The Role of Cultural Heritage in Developing a Legal Framework for Activities in the Exploration, Exploitation and Utilization of Space Resources

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For All Moonkind is a non-profit organization that seeks to protect and preserve human history and heritage in outer space.

Our **entirely volunteer team** of space lawyers and policymakers are working to develop reasonable and practical protocols that will balance development and preservation and include systems to select, manage and study relevant sites.

In so doing, we seek to promote the exploration, development and utilization of space and its resources in a sustainable and successful manner.

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www.forallmoonkind.org

It is without question that the **decisions made today** with respect to the potential legal model for activities in the exploration, exploitation and utilization of space resources will have **far-reaching implications** for future generations, and indeed, all humanity.

For All Moonkind urges the international community to embrace a concept for space that has **already been accepted** by virtually every nation on Earth: **the preservation of cultural heritage**, best implemented in space with the recognition of **temporary heritage protection zones**.





The International Rescue Nubia Campaign "will be numbered among the few major attempts made in our lifetime by the nations to assume their common responsibility towards the past so as to move forward in a spirit of kinship towards the future."

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UNESCO Director-General Amadou-Mahter M'Bow



The World Heritage Convention cannot be applied to outer space. The Convention relies upon States to nominate heritage sites within their territories.

Article II, the nonappropriation principle of the Outer Space Treaty prohibits States from claiming territory in outer space by sovereignty **or any other means**. Thus, we can borrow from the World Heritage Convention, but cannot follow its nominating scheme.



The nations of the world have proved unanimous support of the protection of human heritage. And there is no heritage more universal than lunar landing sites on the Moon, which represent both **milestones in human evolution** and development as well as the **culmination** of the work of humans **throughout the world and throughout history**.

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The human relationship to space is necessarily global and universal.



Few would argue that the site where humans first set foot on another celestial body should be recognized and protected less than any site on Earth.

With this in mind, as the COPUOS considers potential legal models for activities in the exploration, exploitation and utilization of space resources, we urge delegates to reaching agreement on what it means to have **due regard** for humanity's greatest treasures in space – those sites and objects that memorialize our history.

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## **Outer Space Treaty, Article IX**

In the exploration and use of outer space, including the Moon and other celestial bodies, States Parties to the Treaty . . . shall conduct all their activities . . . with **due regard** to the corresponding interests of all other States Parties to the Treaty.

If a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, ... would cause potentially harmful interference with activities of other States Parties ... it shall undertake appropriate international consultations before proceeding with any such activity or experiment.



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While it may be argued that we have some time before actual mining operations begin on the Moon or any other celestial body, the fact is that the concept of due regard for objects already on the lunar surface needs to be addressed on a much swifter timetable. Cultural artifacts on the Moon are vulnerable to any activity on the Moon.

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**Safety zones** can be defined as buffer zones in which safety requires consultations between Parties to avoid harmful interference and related risks.

## The Hague Space Resources Working Group Building Blocks

## 11. Technical standards for, prior review of, and safety zones around space resource activities

- 11.1 The international framework should provide that States and international organizations shall require the conduct of a review prior to a decision to proceed with a space resource activity to ascertain that such an activity is carried out in a safe manner to avoid harmful impacts.
- 11.2 The international framework should encourage the development of:
  - a) Procedures to ensure that equipment, operational procedures, and processes applied in space resource activities avoid harmful impacts;
  - b) Methodologies to assess that equipment, operational procedures, and processes applied in space resource activities meet common technical standards (conformity assessment);
  - c) Technical standards for equipment, operational procedures, and processes applied in space resource activities (standardization).
- 11.3 Taking into account the principle of non-appropriation under Article II OST, the international framework should permit States and international organizations responsible for space resource activities to establish a safety zone, or other areabased safety measure, around an area identified for a space resource activity as necessary to assure safety and to avoid any harmful interference with that space resource activity. Such safety measure shall not impede the free access, in accordance with international law, to any area of outer space by personnel, vehicles and equipment of another operator. In accordance with the area-based safety measure, a State or international organization may restrict access for a limited period of time, provided that timely public notice has been given setting out the reasons for such restriction.

### The Artemis Accords

- The Signatory maintaining a safety zone commits, upon request, to provide any Signatory with the basis for the area in accordance with the national rules and regulations applicable to each Signatory.
- 9. The Signatory establishing, maintaining, or ending a safety zone should do so in a manner that protects public and private personnel, equipment, and operations from harmful interference. The Signatories should, as appropriate, make relevant information regarding such safety zones, including the extent and general nature of operations taking place within them, available to the public as soon as practicable and feasible, while taking into account appropriate protections for proprietary and export-controlled information.
- 10. The Signatories commit to respect reasonable safety zones to avoid harmful interference with operations under these Accords, including by providing prior notification to and coordinating with each other before conducting operations in a safety zone established pursuant to these Accords.
- 11. The Signatories commit to use safety zones, which will be expected to change, evolve, or end based on the status of the specific activity, in a manner that encourages scientific discovery and technology demonstration, as well as the safe and efficient extraction and utilization of space resources in support of sustainable space exploration and other operations. The Signatories commit to respect the principle of free access to all areas of celestial bodies and all other provisions of the Outer Space Treaty in their use of safety zones. The Signatories further commit to adjust their usage of safety zones over time based on mutual experiences and consultations with each other and the international community.

# Law of the Russian Federation on Space Activity

 "[i]n the immediate vicinity of a space object of the Russian Federation within the bounds of a zone minimally necessary for the guarantee of security [or safety] of space activity, rules may be established, which are obligatory for Russian and foreign organizations and citizens."

Закон Российской Федерации о Космической Деятельности [Law of the Russian Federation on Space Activity], Aug. 20, 1993, No. 5663-1 (as amended by Federal Law No. 54-ФЗ, Apr. 15, 2019), art. 17(5).

## The SGAC EAGLE Lunar Governance Report

#### 3.2.9. Safety Zones

#### Recommendation

A Lunar Governance Charter should define the fundamental purposes and features of safety zones. To this end, we suggest that the purpose of safety zones should be to avoid harmful interference among lunar operations. Further, we recommend that the size of safety zones should be limited to what is strictly necessary for avoiding harmful interference. Finally, we believe that the temporal extension and classification of safety zones should always be connected with ongoing operations in the concerned area. In compliance with Articles I, II, and IX OST, the Charter should clarify that safety zones cannot be keep-out zones and that actors entering a safety zone should previously consult with the State who declared it. To foster transparency and ensure coordination, the Charter should invite States to timely and publicly declare their safety zones to the UN under Art. XI OST.

#### Elaboration

As seen in Section 2, safety zones are perhaps the most contentious topic within the global debate on lunar governance. If defined and appropriately coordinated, safety zones can play an essential role in avoiding harmful interference between different lunar surface activities. Therefore, we believe the Charter should clarify their fundamental purposes and limits of applicability to enable their potential as a valuable tool of coordination among lunar activities. In this respect, and pursuant to Articles I, II, and IX OST, the Charter should clarify that safety zones cannot be used as keep-out zones excluding all actors other than the State declaring them. Based on the hearings and reviews we conducted, we concluded that there most likely is no single scope of a safety zone that adequately covers the diverse activities performed on the Moon. Therefore, we propose expanding the concept of safety zones and introducing several zones requiring different coordination levels between actors. For



We urge the Working Group to solicit **expert testimony** from geologists and engineers who can describe the effects and trajectory of the plume effect.

Then taking the science into consideration, consider the **establishment of temporary heritage protection zones** that will assure the preservation of the sites and objects that trace and memorialize humanity's first forays off our planet.

From Luna 2, to Luna 9 to Apollo 11 to Chang'e 4 and everything in between. Our history in space – these missions which embody humanity's greatest technological achievements – deserve special recognition.



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Implementing **temporary heritage protection zones** into a framework for activities in the exploitation and utilization of space resources, will help build a legal model from a baseline of **conservation and inclusion rather than exploitation and exclusion**.



# This our generation's Nubia moment.

Except there is no price tag attached.

As we embark on the next stage of our evolutionary development, we have the **unique opportunity** to manage that development with care we never considered in the past. But of even more import to the exploration, exploitation and utilization of space resources, opening discussion from a place of agreement – preservation of heritage – will speed the process needed to address the uncertainty inherent in the balancing proposition required by the concept of due regard.



Recognizing heritage outside the norm of sovereign territory will provide one more unique and matchless gift: the chance to recognize incredible technological achievements not as national triumphs, but human triumphs.

We can take that first step now. Let this be the major attempt of our lifetime to assume common responsibility towards the past so as to move forward in the spirit of kinship to the future.



# Thank you

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