

IAF SPACE SECURITY COMMITTEE

Introduction

Space security has become one of the key topics in any discussion concerning space. The need to strengthen long-term sustainability, safety and security in space is shared by all nations. It is in the collective interest of all peaceful spacefaring or space-using nations to encourage the responsible use of space and minimize orbital debris, in order to protect any in-orbit manoeuvring spacecraft from a risk of collision and to preserve the space environment.

At the same time, the peaceful use of Outer space, which prevailed in the past, is not to be taken for granted; we are facing a change of paradigm with a contested and conflicting space domain. Today, close approach and proximity operations by foreign objects of satellite-inspection class are already a reality.

We acknowledge the apparition of newcomers and the diversification of space actors, the arrival of large constellations and the multiplication of small satellites, leading to a growing complexity of space operations. There are also moves towards active debris removal (ADR), on-orbit servicing (IOS), rendezvous and proximity operations (RPO), which can be perceived as dual-use technologies. This combination of factors and trends brings many opportunities, but it also means increasing risks of collisions and interferences, as space will become more and more dense and congested.

In this fast-changing environment, with an increase in both the risks and threats in space, the question of Space Situational Awareness (SSA) and Space Traffic Management (STM) is of the utmost importance. Today, and in the future, we will need to be able to detect, identify, characterize, understand, analyze, attribute and verify what is happening in outer space. An awareness of the highly dynamic and increasingly complex near-Earth space environment appears to be essential to safeguarding space-based assets, ensuring

access to space and contributing to the safety, security and sustainability of space in the long run.

The Space Security Committee focuses on a wide spectrum of topics concerned with security, safety and sustainability. More than a technical committee, the Space Security Committee is a high-level policy and strategy Committee welcoming highly distinguished speakers, and fascinating experts as well as researchers from around the globe. From national to international bodies and through multi-actors, the Space Security Committee offers a 360 degrees range of topics and discussions enlightening the space security community as well as the public on a topic that concerns us all.

Summary

In 2024, the Space Security Committee held a series of impactful discussions with experts from various sectors. With the contribution of its high-level members and distinguished speakers, the Space Security Committee was able to discuss and exchange on a wide variety of topics, advancing the dialogue on space security challenges and solutions.

Indeed, in our last meeting in March, we had the honour to listen to **Pierre-Alain Voltz**, Minister of Foreign Affairs in France and GGE PAROS expert, who provided an update on the Group of Governmental Experts (GGE) on the Prevention of an Arms race in Outer Space (PAROS), emphasising a capability-based approach to preventing an arms race in space. This approach focuses on responsible behaviour and the creation of a framework that does not require the resolution of all disputes at once but acts as a stepping stone for future work. As explained by Mr Voltz, the GGE's work is seen as a useful foundation for further initiatives, with Open-Ended Working Groups (OEWGs) planned for 2025 and expected to build upon the GGE's efforts, helping to drive forward the development of comprehensive space security frameworks.

Additionally, **Dick Buenneke** from the US Department of State discussed the challenges and opportunities of the UN Open-Ended Working Group (OEWG) on space threats. He highlighted the importance of international cooperation, particularly between the US and France, in addressing the growing population of space objects and the risks they pose. In his presentation on the UN's processes and the OEWG, Mr Buenneke highlighted that space threats are becoming more sophisticated, especially in relation to rendezvous and proximity operations (RPO). On the topic of collaboration, Mr Buenneke also emphasises that commercial operators have a growing role in space security, given their increasing involvement in space activities, and called for further civil society and commercial entities cooperation to ensure that security measures evolve alongside the burgeoning space economy.

We also had the opportunity to listen to **Rodolphe Munoz**, Head of sector SSA/STM, DG DEFIS from the European Commission, who discussed the implementation of the EU Space Law, focusing on safety, sustainability and security. He outlined the EU's approach to harmonising national regulations, the upcoming regulatory proposals, and the goal of establishing binding and non-binding measures to enhance the resilience of space systems. Mr Munoz also touched on how the EU plans to align with global standards, using ISO and existing laws from other countries. The goal, as explained by Mr Munoz, is to ensure that all Member States apply the same requirements regarding space safety, sustainability and resilience to create a cohesive approach to space governance.

During the meeting in March, we also welcomed one of our newest members, **Richard DalBello**, Director of the US Office of Space Commerce, who shared an update on the Traffic Coordination System for Space (TraCSS), which seeks to relieve the US Department of defence of responsibility for SSA coordination. TraCSS aims to provide basic SSA services and promote safer operations by encouraging US commercial SSA leadership and developing global SSA standards.

His presentation was followed by the one of **Victoria Samson**, Chief Director, Space Security and Stability, Secure World Foundation, and head of the IAF Task Force for security, who briefed the Committee on the IAF Task Force for Security. In particular, she highlighted how different task forces complement each other, and thus the importance of the dialogue between the task force and the IAF Space Security Committee.

Highlights

The Space Security Committee continues to lead global efforts to address the complex challenges related to SSA, STM, ADR, IOS, and RPO. Its work is central to supporting initiatives such as the GGE on PAROS and the two upcoming OEWGs in Geneva, as well as the WG LTS 2.0 in Vienna.

Additionally, the Committee's influence and reputation have been steadily rising, evidenced by the increasing number of experts and professionals wanting to become members. This ongoing interest shows that the Committee is a key platform for shaping global space security policies. By welcoming experts from different fields, the Committee continues to enhance its knowledge and broaden its scope. This diverse participation supports the Committee's ongoing efforts in space security and helps it contribute meaningfully to international initiatives aimed at protecting space for future generations.

Future Outlook

The Committee's focus in the coming years will be on monitoring, exchanging and advancing global cooperation in space security, i.e. the upcoming OEWGs, as well as the ongoing Working Group on Long-Term Sustainability of outer space activities. High-level speakers will continue to be invited to provide their expertise in space security from their perspective. The Committee will continue striving to find common grounds in the field of space security. Committee members will have the opportunity to engage into policy as well as technical matters of common interest. The Committee will maintain its close links to other committees and sub-committees of relevance. Representatives from emerging spacefaring nations are welcome to participate in the exchanges of the committee, as space becomes a critical infrastructure to all.

Committee Activities

The Committee will continue to actively contribute to the IAF Task Force on Space Security, which focuses on space stability and the intersection of security and sustainability. The task force is expected to continue launching webinars and develop a more operational approach to space traffic coordination and SSA. Members of the Space Security Committee will provide input on potential activities and participate in the task force's future meetings.

At future meetings, the Committee will continue to invite presentations on emerging challenges in space

traffic coordination, and the integration of commercial actors into space security frameworks, ensuring that the most pressing challenges are addressed, and that the Committee remains a leading force in space security discourse. In particular, the topic of global coordination between existing and developing Space Situational Awareness systems in the different regions of the

world to support space safety and sustainability will be regularly discussed. At the same time, the Committee will closely monitor the official, multilateral processes in both Geneva and Vienna where space security remains a key focus of international dialogue.