Group of Governmental Experts on Further Practical Measures for the Prevention of an Arms Race in Outer Space

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Outer space is still a shared domain, which means that the international community must generally agree, broadly speaking, about what is considered to be the responsible use of space and how its sustainability can be maintained and encouraged. Yet often discussions about how to ensure the stability and predictability of the domain revert to traditional arms control responses that are no longer useful.

When discussing how to prevent conflict on Earth from extending to space, or vice versa, a formal treaty-making process should not be the only solution. The high degree of technological change makes it difficult to settle on a specific legal answer, and the growing number and diversity of States engaging in space makes it difficult to find consensus. Instead, the focus should be on developing norms of behavior that can begin to have a positive impact now, and might also lay the foundation for future treaty regimes. These norms should be focused on actions and behavior in space that will ensure that space is peaceful, predictable, and continually accessible to all. This is not to say that established principles of non-aggression should not be underlined: foundational documents to international peace and security like the UN Charter are applicable to space and the tenets of the Outer Space Treaty are still relevant. But focusing solely on new treaty mechanisms, and in particular bans on specific technology, are unlikely to yield the near-time benefits that are so desperately needed.

Outside of the treaty-making process, the UN Committee on the Peaceful Uses of Outer Space (COPUOS) began the Working Group on the Long-Term Sustainability of Outer Space Activities in 2010. The 21 guidelines they agreed to in June 2018 are not hard international law, but all 87 Member States of COPUOS agree that these guidelines represent best practices for how actors should comport themselves in space activities. The process of creating, and now implementing, the guidelines has increased transparency, and will build more confidence across States. As well, it signaled that the international community recognizes the value of non-legally binding agreements for space. Now the next critical step involves the national implementation of the 21 guidelines. This effort has been helpful in elucidating priorities of the international community, but until they are carried out via national legislation and policies, the guidelines have limited utility in and of themselves.

In terms of the discussions of this GGE, it is more useful to focus on behavior that may positively or negatively affect the space environment and interfere with another entity's ability to utilize space than to keep having the same argument about restricting or prohibiting technology that has been going on for decades now. This focus on stabilizing behaviors can be enacted in the following four ways.

1. The strongest way to improve security and stability of the space domain is to increase the transparency of space activities. A key way to do this is by improving space situational awareness (SSA) collection, analysis, and sharing. Having an informed, objective, and trustworthy view of what is happening on orbit will do much to mitigate

concerns about activities of space actors. Making space object registries more accessible, transparent, and interoperable will help with that too, as will promoting the expedited registration of space objects once they have been launched. To underline this point, improving the quality of and access to SSA data for all States would do much to strengthen the stability and reliability of space assets and thus the domain itself.

2. A second way is to focus on specific examples of irresponsible behavior that the international community could agree upon. An example that could have some traction is an agreement not to deliberately create long-lasting debris on orbit through testing of anti-satellite or missile defense weapons. Initial voluntary moratoriums by individual States could eventually lead to binding international agreements. Concerns about verifiability can be addressed by leveraging recent improvements in global SSA capabilities that allow for widespread monitoring and attribution of behavior in orbit.

3. Another area that is a high priority to address is rendezvous and proximity operations (RPO) on orbit, also known as close approaches. A wide variety of governments and commercial entities around the world are developing RPO technologies for military, intelligence, civil, and commercial uses. While many of these uses could yield immense benefits for space sustainability, such as space debris removal or fixing satellites, a failure to be transparent about them could create misperceptions or mistrust that increase instability and risk of conflict. The international community should be focusing on developing norms of behavior for discriminating between commercial and civil RPO and national security RPO and for increasing the safety of all kinds of RPO.

4. A final TCBM that is often over-looked is a commitment to sharing information about national policies, budgets, doctrines, and legislation related to space security and stability. Often, the only information about national activities on orbit is what can be found in news reports, which often are limited to reporting what actually happened and then conjecturing why it is being done, allowing for lots of room for misinterpretation. Article XI of the Outer Space Treaty already obliges States to share “to the greatest extent feasible and practicable...the nature, conduct, locations and results of” space activities. However, this language is not clearly instructive in how States can comply. Thus, proposals for how to enhance existing practice could add significant transparency for State activities in space.

To conclude, we feel there is an opportunity to break out of the morass of the last two decades and develop new ideas for enhancing the sustainability and security of outer space to meet the mandate of this GGE. The most pragmatic and effective way forward is to focus on proposals for specific norms of behavior in space that lay the foundation for future legal agreements. Concurrently, increased focus on enhancing global SSA capabilities can help increase knowledge about space activities, potential threats and challenges, and verification of future behavior-based agreements.