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**Open-ended working group on reducing space threats through norms, rules and principles of responsible behaviours**

Geneva, 9–13 May 2022

Item 6 of the agenda

**Consideration of issues contained in paragraph 5 of General Assembly resolution A/RES/76/231**

## **Written contribution to the first session of the United Nation Open-Ended Working Group on “Reducing Space Threats through norms, rules and principles of responsible behaviours”**

### **Submitted by the Outer Space Institute working group<sup>1</sup>**

The Outer Space Institute welcomes the creation of the Open-Ended Working Group (OEWG) pursuant to UN General Assembly resolution 76/231 of 24 December 2021 and this opportunity to contribute views on the issues identified in its mandate. We share the goal of the OEWG as expressed in operational paragraph 3 of its authorizing resolution to have “all Member States reach a common understanding of how best to act to reduce threats to space systems in order to maintain outer space as a peaceful, safe, stable and sustainable environment, free from an arms race and conflict, for the benefit of all...”. In this regard, we wish to make the following suggestions:

#### **A. A ban on the testing of kinetic (physical impact) anti-satellite (ASAT) weapons**

1. Last year the Outer Space Institute issued an Open Letter calling for the UN to initiate negotiations on a kinetic ASAT test ban which received wide support from the international stakeholder community. The problem of space debris is being exacerbated as the number of satellites in orbit grows exponentially. An OEWG recommendation in favour of such a ban, which would be in the interest of all space actors, would represent a practical result of major significance.

#### **B. Focus on actions rather than capabilities**

2. Negotiations on space security have faltered in recent decades due to differences concerning, among other things, whether the focus should be on capabilities or actions. For instance, should negotiations address the existence of ground-based missiles capable of being used as ASAT weapons, or focus instead on developing a prohibition against the action involved in any such use, i.e., kinetic strikes against satellites? We suggest that the OEWG

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<sup>1</sup> The OSI working group was comprised of Paul Meyer, Aaron Boley, Michael Byers, Ram Jakhu, David Kendall, Lucy Stojak and Mac Evans.



recommend a focused scope to initial negotiations, so that differences such as these do not impede all progress on substantive matters.

### **C. Standards for rendezvous and proximity operations (RPOs)**

3. Among the submissions by states and non-state space actors pursuant to UNGA resolution 75/36 of December 2020 there was considerable convergence around the desirability of standards for governing close approaches of space objects. It is recognized that rendezvous and proximity operations (RPOs) may have significant beneficial aims including on-orbit servicing and active debris removal, but they could be utilized in less benign roles as well. The OEWG might wish to recommend a basic rule for RPOs, namely, that no close approach (possibly within three kilometres) of one space object to a space object belonging to another state or owner be made without the prior consent of the other state or owner.

### **D. Safeguarding satellites providing Precision Navigation and Timing Signals (PNTs)**

4. As global dependence on satellites increases, it is necessary to recognize that PNT satellites (those providing precision navigation and timing signals) constitute an element of critical infrastructure crucial for global development and well-being. The OEWG might wish to recommend a protective status for such satellites, including during armed conflicts.

### **E. No harmful interference via non-kinetic means against space objects**

5. Germany, in its official submission pursuant to UNGA Resolution 75/36, proposed that “States shall not conduct or knowingly support cyber or electromagnetic interference that changes space systems, leads to a loss of operational control over or permanent loss of the space system or impairs the provision of space-based services to the public”. This proposal builds on the prohibition contained in Article IX of the *Outer Space Treaty*, namely, that states should refrain from any harmful interference with the functioning of satellites or other spacecraft.

6. We suggest that the OEWG adopt the German proposal, or something similar, to protect space satellites and other space objects against harmful interference via non-kinetic means.

### **F. Transparency and confidence building measures**

7. Within the context of international security, it has long been established that transparency and confidence building measures can enhance stability and predictability. The *Outer Space Treaty* encourages states parties to exchange in an open fashion information about their activities in outer space. The consensus report of the 2013 UN Group of Governmental Experts on transparency and confidence building measures generated a series of measures that warrant review by the OEWG and recommendations for implementation. We also suggest that the OEWG recommend updates to the 1976 *Registration Convention* with a view to improving timely and accurate provision of information, including when space objects are re-located. Finally, compliance with the twenty-one Guidelines for the Long-Term Sustainability of Space Activities, adopted by COPUOS in 2019, would also contribute to confidence building among space actors.

### **G. Verification**

8. As noted in its authorizing resolution, the OEWG recognizes the significance of “further consideration of effective verification regarding space systems”. As capabilities for

space situational awareness (SSA) grow within both governments and the private sector, there is considerable potential for public-private partnerships that would yield superior SSA and which could serve as the basis for enhanced verification procedures and technologies in support of space security measures. We suggest that the OEWG recommend verification research relevant to the issues it will be considering. Such research could involve international institutions such as UNIDIR as well as academia, civil society, and the private sector.

## **H. Institutional support**

9. The results of the OEWG process will likely require institutional support if they are to be fully implemented. The *Outer Space Treaty* lacks specific follow-up measures such as annual or biennial meetings of states parties, as are common in many multilateral contexts. We suggest that the OEWG recommend a meeting of the States parties of the *Outer Space Treaty* to consider the current situation relevant to the treaty's aims and how new "norms, rules and principles of responsible behaviours" could complement its provisions. The OEWG should also recommend which UN forum it considers best suited to carry forward this work.

10. We look forward to interaction with the OEWG as it continues its deliberations on a topic of increasing importance for global peace and security.

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