

SHARING BENEFITS OF LUNAR ACTIVITIES PERSPECTIVE FROM SOUTH AMERICA

Governance of Global Moon Exploration and Settlement: Episode 3

Moon Village Association

Who are we?

The Chilean Space Association AG - www.achide.org - is a civil, non-profit entity, created in February 2000, which currently has more than 50 professionals specialists in space law, satellite engineering, earth observation, telecommunications, global navigation and positioning satellite systems, astronomy, medicine and other related themes.

Our mission is the promotion, protection and improvement of activities related to space and the development of all kinds of space activities, ensuring the creation and application of public policies and especially encouraging the study and use of space science and technology for the benefit of sustainable development of humanity.





South America, Diverse Scenarios



- <u>Disclosure</u>: The following comments only reflect the opinion of ACHIDE and have not been consulted with regional organizations or space agencies or the Chilean Government.
- With the exception of Chile and Uruguay, all regional countries have a space agency, considering Ecuador and Colombia with an intermediate space organization all constituted from the 1960s onward, and the last being set up in Paraguay in 2014.
- Regardless of the level of development of each country, all of them carry out space activities, highlighting Brazil and Argentina that manufacture their own satellites



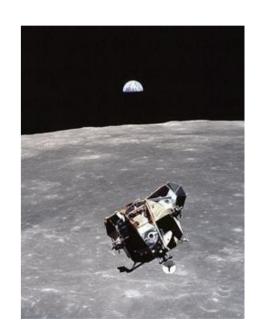
Sharing benefits in Lunar Activities

What should we understand by "benefits"?



Taking a look in the <u>The Moon Agreement</u> (TMA), 4 of 12 countries in the region have ratified it. These are Venezuela, Uruguay, Peru and Chile.

- Articles IV, VI and XI refer to "benefits" with no definition that shall be carried out in the interests of all countries, irrespective of their degree of economic or scientific development;
- Article XI state:
- 3. <u>Neither the surface nor the subsurface</u> of the Moon, <u>nor any part thereof or natural resources</u> in place, <u>shall become property of any State</u>, international intergovernmental or non-governmental organization, national organization or non-governmental <u>entity or of any natural person</u>.
- 5. States Parties to this Agreement hereby undertake to <u>establish an international</u> regime, <u>including appropriate procedures</u>, <u>to govern the exploitation of the natural</u> resources of the moon as such exploitation is about to become feasible.



Sharing benefits in Lunar Activities

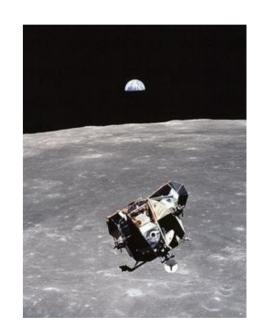


What should we understand by "benefits"?

Taking a look at the MVA principles, considering that not all regional countries are part of TMA, the "benefit" set forth in the principles is broad since it apply to those countries that are not part of the TMA and also protect their interests - "for all humanity".

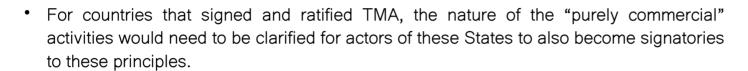
In particular, principles N°2 and N°5:

- Conduct lunar activities in a manner that takes into account interests of other actors and benefits all countries and humankind. Both governmental and nongovernmental actors involved in lunar activities should provide for benefitsharing through all feasible means, including for example the promotion of the participation in lunar activities by all countries, and, in particular, developing countries.
- Promote the development of <u>private activities</u> on the Moon and in cislunar space, <u>including purely commercial activities</u>, such as space tourism and resource extraction, <u>as well as noncommercial private activity</u>, such as science and exploration.



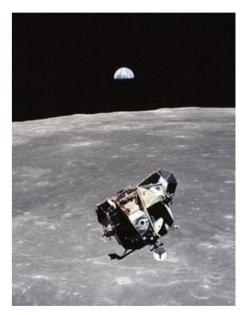
Sharing benefits in Lunar Activities

What should we understand by "benefits"?



- International treaties have not regulated space tourism, and regarding the extraction of resources, TMA specifically indicates that an <u>international regime</u> should be established to regulate the appropriate procedures in relation to this activity (considering that the resources would be common heritage of humanity and are not susceptible of appropriation if the conditions of said Agreement are not fulfilled).
- TMA <u>requires creating a legal framework</u> and these <u>principles could lay the foundations</u> for the same so that the countries bound by TMA fulfill their obligation and also can participate in lunar activities.





Regional Participation

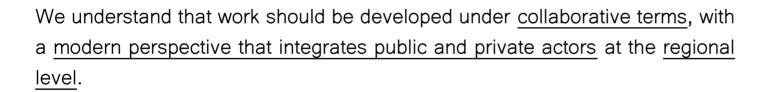
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- To achieve greater adherence to the MVA principles it is necessary to adapt them to those countries that signed TMA (so that they do not fall into contradictions) and also make them attractive to other developing countries that are not signatories of TMA but who are concerned not to be left out of space activities.
- On the other hand, understanding "benefits" in a broad sense, South America shall be part of lunar activities because this will be a very revealing stimulus in the development of knowledge - which we understand framed in the Fourth Industrial Revolution.
- South America can be a relevant member <u>not only to "receive" benefits</u> but also <u>to</u> make relevant contributions to the rest of the countries in Lunar Activities.
- A formula can be to define a quota of participation, but not from a "paternalistic outlook" instead, with willingness to receive regional contributions based on the knowledge and industries in which the countries of the region are strong.



Regional Participation

Regional contributions can be sustained for example:

- Forestry Industry
- Food research and production
- Mining industry
- Astronomy
- Providing natural laboratories



Part of the common activity should be focused on the <u>revision</u> of TMA by the 4 countries that ratified this treaty, in the sense previously indicated.



Thanks for inviting us to this webinar

