General Assembly

Open-ended working group on reducing space threats through norms, rules and principles of responsible behaviours
Geneva, 30 January – 3 February 2023
Item 6(c) of the agenda
Consideration of issues contained in paragraph 5 of General Assembly resolution A/RES/76/231
To make recommendations on possible norms, rules and principles of responsible behaviours relating to threats by States to space systems, including, as appropriate, how they would contribute to the negotiation of legally binding instruments, including on the prevention of an arms race in outer space

Tools and Mechanisms for Reducing Space Threats

Submitted by the United Arab Emirates on the outcomes of security related topics, Abu Dhabi Space Debate 2022*

1.   The global space sector is rapidly growing, and the establishment of regulatory norms for space activities is a global challenge requiring a multilateral approach. Ensuring a constructive discussion is a collective responsibility.

2.   This paper provides context on the matter of threats to space security and the issues that have been most commonly identified as current and/or future threats to space security.

3.   Insights and key takeaways are based on the discussions of the Abu Dhabi Space Debate (ADSD) which was held in December 2022, including:

        (a)   **Ensuring the security of national space assets.** The impact of political turmoil on space commands, benefits, and threats of establishing space forces. The discussions also included elements in assessing the changing landscape of international space operations and ways in sustaining safe and secure space operations;

        (b)   **Managing the mega challenges that come with mega-constellations.** The challenges of deploying large satellite constellations while ensuring both the benefit to society and the continued sustainability of the space domain. Discussions on mega-constellations vs. sustainability advocates. Debating the security and safety risks created by the uncontrolled launch of mega-constellations. Programs can be put in place to avoid overcrowding of space whilst still ensuring inclusivity. The discussions also included critical considerations in developing a sustainable governance system for LEO whilst the private utilisation of space increases;

        (c)   **Shared global infrastructure rather than individual sovereignties.** The shared infrastructure session elements to build a shared space infrastructure, and how to control the mega-constellation space race. Exchange of views for a common understanding of the scale and scope of the risks space faces from uncontrolled constellations. The conclusion is there should be an international regulatory body for space data;

        (d)   **Threat intelligence and cyber defense for space activities and beyond.** The cyber-dialogue touched upon regulations and standards for hacker-proofed technologies

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        * This document is submitted late due to circumstances beyond the submitter's control.

across the entire space supply chain. It also included items on a unified approach to mitigate the complex cyber risks and securing the safety and security of space assets and infrastructure. It concluded with considerations in enhancing the security of space assets to ensure the security of critical assets.

Recommendation on tools and mechanisms for reducing space threats

- It is crucial to encourage broad lateral space cooperation, including military and public-private cooperation, rather than relying solely on the space security of a single country.

- To be inclusive and provide equity and adequate assets in space for all nations.

- Reducing space threats is enabled by the collective cooperation and responsibility of all nations.

- It is important to draw a threshold between unacceptable behavior and an accident.

- Establishing a corporate structure, especially in the sharing of information between nations.

- The promotion of large lateral space cooperation, including military-to-military and public-private cooperation.

- Establish a methodology for states to contribute and benefit from each other's collective peaceful knowledge.

- Inter-operate and communicate planned maneuvers versus maneuvers in real-time.

- Proposal of a commitment in creating a finance program to look into solutions that helps in the removal of debris.

- The legislative process to govern behavior in space is required.

- Forming an international space framework and strategy through setting new programs in the governmental sector while regulating the growing private sector to limit and reduce potential threats.

- Increase awareness of the space trafficking framework.

- Leveraging cooperation in space projects to improve the earth's security and prosperity by utilizing satellite imagery to avert conflicts.

- Encourage operational demonstrators to consider innovative process training and threat assessment.

- Share knowledge, expertise, and information in the field and maximize utilization of space data by facilitating access for all.

- Responsibility for joint efforts and strategic cooperation in order to raise awareness in the importance of space.

4.   In conclusion, supporting the preservation of global peace, safety, security, and sustainability is crucial. Ensuring transparency between states will eventually enhance space safety and security. The provided recommendations are proposed for the consideration of the Open-Ended Working Group.