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Author: Dr. Annamaria Nassisi Thales Alenia Space Italia, Italy

Dr. Maria Messina Italian Space Agency (ASI), Italy Dr. Gaia Guiso Italy

## THE STATUS OF THE OPERATIONAL DEBRIS MITIGATION SYSTEMS REGULATORY POLICY: CURRENT ISSUES AND FUTURE PERSPECTIVES

## Abstract

We have witnessed as especially strong and dynamic in the most recent decades, technological progress in the space sector is shaping a new set of rules, apt primarily to the preservation of the space environment from the savage exploitation of its resources. When focusing on what can be considered the greatest challenge of this still young century, the space debris issue, one cannot refrain from questioning whether such fast-moving technical and technological progress has a solid match in the current legal, policy and political framework: do they go hand in hand, or is the second structurally uncapable of keeping up with the rapidly evolving nature of the first? The paper will involve a deep analysis and legal policy issues for future Operational Debris Mitigation Systems, essential step to draft a set of specific rules, agreed at national and international level, for a governance and regulation framework. What is lacked is a soft law instrument, internationally agreed, that can enforce such decisions on States' behalf, for the sake of the sustainability and ongoing security of the space environment. These aspects are very sensitive and they involve constraints in relation to the national sovereignty and to the identification of "commercial" actors that could invest and operate in these domains. The maritime law can offer some frame of reference to solve this issue. Specifically, the international law of salvage in high seas, as outlined in the International Convention on Salvage, IMO 1989, may establish a similar regime, in space, for abandoned spacecraft. with In this regard, the pivotal role of the International Telecommunication Union (ITU) in setting a regulation for the Active Debris Removal missions (ADR), in the years to come, should not be underplayed. Since this agency is in charge of promoting and coordinating the definition of technical standards, as well as of assigning satellite orbits, it might be able to establish itself as the referral organization for the issuing of finally binding space debris mitigation rules. It is crucial to have an institution capable of maintaining the balance (both technical and political) between multiple stakeholders and security and environmental constraints. So much of the future of space activities will depend on how those rules will succeed in limiting the growing amount of floating debris in space.