

German national contribution to the Secretary General in reference to the Resolution 76/230 “Prevention of an arms race in outer space: further practical measures for the prevention of an arms race in outer space”

UN General Assembly Resolution A/RES/76/230 on “Prevention of an arms race in outer space: further practical measures for the prevention of an arms race in outer space” requests the Secretary General to seek **“the views and proposals of Member States about the provision of guarantees for the prevention of an arms race in outer space”** and to submit a substantive report to the General Assembly at its upcoming session. This paper represents the national contribution by Germany on its views on preventing an arms race and on mitigating threats and security risks in outer space.

1. Introduction: *Guarantees are inadequate for the prevention of arms races*

Legally binding instruments, political commitments, norms of behaviours as well as transparency and confidence building measures are core instruments for arms control and risk reduction in many domains. They complement each other by serving specific purposes. They are most effective if they form a verifiable fabric of obligations, state practice, and voluntary measures underpinned by good intentions. Singling out or limiting approaches to guarantees will not be sufficient to foster security, particularly not in outer space, where guarantees will be difficult to define and verify. It is rather a comprehensive and pragmatic approach we need towards outer space security.

At worst, calls for guarantees may provide cover for fraught intentions. The Russian Federation has for many years called for guarantees to prevent an arms race in outer space – yet its aggression against Ukraine is a case of the most blatant disregards for political commitments Russia itself has made. We see Russia’s stated aims in clear contradiction with Russia’s current aggressive actions in Ukraine, bluntly breaching the security guarantees Russia gave to Ukraine according to the Budapest Memorandum and shattering peace in Europe, gravely breaking international law and damaging the foundation of the European security architecture. Breaching international agreements and fundamental international law is a huge driver for instability, insecurity and arms races. It destroys trust and confidence in international agreements and relations, and increases unpredictability and the risk of miscalculation, escalation and conflict.

Russia’s breach of International Law and past commitments has also a profound negative impact on disarmament, arms control and non-proliferation. However, progress is needed today more than ever, including outer space security.

2. A broader approach towards PAROS

Germany remains strongly committed to enhancing security in outer space and to preventing an arms race in outer space. Outer space must remain a peaceful, safe, stable, secure and sustainable environment for the benefit of humankind.

States around the globe become more and more dependent on space assets for their prosperity, safety and security. Conflict in outer space would not only affect the states involved in the conflict: The consequences of the loss of space-based services would be immense and the

space debris resulting from conflict would likely harm numerous states not party to the conflict. Progress on space sustainability and security is needed more than ever. This requires a multilateral, inclusive process.

The traditional notion of “*preventing an arms race in outer space*” dates back to the bipolar great power competition between the United States and the Soviet Union during the Cold War and builds on the idea of an arms race taking place between great powers. Today, outer space security is an essential security issue for all states, not just for great powers or space-faring nations. We should therefore broaden our scope and discuss and negotiate measures *to increase stability and predictability and to foster transparency and confidence in outer space* in order to create conditions where risk of escalation and conflict in space are mitigated and states have no incentive for contesting outer space or engaging in arms races.

Secondly, fulfilling the mandate of PAROS is not restricted to taking “*measures to prevent for all time the placement of weapons in outer space*” as proposed in Resolution 76/230. The Report of the Secretary-General on “Reducing space threats through norms, rules and principles of responsible behaviours” from 13 July 2021 as well as the debates at the PAROS GGE in 2018/19 concluded that the international community is facing a broad spectrum of space-related threats, emanating from space as well as from Earth. Furthermore, threats are not limited to the kinetic destruction of space objects, but include means of electronic warfare, cyberattacks and so on. Finally, space security is challenged by an inherent dual nature of space technologies giving rise to ambiguities of their intended uses: Capabilities and technologies that are essential for preserving the free and sustainable use of outer space might also be misused with the aim to destroy or impair space assets of others¹. In view of such dual-use concerns, threats in outer space cannot be deduced from objects or capabilities alone, but from a combination of capabilities and behaviour or from the observation of actual actions, operations and activities.

Behind this background, we do not believe that the Russian/Chinese draft treaty on the prevention of the placement of weapons in outer space and of the threat or use of force against outer space objects (PPWT) referred to in Resolution 76/230 adequately responds to the objective of strengthening trust and confidence between States, increasing security and preventing an arms race in outer space.

Firstly, it only covers space-based systems. Ground-based counter-space capabilities – like the Nudol-missile used in Russia’s irresponsible 2021 ASAT-test – but also means of electronic warfare or cyberattacks which constitute significant and serious threats to space systems and the space environment, are not explicitly included in the scope of the treaty. It also cannot address risks emanating from the dual-use nature of space systems. Ambiguities regarding the capabilities of certain objects and regarding intentions of their use could lead to misinterpretations, misunderstandings and miscalculations and could consequently increase the risk of conflict in space.

Secondly, the PPWT has no workable definition of a space weapon and no verification measures.

¹ For examples see German national contribution to the Secretary General in reference to the Resolution 75/36 on norms, rules and principles of responsible behaviours in outer space (page 6) in the attachment.

Thirdly, Russia and China have failed to reconcile their approach with the fact that they – despite claiming to promote the prevention of an arms race in outer space – already possess and continue to develop and test counter-space capabilities, including on-orbit systems. Cases in point are the latest DA-ASAT test of Russia from 15 November 2021, the Russian satellite Cosmos 2543 releasing a projectile-like object in July 2020 and Chinese satellite SJ-21's close proximity operation in January 2022 - combined with intransparency about the function and intent behind these missions. These capabilities and behaviours constitute significant and serious threats to space systems and the space environment but are not explicitly included in the scope of Resolution 76/230. In particular the direct ascent anti-satellite test of Russia using a Nudol-missile against one of its own defunct satellites – Cosmos-1408 – on November 15th 2021, creating more than 1.500 pieces of trackable debris and thereby also endangering human spaceflight on-board the International Space Station, constitutes a reckless and irresponsible behaviour.

Developing, testing and fielding counter-space capabilities, which are not in line with a defensive posture, trigger threat perceptions that may result in misunderstanding, miscalculation and escalation spirals as well as an accelerated arms race.

We therefore believe the PPWT approach is neither feasible nor adequate for preventing an arms race in outer space.

3. How to enhance security and confidence in outer space?

Taking into account that threats in outer space cannot be deduced from objects or capabilities alone, but from a combination of capabilities and behaviour, we believe the most pragmatic and realistic way to increase security and to prevent misperception and miscalculations at this point in time is to agree upon norms, rules and principles of responsible behaviours and to increase transparency and predictability of space activities. Behaving responsibly in outer space includes - in addition to cooperative means such as increased communication, consultation, information exchange and transparency – refraining from actions, operations and activities posing a threat to security and stability or that might easily be misperceived as one.

We therefore call on all states to constructively engage in the incremental and inclusive process offered by the OEWG on reducing space threats through norms, rules and principles of responsible behaviours which will start its work in May 2022. Our goal remains an increased shared understanding and awareness of threats and security risks related to outer space and an actual agreement on and implementation of rules of responsible behaviour. We would like to refer to the German national contribution to the Secretary General in reference to the Resolution 75/36 on norms, rules and principles of responsible behaviours in outer space in the attachment for more detail.

Ultimately, this might help building trust to then take more ambitious steps potentially leading to a comprehensive, effective and verifiable legally-binding instrument designed to cover the relevant threats related to outer space.