

IAF SYMPOSIUM ON SPACE SECURITY (E9)  
Interactive Presentations - IAF SYMPOSIUM ON SPACE SECURITY (IP)

Author: Dr. Josef Koller  
The Aerospace Corporation, United States

Mr. Tyler Way  
Space Policy Institute, George Washington University, United States  
Dr. Mark A. Skinner  
The Aerospace Corporation, United States

ACTIVE DEBRIS REMOVAL – POLICY AND LEGAL FEASIBILITY

**Abstract**

It has been common knowledge for some time that space debris can threaten space operations, requiring satellites to make maneuvers in order to avoid collisions. Such maneuvers are becoming more common in certain orbital regimes as the number of satellites rapidly increases. Preventing the creation of new debris is one way to preserve the space operational environment, removing debris is another. Yet viable options for active debris removal (ADR) remain elusive due, in part, to technical, economic, and legal challenges. Without diminishing the technical and economic challenges of ADR, this paper provides a framework to address the legal questions associated with ADR which are often described as seemingly insurmountable. Our proposed framework aims to resolve these legal questions by applying a simple, bottom-up approach based on mutual consent, approval, and contractual agreements between participants. Our approach contrasts against the often-discussed comprehensive approach that promotes multilateral agreements and the establishment of international institutions as a necessary means. Recognizing that building an international framework is fraught with challenges, our framework instead focuses, not on what is difficult, but on what is achievable, (1) removing debris involving only one nation or (2) removing debris where the service provider and the debris owner share the same interests and recognize the need for active debris removal. Further, this framework offers an initial first step towards establishing that active debris removal is indeed achievable and can lead the way to building more comprehensive legally binding debris removal agreements between States.