

**BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554**

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

To: The Commission

REPLY COMMENTS OF SOUTHERN LINC

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EXECUTIVE SUMMARY

The *Notice of Proposed Rulemaking* in this proceeding resulted in a tremendous response, with over 150 licensees and related entities filing comments. Although the commenters discussed many issues, there was near unanimity that the Commission should not adopt Nextel's proposed realignment plan. The outcry against Nextel's plan was overwhelming, with many diverse interests - including public safety entities - vigorously opposing it. Nextel's proposal for an extraordinarily expensive and burdensome realignment of the 800 MHz band has far more to do with rewarding Nextel with clear, contiguous spectrum than with eliminating its interference to public safety.

Southern LINC is a regional commercial wireless provider with over 250,000 subscribers, including 30,000 public safety users, and it employs the same iDEN technology platform as Nextel. Based on Southern's success in deploying service without disruption to other licensees, it is strongly opposed to adoption of any plan for realigning the 800 MHz band just for the purpose of relieving Nextel of its obligation to operate in compliance with the Commission's Rules and good engineering practices. Southern and many other commenters exposed the following flaws in the various realignment plans that have been suggested in this proceeding:

- **Nextel's realignment plan is little more than a spectrum grab.** Eliminating Nextel's interference to public safety communications can be accomplished without rewarding Nextel with an allocation of clear, contiguous spectrum at 800 MHz, 2.1 GHz, or any other band.
- **Realignment will not resolve public safety interference.** Band realignment is an expensive and disruptive exercise in futility because no licensee relocation short of moving all Public Safety or Nextel operations to another band will resolve interference. This is so because even after in-band realignment, licensees could still be subjected to Nextel-generated intermodulation and receiver overload interference, thus necessitating continuing reliance on technical solutions and "best practices."
- **The causes and cures of public safety interference are site-specific and highly variable, and there is no single solution.** Additionally, while interference to

Public Safety is not to be tolerated, the number of interference reports received to-date does not justify the magnitude of the cost and disruption that realignment would entail. Once the Commission clearly assigns responsibility for correcting this interference and subjects interference-causing licensees to appropriate enforcement mechanisms, the prevalence of such interference will likely decrease.

- **Many realignment plans would sacrifice regulatory parity to provide Nextel with a competitive advantage.** In addition to offering Nextel a spectrum windfall, some plans would effectively grant it the exclusive right to operate "cellularized" systems in the 800 MHz band, while restricting the ability of all other licensees to employ advanced technologies. Although Nextel would undoubtedly benefit from its competitors not being permitted to operate advanced systems in the 800 MHz band, there is no competitively-neutral reason why Nextel should have the only right to operate cellularized systems at 800 MHz.
- **The upper 700 MHz band offers the best long-term means of resolving public safety interference.** By moving public safety licensees to a band where their equipment cannot receive any frequencies from commercial licensees and thus will not be susceptible to harmful intermodulation products from those frequencies, this alternative provides complete elimination of the interference problem. Efforts are already underway in Congress and within the Commission to encourage broadcast licensees to vacate the 700 MHz band by the current statutory deadline of December 31, 2006. These efforts should continue to ensure that the public safety community has the spectrum resources it needs with least impact on other users of the 800 MHz band.
- **Most realignment plans reflect their proponents' self-interest without significant regard to resolving public safety interference.** Nextel's plan has been characterized as a self-interested spectrum grab and an attempt to displace all other SMR and B/ILT licensees, thereby forcing its SMR competitors out of business and leaving many B/ILT licensees with no options other than taking service from Nextel. Realignment would also impose significant re-coordination costs on licensees, all to the benefit of the various frequency coordination services. Realignment also benefits equipment manufacturers, who stand to reap millions of dollars for replacing or re-tuning perfectly satisfactory radio systems. Many public safety constituencies incorrectly believe that in-band realignment will significantly mitigate interference, but this may be because those constituencies have focused more of their efforts on obtaining additional spectrum than on the interference issue. Thus, while realignment and the "churn" it will create would benefit these interests, it will not benefit any of the licensees who actually use the 800 MHz band except Nextel.
- **Realignment of the 800 MHz band will take years to accomplish.** Band realignment will not represent a "quick-fix" to public safety interference. Few of the plans give any consideration to the significant coordination and logistics involved in compelling thousands of mobile service licensees to relocate to channels that are already occupied. Estimates range from three to five years to

accomplish band realignment, thereby rendering this "solution" in no better stead than relocating public safety licensees to 700 MHz. Moreover, proposed realignment plans are largely if not wholly unfunded.

In its Comments, Southern proposed a reasonable and equitable two-stage plan for mitigating and eventually eliminating interference to public safety entities, and other comments filed in this proceeding strongly indicate that the Commission should adopt that plan. The first stage of Southern's proposal would alleviate interference in the short term through a market-based plan that requires the entity causing interference to promptly correct the problem. The second stage would eliminate interference in the long term through allocating the Upper 700 MHz band for public safety licensees and relocating all 800 MHz public safety licensees to that band. Relocating public safety entities to the Upper 700 MHz band has numerous advantages, including allowing public safety receivers to be built to only "hear" the 700 MHz channels where the public safety community already has 24 MHz of spectrum allocated to it and allocating an additional 20.5 MHz of spectrum to public safety licensees.

Relocation of public safety entities to 700 MHz is attainable both technologically and legislatively. Manufacturers are already developing 700 MHz equipment for public safety use, and both the Commission and Congress have expressed interest in expediting the introduction of digital television and thereby clearing the relatively few broadcast facilities remaining in the 700 MHz band.

Southern therefore urges the Commission to carefully consider the motives of the rebanding proponents, and to adopt rules and policies in this proceeding that are appropriately tailored to the harm to be corrected: Nextel's interference to public safety communications.

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REPLY COMMENTS OF SOUTHERN LINC

Pursuant to Section 1.415 of the Rules of the Federal Communications Commission, Southern Communications Services, Inc., d/b/a Southern LINC ("Southern LINC" or "Southern"), by its attorneys, respectfully submits these Reply Comments in response to the initial comments filed in the above-captioned matter.¹

I. INTRODUCTION

In this proceeding, the Commission is seeking comment on means of resolving harmful interference to public safety entities in the 800 MHz band.² In so doing, the Commission wishes to minimize disruption to the band and its licensees and to assure that public safety entities have sufficient spectrum to effectively operate their systems.³ Southern filed Comments in which it proposed a two-stage plan for resolving interference to public safety entities. It also discussed important considerations that must be taken into account under any plan the Commission may

¹ In the Matter of Improving Public Safety Communications in the 800 MHz Band; Consolidating the 900 MHz I/LT and Business Pool Channels, WT Docket No. 02-55, *Notice of Proposed Rule Making*, 17 FCC Rcd 4873 (2002) ("*NPRM*").

² *Id.*

³ *Id.* at ¶ 2.

adopt and reviewed the many problems with Nextel Communications' ("Nextel's") band realignment proposal.

The Commission received a tremendous response to the *Notice of Proposed Rule Making* ("*NPRM*"), with over 150 parties filing comments. Because of the critical importance of the 800 MHz band, a broad array of entities filed comments, including public safety licensees, critical infrastructure entities, major telecommunications associations, large commercial wireless carriers, and small businesses. There were several common threads of argument and concern that ran throughout the comments, but the one that came through most strongly was that the Commission must not adopt Nextel's proposed realignment plan.

The outcry against Nextel's plan was overwhelming, with parties of all types - including some public safety entities - vigorously opposing it. For its part, Southern asserted that Nextel's plan would be extraordinarily inequitable, costly, and disruptive to 800 MHz licensees. Other common themes expressed by commenters were that the Commission must avoid implementing overly disruptive measures to resolve public safety interference, and that the cost of such measures should not be inequitably imposed upon licensees that do not cause interference. Many parties also offered extensive technical evidence that rebanding 800 MHz will not cure the interference problems being experienced by public safety. In addition, some public safety commenters offered evidence that technical solutions can be effective in eliminating interference. Commenters urged the Commission to give careful thought to how any interference resolution proposals would be funded.

Southern has reviewed the interference resolution plans filed by other licensees and organizations, and believes that its plan, the basic outline of which is consistent with many parties' positions, should be adopted by the Commission.

II. SOUTHERN LINC'S PLAN FOR MITIGATING AND EVENTUALLY ELIMINATING INTERFERENCE TO PUBLIC SAFETY ENTITIES IS THE BEST PROPOSAL BEFORE THE COMMISSION

The comments filed in this proceeding strongly point to the conclusion that Southern's plan for mitigating and eventually eliminating interference to public safety entities should be adopted by the Commission. Among other things, Southern's plan addresses the overwhelming concern among commenters that the Commission mitigate public safety interference in a way that is effective yet has the least possible adverse impact on 800 MHz licensees, especially those that are not responsible for causing any interference. In that regard, notably, Southern's plan would not adversely impact critical infrastructure entities, the importance of which was expressly highlighted in President Bush's proposal for the Department of Homeland Security.⁴ Southern's plan also addresses the frequently stated concern that long-range steps need to be taken to completely eliminate public safety interference. Additionally, Southern's plan contemplates a realistic and equitable funding mechanism to compensate public safety licensees for their relocation costs.

Southern's proposal for mitigating and eventually eliminating interference to public safety entities was described in detail in its Comments.⁵ In summary, the plan consists of two stages. The first stage would alleviate interference in the short term through a market-based plan that codifies the responsibility of the entity causing interference to public safety to correct the

⁴ Proposal for Department of Homeland Security, available at <http://www.whitehouse.gov/deptofhomeland/toc.html>. The proposal contains a section specifically addressing critical infrastructure entities, noting their importance and stating that the Department of Home Security would coordinate a national effort to secure them.

⁵ Comments of Southern LINC at 14-30. Unless otherwise indicated, all comments cited or otherwise referenced in these Reply Comments were filed in WT Docket No. 02-55.

problem promptly.⁶ No single solution would be mandated, however, and technical solutions and limited license swaps can be used to address interference problems as they arise. Southern recommends that the Commission promulgate rules to, among other things, obligate licensees to resolve interference that they cause, delineate parties' responsibilities, and provide resolution timetables. The rules should also provide that if parties cannot reach a mutually agreeable solution, they could arbitrate the matter and, if necessary, turn to the Commission.

The second stage of Southern's plan would eliminate interference in the long term through relocating all 800 MHz public safety licensees to the Upper 700 MHz band.⁷ Advantages of this plan include: (1) separating public safety entities from low-site CMRS systems; (2) allowing public safety receivers to be built to only "hear" the 700 MHz channels where the public safety community already has 24 MHz of spectrum allocated to it; (3) allocating an additional 20.5 MHz of spectrum to the public safety community; and (4) enabling the auction of vacated 800 MHz public safety spectrum as a means of funding the relocation of public safety licensees. Notably, Congress has indefinitely postponed auction of the Lower and Upper 700 MHz bands (Auction Nos. 31 and 44).⁸ In so doing, Congress found that the auctions should not be held "before the 800 megahertz interference issues are resolved or a tenable plan

⁶ Although Southern has proposed this plan in the context of alleviating public safety interference, it can also be applied to alleviating interference caused to Business and Industrial/Land Transportation licensees.

⁷ This stage of the plan was initially presented to the Commission in a pre-comment *ex parte* submission by the Coalition for Constructive Public Safety Interference Solutions, of which Southern is a member. Letter from Coalition for Constructive Public Safety Interference Solutions to Chairman Michael K. Powell dated April 26, 2002, filed in WT Docket No. 02-55.

⁸ 47 U.S.C. § 309(j)(15) (as amended on June 19, 2002); Auction Reform Act of 2002, H.R. 4560, 107th Cong. § 3 (2002) (enacted).

has been conceived," and it expressly recognized the possibility of using the 700 MHz band in a solution to the interference problem.⁹

A. Many Commenters Agree That Public Safety Interference Is Not Understood Well Enough To Justify Realignment Of The 800 MHz Band

Many parties agree with Southern that the causes and cures of public safety interference are not well understood. NAM and MRFAC acknowledge that the Commission does not currently have enough data on "the interference mechanisms and possible solutions" to adopt their original realignment plan.¹⁰ The American Mobile Telecommunications Association ("AMTA"), a nationwide trade association whose members include 800 MHz licensees, notes that there are "significant differences of opinion on this subject among respected engineering sources."¹¹ It contends that "the record is devoid of data" that band realignment will provide relief sufficient to warrant the "extraordinary cost and disruption to public safety users and others."¹² The American Petroleum Institute cautions that the Commission needs to "develop and analyze adequate technical information before embarking on a path towards band reconfiguration."¹³

Public safety licensees also recognize that further study is needed before the Commission will be able to determine the causes and cures of public safety interference, and, thus, that simply jumping into a costly band realignment plan is not justified. The State of Florida maintains that "in view of the enormous cost, complexity, and time required to accomplish band restructuring . .

⁹ *Id.* at § 2(4).

¹⁰ NAM and MRFAC Comments at 5. NAM and MRFAC are now members of the Private Wireless Coalition, which filed Comments advancing a modified form of NAM's and MRFAC's original plan.

¹¹ AMTA Comments at 7.

¹² AMTA Comments at 6.

¹³ Comments of American Petroleum Institute at 3.

. [the Commission should] thoroughly investigate all possible non-restructuring options for mitigating the problem.”¹⁴ The City of Baltimore and the Dallas Area Rapid Transit Authority support further investigation, with the Dallas Area Rapid Transit Authority asserting that the Commission should conduct “a thorough study of all costs involved in relocating users, and [a] thorough engineering study of all possible alternatives.”¹⁵ Likewise, the International Association of Fire Chiefs and the International Municipal Signal Association are opposed to implementation of a “band restructuring proposal which will cost well in excess of One Billion Dollars and entail substantial disruption of communication system operation . . . without assurance that the plan adopted in fact constitutes a solution to the interference problem.”¹⁶

An additional consideration is the fact that the actual number of interference reports that have been filed with the Association of Public Safety Communications Officials ("APCO") - approximately 100 - is relatively small.¹⁷ Also, the reports on file do not represent a scientific measure of the types or prevalence of public safety interference because there are no safeguards in place to ensure that the information is truly representative of the universe of actual problems.

B. The Best Means Of Mitigating Public Safety Interference In The Short Term Is Through Technical And Market-Based Solutions

The Commission can alleviate interference to 800 MHz public safety licensees in the short term by requiring licensees to utilize technical and market-based solutions, such as channel

¹⁴ Comments of State of Florida at 1.

¹⁵ Comments of Dallas Area Rapid Transit Authority at 3; Comments of City of Baltimore at 6.

¹⁶ Comments of International Association of Fire Chiefs, Inc. and International Municipal Signal Association at 4.

¹⁷ The City of Baltimore suggests that interference issues may have been overstated by commercial licensees that "see an opportunity to gain valuable blocks of spectrum." Comments of the City of Baltimore at 6.

swaps, in situations where they are causing interference. Parties could employ solutions described in the Commercial/Public Safety Interference Task Force's *Best Practices Guide* and Motorola's *Interference Technical Appendix*, or they could utilize other technical means that may be developed in the near future.¹⁸ For example, in a request for extension of the construction deadline for its 900 MHz Metropolitan Trading Area licenses, Nextel asserted that "pico cell" technology could be used to decrease its signal strength and, thus, alleviate public safety interference.¹⁹ Parties would also be able to engage in limited license swaps whereby they would enter into agreements to voluntarily relocate public safety licensees' radio systems in discrete situations. In this way, solutions can be specifically tailored to the particular aspects of each problem.

Southern's plan should also be applied to mitigate interference to 800 MHz Business and Industrial/Land Transportation ("B/ILT") licensees. Although some B/ILT licensees have not experienced significant interference,²⁰ others have.²¹ Accordingly, to alleviate 800 MHz interference to the greatest extent feasible, Southern's plan should be applied to both public safety and B/ILT licensees.

Additionally, the Commission should not comprehensively impose new technical restrictions, emission limitations, or similar requirements that are applicable to all of a licensee's

¹⁸ The *Best Practices Guide* was published in December 2000 by the Commercial/Public Safety Interference Task Force. It was supplemented by the *Interference Technical Appendix (Issue 1.41)* ("*Interference Technical Appendix*"), published in February 2002 by Motorola.

¹⁹ This concept is discussed in more detail in Section IV(H), *infra*.

²⁰ For example, the American Petroleum Institute stated that to its knowledge, petroleum and natural gas licensees have not suffered substantial interference in the 800 MHz band. Comments of American Petroleum Institute at 12.

²¹ *See, e.g.*, Comments of Private Wireless Coalition at 11.

facilities across the board. Such limitations could unduly impede the performance and growth of licensees' systems. Rather, if a licensee is causing interference in a particular area, it should have the discretion to use whichever technical solutions it feels are most appropriate for that particular situation. In other words, the Commission should mandate the result (alleviation of interference), not the means of achieving the result. This argument is consistent with the position of Cingular Wireless and Alltel Communications, which stated in joint comments that "[n]o broad-brushed 'complementary measures,' such as those proposed in the *Notice* to limit CMRS signal strength or reduce already appropriate out-of-band emission limits, should be imposed."²²

1. Technical And Market-Based Solutions Are Widely Advocated By Commenters

It is undisputed that technical and market based solutions can effectively eliminate public safety interference on a case-by-case basis.²³ For that reason, and also because utilization of them burdens no one but the particular licensee causing the interference, they were widely embraced by the commenters in this proceeding. That support included the voices of many major telecommunications associations, including the Cellular Telecommunications & Internet Association ("CTIA"), United Telecom Council ("UTC"), Personal Communications Industry Association ("PCIA"), Industrial Telecommunications Association ("ITA"), Forest Industries Telecommunications ("FIT"), and Small Business in Telecommunications ("SBT").²⁴ The National Association of Manufacturers ("NAM") and the Association of American Railroads

²² Comments of Cingular Wireless and Alltel Communications at 8.

²³ See generally *Best Practices Guide* and *Interference Technical Appendix*.

²⁴ Comments of CTIA at 7; Comments of UTC at 14-26; Comments of Private Wireless Coalition at 11-13 (PCIA, ITA, FIT, and SBT filed jointly as the "Private Wireless Coalition").

("AAR") joined in the support.²⁵ In addition to UTC, technical and market-based solutions were also promoted by numerous individual critical infrastructure entities.²⁶

Motorola, the largest manufacturer of equipment for the 800 MHz band and one of the companies most heavily involved in evaluating public safety interference problems, filed comments evidencing a strong degree of faith in case-by-case technical and market-based solutions.²⁷ For example, it stated that technical and market-based solutions are necessary to address frequency intermodulation, one of the most prevalent causes of public safety interference.²⁸ To that end, Motorola encouraged the flexible use of technical solutions set forth in the *Best Practices Guide*:

The *Best Practices Guide* and its associated technical appendix on interference, identifies and recommends numerous alternative measures that CMRS carriers and public safety, and B/ILT users can take to mitigate existing interference issues and help prevent such interference in new or future CMRS and private systems. Because the most effective actions are dependent on the specifics of each situation, there is no one set of solutions."²⁹

Public safety commenters also advocate the use of technical solutions. For example, the Gainesville Police Department noted that "many of these interference problems have technical solutions that should be explored prior to enforcing any global changes in the spectrum."³⁰ The State of Florida encourages technical solutions because "any feasible option short of band

²⁵ Comments of Private Wireless Coalition at 11-13 (NAM and AAR are members of the Private Wireless Coalition).

²⁶ See, e.g., Comments of Carolina Power and Light Company and TXU Business Services at 7, 10, 18-19; Comments of Cinergy Corporation at 9-23; Comments of Entergy Corporation at 7-18; Comments of Exelon Corporation at 7-9; Comments of Boone Electric Cooperative at 3.

²⁷ Comments of Motorola at 10-11, 17-20.

²⁸ Comments of Motorola at 20.

²⁹ Comments of Motorola at 11.

³⁰ Comments of Gainesville Police Department at 3.

restructuring would be highly attractive in view of the enormous burdens that restructuring would impose."³¹ The Dallas Area Rapid Transit Authority also backs "technical and technological responses to [public safety interference]."³²

Numerous commenters discussed situations in which technical and market-based solutions were successfully employed to eliminate public safety interference. For example, Motorola noted that the *Best Practices Guide* recommendations were utilized at the Winter Olympics in Salt Lake City with a great deal of success.³³ Fairfax County, Virginia, determined that "interference to Public Safety licensees can be corrected [through] good engineering practice and proven interference mitigation techniques."³⁴ The State of Florida utilized a solution that involved using a pad to reduce the strength of both desired and undesired signals. When the City of Portland added an inexpensive component to its receivers and avoided frequencies with the same channel suffixes as Nextel, it "was able to nearly eliminate all Nextel-caused . . . interference problems in their primary coverage areas."³⁵

Some commenters also argued that Nextel is not doing enough from a technical standpoint to alleviate interference. For example, Supreme Radio Communications, an 800 MHz CMRS licensee, asserts that Nextel often refuses to take action on complaints of interference.³⁶ Danny Hampton, an engineer who formerly worked for Nextel and was responsible for maintaining all of its digital sites in central North Carolina, states that it took "technical short-

³¹ Comment of State of Florida at 8.

³² Comment of Dallas Area Rapid Transit Authority at 2.

³³ Comments of Motorola at 11.

³⁴ Comments of Fairfax County at 25.

³⁵ Comments of City of Portland at 5-6.

³⁶ Comments of Supreme Radio Communications at 10-11.

cuts" in building out much of its system.³⁷ Some comments focused on Nextel's use of "hybrid combiners" as a source of interference."³⁸ Hybrid combiners are not inherently poor choices from an interference mitigation standpoint; there are numerous types of hybrid combiners and some are better than others at alleviating interference. At some sites, Nextel may be using hybrid combiners that are less capable of mitigating interference than others.

2. Technical And Market-Based Solutions Address Commenters' Overwhelming Support For Holding Licensees That Cause Interference Responsible For Their Actions

A recurring sentiment among all types of commenters is that licensees should be solely liable for remediating the public safety interference that they cause; they should not be permitted to shift that responsibility to other, innocent licensees.³⁹ This overwhelming sentiment, which is well grounded in the Commission's Rules, notions of equity, and common sense, often led commenters to level harsh criticism at Nextel, which causes the majority of public safety interference yet wants to shift much of the burden of correcting it to nearly every other 800 MHz non-public safety licensee. Verizon Wireless declared that "we are amazed that Nextel would have the gall to propose to leave the huge balance of the relocation bill to private mobile radio and cellular licensees, even though it is Nextel that is primarily responsible for the interference and Nextel that will benefit from the band realignment."⁴⁰ Cingular Wireless and Alltel Communications accuse that Nextel "greatly underplays the amount of interference its ESMR

³⁷ Comments of Danny Hampton at 1-2.

³⁸ Comments of Fairfax County at 4-5.

³⁹ *See, e.g.*, Comments of UTC at 15-16; Comments of CTIA at 6; Comments of National Rural Telecommunications Cooperative at 2-3; Comments of American Water Works Association at 2; Comments of Duke Energy Corporation at 6; Comments of Carolina Power and Light Company and TXU Business Services at 6-10; Comments of Corn Belt Energy Corporation at 2; Comments of Western Communications at 1-2.

⁴⁰ Comments of Verizon Wireless at 16.

operations are causing to public safety and significantly overplays the amount of interference other CMRS providers are causing."⁴¹ Island SMR contends that "[t]he reality of this situation is Nextel does not wish to pay the amount necessary to fix the interference problems with Public Safety, but instead wishes to persuade the Commission to force the incumbents like Island SMR, Inc., who is not at fault, to pay for the rebanding."⁴²

Public safety and quasi-public safety licensees added their voices to the call to hold licensees responsible for remediating the public safety interference that they cause. The City of Baltimore observes that public safety interference in Baltimore has been caused "by Nextel or other commercial operators, not Baltimore; and it is up to those operators to correct them at their own cost."⁴³ Fairfax County, Virginia, states that "Nextel should take full responsibility for the interference their operation creates to public safety licensees"⁴⁴ The Snohomish County Emergency Radio System "views the resolution of Nextel-created interference to be the responsibility of Nextel."⁴⁵ The New York City Transit Authority maintains that "all costs associated with corrective measures ought to be borne by the interfering party," noting that "the burden to correct the interference historically has rested on the interfering party in accordance with FCC Rules and Regulations Part 90.173(b)."⁴⁶

Southern's plan squarely addresses this concern. By requiring licensees to utilize technical and market-based solutions on a case-by-case basis to resolve public safety interference that they cause, the first stage of Southern's plan places the cost and burden of implementing

⁴¹ Comments of Cingular Wireless and Alltel Communications at 13.

⁴² Comments of Island SMR at 5-6.

⁴³ Comments of City of Baltimore at 2.

⁴⁴ Comments of Fairfax County at 4.

⁴⁵ Comments of Snohomish County Emergency Radio System at 2.

⁴⁶ Comments of New York City Transit Authority at 11.

such solutions solely on the party causing the interference. Also, the solution is strictly limited to the parameters of the particular area in which the interference is occurring. In addition to being equitable for all parties, this plan is more cost-effective than band realignment for the handful of entities that cause interference. Remediating interference in a limited number of discrete situations will be much less expensive for interference-causing licensees than financing a relocation of public safety licensees, which has been estimated to cost as much as \$1.5 billion,⁴⁷ as well as possibly having to fund other relocation costs (such as their own or those of B/ILT licensees). Additionally, the "per-situation" cost of resolving individual interference incidents is likely to decrease over time as licensees become more knowledgeable and experienced in interference-mitigation techniques.

The second stage of Southern's plan, relocation of 800 MHz public safety licensees to the 700 MHz band, is largely self-funding (through auctioning vacated 800 MHz spectrum) and thus will not need to be underwritten by any licensees, regardless of whether they cause interference.

3. Nextel Has Ample Spectrum And Monetary Resources To Effect Voluntary, Pinpoint License Swaps

In their comments, Southern and other licensees suggested that licensees causing public safety interference could resolve some situations by entering into voluntary agreements providing for relocation of the public safety licensee's radio system to other frequencies.⁴⁸ This could be accomplished with either the interference-causing licensee's own spectrum or through a voluntary three-way agreement with another non-public safety licensee.⁴⁹ Such limited, pinpoint license swaps would allow for the relocation of a public safety licensee if doing so would clearly

⁴⁷ Comments of Motorola at 25.

⁴⁸ Comments of Southern LINC at 24; Comments of UTC at 21-24; Comments of Entergy Corporation at 16-17.

⁴⁹ Comments of Southern LINC at 24.