

Keeping Up With Space Law: the First Draft U.N. Principles on the Governance of Space Resource Activities

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Introduction

Every year we are getting closer and closer to making space resource activities a reality. The need to use space resources for sustainable and sustained space exploration is now recognised by the international community at large, and incorporated in business plans as well as space agencies' programs.

Just like any other space activity, the exploration and use of space resources is governed by international space law. The rapid acceleration of space resources missions, especially from commercial actors, has triggered the beginning of multilateral processes within the UN Committee on the Peaceful Uses of Outer Space (COPUOS) to ensure their conduct in accordance with international law and in a peaceful, rational, safe and sustainable manner. These processes are now reaching a turning point, with the release in late March 2025 of a draft set of initial governance principles by the COPUOS Working Group on the Legal Aspects of Space Resource Activities.

The proposed talk will provide a snapshot of the current legal regime applicable to space resource activities, touch upon the most relevant developments at the policy level, and then present one of the first assessments of the draft governance principles prepared by the COPUOS Working Group on Space Resources.

A Snapshot of the Legal Regime

Space activities, including space resources, are regulated by a specialized body of international law, also known as *Corpus Iuris Spatialis*, which comprises of five international treaties and several resolutions of the UN General Assembly. The most important of these treaties is the Treaty on Principles Governing the Activities of States in The Exploration and Use of Outer Space and on Celestial Bodies, also known as Outer Space Treaty or OST [1]. As per its own title, the OST is a *treaty on principles*, which means that its provisions do not establish individual prescriptions for specific space activities. Rather, they define the foundational rights and obligations of all States in the exploration and use of outer space and celestial bodies at large. These foundational rights and obligations are then get interpreted at the UN and applied to specific activities, including by private actors, through national legislation [2].

In principle, space resource activities can be conducted as part of the freedom to use celestial bodies [3]. So far, existing State practice has clarified the

permissibility of the recovery and use of small quantities of lunar and asteroid resources for scientific purposes [4]. But what the future holds for space mining is very different.

Testing the OST to its limits

While initial demonstration missions are not likely to raise major legal issues, the conduct of large scale space resource activities for a long period of time will test the system of international space law to its limits.

To name a few examples, establishing area-based measures to protect space resource activities against harmful interference might infringe on the obligation to ensure free access to all areas of celestial bodies under Article I OST. Conducting large scale and long term mining operations on the Moon might cross the line between legitimate uses and illegitimate appropriation of territory under Article II OST. Exhausting scarce resources and occupying unique locations may violate the obligation that space activities shall be conducted with due regard to the corresponding interest of other States under Article IX OST, and for the benefit and in the interest of all Countries under Article I OST.

Drawing concrete rules from the OST will require making difficult and politically sensitive choices in balancing the application of the above mentioned (and others) provisions from the OST. If made and executed unilaterally, these choices will generate disagreement. Given the current geopolitical climate, and the interests at stake, disagreement can quickly turn into conflict.

Regulatory and Policy Developments

Mindful of these risks, many States have begun national, international, and multilateral efforts to develop dedicated rules ensuring the rational, peaceful, safe and sustainable conduct of space resource activities in compliance with international law.

As of today, the United States, Luxembourg, the United Arab Emirates, Japan, and most recently Brazil, have each enacted domestic laws to regulate the conduct of space resource activities by their nationals [5]. Notably, these laws allow space resource activities by private actors at the explicit condition that they are conducted in compliance with international space law. Interestingly, none of these laws includes any substantive provisions on how to conduct space mining [5].

To ensure regulatory harmony among partner Nations cooperating under the Artemis Program, in October 2020 a group of eight Countries - the United States, Australia, Canada, Japan, Italy, Luxembourg,

the United Arab Emirates, and the United Kingdom, have agreed on a common set of principles for peaceful, safe and sustainable space activities globally known as the Artemis Accords [6]. Relative to space resources, the Accords recognise their importance for the long term sustainability of space exploration and acknowledge the general permissibility of their extraction and use under the OST [6]. While the Accords emphasize that space resource activities should be executed in compliance with the OST, they also do not specify what does this mean in practice [6].

The First Draft U.N. Principles on Space Resources Governance.

Prompted by these domestic and international developments, the Legal Subcommittee of COPUOS has been discussing about the multilateral governance of space resource activities since the year 2016. After initial discussions, in 2022 the Legal Subcommittee established a *Working Group on the Legal Aspects of Space Resource Activities*, with a mandate to develop an initial set of principles ensuring the rational, peaceful, safe and sustainable conduct of space resource activities in compliance with international law by 2027 [7]. Additionally, just last year in June 2024 COPUOS further established an Action Team on Lunar Activities Consultations (ATLAC), with the mandate to develop recommendations aimed at improving consultations for lunar activities, including through a potential international mechanism, also by the year 2027 [8].

At the end of March 2025, the Working Group on Space Resources is expected to release the first draft of its initial recommended principles for the governance of space resource activities. By June 2025, they will have undergone a first round of discussions within the Working Group at the occasion of the 64th Session of the COPUOS Legal Subcommittee.

From confidential information collected by this author, the draft principles will be divided in two parts. The first part will list principles over which there seems to be initial consensus between States Member of the Working Group. The second part will indicate necessary principles in need of further discussions. In the final presentation, this Author will present them in clear terms for the benefit of the audience at the SRR.

To conclude, the aim of this presentation is to create a bridge between legal and policy processes with technical discussions at the Roundtable. On the one hand, this presentation will enable the informed development of international rules that can promote peace, safety, and sustainability without hindering progress and innovation. On the other hand, it will also ensure that commercial and technical discussions are solidly grounded in essential principles of international space law, and up to date with key policy developments.

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