

## **As satellite use grows, geopolitical conflicts could spill into outer space**

We are witnessing an exponential growth in the number of satellites in orbit and in the wide array of services they enable. Approximately 5500 satellites are currently active and tens of thousands more are planned to be deployed before the end of the decade, largely through the efforts of the private sector.

The state of global governance for outer space has lagged behind this burst of activity, especially regarding the security of this vital if vulnerable operating environment. The testing of anti-satellite weapon tests (ASATs) which aim to disable or destroy satellites, has exacerbated the already serious problem of long-lived debris, in particular in the heavily utilized low-earth orbit (LEO), threatening future safe operations. The development of a variety of so-called “counterspace capabilities” which include kinetic ASAT missiles and systems that deploy cyber attacks and lasers, has darkened the prospects for international cooperation to preserve outer space for peaceful purposes as enshrined in the 1967 *Outer Space Treaty*. The hostile rhetoric of leading space powers is even more disturbing – they have been accusing each other of “weaponizing” outer space.

This bleak situation calls out for diplomatic efforts by the international community to safeguard space operations. Fortunately, since last year a UN Open-Ended Working Group (OEWG) on “Reducing Space Threats, through norms, rules and principles of responsible behaviours” has been active. The OEWG held its third session last week in Geneva which was marked by many constructive proposals, However, the sharp criticisms traded between Russia, China and the United States darken the prospects for a positive outcome.

Russia took up the bulk of the initial day of proceedings by engaging in a protracted procedural battle that prevented any substantive discussions. Ostensibly Russia was objecting to the Chair’s agreement that non-governmental entities could address the plenary sessions as observers. Stressing that the OEWG was to work by consensus Russia argued that the Chair’s actions were an abuse of power given Russia’s objection. The Chair and the vast majority of other states held the view that participation of non-governmental entities has been specified in the General Assembly resolution that established the group in the first place.

This petulant obstructionism by Russia was amplified by a Chinese working paper that accused “one space power’ of pursuing “dominance in space, seeking to establish permanent strategic advantage in space”. The Chinese paper also rejected the entire notion of “norms, rules and principles of responsible behaviour” on which the group is predicated, arguing that these would only yield “one-sided and discriminatory outcomes” that would eventually generate “rules of war-fighting in outer space”.

The document also took aim at commercial space companies that it said were directly interfering in armed conflicts. This critique was developed further by the Russian delegate, who delivered a long list of companies (including Canada’s MDA) that were aiding the Ukrainian armed forces and risked being considered military targets. Both Moscow and Beijing contested the applicability of International Humanitarian Law in outer space,

contending that this was tantamount to accepting armed conflict in a realm that was to be dedicated to peaceful activity.

According to Beijing, “The only solution to space security threats is to negotiate and conclude a legally-binding instrument on outer space arms control as soon as possible”. Although some states would prefer legally binding measures the majority believe that at this stage non-binding political measures represent the most practical way forward. In this regard, the session was productive in the number of proposals put forward that were aimed at promoting cooperation and the reduction of mistrust.

Notable proposals include one prohibiting direct-ascent ASAT missile testing an issue the US has championed. Another proposal aims to prohibit interference with other states’ satellites through non-kinetic means (cyber, electromagnetic or laser interference). There were several calls to avoid any close approaches to the satellites of others without prior notification and consent. The need for enhanced transparency in all space operations was stressed, given that the dual-use nature of many space systems could lead to dangerous misperceptions in the absence of clear demonstration of benign intent. The negative impacts of conflict in space on civilians led to calls, notably by the International Committee of the Red Cross, for a ban on any operations that would “disrupt, damage, destroy or disable space systems necessary for the provision of essential civilian services”.

Agreement on any of these measures before the group finishes its work this summer would represent solid progress in enhancing space security. However, any outcome would require consensus approval and with the continued sharp disagreements among the leading space powers, this appears unlikely, regardless of the benefits that cooperation would bring to all countries.

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