

## **Open Lunar Foundation**

Statement under agenda Item 15 "General exchange of views on potential legal models for activities in the exploration, exploitation and utilization of space resources."

Committee on the Peaceful Uses of Outer Space, Legal Subcommittee, 61st Session.

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Chairs and distinguished delegates, thank you for the opportunity to speak today. Open Lunar Foundation would like to express our congratulation at this first *formal* meeting of the working group.

We would also like to thank the working group for inviting contributions from private and civil society. We feel that these perspectives will be especially critical to developing sustainable and effective models for the exploRation, exploiTation and utilization of space resources. Unlike the ISS, lunar activities will not take place as a coordinated performance with a single shared goal, but will involve numerous unscripted activities by actors with diverse and varying interests. This is not to say that governments cannot introduce guidance or limitations, but that, in the absence of action, precedents are now being set by first movers.

This year, there are 7 landers and 4 orbiters and one fly-by scheduled to launch to the Moon. Approximately half of these missions are commercial, with governments participating as customers. The breadth of commercial activities already goes far beyond what governments have a mandate to invest in. From commercial instruments looking for water ice, to enterprising service providers offering to register claims, to sales of crypto art with international fractional ownership— we cannot avoid having to address questions of property rights in outer space.

Crucially, "property rights" does not mean *private* property rights. For example, commons-based resource management also relies on well defined property rights. It is just that those rights are managed and shared amongst a well-defined group of stakeholders.

As an anecdote: Open Lunar regularly speaks with commercial operators who do not realize that putting flags in the regolith to demarcate what they own, might cause concern in the international community. Most want to be good actors, but they are often not aware of how their actions might raise important questions. Therefore, Open Lunar continues to see value in capacity building within the private sector regarding international space law, and of having civil society voices in forums such as this one.

Distinguished delegates, Open Lunar has been undertaking a number of activities to address these issues:



- Over the course of 2021, we brought together dozens of researchers from different fields, cultures and countries, to study and understand the use cases for different resource systems on the Moon. The outcome from this work was to characterize seven types of resources, from electromagnetic spectrum to water ice, and explore different management approaches we might take to each. We believe understanding these use cases will be critically important as governance discussions unfold. All documents are available on our website, at openlunar.org/resluna.
- Our team also developed and prototyped the idea of <u>a "scorecard" for lunar resources</u>.
   This scorecard can be used to evaluate the scarcity of a specific resource, and therefore help to prioritize which resources are actively in need of coordination.
- Finally, understanding that governments often look to civil society when new
  approaches are needed, Open Lunar has been prototyping multi-stakeholder
  governance as it might apply to lunar resources. In 2021, we established an
  independent legal entity— a trust— to purchase and steward small amounts of lunar
  regolith "in place" on the lunar surface. This trust is called <u>Breaking Ground</u>.

In fall 2021, Open Lunar and Breaking Ground held a 5 month multi-stakeholder deliberative process, to discuss management approaches for this lunar regolith. Although there are no current plans to retrieve this regolith, purchasing it still raises important legal questions. The multi-stakeholder process was designed to explore good governance approaches that do not rely on the traditional tools of national jurisdictions. Over the 5 months, the 11-person international, interdisciplinary delegate team were briefed by experts, prompted with open questions, and invited to propose recommendations for how to manage lunar regolith. They came up with 10 recommendations and nine principles that spanned from risk management to the ethics of distributive justice.

The full text of these recommendations is available at <a href="mailto:breakingground.space/recommendations">breakingground.space/recommendations</a>. We believe that these kinds of multi-stakeholder fora will be necessary in the coming years as a complement to fora such as COPUOS, and we look forward to developing this approach with participation and feedback from member states.

Chairs and Distinguished Delegates: to conclude, let me now step back and reflect on where we expect to be, as the mandate of this working group comes to a close. NASA's VIPER mission is probably the most sophisticated mission currently planned to look for water ice on the Moon. It is expected to last for 100 days and traverse up to 20km, gathering important ground truth information about the availability of lunar resources.



At the end of our work together, the VIPER mission will have completed; along with perhaps a dozen private missions. Having potentially found promising deposits of water ice or other resources, those missions will then be left behind on the lunar surface. The locations they occupy may be of interest to competing operators. Discussions of priority, proprietary information, and rights and obligations will be more important than ever. It is this world that we hope the working group will keep in mind as it undertakes to provide some guidance to the international community on the utilization and exploitation of space resources.

We thank you for your kind attention.