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Assuring a Safe, Secure, and Sustainable Space Environment for Space Activities (4)

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A SPACE SECURITY-COMMUNITY AND THE CHALLENGE OF INTERNATIONAL  
COOPERATION FOR ACHIEVING SPACE SUSTAINABILITY FOR GLOBAL ECONOMY AND  
SECURITY

**Abstract**

The increasing reliance on space-based systems for day-to-day activities on Earth (global communication, transportation, commerce, weather, etc.) along with the global trend of a growing use of space for defense turns space, as a global commons, into a congested, contested and competitive environment. Currently, there are almost 60 countries which own assets in space, 1100 operating satellites are in orbit, and about 80 launches take place each year, all of which increases the number of debris. As a result, the vulnerability of the space domain to hazards and harmful activities increases demanding a sustainable and secure space environment. Indeed, the growing number of space security incidents (collisions, escape maneuvers, jamming and interference, cyber events...) in the last decade, is leading nations to seek methods of ensuring their access to space, their freedom of action, as well as proper functioning of their space assets. The nature of space and its hazards demands international cooperation in order to technologically, economically and diplomatically, meet these challenges. Nonetheless, international cooperation in space is highly complicated, because it involves many actors, each of which is motivated by different needs, ambitions and goals. The paper aims to contribute to the discussion and research on the motivations and rationale of how to provide security and sustainability of space. It explores the numerous global security challenges states face in the space domain; and is focused on the international diplomatic efforts to achieve space security and sustainability: mitigating space debris, space situational awareness, creating a code of conduct, etc. The paper depicts on the international dynamic, trends and challenges faced by the international community; especially, the tensions among traditional space-faring nations, and between them and the emerging ones over the mechanisms for transparency and confidence building measures. The paper proposes the way forward is by developing a security community of spacefaring nations to establish and cultivate mechanisms of confidence building measures. A security community is an integrated group of states that do not fight each other physically and settle their disputes and conflicts using other, more peaceful means. Most such communities develop out of a process in which member states come together on the basis of shared values and identities, and establish a peaceful order between them.