

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

In the Matter of)
)
Public Safety and Homeland Security Bureau) RM-11433
Seeks Comment on National Public Safety)
Telecommunications Council’s Petition for)
Rulemaking to Allow Aircraft Voice)
Operations on Secondary Trunking Channels)
in the 700 MHz Band)
)

**COMMENTS OF MOTOROLA SOLUTIONS, INC.
IN SUPPORT OF THE PETITION FOR RULEMAKING**

Motorola Solutions, Inc. (“MSI”) hereby submits these comments in support of the petition for rulemaking filed by the National Public Safety Telecommunications Council (“NPSTC”) requesting that the Federal Communications Commission (“Commission”) consider rule changes to permit public safety aircraft voice operations on 700 MHz narrowband channels designated for secondary trunking use.¹

I. INTRODUCTION

NPSTC’s Petition seeks a rulemaking to amend relevant portions of Subpart R of Part 90 of the Commission’s Rules to enable the use of certain 700 MHz narrowband channels for secondary aircraft voice operations. Specifically, NPSTC requests that the Commission “either amend Part 90.531(b)(7) to allow the use of certain interoperability channels separately from the channels listed in 90.531(b)(1)(iii) or clarify that the channels listed in Part 90.531(b)(7) can be operated separately as 12.5 kHz wide channels for secondary trunking or air to ground voice use

¹ See Petition for Rulemaking of the National Public Safety Telecommunications Council, RM-11433 (filed Mar. 19, 2010) (“Petition”).

in compliance with Part 90.548.”² NPSTC further recommends that secondary aircraft voice operations over the channels be limited to two watts effective radiated power (“ERP”), consistent with the power limit transmitters operating on 700 MHz narrowband low power channels, as set forth in Section 90.541(d).³

NPSTC points out that this action is necessary to help minimize potential interference conflicts that would be caused if aircraft voice operations were conducted on channels used for state-wide communications systems in other nearby states. The problem was originally brought to NPSTC’s attention by the State of Maryland, which, in designing its statewide public safety 700 MHz narrowband communications system, recognized the difficulty it would have in conducting aircraft communications over the 700 MHz channels reserved for direct licensing to States⁴ or general pool 700 MHz channels⁵ without causing interference to distant systems. The NPSTC Petition notes that this problem is not unique to Maryland and instead “is a nationwide issue affecting all licensees operating aircraft radios in the 700 MHz band.”⁶ Therefore, NPSTC recommends a solution be provided for public safety agencies nationwide. NPSTC also noted that its proposed solution could provide help to 800 MHz licensees as well.

² Petition at 1. Currently, Section 90.531(b)(7) indicates that the channels at issue are reserved for secondary trunking operations and that “[t]hey may be used only in combination with the appropriate adjacent Interoperability channel pairs specified in paragraph (b)(1)9iii) of this section in trunked systems.” 47 C.F.R. § 90.531(b)(7).

³ Petition at 1.

⁴ See 47 C.F.R. § 90.531(b)(5).

⁵ See 47 C.F.R. § 90.531(b)(6).

⁶ Petition at 2.

II. NPSTC'S PROPOSAL WOULD ADDRESS A CRITICAL PUBLIC SAFETY COMMUNICATIONS REQUIREMENT.

MSI supports NPSTC's Petition because it offers a potential solution to a critical operational need facing public safety, *i.e.*, supporting aircraft communications requirements in the 700 MHz band without interfering with operations of adjacent public safety neighbors. The operational flexibility requested by NPSTC would also help make more efficient use of the secondary trunking channels. In light of the various 700 MHz narrowband deployments currently in development and the important technical issues raised by the Petition, MSI recommends the Commission promptly issue a Notice of Proposed Rulemaking on the relief NPSTC requests.

The same favorable propagation characteristics that make 700 MHz frequencies desirable for cost-effective ubiquitous wireless communications deployment unfortunately extend the potential interference range of aircraft voice operations conducted over these frequencies. The Commission's 700 MHz band plan assigns 96 pairs of 12.5 kHz channels to state use.⁷ As the State of Maryland explained in its proposal, when states in close proximity to each other attempt to develop statewide 700 MHz systems, these channels are used and reused very quickly.⁸ Use of any of these channels for aircraft voice operations could prevent terrestrial reuse of those channels over a wide area. MSI agrees with NPSTC and the State of Maryland that these challenges are likely to be faced by public safety users across the country, and thus a national solution is appropriate.

NPSTC's proposal would circumvent these problems by making available for aircraft voice communications the channels reserved for secondary trunking activities in Section

⁷ 47 C.F.R. § 90.531(5).

⁸ Petition at 8.

90.531(b)(7) of the Commission’s rules. While the potential of these channels for use in trunking operations should be preserved, as NPSTC notes in its Petition, many public safety communications systems will not require the full 25 kHz wide channels made available by coupling these secondary trunking channels with interoperability channels listed in Section 90.531(b)(1)(iii).⁹ As such, these channels are likely to be artificially underutilized when they could be put to use to support critical public safety airborne communications requirements. With eight 12.5 kHz channel pairs available, sharing among geographically adjacent agencies can be accomplished through the Statewide Interoperability Executive Committees (“SIEC”). This sharing would be further facilitated by NPSTC’s proposal to limit transmissions over these channels to two watts ERP, which would help reduce the extent of the interference contour of the aircraft operations. In this way, the NPSTC proposal would increase the flexibility available to state users of the 700 MHz narrowband channels and would thereby increase the efficiency of use of the 700 MHz band.

III. THE COMMISSION SHOULD PROMPTLY ISSUE A NOTICE OF PROPOSED RULEMAKING BASED ON THE PETITION.

MSI recommends the Commission promptly issue a Notice of Proposed Rulemaking (“NPRM”) based upon NPSTC’s proposal. A full rulemaking proceeding will give all parties an opportunity to provide further information on public safety airborne communications requirements, how the NPSTC proposal addresses those requirements, and any additional analyses of the steps recommended to help prevent interference. Moreover, there is broad interest in making robust use of the 700 MHz narrowband frequencies assigned to the states. Jurisdictions across the country are in various stages of developing or implementing state or regional public safety network deployments that include the use of the 700 MHz narrowband

⁹ Petition at 5.

frequencies.¹⁰ As discussed above, the potential interference concerns regarding aircraft use of the 700 MHz state narrowband frequencies likely would be experienced by additional jurisdictions as the benefits of public safety airborne operations become evident in additional areas.

MSI recommends the Commission move swiftly to issue a NPRM on the NPSTC proposal. This issue could be included in a more comprehensive rulemaking proceeding that addresses other issues related to the 700 MHz narrowband channels previously raised by NPSTC in its February, 2008, Petition for Rulemaking.¹¹ Indeed, the Commission has assigned the present Petition to the same RM file number, RM-11433, as that earlier petition, seemingly acknowledging the relationship between the two. The 2008 petition received strong support from the industry and public safety communities, and to the extent the Commission can promptly address the issues raised in both petitions in a single rulemaking proceeding, MSI supports that action.

IV. CONCLUSION

As discussed above, MSI supports NPSTC's Petition for Rulemaking that offers an effective solution to the need to accommodate 700 MHz band public safety airborne voice communications while minimizing the potential for interference to neighboring jurisdictions. The Petition recommends a mechanism to increase the flexibility available to state and regional public safety licensees and system designers, and will improve the overall efficiency of use in the

¹⁰ See, e.g., Status Update of St. Charles County, MO, WT Docket No. 99-87 (filed June 9, 2011) (discussing status of development of regional public safety communications system including use of 700 MHz narrowband spectrum).

¹¹ See Public Safety and Homeland Security Bureau Seeks Comment on Petition for Rulemaking of the National Public Safety Telecommunications Council Concerning the 700 MHz Public Safety Narrowband Channels, RM-11433, *Public Notice*, 23 FCC Rcd 9395 (2008).

700 MHz band. Therefore, MSI recommends the Commission promptly issue a Notice of Proposed Rulemaking based upon the NPSTC Petition.

Respectfully submitted,

/s/ Chuck Powers

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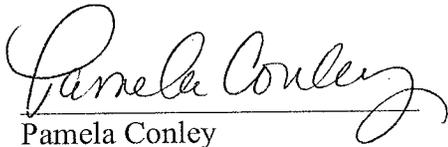
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July 15, 2011

Certificate of Service

I, Pamela Conley hereby certify that on this 15th day of July 2011, a copy of the foregoing Comments of Motorola Solutions, Inc. in Support of The Petition For Rulemaking is being sent via first class, U.S. Mail, postage paid, to the following.

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Pamela Conley