

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

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 ACCESS SPECTRUM, LLC

Access Spectrum, LLC (“Access Spectrum”) hereby submits its Comments on the Notice of Proposed Rulemaking issued by the Commission (“*800 MHz NPRM*”)¹ in the above-captioned proceeding. Access Spectrum strongly supports the Commission’s efforts to understand and alleviate interference to public safety operations in the 800 MHz band. The fundamental strategy of any final action taken in this proceeding, however, should be to identify practical solutions that resolve the potential for public safety interference while minimizing disruptions to existing incumbents and to the current allocation structure. Given the highly specific and location-dependent causes of interference, the nationwide reallocation of spectrum, as proposed by several parties, would be cost prohibitive, unnecessarily disruptive to existing licensees, and ill-suited to satisfying FCC spectrum management goals.

Instead, as discussed below, Access Spectrum encourages the Commission to address the interference problem at its source by adopting policies that are effective at the local level. Specifically, the Commission should adopt policies that mandate the deployment of more

¹ Improving Public Safety Communications in the 800 MHz Band; and Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, *Notice of Proposed Rulemaking*, FCC 02-81 (rel. March 15, 2002) (“*800 MHz NPRM*”).

effective receivers, encourage the use of the *Best Practices Guide*, and facilitate the resolution of interference problems through negotiated solutions targeted to meet the needs of affected users. While the goal of creating contiguous allocations for classes of users is laudable, the variations in usage of the 800 MHz band can only be rationally accommodated by allowing the process of channel consolidation to be implemented by interest holders within the areas where interference problems exist. Simply put, attempting to overlay a one-size-fits-all national allocation scheme in the 800 MHz band artificially creates spectrum winners and losers and imposes significant costs on licensees without any commensurate interference mitigation benefit.

I. BACKGROUND

Access Spectrum is uniquely qualified to understand the challenges of managing spectrum and resolving interference among operators in an effective and efficient manner. Access Spectrum is the licensee of guard band spectrum in the 746-806 MHz band (“Upper 700 MHz Band”) in twenty-one major economic areas (“MEAs”). Access Spectrum is a private venture formed by the Industrial Telecommunications Association (“ITA”) to increase the availability of spectrum for private mobile radio users. One of Access Spectrum’s challenges is to coordinate operations using its band manager spectrum with adjacent public safety allocations in the 700 MHz band. It is apparent to Access Spectrum that adopting a single, national approach to accommodate the potential for instances of public safety interference in its 700 MHz guard bands, for example, may result in inefficient spectrum use and lost communication solution opportunities for mission-critical system operations. Indeed, these problems are even more complex in the 800 MHz band, which is already saturated with users and subject to significant variations in channel usage from city to city.

II. THE STRATEGIC OBJECTIVE OF ANY COMMISSION ACTION IN THIS DOCKET SHOULD BE RESOLVING PUBLIC SAFETY INTERFERENCE WITH MINIMAL DISRUPTION TO THE 800 MHz BAND.

Access Spectrum fully supports the primary objective of the 800 MHz NPRM: to explore all available options and alternatives for improving the spectrum environment for public safety operations in the 800 MHz Band.² Access Spectrum also agrees with the Commission's conclusion that any action taken in this proceeding should impose only minimal disruptions to the existing license structure.³ Yet, large parts of this docket appear to be only minimally related to that goal, and rather are directed at significantly increasing – or creating ancillary – benefits for third party licensees at the expense of other licensees. Access Spectrum believes the Commission must be vigilant in maintaining as its guiding principle the reduction of public safety interference with minimal disruption and consider less costly and burdensome alternatives than nationwide spectrum reallocation proposals.

As the Commission has recognized, restructuring plans are not fully able to meet the goal of reducing or eliminating interference without burdening existing licensees.⁴ Any nationwide reallocation of spectrum presents a zero-sum game, where additional spectrum (and the associated benefit) is awarded to some licensees at the expense of others. In this instance, a nationwide reallocation of spectrum would impose significant burdens and costs on existing licensees in the 800 MHz bands that do not pose a significant risk of interference to public

² See 800 MHz NPRM at ¶ 3.

³ See *id.* at ¶ 2.

⁴ See *id.* at ¶ 20. (“[N]o one restructuring candidate appears fully able to meet our goal of reducing or eliminating interference without burdening licensees.”)

safety.⁵ In fact, there are substantial areas of the country where 800 MHz public safety users co-exist with other private and commercial users harmoniously without harmful interference. In such cases, it makes no public policy sense to require those users to re-tune, relocate, or be displaced. In addition, if the relocation of displaced 800 MHz licensees to other bands is necessary, this relocation will undoubtedly have an impact on the incumbent licensees in those other bands.

Moreover, due to inter-service sharing policies and the creation of shared trunked systems, the usage of the 800 MHz band is not amenable to a uniform nationwide solution. Over time, the 800 MHz band use profile in one market may have evolved in a completely distinct manner from spectrum usage in other markets or regions. The retroactive imposition of what may at first blush appear to be a complete national solution of contiguous, use-specific blocks will, in fact, lead to increases or decreases in spectrum available for certain classes of operations and the creation of guardbands with no discernable purpose for certain localities. Obviously, such results are not only spectrally inefficient, they create massive relocation expenses with little public interest benefit.

Thus, the proper focus of this proceeding is not how to best engage in the zero-sum game of rearranging the beneficiaries in the frequency bands, which is a losing proposition, but how to best resolve interference to public safety entities – the strategic objective of this docket – in a manner that does not require wholesale dislocation of the existing licensing structure.

⁵ See e.g., *A Principled Approach to LMCC Spectrum Management*, Remarks of FCC Commissioner Kathleen Q. Abernathy at the LMCC National Conference, April 19, 2002; letter of December 21, 2001, to Michael Powell, Chairman, Federal Communications Commission, from Jerry Jasinowski, President, National Association of Manufacturers and Clyde Morrow, Sr., President, MRFAC, Inc. (“*NAM Letter*”); letter of January 15, 2002 to Michael Powell, Chairman, Federal Communications Commission, from Walter V. Purnell, Jr., President and CEO, Motient Communications Inc. (“*Motient Letter*”).

III. CASE-BY-CASE ANALYSIS AND NEGOTIATED RESOLUTION OF INTERFERENCE BY AFFECTED PARTIES AT THE LOCAL LEVEL BEST ACHIEVES THE GOAL OF RESOLVING INTERFERENCE WITHOUT BURDENING EXISTING LICENSEES.

Instead of attempting to impose a nationwide structure on a band with significant variations in usage patterns, Access Spectrum believes public policy would be better served by adopting policies that facilitate the coordinated resolution of interference problems by those entities actually affected by interference. As an initial matter, this proposed resolution avoids entirely the dislocation and associated imposition of costs on licensees that operate harmoniously without problems. Access Spectrum discusses below some of the potential means for assisting affected interest holders in eliminating harmful interference in the least intrusive manner possible.

As was recognized in the *Best Practices Guide*, “the most effective actions to address public safety interference will depend on the specifics of each particular situation.”⁶ As noted above, the “particular situation” in the 800 MHz band can vary dramatically from community to community based upon how the channels have been licensed and the degree of cooperation among licensees in implementation of shared networks. In addition, the potential for interference to public safety operations in the 800 MHz band is not uniform across the nation. It is axiomatic that interference potential is highest in urban areas where customer demand for PMRS/CMRS services is large, the number of public safety users is high, and, as a result, public safety users are forced to operate in close proximity to PMRS/CMRS antennas.⁷ In contrast, the potential for interference is lower in non-urban areas where PMRS/CMRS system deployment is

⁶ See *Avoiding Interference Between Public Safety Wireless Communications Systems and Commercial Wireless Communications Systems at 800 MHz – A Best Practices Guide*, December, 2000, at 11 (“*Best Practices Guide*”).

⁷ See *800 MHz NPRM* at ¶ 11 (describing the differing needs and characteristic among various public safety systems).

less dense, fewer law enforcement and other critical industries have a need to operate, and therefore networks operate distantly, both spatially and spectrally, from each other. In fact, the only instances of interference discussed in the *800 MHz NPRM* appear to be in highly urbanized areas.

The Commission itself has already observed that a nationwide reallocation may not be sufficient to resolve the problem absent “additional palliative measures.”⁸ Among the additional measures suggested as necessary are the deployment of more interference resistant receivers and other location-specific efforts to resolve interference, such as avoiding low antenna elevations and downtilt or increasing public safety signal strength.⁹ Thus, the *800 MHz NPRM* recognizes that public safety interference resolution may ultimately occur at the local level — not at the national level — in any event.

Access Spectrum believes some additional policies can and should be introduced to assist affected parties in addressing specific interference scenarios. First, it is indisputable that the deployment of more interference-resistant public safety handheld and mobile receiver units will help alleviate interference,¹⁰ and Access Spectrum supports such efforts. Second, the Commission should also actively encourage the use of the *Best Practices Guide* and its recommendations for resolving interference on the local level. As noted in the *Best Practices*

⁸ *800 MHz NPRM* at ¶ 73; see also, *Promoting Public Safety Communications: Realigning the 800 MHz Land Mobile Radio Band to Rectify Commercial Mobile – Public Safety Interference and Allocate Additional Spectrum to Meet Critical Public Safety Needs*, Nextel Communications, Inc., ET Docket Nos. 00-258 and 95-18, IB Docket No. 99-81, WT Docket No. 99-87 (submitted Nov. 21, 2001) at 31 (“Realignment alone . . . will not completely eliminate [CMRS-public safety] interference . . .”) (“*Nextel Proposal*”).

⁹ *Id.* at ¶¶ 73-77; *Nextel Proposal* at 31-34.

¹⁰ See *800 MHz NPRM* at ¶ 73-74 (Recognizing higher receiver standards may help to alleviate interference); *Best Practices Guide* at 12-13; *Nextel Proposal* at 32-33.

Guide, measures implemented at the local level are a “win/win” solution to the problem of interference, enabling both public safety and CMRS operators to mitigate interference without impeding their ability to fully utilize their licensed channels.¹¹

Most importantly, however, the Commission should adopt policies that facilitate mediation between affected parties to resolve interference by creating contiguous, use-specific bands implemented through channel swaps and relocation of users within a community. Specifically, the Commission should affirmatively assist licensees seeking to implement consensus-based plans designed to alleviate interference, even if such plans do not accord with existing channelization plans or strictly adhere to the technical requirements of Part 90. Necessary modifications to authorizations should, at a minimum, be subject to expedited processing. Federal policy should also encourage public safety entities to negotiate in good faith with private parties seeking relocation to avoid potential interference. On a more global scale, the FCC should also encourage affected parties, when implementing rechannelization plans within a community of interest, to attempt to transition like classes of users to contiguous spectrum. Based on — and only limited to — the current channel use patterns and specific licensees represented within a community of interest or geographic area, negotiated rechannelization plans should attempt to consolidate public safety users into the lowest part of the band, commercial users into the highest part of the band, with Business, Industrial, and Land Transportation users occupying the spectrum between the two.

¹¹ See *Best Practices Guide* at 13.

IV. PROPOSED POLICIES FOR NEGOTIATED RESOLUTION OF INTERFERENCE ISSUES BY AFFECTED PARTIES

As discussed herein, there are specific, pragmatic steps that the Commission can take to significantly expedite the resolution of interference problems — where they exist — in the 800 MHz band. In particular, Access Spectrum believes the Commission should adopt the following policies and procedures to address any actual or threatened interference:

- **First**, when a party reasonably believes that operations by another licensee will cause actual harmful interference, both affected parties should be required to review their own deployments under the *Best Practices Guide* to identify and, if possible, implement technical measures to mitigate or eliminate the interference.
- **Second**, if the parties reasonably believe that interference will likely result notwithstanding application of technical equipment and engineering solutions, the affected parties should be able to request that the relevant certified frequency advisory committee(s) convene a meeting of interested parties to investigate alternative technical solutions and, if needed, determine a viable rechannelization proposal accommodating the needs in the community of interest. The certified frequency advisory committee(s) should adhere to guidelines established to expedite resolutions, including: (i) tailoring the existing spectrum assignments to needs of the locality; (ii) minimizing modifications to the amount of spectrum available for particular classes of users; and (iii) attempting to transition public safety users to contiguous spectrum in the lower part of the band, with Business, Industrial, and Land Transportation licensees occupying adjacent spectrum blocks, and commercial users consolidated into the highest part of the band.
- **Third**, the parties should negotiate amongst themselves a reasonable allocation of costs and resources necessary to implement the retuning or rechannelization necessary to eliminate interference issues for all, recognizing that public safety users will not typically be in a position to fund extraordinary system changes.
- **Finally**, should licensing changes be necessary to implement the consensus plan for a community, the Commission should commit to processing any necessary modifications to existing authorizations in an expeditious manner that allows the interested parties to quickly and efficiently resolve interference issues.

By implementing these simple practices and policies, Access Spectrum believes the FCC will provide 800 MHz band licensees with the tools necessary to accomplish — in a tailored and

surgical manner — the most efficient, and minimally intrusive, solutions to existing and potential interference problems identified in the NPRM.

V. CONCLUSION

Access Spectrum strongly supports the Commission's efforts to understand and alleviate interference to public safety operations in the 800 MHz band. Given the highly specific and location-dependent causes of interference, the attempt to impose a nationwide rechannelization plan would not only be highly costly and disruptive to existing licensees, but is also ill-suited to meeting the FCC's goal of resolving public safety interference with a minimal amount of disruption to the existing license structure. Instead, Access Spectrum encourages the Commission to address the interference problem in a targeted manner by adopting policies that mandate the deployment of more effective receivers, that encourage the use of the *Best Practices Guide*, and that facilitate and streamline the ability of affected parties within a community to resolve interference through negotiated, narrowly tailored, and minimally disruptive means. To the extent possible — and tempered by the actual needs of the specific users represented within a geographic area — a consensus rechannelization framework within a community of interest should incrementally begin transitioning public safety users to contiguous spectrum in the lower

