



UNIDIR/SWF Informal Consultation: Implications of the Commercialization of Military Space Services

On 24 October 2019, the United Nations Institute for Disarmament Research (UNIDIR) and the Secure World Foundation (SWF), with the support of Airbus, convened an informal consultation to examine some of the implications of the commercialisation of military space services. Roughly 50 experts from across government, industry and academia participated, by invitation of the organisers. The meeting was divided into two parts. The first dealt with technical considerations stemming from the proliferation of “counterspace capabilities”. These capabilities can target space objects for disruption, or possible destruction. The second part of the consultation examined the legal implications of mixed commercial/military satellites. All experts were invited to provide input with a view towards developing a list of issues actors looking to partake in commercial/military space activities could consider. The following is a brief summary of the considerations raised by participants.

- Commercial actors acknowledge challenges presented by counterspace capabilities, notably that their space objects may become the target of disruption or even destruction by foreign military rivals.
 - Some see these as opportunities rather than hurdles.
 - Commercial actors are already engaged with the military on many fronts (including ground, air and sea operations). While the space domain makes it harder to isolate a conflict to a geographical region, participants said they did not necessarily see space activities as being fundamentally different than any other domain.
 - One view expressed was that the commercial sector might be able to make systems so robust that interference or disruption was not cost-effective.
 - There was some concern expressed over supply-chain vulnerabilities for space companies. Commercial experts present saw this as no different than any other area, noting that even cyber threats are manageable.
 - It was also noted that the commercial sector is a diverse community and contains distinct actors with different needs and priorities. As such, the challenge of counterspace capabilities will be viewed distinctly by actors such as manufacturers, launch-service providers and operators.
- While counterspace capabilities were acknowledged as being a source of challenges, commercial actors at the event tended to place greater emphasis on a lack of “norms of behaviour” or “rules of the road” as being a source of instability.
 - Some space assets may be in danger from being targeted for disruption, but there was greater concern over threats from possible collisions and a proliferation of space debris.
 - Rather than seeking conflict-prevention mechanisms, commercial experts present advocated for the adoption of space-traffic rules or standards—where even

manoeuvrable objects are trackable —as a preferred method to promote the long-term sustainability in outer space.

- Such rules might include beacons to track objects, greater enforcement of registration requirements, and more detailed notifications regarding launches and manoeuvres.
- Considerable concern was expressed about the international community's tacit acceptance of destructive anti-satellite (ASAT) tests that generate debris.
 - It was noted that, following the 2019 ASAT demonstration, there was little public outcry, further supporting the argument that ASAT testing below 300km in altitude are consistent with the existing international governance framework in space.
 - Yet it was observed that commercial actors operating in low-Earth orbit see this as a highly destabilising practice that should be addressed at the multilateral level and are willing to support with their national lawmakers.
 - It was generally agreed that while a perfect system of rules for space activities is unlikely, industry appears to support the establishment of common rules that will increase transparency and certainty in near-Earth orbits, even if it is imperfect.
 - Two areas that both government and industry appear to see as beneficial would be the development of an agreement not to deliberately create debris, notably through ASAT tests, and a wider set of space traffic rules.
 -

It was suggested that additional consultations such as this one should be held in other regions, notably those with burgeoning space industries.

For more information, please contact SWF Washington Office Director Victoria Samson (vsamson@swfound.org) or Daniel Porras, UNIDIR Space Security Fellow (daniel.porras@un.org).

About Secure World Foundation

Secure World Foundation (SWF) is a private operating foundation dedicated to the secure and sustainable use of space for the benefit of Earth and all its peoples. SWF engages with academics, policy makers, scientists, and advocates in the space and international affairs communities to support steps that strengthen global space sustainability. It promotes the development of cooperative and effective use