

Closing the Gap in Space Law: An Implementation Agreement for the Moon Treaty

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There is a gap in space law. Its origin can be traced back to the non-appropriation clause of the Outer Space Treaty: “Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.” There are now non-governmental entities with the capacity to reach celestial bodies. Their objectives include extracting/recovering materials, harvesting solar energy, and building settlements. But without a framework of law that provides them with legitimacy and certainty, their progress is severely impeded. The Rescue Agreement, Liability Convention, and Registration Convention also have gaps when applied to the Moon and other celestial bodies. The Moon Treaty can resolve these issues. Article 11, after repeating the OST’s prohibition against appropriation, creates an exception, a legal “regime” that can be created by international agreement. The proposed 10-paragraph implementation agreement for the Moon Treaty addresses all the issues, using **four organizational principles**: 1. The legal framework must be **comprehensive** in scope and **support all private activity**; 2. **Trade** private property rights for public policy obligations (The Grand Bargain); 3. **Defer** issues currently at impasse (e.g., monetary sharing of benefits) by creating a governance process for making future decisions; 4. **Build** upon and integrate current institutions and processes. Without a binding international agreement, humanity’s efforts to leave the planet will result in conflict that will cripple humanity and keep it from attaining its best destiny. It is time to choose cooperation over conflict. It is time for nations to ratify the Moon Treaty and begin the work of creating an international framework of laws. This paper will explain how.

Jurisdiction and nationality on the Moon

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Jurisdiction means the authority under international law for the state to apply and enforce national laws to a certain range of people and things. In general, jurisdiction is divided into three types; territorial jurisdiction, quasi-territorial jurisdiction, and personal jurisdiction. Territorial jurisdiction means jurisdiction over a state's territory, including all persons and things therein, and it is connected to the concept of territory. Quasi-territorial jurisdiction means jurisdiction over ships and aircrafts of a state's nationality, including all persons and things therein, and it is connected to the concept of nationality. Personal jurisdiction means jurisdiction over a state's nationals, and it is connected to the concept of nationality. However, rules of jurisdiction in outer space is different from general rules of jurisdiction. No State has territorial jurisdiction, because of the article 2 of the Outer Space Treaty. Treaties do not apply the concept of nationality to the spacecraft or the station, so quasi-territorial jurisdiction is not adopted. But it would be clearer to apply the concept of the nationality to the spacecraft or the station in the same way as ships and aircrafts.

Applying the space law to the community on the Moon?

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Moon, Community, Law

The day will come when more than 1,000 people live on the Moon, they may need to establish their own rules in order to maintain their society on the Moon. However, under the Outer Space Treaty (the “OST”), any people is not permitted to establish their own rules independently from national laws on the Moon. On the other hand, if people living on the Moon reject having the existing national laws applied to them when they have already established sustainable living environment on the Moon without depending on supplies from the Earth, any sanction against them on the Earth cannot be effectively enforced against them. In addition, since the peace should be considered as the fundamental principle of the OST, to allow any State to use armed force against them must be considered as a definite violation of the OST. Therefore, we should consider that under the current international space law, there are no effective measures, without breaching the fundamental principle of the OST, dealing with the situation in which the people living on the Moon establish their own autonomous rules that breaches the OST. Since this question is strongly related to fundamental principles such as peace, human rights, democracy and liberty, it should be very hard to find a possible solution to this question. However, considering the current progress of discussion on building the Moon society, now may be the time to commence considering the solution of this question.

Harmonization of Interfaces for Moon Exploration

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One of the pillars of global efforts and technologies integration when creating the prospective Long-term Operation Extraterrestrial Space Systems (LOESS) and their components should be the activity on harmonization of LOESS interfaces. Recently the international community of leading players actively involved in space exploration missions such as International Space Station operation initiated and is developing the package of international standards to consolidate and summarize gained experience in order to develop future LOESS to explore cis-lunar space, surface of the Moon and Mars, deep space. The package of international standards being developed covers LOESS interfaces harmonization problematics only partially. It is mainly focused on the Deep Space Gateway and Transport implementation, but is expected to go beyond its scope. Though, there is a considerable scope for expanding activities in a number of areas. Within activities of MVA Cooperation & Coordination Working Group the Subgroup on Standards Harmonization was established. During June-November, 2019 the participants of this Subgroup prepared Report on Conceptual Analysis of Directions of Interfaces Harmonization of Long-term Operation Extraterrestrial Objects for the Moon Exploration. Brief summary on this Report is planned to be presented during the 3rd International Moon Village Workshop & Symposium.

Realizing the Moon Village: Participation of Emerging Space Countries

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Expanding space activities to involve long term exploration and utilization of the moon is no longer science fiction. In October 2018, NASA has released the National Space Exploration Campaign report. This report mentioned the return to the moon for long term exploration and utilization in co-operation with International and commercial partners as a strategic goal for NASA in the following 10 years. The space community in general is looking at the moon more seriously, and very serious initiatives are ongoing.

Realizing the Moon Village: Participation of the Emerging Space Countries (MV - PESC) mission and vision were inspired by the Moon Village Association and it is an independent activity organized by the youth in Kuwait. The mission is to “provide a forum for the young generation in developing and non-space faring countries to contribute on the concept of a Moon Village”. This mission can be achieved by defining scientific, engineering and/or commercial opportunities for a particular country. This means that the MV – PESC is a platform in which potential Moon Village stakeholders in an emerging space country can learn about potential opportunities, which might open a new horizon for the Moon Village. The event is planned to happen in different emerging space countries around the world such as Saudi Arabia, Lebanon and Mexico. The first MV – PESC event was held in Kuwait in April 2019. The event was sponsored by the Kuwait Foundation for the Advancement of Science (KFAS) and mentored by a representative from the Moon Village Association. This paper describes the mission and vision of the MV - PESC, It also describes the legal structure, partnerships and work plan.