

**AGENDA ITEM 9
POTENTIAL LEGAL MODELS FOR ACTIVITIES IN EXPLORATION, EXPLOITATION
AND UTILIZATION OF SPACE RESOURCES**

**STATEMENT BY EMILY PIERCE, U.S. REPRESENTATIVE
TO THE LEGAL SUBCOMMITTEE
OF THE UN COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE**

APRIL 18, 2024

The United States was pleased to participate in the expert meeting in Luxembourg in March of this year and appreciates the efforts of the delegations of Belgium and Luxembourg in co-hosting the event. Many of the experts shared valuable information about the status of the science, technology, and the business cases that are developing for space resource activities.

Our first takeaway from the expert meeting is that humanity stands to benefit greatly from the extraction and utilization of resources in outer space, in particular for safe and sustainable deep space exploration. We heard from several experts that utilization of space-based resources – whether on the Moon, asteroids, or elsewhere – is critical to the long-term viability of space activities. We learned that relying on the extraction and transport of Earth’s limited resources to outer space to support exploration missions to Mars and beyond is both operationally and economically unsustainable. The government and private sector experts shared their work on technologies to build solar panels, habitats, and other infrastructure from lunar regolith and to manufacture propellant from ice. In the words of one private sector expert in Luxembourg about the benefits of space resource activities, these activities have “a unique capability of enabling other activities.”

A second takeaway from the expert meeting in our view is that there is still so much more that we do not know, including in particular about the ice on the Moon, and so much more exploration and technology development remains to be done. This reinforced for us that, at this stage, we continue to lack a practical basis to elaborate a comprehensive international legal framework for space resource utilization activities. We heard at the meeting in Luxembourg that resource exploration and surveying missions, as well as initial technology

demonstration missions, must take place long before widespread space resource utilization activities occur. Codifying rules in international law given the scientific, technical, and operational uncertainties would be not only inadvisable, but also needlessly stymie the development, and our enjoyment of the potential scientific benefits of, space resource activities before they even occur. The four core space treaties provide a basic legal framework within which interested States can ensure their interests are protected for such initial missions.

Chair, we also appreciate that the international conference on space resources took place on April 15 here in Vienna. In light of the views expressed on the international legal framework applicable to space resource activities, the United States reiterates its long-standing view that utilization of space-based resources – including commercial utilization – can be done consistently with the four core United Nations space treaties. Under Article II of the Outer Space Treaty, outer space, including the Moon and other celestial bodies, is not subject to national appropriation by claims of sovereignty, by means of use or occupation, or by any other means. In the U.S. view, this prohibition on national appropriation does not, however, limit ownership to be exercised by States or private entities over those natural resources that have been removed from their place on or below the surface of the Moon or other celestial bodies when carried out in a manner consistent with U.S. international obligations and domestic law. Such removal is permitted by Article I of the Treaty, which provides for freedom of exploration and use of outer space by all States. In other words, it is the U.S. position that the non-appropriation principle in Article II applies to the natural resources of celestial bodies only when such resources are in place, and Article I recognizes the right of exploitation, as a part of the right of use. The Outer Space Treaty shapes the manner in which space resource utilization activities are carried out, but it does not broadly preclude such activities.

We do, however, see potential benefits of a general, high-level initial set of recommended principles to help ensure that all nations engaged in space resource activities share a common set of fundamental beliefs: in the rule of law, transparency, open science, interoperability, avoiding harmful interference, and in peaceful purposes, among others. The Artemis Accords underscores these and other critical principles, and forms a starting point for our efforts on space resource activities. In addition, the United States will be guided by scientific and technological advancements. In this regard, we will utilize ground development

and early space resource demonstration missions to inform our participation in this working group, which will help define and develop best practices for future activities.

We acknowledge the efforts of the Chair and Vice Chair of the Working Group on space resources in shepherding our work towards a pragmatic outcome that reflects the rich inputs from the stakeholders who participated in the expert meeting and international conference.

Thank you, Chair.