto* guard band.
- Using the PCS carriers' own arguments, Nextel's customers in Land Mobile Radio Band (851-866 MHz) should be experiencing severe interference from cellular mobiles transmitting at 824-849 MHz – *but* they are not.
- More than 50 million customers in 800 MHz cellular band adjacent to Land Mobile Radio band. Nextel has more than 10 million subscribers in the Land Mobile Radio band. *There have, however, been few if any incidents of customer- impacting interference caused by cellular M-TX to Land Mobile Radio/SMR M-RX band.*