31st IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3)
Assuring a Safe, Secure and Sustainable Environment for Space Activities (4)

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SPACE SECURITY AND STRATEGIC STABILITY: WHEN, WHERE AND HOW THEY INTERSECT

Abstract

Whether or not space weapons are pure science fiction, there has never been an era in which satellites have operated without threats of any kind. While creating a sanctuary in space was instrumental in ensuring strategic stability, not least because of the key role that space systems played in nuclear deterrence, today's space and security landscapes have morphed. Security threats are diverse and go beyond military ones. Similarly, outer space is not anymore the domain of two superpowers looking for dominance. It is a "congested, contested and competitive" environment where plethora of new actors and activities can disrupt the limited stability framework governing the use of space and destabilise governments' relations with the potential to go to war.

In discussing when, where and how space security and strategic stability intersect, the objective of this paper is four fold. First, it defines space security and strategic stability in light of the changing space and security environments. Second, it analyses both the implications of reliance on strategic stability to secure high-valued space systems and the obstacles to pursue an effective strategy of deterrence in space. Third, it examines whether and how current developments and trends in space activities and technology can endanger space security and stability. Fourth, it offers a number of potential avenues to ensure that space will continue to be accessible and used for peaceful purposes and societal benefit.

The paper argues that the concepts of space security and strategic stability need to be reassessed in light of the evolving challenges facing the space and security environments; that reliance on strategic stability cannot ensure a safe, secure, sustainable and predictable space environment and that the logics of classical deterrence are mostly inapplicable to outer space; and that dual-use systems and the next generation of space activities can be destabilising and lead to escalatory relations amongst states. The paper concludes that persuasion and cooperation will have to play a greater role in space security. Effective diplomacy can help reduce tensions, build confidence and facilitate the pursuit of common goals, as the creation of norms prohibiting or limiting the use of ASAT weapons having indiscriminate impacts (e.g. generation of space debris) could be. The rising of commercial interests and the decreased role that outer space might eventually play in modern warfare can contribute further to peace, security and stability in space.