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

In the Matter of:	)	
	)	
Amendment of the Commission's Rules Regarding the 37.0 - 38.6 GHz and 38.6 - 40.0 GHz Bands	)	ET Docket No. 95-183 RM-8553
	)	
Implementation of Section 309(j) of the Communications Act -- Competitive Bidding, 37.0 - 38.6 GHz and 38.6 - 40.0 GHz	)	PP Docket No. 93-253

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COMMENTS OF THE NATIONAL SPECTRUM MANAGERS ASSOCIATION

The National Spectrum Managers Association ("NSMA") hereby submits the following comments in response to the Notice of Proposed Rulemaking in the above-captioned proceeding.[1] The NPRM proposes various revisions of the Commission's Rules relating to the future provision of fixed wireless services in the 38.6 - 40.0 GHz band (the "39 GHz band") and in the previously unused 37.0 - 38.6 GHz band (the "37 GHz band").

I. SUMMARY

NSMA believes that effective streamlined procedures for precluding unacceptable interference to and from authorized 37 GHz and 39 GHz operations are essential to viable commercial operations, and are a critical factor in determining the attendant economic value of the spectrum. NSMA is already providing an established forum, open to all interested industry parties, to address these important technical issues. NSMA urges the Commission

[1] See Notice of Proposed Rulemaking; ET Docket No. 95-183, RM-8553 & PP Docket No. 93-253; FCC 95-500) (the "NPRM").

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to utilize the established NSMA framework to develop final 37 GHz and 39 GHz frequency coordination recommendations.

II. BACKGROUND

Consistent with its organizational mandate, NSMA's comments focus on issues raised in the NPRM relating to frequency coordination matters, and, in particular, to the preclusion of unacceptable interference to and from facilities of authorized 37 GHz and 39 GHz service providers.[2] NSMA is well-suited to develop industry recommendations for ongoing frequency coordination procedures in the 37 GHz and 39 GHz bands. NSMA believes that frequency coordination procedures for the subject frequency bands must be effective in precluding unacceptable interference and encouraging efficient use of the spectrum resource, while affording licensees the flexibility to expeditiously deploy facilities as provided for in the service rules.

Based on its review of the NPRM, and its findings to date, NSMA has concluded that industry-developed recommendations for ongoing frequency coordination among licensees in the 37 GHz and 39 GHz bands can be effectively formulated and implemented within the established NSMA Working Group structure, with minimal Commission oversight, and consistent with the general guidelines set forth in the Commission's current frequency coordination Rules.[3] In fact, NSMA initiated its activities relating to 37 GHz and 39 GHz coordination issues in the summer of 1995, in recognition of industry need, and in

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[2] See NPRM at paras. 115 - 119.

[3] See, e.g., 47 C.F.R. §21.100(d).

anticipation of the Commission moving forward with the above-captioned rulemaking proceeding.

Formed in 1984, NSMA is a non-profit association dedicated to developing consensus industry recommendations for the conduct of frequency coordination among commercial and private FCC applicants, permittees and licensees engaged in the provision of a broad range of fixed and mobile services. NSMA is an open organization, providing a forum to all parties interested in developing workable and efficient procedures to facilitate effective frequency coordination, while minimizing the resulting burden on affected spectrum users. NSMA invites the participation of all members of industry interested in furthering these objectives.

Since its inception, NSMA has published over fifty-five (55) industry consensus recommendations and reports, and is currently developing numerous others on an ongoing basis through its Working Group process. Each of these NSMA recommendations and reports are updated as regulatory and industry conditions warrant, and addresses in detail guidelines and/or technical information intended to improve and streamline frequency coordination procedures for designated fixed or mobile radio service operations. As a result of its long history, NSMA has substantial knowledge and expertise with respect to frequency coordination matters, and is widely recognized as the leading industry organization responsible for the development and promulgation of recommendations designed to facilitate effective and streamlined notification and frequency coordination procedures.

It should also be noted that NSMA works closely with the Telecommunications Industry Association ("TIA"), the petitioner in the above-captioned rulemaking, in developing industry consensus with regard to technical standards relating to frequency coordination

matters. Since 1992, NSMA has participated jointly with TIA Committee TR 14-11 in the ongoing refinement of TIA Bulletin TSB-10, "Interference Criteria For Microwave Systems", as that document has evolved from a guideline for interference computations for the private microwave industry to a far broader technical reference for the private, common carrier and PCS industries. NSMA has also been instrumental, along with TIA, in providing industry input to the Commission's efforts in WT Docket 94-148 and CC Docket No. 93-2 to consolidate current Rule Parts 21 and 94 into a new Part 101. NSMA has followed this long-established pattern of cooperation with TIA in connection with its examination of 37 GHz and 39 GHz frequency coordination issues. Among other things, NSMA is seeking to obtain the guidance of TIA and its member companies in ascertaining appropriate values for interference protection criteria for facilities operating in the 37 GHz and 39 GHz bands.

III. NSMA IS SPEARHEADING INDUSTRY EFFORTS TO DEVELOP CONSENSUS VIEWS ON 37 GHz AND 39 GHz FREQUENCY COORDINATION ISSUES

NSMA is spearheading an organized industry effort, which it commenced in the summer of 1995, to develop recommendations regarding frequency coordination procedures specific to the 37 GHz and 39 GHz bands. NSMA's 37 GHz and 39 GHz band frequency coordination recommendations are being developed using the general parameters of the Commission's existing frequency coordination rules, with due account afforded to the licensing and service rules and revisions thereto proposed in the above-captioned rulemaking. During this process, NSMA has identified issues and developed appropriate Working Group agenda items relating both to prior coordination by applicants and to

streamlined coordination between licensees seeking to deploy blanket authorized facilities within their licensed service areas.

In this regard, NSMA has determined that the potential for unacceptable interference arising from adjacent service area operations, as well as the Commission's acknowledgement in the NPRM of frequency coordination concerns related thereto, merit focus in these comments on the development of recommendations for 37 GHz and 39 GHz coordination procedures between authorized service providers.[4] As recognized by the Commission in the NPRM, such procedures are necessary to avoid unacceptable interference from facilities in one authorized service area to facilities located in an adjacent service area(s).[5]

Specifically, NSMA is actively studying several procedural approaches to the coordination of operations in adjacent service areas. These approaches include the use of

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[4] Among other things, the NPRM also requests comment on NTIA's request that the 37.0 - 38.0 GHz band be allocated for space-to Earth operations in the Earth Exploration Service. While NSMA takes no position with regard to the merits of this proposal, it should be noted that prior coordination procedures will have to be developed if the Commission adopts the proposed new allocation and it is determined that co-channel sharing between Non-government Fixed Service operations and Earth Exploration Service operations is feasible. In this regard, NSMA urges the Commission to require that protection criteria for the two services be determined on a common approach (i.e., that there be parity between standards for interference protection). See NPRM, at paras. 14 - 15.

[5] See NPRM at para. 118. The NPRM also raises questions concerning frequency coordination procedures in the 37 GHz band between non-Government users and possible Government Fixed Service users. See NPRM, at para. 20. In this regard, NSMA believes that any Government Fixed Service use of the 37 GHz band should be subject to the same coordination process, procedures, and coordination timeframes utilized among non-Government entities. NSMA urges the Commission to work in the above-captioned rulemaking, and within the Interdepartment Radio Advisory Committee framework, to streamline the existing Government/non-Government frequency coordination process to bring it more into harmony with the legitimate time requirements of commercial operators and to avoid inequitable burdens on non-Government and Government users alike.

a power flux density threshold, as proposed by the Commission, and/or fixed separation distance triggers.[6] Based on the findings to date of NSMA Working Group 3 "Coordination Procedures", which last convened at the January 30 - 31, 1996 NSMA Working Group Cluster Meetings, there are a number of technical issues that require further study before any final conclusions can be reached regarding recommendations as to specific procedures for coordination among authorized 37 GHz and 39 GHz facilities.

Of particular relevance to the specific request for comment contained in the NPRM, NSMA believes that the Commission's proposal for use of a power flux density threshold merits careful examination and analysis as to the practical implications of its computation and use prior to any final decision on the matter.[7] Among other things, there does not appear to be sufficient available technical information to determine protection criteria for the various equipment types that may be employed by licensees. Moreover, there does not appear to be any consensus within the industry at this time as to the values that should be used to calculate a power flux density threshold that will provide adequate interference protection to victim receivers. Furthermore, the variability of path loss possibilities, including, but not limited to the effects of terrain, vegetation, and man-made features between the radiating station and the service area boundary, as well as the irregular nature of many BTA boundaries, is likely to lead to substantial difficulty in the preparation of compliance computations and may precipitate disputes as to their technical validity. Further study is indicated within the NSMA working group structure to address all of these issues, and to evaluate whether the use of fixed separation distances as triggers for notification

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[6] See NPRM, at para. 118.

[7] Id.

and/or coordination may offer an appropriate alternative means of providing interference protection for 37 GHz and 39 GHz operations. The study process is complicated somewhat by the fact that the NPRM has set forth the prospect that variable technical parameters for antenna gain, pattern, and/or transmit power may be permitted in at least some portion or portions of the 37 GHz and 39 GHz bands.[8]

In the interest of moving forward with a concerted industry examination of these issues, taking into account the interests of all affected parties, NSMA Working Group 3 has established a 37 GHz/39 GHz Task Subgroup, which is open to participation by all interested parties, to move ahead with the formulation of preliminary recommendations that will be developed using parameters for transmitters and antennas that are currently approved by the Commission for use in the subject frequency bands. It is anticipated that NSMA will be prepared to forward more detailed findings to the Commission concerning frequency coordination in the 37 GHz and 39 GHz bands among authorized service providers shortly after the close of the NSMA Annual Conference, to be held at the Ritz Carlton Hotel in Tysons Corner, VA, May 13 - 16, 1996.

Based on the foregoing, it is clear that there are a number of frequency coordination issues that should be addressed in the above-captioned rulemaking in order to facilitate efficient use of the 37 GHz and 39 GHz spectrum resource, to assure licensees that potential interference possibilities have been adequately addressed, and to ensure that appropriate coordination procedures have been developed. The preclusion of potential interference is essential to viable commercial operations in the 37 GHz and 39 GHz bands. Moreover, the successful implementation of appropriate procedures for frequency

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[8] See NPRM, at paras. 115-116.

coordination among authorized service providers will greatly enhance the economic value to the public of the 37 GHz and 39 GHz spectrum.

NSMA is already providing an established forum, open to all interested industry parties, to address each of these issues. Accordingly, because the Commission has recognized NSMA as an industry catalyst for the development of recommendations relating to ongoing frequency coordination procedures for fixed service operations, NSMA is an appropriate forum, in the context of the above captioned-rulemaking, for resolution of such issues affecting operations in the 37 GHz and 39 GHz bands.

IV. CONCLUSION

For all of the above-stated reasons, NSMA-developed recommendations relating to frequency coordination in the 37 GHz and 39 GHz band will be submitted for consideration in the record of the above-captioned rulemaking process and, where appropriate, should be reflected in any Commission decisions resulting therefrom.

Respectfully submitted,

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Its President

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