

Space Security: An Overview

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- What is Space Security?
- Space Security in the International Context
- Role of Space Security Within the CD
- Secure World Foundation

- **FACT: Space is big**
 - HOWEVER, much of our use is currently confined to small regions
 - KEY orbits in which the majority of the world's satellites operate
 - Sun Synchronous Orbit (SSO)
 - Geostationary Orbit (GEO)
- **FACT: Objects in orbit are travelling extremely quickly**
 - The human eye does not have the ability to see two objects on a collision course in Low Earth Orbit
 - This affects how space security should be conceptualized
 - Two things colliding in space, intentionally or unintentionally, presents a major problem in that they break into pieces those pieces create more potential collisions risks

- Securing the long-term sustainability of critical orbital regions for continued beneficial use
- Securing freedom of access to and use of space for socioeconomic benefit for all of humanity

- From a policy perspective, Space Security is becoming more and more prominent.
- Key considerations need to be taken into account in the international policy arena in the formulation of cooperative space security initiatives:
 - Organizational proliferation
 - Options of legal and policy models
 - International political climate
- How does one achieve a balance between the interests of those States already heavily invested in the space environment and emerging space States?

- Sustainability of action
 - For human space activities, military or civil, the space environment needs to be made sustainable in the long-term
 - Highest profile issue is Debris
 - Debris is apolitical: does not discriminate in whose space assets it damages and whose space services it interrupts
 - The importance of space as a tool for emerging space States to provide human security to their people
 - Border security
 - Water and other Earth resource management
 - Military activities
 - Disaster warning, management, and relief

- Sustainability of space crucial for general disarmament questions
 - Significant value in use of space for verification and confidence building
 - Overhead imagery of controlled sites
 - Missile and space launch detection
- Potential for military activities to be a major threat to the space environment
 - Intentional or unintentional

Clearly within mandate of the CD to discuss mitigation of potential threats to the world's use of space through military activities or other means.

- KEY CHALLENGE:
 - Bringing together new initiatives in space security into a network of effective agreement that regulates human interaction in space without hindering the entry of new players into the space arena.
 - Need for technical community to engage with international policymakers
- Given that space is so globalised, it is imperative that **ALL** space actors are engaged and invested in space security initiatives
 - The apolitical nature of space safety?
 - The risk associated with a ‘rogue actor’ in orbital activities

- Who are we?
 - Research body, convener and facilitator on space security issues
 - SWF is a fully funded, private operating foundation
 - Space Security projects around the world (Europe, Latin America, Africa, East Asia)

- What do we do?
 - Three key themes
 - **Space security:** Exploring multi-lateral solutions to space security questions
 - **Human and environmental security:** Maximizing global cooperative use of space assets
 - **Planetary defense:** Space governance on international decisions on Near Earth Object Threats

Many Thanks

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