

**Remarks by Dr Peter Martinez, Executive Director of the Secure World Foundation, at the
United Nations/China 2nd Global Partnership Workshop on Space Exploration and Innovation
Beijing, 22 November 2022**

Thank you for your kind introduction. I'd like to thank the organizers for inviting me to participate in this conference. It is a great honour for me to present a few remarks in this panel discussion on the Long-Term Sustainability of Outer Space Activities and to share this podium with some of the eminent colleagues that I worked with in COPUOS on this issue.

As we are all aware, the global space arena is undergoing a period of rapid evolution that is characterized by a sharp increase in the number and diversity of space actors, a growing number of commercial space actors, the deployment of very large satellite constellations, and the emergence of new kinds of space activities such as on-orbit servicing & other kinds of rendezvous & proximity operations.

These new developments hold out great promises of benefits to people on the Earth, but they also give rise to concerns about the future safety and sustainability of outer space activities.

This is an intrinsically multilateral issue that requires debate in the competent multilateral forum, which in this case is the United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS).

In 2010, the Committee turned its attention to this question and established a Working Group on the Long-Term Sustainability of Outer Space Activities, which was mandated to produce a set of voluntary guidelines that could be applied by States and non-State actors involved in space activities. I had the privilege of serving as the Chair of this Working Group. In what follows, I will refer to the acronym "LTS", which is the term we have come to use in COPUOS to refer to this topic of the "long-term sustainability of outer space activities."

In June 2019, after an 8-year process, the Committee adopted 21 Guidelines for the Long-Term Sustainability of Outer Space Activities. The process to develop these guidelines involved many international experts from governments and government agencies, intergovernmental organizations, industry and academia. Several of those experts are here with us today.

The 21 agreed guidelines comprise a collection of internationally recognized measures for ensuring the long-term sustainability of outer space activities and for enhancing the safety of space operations. They address the policy, regulatory, operational, safety, scientific, technical, international cooperation, and capacity-building aspects of space activities. They are based on a substantial body of knowledge, as well as the experiences of States, international intergovernmental organizations, and relevant national and international non-governmental entities.

The guidelines are relevant to all space activities, whether planned or ongoing, as practicable, and to all phases of a space mission, including launch, operation, and end-of-life disposal. They are grouped into four categories:

- Policy and regulatory framework for space activities
- Safety of space operations
- International cooperation, capacity-building, and awareness
- Scientific and technical research and development

The guidelines are voluntary and non-binding. But non-binding does not mean non-legal, in the sense that countries may choose to incorporate elements of these guidelines in their national regulation and licensing processes to give them real legal character.

The full text of the LTS guidelines is available on the website of the UN Office for Outer Space Affairs.

Now that we have the guidelines, they will only achieve their intended purpose if they are widely implemented. States and international intergovernmental organizations are therefore encouraged to implement these guidelines to the greatest extent feasible and practicable, in accordance with their respective needs, conditions and capabilities, and with their existing obligations under applicable international law.

Implementation of the guidelines both requires and fosters international cooperation. States and international intergovernmental organizations are encouraged to share their practices and experiences with COPUOS regarding the implementation of the guidelines. States are also encouraged to promote and/or conduct research on topics relevant to these guidelines and their implementation.

Of course, we cannot ignore the fact that nowadays commercial actors are the fastest growing category of space actors. Hence, the commercial space actors have a major role to play in socializing the issue of space sustainability, demonstrating their adherence to these guidelines as a minimum standard of behaviour, and leading by example. Indeed, a number of private sector entities are already taking steps to promote responsible behaviours in outer space through initiatives such as the Space Safety Coalition and the Consortium for Execution of Rendezvous and Servicing Operations, which are both open to industry participation from any country. The former group promotes the use of international best practices, such as the LTS Guidelines. The latter is working to develop and propose new standards to ISO for commercial orbital rendezvous and proximity operations.

While the 21 consensus LTS guidelines represent a significant step forward to promote space sustainability, COPUOS member States agree that the work of COPUOS on this issue is far from over. At its 62nd session in June 2019, COPUOS agreed on the establishment of a new working group with a five-year mandate under its Scientific and Technical Subcommittee to continue the LTS discussions in COPUOS.

This new Working Group will consider possible new guidelines. It will also be a forum for States to share their experiences, lessons learnt and practices established in the implementation of the already-agreed guidelines, and to discuss ways to build capacity for guideline implementation in States that lack such capacity at the moment.

I would like to close with some remarks on the wider significance of this work in COPUOS. Although these LTS guidelines hardly represent the cutting edge of technical measures to address space safety and space sustainability, they represent consensus among all member States of COPUOS about internationally agreed practices to promote responsible behaviour in outer space in order to preserve the benefits of the peaceful uses of outer space for future generations. In this regard, States are encouraged to implement these guidelines to the greatest extent practicable and to support capacity building for guideline implementation by emerging space nations.

Implementation of these guidelines must be coupled with other efforts to promote space sustainability, such as avoiding the intentional creation of space debris and promoting responsible investments in sustainable commercial space activities.

Thank you for your kind attention.