



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****Proposals of the United States of America Regarding Responsible State Behavior for Outer Space Activities****Submitted by United States of America**

1. Norms, rules, and principles of responsible State behavior with respect to outer space can reduce risks to international peace and security and enable people around the world to benefit from space activities. Adherence during peacetime to a common set of voluntary, non-legally binding measures can increase stability and predictability, enable crisis management, enhance operational safety, and reduce the risks of misperception and miscalculation, thus contributing to the prevention of conflict.
2. The U.S. submission to the United Nations Secretary-General pursuant to United Nations General Assembly Resolution 75/36 provided initial views on concepts for voluntary, non-legally binding norms, rules, and principles of responsible behavior for space operations. This document builds on that submission with proposals that the United States believes could help guide the outer space activities of States during peacetime.
3. The United States believes voluntary, non-legally binding measures complement and operate within the existing legal framework relevant to outer space activities, including the four core treaties on outer space¹, the Charter of the United Nations, and other international law, including the law of armed conflict. Voluntary measures also can build upon existing voluntary international guidelines pertaining to all State space activities, such as those measures enumerated in the United Nations Space Debris Mitigation Guidelines and the United Nations Guidelines for the Long-Term Sustainability of Outer Space Activities. Adherence to norms, rules, and principles of responsible behavior in moments of tension would promote international peace and security and help avoid unintentional escalation.

¹ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (1967) (“Outer Space Treaty”); Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1968); Convention on International Liability for Damage Caused by Space Objects (1972); Convention on Registration of Objects Launched into Outer Space (1976).

I. Proposals for Norms, Rules, and Principles of Responsible State Behavior

4. The United States proposes the following voluntary, non-legally binding norms, rules, and principles of responsible State behavior. These proposals also could serve as a starting point for developing specific measures that are consistent with the criteria recommended by the 2013 Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities (A/68/189).

A. States should promote compliance with international law and adherence to voluntary guidelines and standards applicable to space activities

- Compliance with international law and consistent adherence to a State's voluntary commitments are the foundation of the rules-based international order and peaceful relations between States. States should promote the adoption of, and compliance with, existing international law applicable to outer space activities, including the four core outer space treaties, the Charter of the United Nations, and other international law, including the law of armed conflict. In addition, States should promote the implementation of agreed voluntary international guidelines for outer space activities, including the United Nations Space Debris Mitigation Guidelines, the United Nations Guidelines on the Long-Term Sustainability of Outer Space Activities, and other United Nations principles relevant to outer space activities.

B. States should share information publicly and with other States about national space policies, strategies, doctrine, and major activities

- States should share information that clarifies their intentions regarding State space activities. Sharing national-level policies, strategies, doctrines, and information on major State space activities could build mutual understanding and confidence between States and facilitate the development of a common framework for communicating concerns.

C. States should operate in, from, to, and through space in a safe and professional manner

- Article IX of the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (the "Outer Space Treaty") sets forth the obligation to conduct space activities "with due regard to the corresponding interests of all other States Parties to the Treaty." Similar to operations in the air and at sea, acting in a safe and professional manner in outer space entails taking into account the corresponding interests of other operators. States should elaborate actions that can be taken when conducting space activities to avoid impacting others' space operations. Adherence by States to a practical set of common guidelines and standards would create a more orderly and predictable space environment for all, allowing space operators to avoid unnecessary maneuvers and other activities that could arise from confusion about another's plans or intentions.

D. States should limit the creation of new space debris

- Space debris is a hazard to space activities. Responsible States should limit the creation of new space debris, in particular long-lived debris, by developing and implementing new measures that complement existing guidelines describing how to design, operate, and maintain space objects, from initial design through end-of-life disposal, in ways that limit the creation of long-lived debris, consistent with mission requirements and cost effectiveness. New measures could focus on how States should

conduct tests and experiments in space so as to limit the creation of new space debris, as well as how States should track, share information on, and remediate space debris.

- As an initial, urgent measure to address current threats and risks, United Nations General Assembly Resolution 77/41 calls upon States to commit not to conduct destructive, direct-ascent anti-satellite missile testing. Adoption of this resolution by the United Nations General Assembly, together with individual States making commitments along these lines, is an important first step in solidifying multilateral support for this measure. States also could consider refraining from any tests, experiments, or other activities that result in satellite break-ups or the intentional destruction of spacecraft or orbital stages.

E. States should avoid the creation of harmful interference

- Harmful interference with another State's outer space activities outside the context of armed conflict may give rise to tensions between States, increasing the risk of escalation and inadvertent conflict. Avoiding the creation of harmful interference when conducting outer space activities in peacetime can help avoid misperceptions regarding a State's intentions. Development of norms, rules, and principles regarding harmful interference should be informed by – and build upon – existing relevant international obligations and commitments.
- Harmful interference with certain outer space activities could lead to misunderstanding and potentially be destabilizing. For example, States could view interference with certain space objects, such as those designed to support treaty compliance monitoring; command, control, and communications of nuclear forces; or missile strike warning, as a precursor to other, more escalatory activities. Additionally, interfering with the provision of space traffic management services or interrupting the command, control, and communications of a space object in a manner that creates spaceflight safety risks could create harmful interference with many States' space activities. Furthermore, harmful interference with space-based services that constitute or support critical infrastructure, such as global navigation satellite services, could have widespread impacts on society.

F. States should maintain safe separation and safe trajectory

- States should operate their space objects in a manner that maintains safe separation from other space objects. States also should plan trajectories that avoid introducing spaceflight safety risks for other space objects. As the number of space objects increases and complex space operations become more commonplace, establishing and following common operational guidelines can help avoid misinterpretation about the intent of an operation. Different categories of outer space activities may warrant different guidelines for what constitutes safe separation and safe trajectory, as well as different expectations for communications and coordination.

F. States should communicate and make notifications to enhance the safety and stability of outer space activities and to resolve concerns about international peace and security that arise from the conduct of outer space activities

- Communication and notification can provide clarity in uncertain situations. Establishing and utilizing routine channels of communications can build trust over time, while utilizing emergency channels of communication when necessary can facilitate the resolution of crises.
- The United Nations Guidelines for the Long-Term Sustainability of Space Activities and the report of the 2013 Group of Governmental Experts on Transparency and Confidence-Building Measures in Outer Space Activities contain a number of specific

provisions for communication and information exchange regarding space objects and events. These provisions include sharing space situational awareness information, exchanging contact information for space operations centers and entities providing spaceflight safety support services, providing pre-launch notifications of space vehicle launches, and notifying potentially affected parties of high-risk events such as potential collisions, break-ups, loss of control of a space object, and uncontrolled high-risk reentries. Furthermore, acknowledging receipt of and responding appropriately to notifications and queries from those seeking clarification or coordination regarding activities or incidents of concern in outer space can facilitate the resolution of identified issues. States should implement these measures for their space activities.

- Additionally, when a situation related to outer space activities gives rise to tensions between States, States should make every effort to communicate those concerns in a timely manner and seek to resolve them. In many cases, consultation and communication mechanisms already exist between States. Although some of these mechanisms were not established specifically for outer space activities, States nonetheless could expand their application to include outer space activities and utilize those mechanisms as circumstances dictate. Where such mechanisms do not exist, States should consider establishing them on a bilateral and multilateral basis.

II. Conclusion

5. As the exploration and use of outer space grows, it is imperative that States cooperate in strengthening international governance of outer space activities. Ensuring that outer space activities do not give rise to tensions between States is essential to maintaining international peace and security and enabling all of humanity to benefit from outer space activities.

6. Competition in outer space must be managed to ensure it does not inadvertently escalate into crisis or conflict. The United States believes that compliance with existing international law; the continued promotion, development, adoption, and implementation of voluntary international norms, rules, and principles of responsible behavior; and the exercise of mutual restraint is crucial for preserving the use of outer space for current and future generations. For these reasons, the United States is already undertaking these efforts and urges all States to consider the proposals contained herein to bolster the responsible and peaceful use of outer space by all.
