



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

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**Panel on Voluntary mechanisms and regimes applicable to outer space**

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There is a growing recognition of the need to enhance the governance regime for space activities, particularly as it pertains to the safety and sustainability of space activities. Notably, we are witnessing a growing reliance on space by militaries and, consequently, a proliferation of counterspace capabilities. This has given rise to calls for multilateral instruments to address the politically thorny issue of space security. But here, too, discussions on legally binding instruments have become deadlocked, much like in the rest of the CD. In this environment, bottom-up soft law approaches may provide a pragmatic option to make progress in certain areas, particularly where consensus can be achieved on various technical and procedural issues and incorporated into non-binding standards and guidelines.

In passing, I would remark that it is a bit of a false dichotomy to have to choose between either legally binding approaches and voluntary soft-law instruments. In my view, we will need both types of instruments, used in a complementary fashion.

Soft law played a role in guiding the behavior of States before the adoption of the 1967 Outer Space Treaty. The first important decision by the United Nations concerning Space Law dates back to December 20, 1961 when the General Assembly adopted Resolution 1721 (XVI) on International Cooperation in the Peaceful Uses of Outer Space. This resolution expresses the foundational principle that international law, including the Charter of the United Nations, applies to outer space and celestial bodies, and that outer space and celestial bodies are free for exploration and use by all States in conformity with international law and is not subject to national appropriation. The Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, adopted in 1963 by the General Assembly as Resolution 1962 (XVIII) reaffirms and expands the scope of the earlier resolution to introduce, inter alia, State responsibility for the space activities, the State obligation for authorization and continuing supervision, the obligation for registration, the notion of a launching State as the basis of the liability regime for damage, and the obligation for consultation. The Outer Space

Treaty was essentially a codification of these same principles, which were then further developed in the succeeding space treaties.

Soft law can, therefore, be seen as a first step in achieving more robust, binding agreements. One may observe that although soft-law instruments are non-binding, this does not mean they are non-legal. Although soft law may not be legally binding, State actors may regard it as politically binding. States that adopt a soft law instrument may choose to demonstrate their political commitment to the instrument by implementing its provisions in their national regulatory frameworks for outer space activities. Such has been the case in a variety of contexts. For example, a number of States have implemented elements of the UN Space Debris Mitigation Guidelines in their national regulatory processes for licensing and ongoing supervision of space activities.

Soft law instruments can also help States to “socialize” adherence to technical standards and recommended practices. A number of soft law instruments are bottom-up, technically based instruments drawn from technical standards and best-practice guidelines based on the experiences of States in the safe conduct of space operations. Other States may use these soft law instruments as a basis for enhancing their own national regulatory frameworks and associated administrative procedures. For example, the provisions contained in these soft law instruments may find expression in national regulatory frameworks for the licensing and supervision of space activities, or in legally binding contracts. They may also find expression in cooperation agreements among States, thus helping to internationalize such standards and practices.

Even if they are non-binding, soft law instruments really need to be developed with a broad international mandate ab initio if they are not to face legitimacy challenges later on. This broad support takes patience and time to build. This was our experience in COPUOS, where it took several years to socialize the idea among States that there was a need for the Committee to address space sustainability with a view to adopting international guidelines. When the idea of space sustainability guidelines was first proposed in COPUOS, a number of States were suspicious of the motive behind this initiative, coming at a time when commercial off-the-shelf components and easier, cheaper access to space were lowering the financial and technological barriers to entry into the space club.

We can also look to the development of transparency and confidence-building measures (TCBMs) as a means to enhance space sustainability. The motivation for adopting broadly agreed TCBMs is that States and intergovernmental organisations should implement such TCBMs to the greatest extent practicable. It is, therefore, important to demonstrate that the proposed measures or actions are applicable to the domain and actors, and that they are implementable (that is, practicable), and verifiable by other parties. With regard to this latter point, given their non-binding nature, the report of the GGE on TCBMs notes that TCBMs should complement, but not substitute for, the verification measures of legally binding arms control agreements and regimes. Nevertheless, the process of developing voluntary TCBMs offers a pragmatic possibility to develop a shared understanding of what constitutes safe and responsible space activities and contributes to a more stable space environment by reducing the risk of miscommunications, misperceptions, and miscalculations.

Now, one could imagine any number of potential TCBMs, so how do we identify those most likely to make a positive contribution to building trust and reducing the potential for misunderstandings and misperceptions? In other words, what are the characteristics of a good TCBM?

Firstly, a proposed TCBM should be clear, practical and proven, meaning that both the application and the efficacy of the proposed TCBM has been demonstrated by one or more actors. Secondly, the application of the proposed TCBM should be objectively verifiable by other parties, either independently or collectively. Thirdly, the proposed TCBM should reduce or even eliminate the causes of mistrust, misunderstanding and miscalculation with regard to the activities and intentions of States.

So, if a TCBM is to be implemented as widely as possible in order to achieve the intended effect, we need to have a clear understanding of what implementation means, from several perspectives. It is helpful to consider implementation from the following perspectives: Who will implement the measure? What exactly is the actual measure/action to be performed (or not performed)? Why is this beneficial – i.e. what is the rationale? When the measure is to be performed? How the measure is to be performed?

Allow me to elaborate on each of these aspects.

#### *Who*

It is important to identify the respective roles of the different actors. These range from those responsible for performing the required task to those responsible for monitoring and reporting. Who should implement the measure? Who will be able to confirm that the measure has been implemented?

#### *What*

It is necessary to articulate the actual measure or action that is to be performed. A description of the action required should not necessarily be prescriptive, but it should indicate what ultimate objective or outcome is desired. What is the measure that should be implemented? Is it clearly identified and understood? What should be demonstrated to confirm implementation?

#### *Why*

Clearly, in order to justify a particular measure, it is important to demonstrate the value or benefit of performing an action. Accordingly, it is important to provide an explanation of why it is necessary to perform the action, that is, the rationale. What is the value or benefit of performing the measure? Do all relevant actors have a clear understanding of why it is important to be able to confirm or demonstrate implementation? When It is also important to specify at what point in time the action is to be performed. Is it to be performed on fixed timescale (e.g. annually?) or relative to a certain point in a project life cycle (e.g. in the post-mission phase)? When should the measure be implemented? At what point is demonstration or confirmation performed? And finally,

#### *How*

It is necessary to describe how to implement particular measures, both in terms of the actor and a potential observer. This should also address how the activity can be verified. Can the action be independently observed and must it be reported with supporting evidence? How should the measure be implemented? How is implementation of the measure to be validated, demonstrated or confirmed?

We must allow for flexible implementation of TCBMs, as implementation will be consistent with national capabilities, needs, and state of development. For this reason, it is important to determine what TCBM implementation means in different contexts. This is why voluntary sharing of information on implementation experiences is so helpful. In this regard, I am pleased to see that a number of

delegations in COPUOS have started to report their implementation experiences for the LTS guidelines. This information sharing helps other States to think about how they might implement the guidelines and it also encourages wider implementation of the guidelines.

Improving space situational awareness can help by verifying actions in orbit and by establishing pathways for technical cooperation and data exchange, which lays the groundwork for possible future collaboration and allows for regular communication between space actors. While the notion of “verification” is usually used with legally-binding arms control agreements, there is a place for space situational awareness to verify that the information being shared about countries’ military/civil space activities is accurate.

Several interventions have noted the potential for overlap between our discussions here and the work of COPUOS. So permit me, if I may, to share some thoughts on this overlap. Let me begin by saying that some overlap is inevitable, because, as we have repeatedly heard in this session, so much of space activity is dual-use in nature. But, both here and in COPUOS, we are following approaches that focus primarily on encouraging certain behaviours, rather than attempting to regulate functions. In COPUOS we are looking at threats to spaceflight safety and the space environment, and here in this OEWG we are concerned primarily with threats to the security and stability of space operations. Fully respecting the respective different mandates for addressing the security aspects and the peaceful uses of space in the respective I and IV Committee bodies dealing with space issues, we can nevertheless accept that there will inevitably be a need to coordinate between these two fora because some issues will be cross-cutting. It was probably a good thing for the GGE on TCBMs that about half of the experts in that GGE had direct experience of working in COPUOS and I believe that enriched our discussions in the GGE. I observe a number of delegates in this OEWG session, including our esteemed chair, who have extensive COPUOS experience and I believe this is a good thing for our efforts.

Now, to the linkages between the report of the GGE on TCBMs and the COPUOS LTS Guidelines. The COPUOS LTS Working Group was tasked in its terms of reference to consider appropriate linkages with the GGE. This was done by the Chairs of two respective processes providing formal briefings to each other’s groups. It is instructive to identify some interlinkages between the LTS guidelines and the recommendations in the report of the GGE on TCBMs as contained in document A/68/189\*. The GGE report refers in paragraph 39 to exchanges of information on orbital parameters of outer space objects and potential orbital conjunctions.

Reference is also made to the registration of space objects. The LTS guidelines B.1 concerning the exchange of contact information, exchange of data on space objects (B.2), and risk assessments relating to space objects address such matters. LTS guideline A.5 refers to enhancing registration practice and encourages States to consider providing information on any change of status in operations (inter alia, when a space object is no longer functional) and, following the change in supervision of a space object in orbit, information about changes in the orbital position. The guideline also contains recommendations for information to be provided in cases where a launched space object contains other space objects planned for future separation and independent orbital flight. This includes the number and names of space objects that may, in the future, separate from the main space object, and be subsequently registered.

The GGE report refers in paragraph 40 to exchanges of information on forecast natural hazards in outer space. The LTS guidelines B.6 and B.7 on sharing of operational space weather data, forecasts, and best

practices address this issue. Paragraph 42 of the GGE report refers to notifications relating to scheduled maneuvers that may result in a risk to the flight safety of space objects of other states and to pre-launch conjunction assessment. The LTS guidelines B.4 and B.5 on the safety of space operations address such matters. Paragraph 43 addresses measures to minimize the risks due to uncontrolled re-entries. LTS Guideline B.9 addresses this issue.

Section V of the GGE report refers to international cooperation and touches, inter alia, on international cooperation for capacity-building and confidence-building. The LTS guidelines C.1, C.2 and C.3 on international cooperation in support of long-term sustainability and capacity-building address such issues. Therefore, I hope the above examples illustrate the inter-relation between the LTS guidelines and the recommendations of the GGE on TCBMs. Indeed, some of the LTS guidelines offer a bottom-up approach to implement some of the recommended TCBMs.

Finally, I would like to end with some concrete examples of what, from the Secure World Foundation perspective, could be some low-hanging fruits for actions that could be TCBMs to enhance space security:

- Demonstrating commitment to the existing legal framework governing outer space activities, notably signing and ratifying the Outer Space Treaty, Registration Convention, and Liability Convention; and registering space objects, including military objects, in a timely manner with the UN;
- Providing transparency regarding plans and intentions for space activities, including military ones, such as prior notifications of launches, maneuvers, or close approaches, where possible;
- Committing to refrain from non-consensual and uncoordinated rendezvous and closeproximity operations;
- Sharing information about national military policies, budgets and programs pertaining to space;
- Following existing best practices for orbital debris mitigation, including for military activities;
- Declaring a commitment to minimize as far as practicable the creation of long-lived orbital debris in the course of normal space operations.
- Declaring a commitment not to carry out activities that intentionally generate large amounts of orbital debris.

In this regard, we believe the recently announced US commitment not to conduct any further direct-ascent destructive ASAT tests in orbit is a step in the right direction. We note that throughout the course of this week, a number of delegations have expressed their appreciation for this commitment by the United States and we applaud Canada announcing a similar clear commitment at this meeting.

In our view, the declaratory value of such a commitment not to perform destructive direct-ascent antisatellite tests is not dependent on whether a country has already developed such a capability, or is close to having such a capability, in order to make such a declaration meaningful. Rather, by making such a declaration, States affirm that, in their sovereign assessment, the intentional creation of orbital debris through performing such tests can no longer be considered a responsible use of space because there is an ever-increasing number of States and non-governmental entities that rely on space systems and space services which are vulnerable to debris caused by such tests. We therefore call on other

nations to consider making similar commitments and to work together to establish this as an emerging norm of responsible behavior. This is one of the ways in which the international community can identify this as an emerging norm.

Space sustainability and security are intrinsically multilateral challenges because no single actor or group of like-minded actors can ensure the safety and security of their space activities entirely through their own efforts. These challenges can only be addressed successfully if all countries act collectively. Developing a shared understanding of what constitutes safe and responsible space activities contributes to a more stable space environment by reducing the risk of miscommunication, misperceptions and miscalculations. This OEWG is an important step toward this goal to ensure that the space environment is preserved and protected for use by all nations for peaceful purposes and for future generations. With that I would like to conclude my remarks. I look forward to your questions.

Thank you, Mr Chairman.