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GLOBAL SPACE DEBRIS INSURANCE POOL AS A VIABLE MECHANISM FOR SUSTAINABLE
SPACE ACTIVITIES

Abstract

This paper proposes the establishment of a Global Space Debris Insurance Pool (GSDIP) as a potential mechanism to address the escalating challenge of space debris mitigation (SDM), in consideration of active debris removal (ADR). This approach seeks to bridge the gap between existing legal instruments and the realities of space activities, and to incentivize adherence to SDM guidelines by providing economic certainty for debris remediation efforts.

The analysis begins by examining the current legal frameworks governing space debris, focusing on the Liability Convention and its implementation in debris-related issues. It identifies legal gaps, particularly in attributing liability for damage caused by space debris and occurred in ADR missions, and suggests how a global insurance pool may function in dealing with such incidents. The viability of the GSDIP is then assessed, in terms of how this initiative can encourage compliance with mitigation standards by linking the insurance premiums with the adoption of SDM technologies. Furthermore, the role of international institutions, especially UNCOPUOS and the IADC, in establishing and managing the GSDIP is assessed, regarding how they can facilitate international consensus and/or supervise the pool's governance. Finally, the paper analyzes how a cooperative mechanism like the GSDIP can enhance global space traffic management by promoting transparency and collaboration among spacefaring nations while underscoring the necessity of international cooperation and institutional support in implementing such a mechanism, which is a crucial step towards sustainable and responsible exploration and use of outer space.