

**Introduction:** With the formal withdrawal of Saudi Arabia in 2023, there are now seventeen State parties to the Moon Agreement. Nine of these states are also signatories of the Artemis Accords. Three states participating in the China-led International Lunar Research Station (ILRS) are also Moon Agreement signatories. Hence, despite repeated characterization of the Moon Agreement as a ‘failed treaty’ it still carries both formal and informal weight as the only international space law treaty that addresses space resource extraction in detail. China is not a party to the Moon Agreement. The US has, via Executive Order, rejected the validity of the Moon Agreement and concepts of the commons with respect to resource utilization.[1] This paper argues, that given the number of Moon Agreement States who are part of the two international lunar projects, greater attention should be paid to how the provisions of the Moon Agreement may be applied to future resource utilization and extraction on the Moon. It concludes that the Moon Agreement retains some influence as an international treaty that could be used as a bargaining tool for creating rules of the road on the Moon.

**Moon Agreement:** The Moon Agreement (formally *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies*, (1979) 1363 UNTS 3) entered into force in 1982. It contains specific provisions which address resource utilisation on the Moon (and other celestial bodies). Article 11(1) provides that ‘the moon and its natural resources are the common heritage of [hu]mankind’. Significantly, Article 11(3) of this treaty provides that:

‘Neither the surface nor the subsurface of the moon, nor any part thereof or natural resources in place, shall become property of any State, international intergovernmental organization, national organization or non-governmental entity or of any natural person.’

Most importantly from the perspective of space resource utilisation, Article 11(5) provides that state parties ‘undertake to establish an international regime, including appropriate procedures, to govern the exploitation of the natural resources of the moon as such exploitation is about to become feasible’. According to Article 11(7), the main purposes of this international regime include ‘the orderly and safe development of the natural resources of the moon, the rational management of those resources, [and] the expansion of opportunities in those resources’. Further, the Moon Agreement also commits parties to the principle of ‘equitable sharing ... in the benefits derived from those resources’ and special

consideration of the ‘interests and needs of the developing countries, as well as the efforts of those countries which have contributed either directly or indirectly to the exploration of the moon.’

**National approaches to the Moon Agreement:**

No major spacefaring state is a party to the Moon Agreement. However, there are several Artemis members, including Australia, the Netherlands and Austria, who are signatories to the Moon Agreement. Saudi Arabia withdrew from the Moon Agreement shortly after signing the Artemis Accords, but has not made any public statement regarding the reasons behind its withdrawal.

Australia has been explicit that its membership of both the Artemis Accords and the Moon Agreement is consistent. For example, in 2024, Australia submitted a Statement to the 61<sup>st</sup> Session of the COPUOS Legal Subcommittee, which asserted that ‘the Moon Agreement provides a framework which clearly enables scientific investigation on the Moon and other celestial bodies, and may provide for other exploratory or experimental activities, prior to the establishment of an international regime. We look forward to further sharing our views during meetings of the working group on space resources.’ It further confirmed that this ‘framework will support Australia’s planned activities on the Moon over the coming years as part of NASA’s Artemis program.’

**Artemis Accords and ILRS:** Both the Artemis and ILRS projects involve in-situ resource utilisation and both have identified the lunar south pole as a destination. The Artemis and ILRS projects together propose a significant number of activities planned for the Moon and cislunar space in the next two decades. In 2022, NASA identified that ‘[j]ust within the next four years, we expect to see at least 22 lunar surface missions. Half of these missions will occur in the Moon’s south polar region.’ [2] The ILRS has stated that it wants ‘50 countries, 500 international research institutions and 5,000 overseas researchers’ to join the ILRS program. These state-sponsored activities will also likely be accompanied by increasing number of private plans for the Moon, including robotic missions.

In 2020, NASA announced the Artemis Accords, expressed as ‘a common vision via a practical set of principles, guidelines, and best practices to enhance the governance of the civil exploration and use of outer space with the intention of advancing the Artemis Program’. Signatories commit to the implementation of those principles in their own space activities. The original eight signatories to the Accords has expanded

rapidly to fifty-three signatories in as of January 2025: Angola, Argentina, Armenia, Austria, Australia, Bahrain, Belgium, Brazil, Bulgaria, Canada, Chile, Colombia, Cyprus, Czech Republic, Denmark, Dominican Republic, Ecuador, Estonia, Finland, France, Germany, Greece, Iceland, India, Israel, Italy, Japan, Liechtenstein, Lithuania, Luxembourg, Mexico, Netherlands, New Zealand, Nigeria, Panama, Peru, Poland, the Republic of Korea, Romania, Rwanda, Saudi Arabia, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, Thailand, Ukraine, the United Arab Emirates, the United Kingdom, the United States, and Uruguay.

China announced its plans for the establishment of a permanent base on the Moon in 2021 and is actively seeking additional partners to join in the conception and execution of this project and associated activities. China called for interested international partners ‘to cooperate in the areas of planning, substantiating, engineering, development, implementation and operation of ILRS, to strengthen scientific research exchanges and promote the peaceful exploration and use of outer space in the interests of all humankind.’[3]

As of January 2025, thirteen states have joined as participants in the ILRS, China, Russia, Venezuela, Pakistan, Azerbaijan, Belarus, South Africa, Egypt, Thailand, Nicaragua, Serbia, Senegal and Kazakhstan. A number of non-governmental entities, such as corporations, agencies, universities and astronomical associations have also signed agreements with the ILRS, as well as the Asia-Pacific Space Cooperation Organization (APSCO). Notably, a number of Artemis Accord signatory states already have some involvement with China’s space program, including Bahrain, UAE and Peru, either through membership of APSCO, or involvement in other space projects through commercial, educational or government operators. Rather than presenting participants with a standard set of principles to be agreed to, the ILRS program itself includes the ‘[j]oint development of the legal documents regulating relations, including the involvement in cooperation of third parties, in the framework of creation of ILRS’ as one of the designated co-operation domains. [4] China has positioned involvement in the ILRS as open to all States, and particularly developing nations. This approach is intended to position China not only as a leader in space technology, but also as an exemplar of peaceful and inclusive cooperation in space and on Earth.

Strategically, the existence of the ILRS and the invitation for other states to join in the program provides an alternative to the US-led Artemis program and ensures that the Artemis Accords will not become

the sole rule book for operations on the Moon. The existence of two different sets of rules being applied to operations on the Moon and in cis-lunar space may be seen to undermine any arguments that activities undertaken by partners in either the Artemis Accords or the ILRS provide strong evidence of state practice for the purposes of development of international law in novel areas such as ISRU and human space habitation. However, it is also evident that despite attempts to distinguish the two approaches, it is likely that for practical and safety reasons alone, the two projects may end up producing a very similar set of principles needed to survive and operate on the surface of the Moon. [5]

**Conclusions:** Therefore, despite assertions to the contrary, the Moon Agreement is not dead. Indeed, there is now a renewed interest in whether it may be adopted and revised to develop a more coherent set of rules for resource allocation and utilisation on the Moon. For example, Yu and Nie have suggested that if ‘space capable states, such as China, were to become States Parties to the Moon Agreement, its status would no longer be lamented or underestimated as a failure.’ [6] Rather, accession by China to the Moon Agreement would signal that China had an international (rather than a domestic) legal framework pursuant to which it could engage in resource utilisation on the Moon and it may counter claims that China intends to ‘colonize the Moon’. It is worth considering if Article 11 of the Moon Agreement may suggest a way forward for the development of a set of principles that will support safe and sustainable operations on the Moon and reduce the likelihood of conflict or may become yet another bargaining chip in space security.

#### References:

[1] Executive Order on Encouraging International Support for the Recovery and Use of Space Resources, 6 April 2020. [2] G. Swiney and A. Hernandez, NASA, Office of Technology, Policy and Strategy, Lunar Landing and Operations Policy Analysis, 30 September 2022 [3] Joint Statement Between CNSA and ROSCOSMOS Regarding Cooperation for the Construction of the International Lunar Research Station, 29 April 2021 [4] International Lunar Research Station (ILRS) Guide for Partnership, 16 June 2021, 12. [5] Submission by the Delegation of China to the Working Group on Legal Aspects of Space Resource Activities of the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space, March 2024. [6] H. Yu and M. Nie ‘Acceing to the Moon Agreement to acquire legal certainty: An optional solution for China in the new era of lunar exploration and exploitation’ (2023) *Acta Astronautica* 212, 665-671.

