Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:	)	
	)	
Utilities Telecom Council and Winchester	)	
Cator, LLC	)	
Petition for Rulemaking to Establish Rules	)	RM - 11429
Governing Critical Infrastructure Industry	)	
Fixed Service Operations in the 14.0–14.5	)	
GHz Band	)	

To: The Commission

REPLY COMMENTS OF THE NATIONAL SPECTRUM MANAGEMENT ASSOCIATION

The National Spectrum Management Association ("NSMA"),[1] hereby submits its reply comments in response to the Petition for Rulemaking in the above-captioned proceeding.[2] In the Petition, the UTC and Winchester Cator, LLC request that the Federal Communications Commission ("FCC") to commence a proceeding to permit secondary use of the 14.0-14.5 GHz band for point-to-point and point-to-multipoint services for critical infrastructure industries ("CII") via a single nationwide licensee/coordinator, and secondary non-commercial and commercial use of the band when not needed for CII applications. Because this request involves frequency coordination and spectrum management issues between satellite and terrestrial

[1] NSMA is a voluntary association of individuals involved in the spectrum management profession. NSMA's goal is to promote rational spectrum policy through consensus views formulated by representatives of diverse segments of the wireless communications industry. In May 2008, the NSMA changed its name from the National Spectrum Managers Association to the National Spectrum Management Association to better reflect our membership and activities.

[2] *In the Matter of Utilities Telecom Council and Winchester Cator, LLC Petition for Rulemaking to Establish Rules Governing Critical Infrastructure Industry Fixed Service Operations in the 14.0–14.5 GHz Band*, RM-11429, Petition for Rulemaking (filed May 6, 2008) ("Petition").

services, the NSMA has a particular interest in this proceeding. The NSMA provides the following reply comments to address certain issues raised in the initial round of comments that require additional clarification to better understand the potential spectrum management impact of the proposed operations.

I. DISCUSSION

NSMA agrees that a clearer definition of critical infrastructure industries and the licensing regime applicable to those industries needs to be provided by the FCC.[3] If the proposed allocation is to take into account the spectrum requirement of critical infrastructure industries, then the issue of what is critical communications needs to be addressed. Of particular concern is that spectrum users other than critical infrastructure industries carry critical communications. Addressing this issue is especially important with regard to the UTC proposal since a secondary allocation would create a regulatory structure whereby the critical communications of UTC could expect legitimate interference from the incumbent primary FSS users and have no expectation of or requirement for resolution. The interfering primary transmissions may or may not be carrying critical communications.

NSMA also agrees that the choice of the heavily used 14 GHz band is not sufficiently explained by UTC given that there may be other, more appropriate bands available.[4] NSMA notes that there is currently no FCC allocation for terrestrial fixed service use of the 14-14.5 GHz band. However, allocations for fixed terrestrial point-to-point and point-to-multipoint service exist in other bands. It may be appropriate for UTC to establish its proposed fixed terrestrial systems in bands already allocated for that purpose.

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[3] *See* Comments of FiberTower Corporations., RM-11429, filed June 26, 2008, at 2-3.

[4] *See, e.g.*, Opposition of Hughes Network Systems, LLC, RM-11429, filed June 26, 2008, at 2; Opposition of SeaMobile, Inc., RM-11429, filed June 26, 2008, at 3.

NSMA believes that bi-lateral coordination works best and should be required by the Commission when multiple entities and services are accommodated in the same spectrum. In this case, coordination would be required among secondary users of the band with an additional notification to primary users of the band. Should the FCC permit UTC access to this band, notification by secondary licensees of all potentially affected licensees, both primary and secondary, using traditional prior coordination notices containing the proposed technical parameters of each new station,[5] would: (i) allow secondary link designers the necessary information to avoid interference to both incumbent primary and secondary stations; (ii) provide primary licensees the necessary information to better track down cases of actual interference; and (iii) provide primary link designers information to allow them to put potentially interfering secondary licensees on notice regarding proposed new primary stations. Should this process be implemented, a necessity if the UTC secondary-fixed proposal is permitted, NSMA is concerned with the potential workload that would be imposed on primary licensees by the necessity to interact with secondary users.

Proposed fixed use of the band for temporary emergency services makes prior coordination essential to prevent interference into incumbent services and to assure successful operability of the emergency service activation. Careful development of regulatory policy is especially important in light of the UTC proposal to create a "communications cloud" over population centers in the vicinity of disasters and allow emergency response crews to "set up small antennas and point them in the direction of the cloud." A thorough explanation of how this proposal would work is needed along with an explanation of how interference to primary licensees and other secondary licensees would be avoided.

[5] *See* 47 CFR §101.103(d).

NSMA agrees with the comment that two ubiquitous services cannot share without some expectation of interference into both systems.[6] NSMA is concerned with the proposal to allocate the same spectrum for two potentially interfering services where coordination and interference resolution are likely to be difficult, time consuming and expensive. The incumbent primary allocation for FSS is widely used for VSAT operations, with many hundreds of thousands of terminals currently deployed. Introduction of a secondary allocation for another ubiquitous deployment of fixed stations, particularly in a point-to-multipoint topology, would be likely to produce interference from each of these services into each another.

Identification of the sources of interference is made more difficult because space station interference may be caused by the aggregation of transmissions from many terrestrial stations.[7] Especially given the lack of an accessible database for the secondary stations, identifying sources of interference into primary licensed stations would be very difficult and expensive. Even with assurance from the secondary user that it would shut down upon notification of an interference situation, NSMA believes realization of this type of coordination is impractical.

[6] *See*, Opposition of Artel, Inc., RM-11429, filed June 26, 2008, at 3.

[7] *See*, *e.g.*, Comments of Satellite Industry Association, Inc., RM-11429, filed June 26, 2008, at 9-10; *see also* Opposition of SES Americom, Inc., New Skies Satellites, Inc., and Intelsat Corporation, RM-11429, filed June 26, 2008, at 8.

II. CONCLUSION

To the extent that the Commission moves forward with this rulemaking, it should include the foregoing spectrum management issues and related considerations in any future notice of proposed rulemaking.

Respectfully submitted,

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