

Submission by New Zealand to the UN COPUOS Legal Subcommittee on the mandate and purpose of the Working Group on Legal Aspects of Space Resource Activities

New Zealand appreciates the opportunity to submit its views on the mandate and purpose of the Working Group on Legal Aspects of Space Resource Activities, as per the invitation from the Chair and Vice-Chair of the Working Group outlining possible areas for member state input/contributions’.

New Zealand recognises the advantages that space resource utilisation (SRU) offers in enabling further exploration of our solar system and beyond. However, the benefits of SRU will not be fully realised if it is not conducted in a safe, sustainable, responsible and peaceful manner, that is consistent with international law.

New Zealand offers the following views on the topics proposed by the Chair and Vice-Chair of the Working Group.

The type of space resources that fall within the mandate and scope of the Working Group

New Zealand submits that the scope of the Working Group should be limited to materials extractable or recoverable from space. including the moon and other celestial bodies. The scope should exclude radio frequencies and slots in geostationary orbit as these are already managed by the International Telecommunications Union.

The types of activities that fall within the mandate and scope of the Working Group

New Zealand notes the utilisation of space resources will be a key enabler of the next phase of space exploration, deepening our scientific understanding. Beyond SRU for scientific exploration, there is also the possibility of commercial for-profit resource extraction that should be considered by the Working Group.

New Zealand proposes that the Hague International Space Resources Governance Working Group’s definition of space resource activity as set out in *Building Blocks for the Development of an International Framework on Space Resource Activities 2019* serve as the starting point for discussions on the types of activities that fall within the mandate of the LSC Working Group.

Any determination of the types of activities falling within the mandate of the Working Group should remain flexible enough to ensure that an SRU framework does not present an unnecessary barrier to innovation.

The type of information to be collected by the Working Group in accordance with its mandate

It would be useful for the Working Group to request information on current and planned SRU activities, including those activities planned as part of a government-led space program and commercial SRU activities.

The views of States members regarding the existing legal framework for space resource activities

New Zealand is party to four UN space treaties: the Outer Space Treaty, the Registration Convention, the Liability Convention, and the Rescue Agreement. New Zealand considers that SRU activities are permissible under international law and must be consistent with the Outer Space Treaty and general international law. However, given that existing international space law was developed before SRU was contemplated, there are many unaddressed issues that will need to be resolved. Additional multilateral rules, norms or standards will be important for resolving these issues.

While existing international space law does not provide a specific regulatory framework for SRU, it does provide a number of high-level rules that apply to the conduct of all space activities. There are a number of articles relevant to SRU in the Outer Space Treaty, in particular. New Zealand proposes using those relevant articles as a basis for discussion within this Working Group.

New Zealand's space activities are also guided by non-binding instruments. Of relevance to SRU are the Artemis Accords, which New Zealand became a signatory of in 2021. The Artemis Accords recognises the importance of SRU in supporting space exploration and development and provides non-binding principles to ensure the safety and sustainability of space exploration, including SRU activities in support of exploration.

The current practices and challenges in the implementation of the existing legal framework for such activities

As with many novel space activities, the implementation of the existing international space law framework for SRU presents challenges. Existing international space law is not sufficient to regulate SRU activities and associated risks in the long term. While the obligations in the Outer Space Treaty are binding, there is a need for more detailed rules to ensure the safety and sustainability of SRU activities, including protection of the space environment. The Outer Space Treaty requires the exploration and use of outer space, including the Moon and other celestial bodies, to be carried out for the benefit and in the interests of all countries, however, further work is needed to effectively operationalise this in the SRU context.

New Zealand recognises the importance of SRU for deep space exploration and acknowledges the need for further clarity and rules for SRU under existing international space law, which will facilitate beneficial SRU activities.

In addition to the UN space treaties, New Zealand's space activities are also guided by non-binding instruments. Of relevance to SRU are the Artemis Accords, which New Zealand became a signatory of in 2021. The Artemis Accords establish a set of shared principles guiding space cooperation and exploration, including SRU, grounded in the Outer Space Treaty. New Zealand sees the Artemis Accords as being complementary to the efforts of this Working Group.

The benefits and challenges of development of a framework for space resource utilisation activities

New Zealand recognises the benefits of a multilateral approach to developing a framework on SRU to ensure that it is carried out safely, peacefully, sustainably, and in accordance with international law. New Zealand hopes that the following benefits will come out of the development of an internationally agreed upon framework on SRU:

- Limiting or avoiding long-term negative impacts of SRU.
- Ensuring the sustainable management of space resources, such that SRU activity does not preclude future, long-term use of space resources.
- Ensuring that existing international obligations are given effect in a way that ensures transparency and clarity.
- Providing certainty to both scientific and commercial SRU operators.
- The development of an agreed approach to addressing benefit sharing.

SRU is a relatively novel space activity, and there is uncertainty around the types of SRU activity that may be possible, the resources that may be targeted and their locations, and what impact SRU may have on the space environment. This, along with the rapid pace of development of space technology, presents challenges for developing a framework and highlights the need for the Working Group to be aware of SRU activities and exploration programs involving SRU being undertaken in the near future, along with longer-term plans.

The relevant factors for the development of a set of initial recommended principles for such activities

SRU is highly technical and any framework on SRU would be usefully informed by updates on technical developments in SRU and best practice planetary protection protocols. New Zealand recommends that technical bodies such as the Committee on Space Research (COSPAR) and the International Space Exploration Coordination Group (ISECG) be given the opportunity to provide scientific and technical input to the Working Group.

The Hague International Space Resources Governance Working Group's *Building Blocks for the Development of an International Framework on Space Resource Activities 2019* sets out principles for an international SRU framework. This may serve as useful starting point for a discussion of initial recommended principles within the LSC Working Group.

The format, agenda, topics and other details of the dedicated conference (currently) scheduled for 2024

As noted above, New Zealand recognises the importance of technical inputs into the development of a framework for SRU. The conference scheduled for 2024, therefore, could serve to facilitate technical inputs into this Working Group, including an overview of planned SRU activities. New Zealand supports broad participation in the conference across industry, academia, non-governmental organisations (NGOs) and technical bodies such as the ISECG.