

16th IAA SYMPOSIUM ON SPACE DEBRIS (A6)

Policy, Legal, Institutional and Economic Aspects of Space Debris Detection, Mitigation and Removal
(Joint Session with IAF Space Security Committee) (8)

Author: Ms. Giulia Pavesi
University of Milan, Italy

AN ANALYSIS OF THE PUBLIC AND PRIVATE DIMENSION IN THE FIELD OF ACTIVE DEBRIS REMOVAL

Abstract

Since almost three decades, the international space community has realised the growing threat of orbital congestion, this phenomenon affecting the security of space activities both in terms of sustainable access to outer space, potentially leading to the unsuitability for use of some orbital regions, and the safety and security of operations in space, progressively increasing the instability of the space environment where satellites operate. Therefore, besides the mitigation efforts perpetrated so far, among others in terms of end-of life disposal, passivation and design for demise, remediation has to be performed and its RD promoted, in the form of active debris removal (ADR), with a particular focus on densely populated orbital regions, accompanied by research on the legal and policy consequences of such activity. This paper will distinguish between the public and private dimension of active debris removal, two sides of the same activity but with different repercussions on the legal framework. The former activity only relates to the remediation of those debris originated by an international wrongful act deriving from the breach of a due diligence standard on which to evaluate the legality of States conduct, potentially be inferred from a joint interpretation of Articles I and IX of the Outer Space Treaty, where the remediation might be seen as a consequence of the State responsibility and consists in the obligation for the State to restore the previous situation. Here, an analysis of the legal basis of ADR and the most suitable international body for the enforcement of such measure will be conducted. Conversely, the private profile of ADR pertains to the business opportunity deriving from debris remediation, regardless of any international responsibility of the State, where potential customers might be both States, in case of sensitive technology which need to be recovered, but also private operators, interested in the de-orbit of debris or inactive satellites (for the purposes of this paper assimilated to the category of space debris for potential remediation) located in valuable orbital slots. Here, the analysis will cover the consensus of the State issue (in the case of military satellites, for instance), insurance clauses, where remediation might be foreseen in insurance contracts related to space operations, and allocation and waiver of liability in the case of failures or further damages when performing ADR. Finally, this session will dig in the investigation of the most suitable and effective dispute settlement mechanisms to solve disputes arising from ADR.