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

In the Matter of	**)**	
	)	
Mitigation of Orbital Debris in the New Space Age	**)**	**IB Docket No. 18-313**
	)	

COMMENTS OF THE CONSORTIUM FOR THE EXECUTION OF RENDEZVOUS AND SERVICING OPERATIONS

I. INTRODUCTION AND SUMMARY.

The Consortium for Execution of Rendezvous and Servicing Operations ("CONFERS") is an industry-led initiative that aims to leverage best practices from government and industry to research, develop, and publish non-binding, consensus-derived principles, practices, and technical and operations standards for On-Orbit Servicing (OOS) and Rendezvous and Proximity Operations (RPO). These standards would provide the foundation for a new commercial repertoire of robust space-based capabilities and a future in-space economy.

CONFERS has been developed by a team of private sector organizations with initial funding from the Defense Advanced Research Projects Agency (DARPA). Advanced Technology International (ATI) is providing overall program management. Technical expertise and project execution support is being provided by the Secure World Foundation (SWF), the University of Southern California's Space Engineering Research Center (SERC), and the Space Infrastructure Foundation (SIF).

To fulfill its mission, CONFERS is recruiting a broad array of members from satellite equipment manufacturers, satellite operators, service providers, developers of RPO simulation, planning and safety tools, and insurers; interacting with standards development organizations; and engaging other stakeholders from industry, academia, and governments. CONFERS currently has 24 industry members from the United States and abroad. The process is fully collaborative and includes dedicated outreach activities to the global commercial satellite and space community.

We appreciate the efforts of the Commission to conduct a comprehensive review of its orbital debris rules and the opportunity to provide comment in the Notice of Proposed Rulemaking.[1] Over the last year, we have convened multiple workshops with our members and other subject matter experts in RPO and OOS.

II. Member Perspectives on Commercial RPO

In November 2018, our members approved the first set of CONFERS Guiding Principles for Commercial RPO and OOS ("CONFERS Principles"), which emphasize the importance of consensual operations, compliance with relevant law and regulations, responsible operations, and transparency as the core elements of commercial RPO and OOS.[2] In February 2019, our members approved the first set of CONFERS Recommended Design and Operational Practices ("CONFERS Practices") that added further detail to how industry should implement those principles to enhance operational safety and success.[3] The practices represent lessons learned from prior servicing operations, which have historically been conducted by governments, and are intended to evolve based upon experience gained through future commercial and government servicing operations.

Pursuant to the Commission's question in para 68 of the NPRM, our Members agree that applicants should be required to disclose whether the spacecraft is capable of, or will be, performing any space rendezvous or proximity operations, including whether the satellite will be intentionally located or maneuvered near another spacecraft or other large object in space. This requirement is consistent with the CONFERS Principles and Practices, which state that the parties conducting a commercial servicing operation will notify the relevant State(s) of the general nature, conduct, locations, and results of servicing operations. The State(s) may determine how best that information should be provided and to which government entity or entities.

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[1] *Mitigation of Orbital Debris in the New Space Age*, IB Docket No. 18-313, Notice of Proposed Rulemaking and Order on Reconsideration, FCC 18-159, ¶ 3 (rel. Nov. 19, 2018) ("*NPRM*").
[2] *Guiding Principles for Commercial Rendezvous and Proximity Operations (RPO) and On-Orbit Servicing (OOS)*, Consortium for the Execution of Rendezvous and Servicing Operations, Nov. 7, 2018, https://www.satelliteconfers.org/wp-content/uploads/2018/11/CONFERS-Guiding-Principles_7Nov18.pdf
[3] *CONFERS Recommended Design and Operational Practices*, Consortium for the Execution of Rendezvous and Servicing Operations, Feb. 1, 2019, https://www.satelliteconfers.org/wp-content/uploads/2019/02/CONFERS-Operating-Practices-Approved-1-Feb-2019-003.pdf

III. Harmonizing U.S. Government Orbital Debris Mitigation Guidelines

While our Members strongly believe in complying with the orbital debris mitigation guidelines, they also believe that those requirements, when put in the form of regulations, should be as streamlined and harmonized as possible. Currently, three different U.S. government entities - the Commission, the National Oceanographic and Atmospheric Administration in the Department of Commerce, and the Federal Aviation Administration in the Department of Transportation - all require some form of orbital debris mitigation plan in their satellite license applications.

Thus, in reference to the question posed by the Commission in para 17 of the NPRM, our Members urge the U.S. government to consider consolidating the orbital debris mitigation guidelines into a single framework under a single agency. Our members are agnostic as to which agency that is, only preferring that whatever agency is chosen is given authority to implement the orbital debris mitigation guidelines across all U.S. private sector space activities equally. Our members also recommend that, to the greatest extent possible, any U.S. government regulations or requirements for orbital debris mitigation be based on industry best practices and standards.

Submitted,

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April 4, 2019