OUTER SPACE TREATIES AND STATE RESPONSIBILITY: A CHANGE OF CONCEPT

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Abstract

Fantasies of space exploration in 1960's have evolved to an ever-expanding scientific strife and real life commercial arena for private venture.
Political competition and gaining national prestige in the beginning, which grew into cooperation and collaboration of governments in development of engineering and scientific knowledge, has changed to multinational investment and deep private interest in a very promising new industry with almost no limits for growth compared to what is known in human history.
The pioneers in space explorations and those who put together The Outer Space Treaty have brought us something of value, concepts that for the duration of written history man has been longing for. Now those concepts are being challenged and many aspects of life and space technology will bring a devastating blow in the next century if we choose to take things as they come.
In this paper we review the space treaties in respect to states' responsibilities facing new issues such as multinational cooperation, privatization and commercialization of activities in space and limitations of states to control such activities under the existing treaties.

Introduction

Although human activities in outer space started only half a century ago, the program and development of these activities are so significant that they cannot be compared with other activities of mankind in any period of human history.

In such an extraordinary nature of activities, making international law to govern the states' activities is a great success, which was achieved by man through the United Nations Organization and especially COPUOS and its Legal Subcommittee.
The adoption of the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space by the General Assembly in 1963 was the first important step in international law making for outer space activities.
From 1966 until 1996, five outer space treaties and five sets of principles were adopted by the Untied Nations, namely:

- Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies (1967).
- Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1968).

- Convention on International Liability for Damage Caused by Space Objects. (1972)
- Convention on Registration of Objects Launched into Outer Space (1975).
- Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (1979).
- Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space (1963).
- Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting (1982).
- Principles Relating to Remote Sensing of the Earth from Outer Space (1986).
- Principles Relevant to the Use of Nuclear Power Sources in Outer Space (1992).
- Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking Into Particular Account the Needs of Developing Countries (1996)[1].

Main concepts of Space Treaties

The 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies can be seen as the foundation of a general legal basis for peaceful uses of Outer Space and provides a framework for the development of law for Outer Space. The four other treaties deal more specifically with certain concepts included in the 1967 treaty.

The Outer Space treaty enunciates very important principles governing the activities in outer space. The exploration and use of Outer Space, including the Moon and other celestial bodies shall be carried out for the benefit and in the interests of all countries and shall be the province of all mankind (Art. I). Outer Space shall be free for exploration and use by all states and there shall be free access to all areas of celestial bodies (Art. I)

Outer Space is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means (Art. II)

All activities in Outer Space shall be carried out in accordance with international law, including the Charter of the United Nations (Art. III)

States parties to the treaty shall not place nuclear weapons or any other kinds of weapons of mass destruction anywhere in Outer Space (Art. IV)

States parties to the treaty shall bear international responsibility for national activities in Outer Space whether such activities are carried on by government agencies or by non-governmental entities (Art. VI).

States parties are internationally liable for damage to another state party or its juridical persons for activities from their territory or facility from which an object is launched (Art VIII). State parties to the treaty shall conduct their activities in a manner that prevents environmental contamination and harmful interference with the lawful activities of other states (Art IX).

The main objects of the agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space can be seen in its preamble which quotes the Outer Space treaty's call on states for rendering of all possible assistance to astronauts in the event of accident, distress or emergency landing, the prompt and safe return of astronauts, and the return of objects launched into outer space to representatives of the launching authority (Also Art. 4). The return of personnel of a spacecraft to the launching state is unconditional

and shall be safe and prompt action, however the return of objects is not the same, the state on whose territory a foreign space object is found may request explanation to make sure that such object or its component part are not hazardous and also request for compensation for all expenses incurred in fulfilling obligations to recover and return a space object or its component parts [Art.5 (5)].

The Convention on International Liability for Damage Caused by Space Objects is the application of Article VII of the Outer Space Treaty. This convention adopted a dual system of liability: "absolute liability" and liability based on fault. A launching State shall be absolutely liable to pay compensation for damage caused by its space object on the surface of the earth or to aircraft flight (Art. II), but in the event of damage being caused elsewhere than on the surface of the earth to a space object of one launching State or to persons or property on board such a space object by a space object of another launching state the latter shall be liable only if the damage is due to its fault or the fault of persons for whom it is responsible. (Art. III) Exoneration from absolute liability shall be granted if the launching state establishes that the damage has resulted either wholly or partially from gross negligence or from an act or omission done with intent to cause damage on the part of a claimant state or of natural or juridical persons it represents (Art. VI.1). The compensation which the launching state shall be liable to pay damage for under this convention shall be determined in accordance with international law and the principles of justice and equity in order to provide such reparation in respect of the damage as will restore the person, natural or juridical, state or international organization on whose behalf the claim is presented to the condition which would have existed if the damage had not occurred. (Art. XII). This convention is the first multilateral treaty that has imposed the regime of absolute liability directly on states[2].

Clear and precise information about objects launched into outer space is essential for their identification. The Convention on Registration of Objects Launched into Outer Space provides for dual registration of space objects. When a space object is launched into earth orbit or beyond, the launching State shall register the space object by means of an entry in an appropriate registry which it shall maintain, "Domestic registration" (Art. II.1), and each launching State shall inform the Secretary. General of the United Nations of the establishment of such a registry "International Registration" (Art. II.1).

The absence of a legal regime concerning the use of natural resources on the Moon and other celestial bodies was the reason for development of the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies. Only a handful states was in a position to land on the Moon and collect the natural resources. Many states were seeking a treaty, which would secure their share of the natural resources on the Moon and other celestial bodies on an equal basis. The Agreement Governing the Activities of States on the Moon and other Celestial Bodies in its preamble determined to promote on the basis of equality the further development of celestial bodies. Although states are free to collect samples of mineral and other substance for scientific investigation [Art. 6(2)], the Moon and its natural resources are the common heritage of

mankind [Art. II (1)]. Neither the surface nor the subsurface of the Moon, nor any part thereof or natural resources in place, shall become property of any states [Art II (3)].

If we look at these five treaties we realize that the most important goals for the founders of them where:

- Freedom of states for Exploration and Use of outer space
- Outer space is not subject to national appropriation
- Outer space is the province of mankind,
- States bear international responsibility for national activities in outer space whether carries out by governmental or private entities.
- Astronauts are the envoys of mankind

When we look at the period in which these five treaties have been drafted (from 1967 to 1979), it can be easily realized why notions such as commercialization and privatization where not directly addressed. In that period the dimension of the commercial sector in space activities was quite limited, therefore justified the absence of these notions.

Commercialization of Space

During the cold war, activities in outer space were a matter of national prestige and heavy competition existed between the two super powers. They were ready to pay virtually any price to win this competition, therefore activities in outer space were very expensive and it was commercially not attractive for private sector to enter this business.

Commercialization and privatization of space activities rapidly grew after the end of cold war era and it will continue to grow in the next coming years.

According to one study for the period 1993-2001, the launch of 656 satellites was predicted, most of these launches where governmental. After eight years the number of estimated launches for the period 2000-2009 was more than 2147, in fact three time more than before, of which more than 65% are commercial communication satellites[3].

For the first time in 1996 the budget of commercial space undertakings was superior to government expenses[4]. The future worldwide space revenue has been estimated to grow to USD 577 billion from 1998 to 2002, with telecommunication services accounting for USD 218 billion of that total[5].

No doubt that the entrance of the private sector into outer space activities and the commercialization of these activities brought great value for progress and welfare of mankind. It generates necessary funds which are important to develop the opportunities which exist in outer space and as a consequence change life for the better. It makes it easier for the public to access the services such as telecommunication, education, health services, ...

Bearing in mind that the main objective of private enterprise is to maximize profit, and the fact that private activities in outer space are rapidly growing and prevailing over state activities, and the absence of internationally accepted rules to regulate and control private sector activities in outer space, this may result in a bizarre situation which not only will not be in the best interest of the world as a whole but also does not meet the private sector's interest.

Although existing space law does not prohibit commercialization and private sector activities in outer space, it clearly gives supremacy of the public interest over the private interest. Art. 1 of the outer space treaty (1967) expresses that the exploration and use of outer space, including the Moon and Other Celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their

degree of economic or scientific development, and shall be the province of all mankind[6].

On the other hand the private sector is very fragile in case of liability and compensation payment, liability is unlimited according to the liability Convention, but the private sector would like to see limited liability like in Air Law.
Although outer space activities have an international characteristic, the law applicable to private enterprises is the national law of states concerned, and it depends on states how to regulate or monitor the private sector activities in outer space, which is not necessarily done in the same way in every state.

Conclusions

- It seems that the existing Outer Space Treaties can serve as the fundamental legal framework for commercialization and private sector activities in Outer Space.

- Outer Space activities have an international characteristic, therefore activities of private sector in outer space cannot be regulated only by domestic law of the state concerned, especially when it comes to cases where multinational co-operations are involved.

- Private sector needs more clear rules and regulations for better participation and investment in outer space activities.

- Public interest needs to make sure that commercial and private sector activities overall serve the best interest of mankind.

- An International mechanism is necessary to regulate and control the activities of the private sector in outer space.

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