

Transcending Societal Issues for Space Exploration (12)
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THE THREAT OF SPACE DEBRIS AND ITS MITIGATION: AT A CROSSROADS BETWEEN
INTERNATIONAL AND NATIONAL EFFORTS TO ENABLE FURTHER DEVELOPMENT IN
SPACE EXPLORATION.

Abstract

On May 15th 2020, NASA released a set of principles, named the Artemis Accords, to guide the execution of the Artemis programme. The agreement aims to play a role in various challenges that the space sector is dealing with. In particular, its principle 12, “Orbital debris”, strictly correlates with the mitigation of space debris. The incrementation of new actors in the space context (e.g., National Agencies and private companies) and the increase of space exploration activities, emphasize the necessity of better coordinating and implementing a new legal regime to deal with space sustainability. Indeed, the optimal management of space debris, Space Situation Awareness and Space Traffic Management, are a few of the most significant concerns where an adequate legal framework seems not yet achieved. Instruments of hard law in International Space Law (ISL), especially the 1967 Outer Space Treaty and the 1972 Liability Convention, as well as the principles of International Environmental Law, seem excessively generic and insufficient to deal with the complexity of the issues. Secondly, the current regime appears largely more based on gentlemen’s agreements rather than international law. Soft law tools such as the “UNCOPUOS Space Debris Mitigations Guidelines” and “UNCOPUOS Guidelines on the Long-term Sustainability of Outer Space Activities” aim to support a global effort to mitigate the growth of orbital debris, but finds limits in their non-binding nature, as well as their non-retrospective effect and its non-militaries activity applicability. Their implementation through domestic law leads to controversial signals, raising questions regarding its effectiveness. Some States have integrated them into their domestic law consequently binding private companies, while others have voluntarily made their space debris mitigation guidelines. This paper will highlight the advancement of space exploration missions, and will address the impact that the principles embedded in the NASA Artemis Accords can have on the current practices at the institutional and private level. Certainly, the Artemis Accords can bring further recognition of the issue and new perspectives, meanwhile also demanding for an acceleration of the formulation of policy and regulation dealing with the concern. All in all, the sustainable future of human activities in exploring outer space, and the growing applications of such activities on Earth, demand an enormous effort to alleviate the problematic remanding to the necessity to a more defined and satisfactory legal framework operating both under a trend of both nationalization and internationalization of space activities.