#### CONFERENCE ON SPACE LAW AND POLICY Moon Agreement: Establishment of a Legal Regime that Regulates the Exploitation of the Moon and Other Celestial Bodies

#### Prof. Rosa Ma. Ramirez de Arellano y Haro Mexico

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#### Introduction

The Moon Agreement is the last of the 5 international treaties that make up the Outer Space Law. To date, it has 18 ratifications and some signatures. None of the countries with significant technological capacities to access outer space have ratified it.

Drafted during the end of the space race between the USA and the USSR, its objective in general terms is to introduce greater details in the corpus of outer space law, about the scope and limits of the States activities in outer space that the Outer Space Treaty (OST) itself had already advanced. And in particular on the issues of non-appropriation and use of the Moon and celestial bodies, as well as the natural resources they contain, that are within the solar system.

The low acceptance of this instrument is likely to be related to two elements that it includes and that caused controversy during its negotiation:

a) The concept of **Common Heritage of Mankind** (CHM) andb) The resource use regime oriented to the economic exploitation that it proposes.

#### II. Historic context

The negotiation and drafting of the Moon Agreement was carried out in parallel to the negotiations of the Third Convention on the Law of the Sea (UNCLOS) or the Montego Bay Agreement, which had a decisive influence on the issue of the common heritage of mankind. Similarly, the Antarctic Treaty influenced other provisions of the Moon Agreement such as free access, demilitarization and mutual inspections. The Moon Agreement was ready for signature in December 1979 and entered into force in July 1984.

#### II. Historic context

•The Cold War is the international context in which the Moon Agreement negotiations take place. These extend from the second half of the 1960s until the end of the 1970s, in a period characterized by the distension of the conflict between the USSR and the USA.

After the Missile Crisis in Cuba (1962) begins a general movement aimed at establishing mechanisms of mutual control of weapons, a set of treaties oriented to this objective are celebrated: The Treaty Banning Nuclear Weapon Tests in the Atmosphere (1963); the Treaty on the Non-Proliferation of Nuclear Weapons (1970); The Strategic Arms Limitation Talks SALT; and the Anti-Ballistic Missiles Treaty (1972).

•Along with the "distension" of relations between the USA and the USSR, the space race was developed to reach the Moon, which reached its climax with the success of the US Apollo 11 mission, which placed Neil Armstrong on the Moon in July 1969, the same year in which COPUOS (in the Legal Subcommittee) opened a space on its agenda to address the issue of the Moon Agreement.

•The Moon Agreement essentially arose from the work that COPUOS carried out from three initial proposals: a) USA in 1966; b) Argentina 1970, y c) USSR 1971:

•In 1971, the Legal Subcommittee of COPUOS included a new theme in its Agenda: "Matters related to the Moon" and created a working group to address it. From these works the first draft emerged in 1972, which was generally accepted, although with reservations but in relation to both the scope of its application and the concept of common heritage of humankind. Finally in 1978 Austria proposed a draft agreement that was the result of some informal negotiations that made it possible to overcome previous reservations, which paved the way for the adoption of a final draft that was presented to the United Nations General Assembly in 1979.

The main points for discussion were two:

- a) the scope of the implementation of the agreement
- b) and the use (economic exploitation) of the Moon's natural resources

Regarding these two points, countries with space technology capacities, the USSR and the USA, presented divergent positions since the beginning of the negotiations. On the other hand there was a convergence of positions regarding the peaceful use of the Moon and the prohibition of placing weapons of mass destruction, reflecting the points of agreement on the demilitarization of outer space that had already been included in the Outer Space Treaty (Art 3 MA).

On the scope of the implementation of the agreement.

The USA favored an implementation of the **agreement covering both the Moon and the rest of the celestial bodies** (planets, asteroids, comets, etc.), and indirectly or directly a group of countries: Great Britain, Canada, Australia, Belgium, Romania and Iran, supported this vision. For its part, the USSR had in mind to restric the implementation of the treaty to the Moon; Bulgaria, Poland, Egypt, France and Japan shared this position.

It is included in Article 1 of MA

It is important to point out that the Moon Agreement is the first of the international agreements relating to outer space to include an explicit physical delimitation for its area of application:

•With celestial bodies it refers to any aggregation of matter in space that constitutes a unit, this includes: planets, asteroids, comets, moons, etc.

•The limitation to the solar system (whose limit from the scientific point of view is the Oort cloud, a light year away) from human activities makes sense in the understanding that these activities are limited to that part of the universe that human beings have discovered and know with relative certainty

•An exception is also added to the article that specifies that its scope may be limited if specific legal norms are established for any other celestial body, which, from the Moon Agreement itself, makes it more flexible to determine the status of other celestial bodies as the case and opens the door to the possibility of establishing international agreements that are oriented to space mining activities, at least in bodies other than the Moon.

#### On the use of the natural resources of the Moon and other celestial bodies.

In this case, the use of the natural resources of the Moon and other celestial bodies was directly determined by the status assigned to them in the agreement, a status that was debated according to two statements that generally tend to be confused:

a) "**Province of all mankind**", which in Spanish would be "*la provincia de toda la humanidad*", an expression that is understood as a rhetorical figure and which in Spanish was translated as: "que incumbirán a toda la humanidad"

b) "**Common Heritage of Mankind**", which in Spanish would be " *el patrimonio común de la humanidad.*"

The result of the debate on these statements and the meaning of their interpretation will be reflected in the final wording of Articles 4 and 11 of the Moon Agreement. The status of the natural resources of the Moon and other celestial bodies is clearly reflected in article 11, which is considered the key article of the treaty, which opens the possibility for, within a specific international legal framework, the economic exploitation of such resources natural

#### Article 4 "Province of Mankind"

The exploration and use of the Moon **shall be the province of all mankind** and shall be carried out for the benefit and interest of all countries, irrespective of their degree of economic and scientific development. **Due regard shall be paid to the interests of present and future generations**, as well as the need to promote higher standards of living and conditions of economic and social progress and economic and development in accordance with the Charter of the United Nations.

The main objective of including the expression "province of all mankind" by the US delegation was to make a direct reference to the Outer Space Treaty, which reaffirmed the freedoms expressed therein in its article 1: freedom of exploration and use of outer space and celestial bodies.

The group of developing countries expressed an explicit disagreement to the inclusion of this expression since they had in mind the inclusion of the expression "common heritage of mankind" which implied going beyond the rhetorical figure towards an expression that could give rise to a legal basis in the future for an international administration of said common heritage of mankind.

This article (7) also includes an important forecast that deserves to be highlighted, since in its time it was an important innovation. Introduced by the USSR: "The interests of current and future generations will be duly taken into account." This expression introduced a new concept in space legislation: intergenerational equity, which refers to the need for the exploration and use of outer space and celestial bodies to be carried out in a way that preserves the lunar environment in order to guarantee the access of the next generation in the conditions in which it was received from past generations. This is an important environmental approach that reinforces the scope of the expression "province of mankind" (it will be the responsibility of all mankind), included both in the OST and the Moon Agreement, emphasizing its inclusive nature and guaranteeing the exercise of freedoms of exploration and use for future generations.

#### Article 11 "Common Heritage of Mankind"

The expression was initially introduced in the draft submitted by Argentina in 1970, supported by the USA delegation. This draws attention because if you compare the draft presented by the USA in 1966 with that of Argentina, different priorities can be discerned. The USA highlights the freedom of exploration and use of the Moon and other celestial bodies in addition to the issue of sovereignty and property within the meaning of the OST, on the other hand, in the draft of Argentina highlights the issue of moon resources and their exploitation concentrating on the legal nature of these resources and the distribution of the benefits derived from said resources, for which the expression "common heritage of mankind" was used.

This strategy is directly related to the process that took place in the Montego Bay negotiations, during the Third United Nations Convention on the Law of the Sea (UNCLOS). To understand the meaning and scope of this expression it is necessary to analyze its inclusion in the Moon Agreement in relation to the international context of that time and in particular with the international legal context, characterized by the UNCLOS negotiations where the concept of "common heritage of mankind" was discussed and elaborated extensively.

The 1960s and 1970s were characterized by an effort by developing countries to reach a new international economic order more favorable to their interests. The main obstacle was considered to be underdevelopment that had been induced by developed countries during the long colonization process, and from which they achieved their development in the first place. Based on this premise, the objective of developing countries was to promote an international legal regime that will validate the obligation of a transfer of technology from developed to underdeveloped countries and the development of a system that will authorize concessions on defined set of international public goods, such as the ocean floor of the oceans.

•UNCLOS was presented as the forum and the opportunity to defend this position and that ended up establishing a regime for the international administration of ocean funds, which would otherwise end up being an unrestricted area of operation for the action of the States. Article 136 of UNCLOS establishes that the ocean floor is a common heritage of mankind and a legal mechanism was established to guide the international interest of exploiting the natural resources of the seabed and prevent economically and technologically more developed countries from monopolizing exploitation of the ocean floor for its own benefit: The International Ocean Fund Authority, whose mandate was the distribution of the benefits derived from the resources of the seabed to all countries.

•The inclusion of the concept of the common heritage of mankind by Argentina follows the logic that led the efforts of developing countries in UNCLOS: to limit the possibility that more developed countries monopolize the exploitation of the Moon's natural resources and other celestial bodies, but this is very different from preventing resources from being exploited

By 1972 the treaty was generally approved in COPUOS but with some reservations, including the theme of the concept of the **common heritage of mankind**. The consensus on the Moon Agreement was reached in COPUOS in 1978, when, on the one hand, the USSR accepted Brazil's proposal, and on the other, when the bloc of developing countries accepted the desirability of not insisting on a forecast that established a moratorium on the exploitation of the natural resources of the Moon and other celestial bodies, which was the sense in which the concept of the common heritage of humankind could be interpreted without the amendment proposed by Brazil, and specified it in the sense to leave open the possibility of establishing an international regime to govern such exploitation.

#### Article 11 of MA:

The Moon and its natural resources are a common heritage of mankind in accordance with the provisions of this Agreement and in particular in paragraph 5 of this article.

1. States Parties to this Agreement hereby 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. This provision shall be implemented in accordance with article 18 of this Agreement.

6. In order to facilitate the establishment of the international regime referred to in paragraph 5 of this article, States Parties shall inform the Secretary-General of the United Nations as well as the public and the international scientific community, to the greatest extent feasible and practicable, of any natural resources they may discover on the moon.

#### Article 11 of the MA:

7. The main purposes of the international regime to be established shall include:

a)The orderly and safe development of the natural resources of the moon;

b)The rational management of those resources;

c)The expansion of opportunities in the use of those resources;

d)An equitable sharing by all States Parties in the benefits derived from those resources, whereby 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, shall be given special consideration.

#### •Article 11 of the MA

•8. All the activities with respect to the natural resources of the moon shall be carried out in a manner compatible with the purposes specified in paragraph 7 of this article and the provisions of article 6, paragraph 2, of this Agreement.

Beyond the text and its interpretation is the international experience that UNCLOS brings us with respect to the concept of the common heritage of mankind. In practice, there was strong opposition from developed countries within the negotiations to the inclusion of the concept, which, under the assumption that it was developed countries that should assist developing countries, became a critical divergence. The solution is based on the intermediation of the Secretary General of the United Nations Xavier Pérez de Cuellar, who promoted a more liberal interpretation and application of the concept, which resulted in the absence of a mandatory mandate to transfer technology as well as the decline on the insistence of developing countries to allocate a majority number of spaces on the Council of the International Authority of the Ocean Fund.

This demonstrates that the idea of the common heritage of mmankind should not be understood as a static concept, but as a dynamic concept that is subject to the interpretation that the international political context can print as well as the specific requirements of the sector.

The Moon Agreement can be understood as a proposal to establish a regime for the **exploration** of the Moon and its natural resources, which includes some **guidelines for its exploitation** in the future.

# **IV. Resumption of negotiations**

One Hundred Fourteenth (114th) United States of America Congress at the First Session, the sixth day of January, two thousand an fifteen (2015) it was ssued an Act to facilitate a pro-growth environment for the developing commercial space industry by encouraging private sector investment and creating more stable predictable regulatory conditions, and other purposes, which is stablished in the Chapter 513 --- SPACE RESOURCE COMMERCIAL EXPLORATION AND UTILIZATION. Former President Barack Obama promulgated it at the end of that year.

At the Meeting of the Scientific and Technical Subcommittee of COPUOS, in February 2016, many of the Members formulated various opinions against said Law. This situation disturbed the Members of COPUOS, who thereafter sought to establish a mechanism. The issues are already on the agenda of the COPUOS Legal Subcommittee.

# **IV. Resumption of negotiations**

#### The working paper introduced by Greece and Belgium notes, among others, the following :

"The issue of '*potential legal models for activities in exploration, exploitation and utilization of space resources* was discussed during the last session of the Legal Subcommittee of the UNCOPUOS, under Agenda Item 15.

During said discussion, the Greek Delegation launched the idea to create an *ad hoc* working group of the LSC, with the mandate to develop and to propose to the LSC alternative legal solutions capable of providing the legal certainty necessary for acts of exploration, exploitation and utilization of outer space resources. The same proposal was supported by at least one other delegation.

Further, under Agenda Item 16 (Proposals to the Committee on the Peaceful Uses of Outer Space for new items to be considered by the Legal Subcommittee at its fifty-eighth session), the Greek Delegation expressed the view that consideration of AI 15 should be included in the agenda of the Working Group on the Status and Application of the Five United Nations Treaties on Outer Space, in order to stimulate a focused debate. (2018 LSC Report (A/AC.105/1177), paras. 264-265).

# **IV. Resumption of negotiations**

The working paper was made available to all COPUOS Members. There is a lot of resistance to its creation and it still persists, but the decision to create it has already been made (mandate, work schedule). It was questioned that why it could not be created, there was talk in a meeting of at least 3 years to create it, but if there were precedents that already established a way of exception provided by UNOOSA, it pointed out for example the creation of the Working Group on the Agenda SPACE2030 and its implementation plan.

There is no doubt that the Ad Hoc Group will be created with its mandate and work schedule, that COPUOS is the forum to carry it out, but it will undoubtedly NOT be an easy path, despite the fact that Article 11 of the MA provides the basis for developing a international regime. Many will be the questions that will have to be raised, including whether or not such a regime will be

binding; if it will only apply to the states that ratified it; if it could be a treaty ...

This is everyone's task.

# **IV. CONCLUSIONS**

1. The Moon Agreement, unlike the idea that exists in the international context, does not close the door to the exploitation of the natural resources of the Moon and other celestial bodies, on the contrary, it establishes a legal basis on which establish an international regime that governs this activity.

2. The concepts of "province of all mankind" and "Common Heritage of Mankind" are often confused, however, when reviewing the context in which they originated, it is clear how they can be interpreted, even more, that these are not contradictory or compete with each other. The first refers to the freedoms included in the OST, of exploration and use, which connects the Moon Agreement with the Outer Space Treaty; while the second one has the objective of defining the status of the natural resources found on the Moon and other celestial bodies.

3. The particular orientation promoted by Greece, Belgium and Brazil opens the door to the establishment of an international regime for the exploitation of the resources of the Moon and other celestial bodies that is yet to be defined.

4. It is necessary to begin to elaborate the international regime, under penalty that in ten years the conditions for the exploitation of the celestial bodies will be a fact and the regulation could be non-operative... If it is elaborated, negotiated and consensual.