

Secure World Foundation

United Nations Committee on the Peaceful Uses of Outer Space
60th Legal Subcommittee

Agenda Item 14. *General exchange of views on potential legal models for activities in exploration, exploitation and utilization of space resources*

1 June 2021

Madam Chair, distinguished delegates, the Secure World Foundation welcomes this opportunity to offer its observations on this agenda item. We are pleased that the international conversation has moved past stark disagreements regarding the legality or illegality of using space resources. This is because space resource utilization is not just a factor for space commercialization. Rather, space resource utilization is a fundamental component of space exploration in general, and critical for any long-term human presence in space and on celestial bodies.

This can be seen by examining various national and international space exploration programs, policies, and roadmaps. One such example is from the International Space Exploration Coordination Group (ISECG), a forum set up by 26 space agencies to advance the *Global Exploration Strategy* through coordination of mutual efforts. In particular, the ISECG's 2020 *Lunar Surface Exploration Scenario Roadmap* has as one of its objectives "Demonstrate *in-situ* resource production and utilisation capability sufficient for crew transportation between lunar surface and Gateway and lunar surface utilisation needs."¹ In March of this year, the ISECG made public its *In-Situ Resource Utilization Gap Assessment Report*, which further details its plans and objectives on space resource use.² Consequently, these 26 space agencies of the ISECG have formally and explicitly agreed that lunar resources are critical components in lunar exploration.

The current international space law regime gives the legal authority to regulate and manage space activities to nation states, not international bodies, through Article VI of the Outer Space Treaty. International bodies often play a critical role in establishing standards and facilitating coordination, but the licensing and enforcement of those standards is at the national level. This is similar to governance in other domains, such as telecommunications, where the International

¹ International Space Exploration Coordination Group, *Global Exploration Roadmap - Supplement August 2020, Lunar Surface Exploration Scenario Update*, page 18, available at

https://www.globalspaceexploration.org/wp-content/uploads/2020/08/GER_2020_supplement.pdf

² International Space Exploration Coordination Group, *In-situ Resource Utilization Gap Assessment Report*, <https://www.globalspaceexploration.org/wordpress/wp-content/uploads/2021/04/ISECG-ISRU-Technology-Gap-Assessment-Report-Apr-2021.pdf>

Telecommunication Union (ITU) sets global standards and allocations that are then enforced by national administrations. Another example is the air domain, where the International Civil Aviation Organization (ICAO) sets international standards, but the licensing and regulation is done at the national level.

We believe that governance of space resource utilization is likely to follow a similar model that utilizes both international coordination and standards with national licensing and enforcement.

In order to provide effective governance, and the legal certainty that governmental programs and commercial operators need, international coordination and agreement will be required. Individual states cannot provide that certainty on a unilateral basis. For example, one cannot create a claims system without some level of mutual recognition and protection, be that on a bilateral or multilateral basis. Consequently, providing private operators legal certainty in space resource utilization will fundamentally require international consultation and coordination.

We do not think this international coordination must take the form of a treaty, at least not initially. Given the nascent nature of space resource access and utilization, a binding treaty is likely inappropriate before the actual activity begins, and may not even be appropriate thereafter. Implementation of space resource governance will require international coordination, but that coordination might take several forms. Such multilateral coordination might consider the *Building Blocks* developed by The Hague International Space Resources Governance Working Group. While the *Building Blocks* themselves are unlikely to be implemented in their entirety by any country, they represent a good starting point for discussion.

In the context of national space exploration activities, states are coordinating elements of exploration governance principles through various international cooperation agreements. The Artemis Accords represents a group of states taking practical steps to interpret and apply the principles of the Outer Space Treaty to future activities on the Moon and in cislunar space, including space resources utilization. Consequently, international cooperation agreements of this manner – pursued in the context of national space exploration programs – complement the work of COPUOS, as states develop practice in support of the interpretation of the principles of the Outer Space Treaty.

We also urge the international community to recognize the vast differences between various categories of resources in space, and that one single regime is unlikely to be applicable to all types of space resources. NASA estimates that Main Belt asteroids between the orbits of Mars and Jupiter number

between an estimated 1.1 and 1.9 million asteroids larger than 1 kilometer in diameter, and millions of smaller ones. The physical characteristics of utilizing the space resources of asteroids may be fundamentally different than elsewhere, such as on rocky body planets of the inner solar system, or on the Earth's Moon. Yet currently, the same international legal regime applies to space resources at all of these locations. We will likely find that space resources in one location ought to be under different rules than space resources elsewhere.

Should discussions at the UN turn towards deliberate action, a prudent and modest goal might be the articulation of tightly-focused soft law instruments, akin to successful UN accomplishments that did not rise to the level of new treaty-making, such as the Long-Term Sustainability Guidelines for space activities. The interdisciplinary nature of space resource utilization activities will require an inclusive process in developing such instruments. Here again the LTS process provides an example.

Madam Chair, distinguished delegates, in conclusion, we look forward to further discussions on this important topic, and appropriate and competent action when the day arises.