



Agenda Item 10 – Outer Space Institute Statement on Long-term Sustainability of Outer Space Activities through Widely Inclusive Science Projects on the Moon

Madam Chairperson, distinguished delegates,

The Outer Space Institute agrees with many previous statements that humanity's increasing missions to and exploration of the Moon carries tremendous potential for scientific discovery and technological innovation. However, failures by space actors to coordinate, cooperate, and take steps to preserve the Earth-lunar environment during this epoch of lunar exploration could create risks to truly unique opportunities, as well as undercut other potential benefits of accessing the Moon. In order to foster international communication, collaboration and cooperation, promote the peaceful use and exploration of outer space, and advance humanity's understanding of the cosmos, the Outer Space Institute recommends that the international community work together on one or more major science projects on the Moon.

Humanity's presence on-and-around the Moon is rapidly expanding. There were 12 launches to the Moon in the decade from 2010 to 2019. In 2024 alone there were 6 lunar missions: Intuitive Machines' IM-1; JAXA's SLIM; China's Chang-e 6, India's Chandrayaan 3; Roscosmos' Luna 25 and Astrobotic's Peregrine. Altogether, these 2024 missions had mixed successes, which is indicative of the challenges being encountered as well as the learning processes experienced by the many innovative actors, including companies, that are now venturing beyond Earth orbit.

Growing numbers of state and non-state actors are demonstrating both the desire and the capability to conduct prolonged missions on the lunar surface and in cislunar space. Multiple states are making steady progress toward the decades-long goal of returning humans to the Moon and establishing a permanent presence there.

On the one hand, these activities hold great promise for humanity through scientific discovery, technological development, a strengthened understanding of our connection to the cosmos, and other advancements not yet envisaged. On the other hand, these activities may threaten the Moon's pristine state, including its radio-quiet environment and truly unique scientific opportunities.

The Moon's characteristics present many challenges, including: the lack of an atmosphere; the lofting and transport of lunar dust; limited options for long-term stable orbits; a far side that requires communication relays; resource concentrations that could potentially lead to conflicting activities by different actors; large temperature changes between night and day; the need for power sources that can span lunar night; and last but not least, the difficulties involved in tracking objects in the expansive cislunar environment.

Moreover, the Moon is important to many peoples and societies for reasons of history, culture, religion, philosophy, and art.



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International cooperation has always served as a catalyst for space exploration, and the Outer Space Institute believes that further success requires continued respect, good will, open communications, ongoing engagement and confidence-building - as well as, in many instances, firm commitments, and cost-sharing. International cooperation often begins with small steps such as the sharing of scientific data and other forms of information exchange.

There are many examples of how international cooperation has enabled the pooling of experience, expertise, equipment, and financial resources for missions into the vast and challenging environment of outer space. The Committee on Space Research (COSPAR) was established in 1958 and promotes and coordinates a wide range of space-related research from around the globe. The COSPAS-SARSAT satellite-based search-and-rescue system was established in 1979 and has saved tens of thousands of lives. The International Charter Space and Major Disasters, established in 2000, provides imagery-on-demand from private satellite companies and spacefaring states. All three of these international mechanisms remain fully operational today.

Major astronomical observing facilities on Earth also constitute critical infrastructure for space exploration. They provide opportunities for all astronomers to submit observing proposals, regardless of their affiliation, nationality, or location.

Therefore, recognizing the international character of the Moon, and given the many successes in COPUOS to date and its lead role in international civil space affairs, we recommend under this Agenda Item discussion of collaborative, internationally inclusive lunar science projects. Any collaborative project should utilize the unique characteristics of the Moon. It could involve, for example, major science facilities, including on the lunar far side, or a coordinated and sustained effort to conduct widespread sampling and instrumentation deployment, or some combination of these two approaches. In any case, a COPUOS process to determine the exact project or projects could begin with open sharing of information and ideas.

Whichever approach is selected, it should, we believe, be open to the entire international community without discrimination of any kind, on a basis of equality and inclusivity and taking into consideration the Moon's importance to many peoples and societies. The projects should in no way preclude states from carrying out their own lunar exploration activities, while exercising due regard and adhering to the principle of non-interference in accordance with international law. The projects could also promote capacity building across the international community, while further fostering the peaceful use and exploration of outer space, including the Moon.

To conclude, OSI wishes to affirm its support to the Chair and the work of the Sub-committee. Thank you for your attention.