

## SPACE DEBRIS SYMPOSIUM (A6)

Political, legal, Institutional and Economic Aspects of Space Debris Mitigation and Removal (8)

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ACTIVE SPACE DEBRIS REMOVAL, AN INDISPENSABLE MECHANISM FOR LONG TERM  
SUSTAINABILITY OF SPACE OVERCOMING CONCERNS OF SPACE DEBRIS**Abstract**

More than half a century ago, prior to the launch of the earliest artificial body into space, the thought of human activities resulting into junk in the outer space was out of imagination. But debris in Earth's orbits is no more just a postulation. Over a long period of time, several space levy nations have contributed to space debris environment that is self-perpetuating and threatens to render the outer space surroundings. The argument of space debris expulsion is an unconventional one for which the economical and legal policy are yet to be confronted. The matter encircling space debris is in genesis and the panacea to them can only be defined once the issues themselves are intelligibly interpreted. The objective of this study is to aim to recognize and briefly analyse some legal challenges and their potential solutions. This report focuses on the most promising methods for minimizing the hazards cause by artificial space debris from technical, economic and legal perspectives. From technical aspect, the catastrophic domino effect of the space debris would lead to obstruction for space exploration and development. Debris mitigation is insufficient to constrain the orbiting debris population and that ensuring safe future space activities will require the development and deployment of system that will actively remove debris. Measures must be taken to effectively reduce the space junk and perilousness. The most promising approaches are recognized and examined in the paper. Enhanced proficiency of the economic issues auxiliary with debris is crucial to generate effective policies and regulatory frameworks. A suitable balance requires being attained one that substantiates low cost and effective practices as assurance against cataclysmic escalation with jeopardizing on economic growth. The legal approach uses legislation, administrative orders and regulations, and intergovernmental consensus or alliances to inflict solutions. The legal requirements involve ensuring compliance with existing international law and standards, UN treaties, on outer space. Given the lack of political will both at the national and international levels in relation to the conduct of active debris removal, there is a need to encourage unilateral action on part of individual state in order to commence the process.