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Space Law as a Source of International Cooperation

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“In the enterprise of man in space, obviously the scientists and technicians who invented and built the first satellites played a very important role; the achievements of the astronauts have been very great. However, the road has been very long, and men from many countries helped to pave it.”¹

Abstract

In the society when a phenomenon that has consequences on human life occurs, invariably starts to become the subject of legislation. Indeed, the term called International Law of Outer Space or Interplanetary Law appears. This law arises in the second half of the twentieth century as a branch of Public International Law, and is the first law extends beyond Earth. After the launch of *Sputnik I* in 1957, the international community established that human activities in space would be subject to legal regulation by the General Assembly of the United Nations (UN) as a new International Law in the form of conventions on the use of cosmic space under the control of the organization, exclusively for peaceful purposes. The Law of Outer Space is a principle that the sovereign right of states to airspace do not extends into outer space, and in that area the *res communis omnium universi*, common to all mankind thing applies. The aim of this study is to observe and understand how Space Law has served as a source of cooperation among space nations and also that such activity is for the benefit of humanity. The launch of Space Law made specifically codify international agreements and treaties in the different activities that States develop in space. Some of these treaties and agreements that will be analyzed in this study are: Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, the Agreement on the Rescue and Return of Astronauts and the Return of Objects Launched into Outer Space. With the analysis of these legal instruments seeks to contribute to be knowledge of space science and technology for these scientific areas will be understood in an interdependent, globalized and regionalized world.

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1 Lachs, Manfred, *El derecho del espacio ultraterrestre*, Mexico-Madrid-Buenos Aires, Fondo de Cultura Económica, 1977, pp. 41-42.

Introduction

In society, when a phenomenon that has consequences on human life occurs invariably starts to become the subject of legislation and cooperation. Indeed, the term called International Law of Outer Space or Interplanetary Law arises in the international community. Also, the Law of Space receives other denominations as: Astronautical Law, Cosmonautical Law, Cosmic Law, Etheronic Law, Sidereal Law, Intersidereal Law, Interastral Law, Satellite Law, Extraterrestrial Law, Ultraterrestrial Law, Interplanetary Law, International Space Law, Law Space, Universal Law.²

This law arises in the second half of the twentieth century as a branch of Public International Law, and is the first that leaves the globe and its atmosphere. This phenomenon was one of the great opportunities of those years. “In principle, the characters and legal nature of the Space Law do not differ much with those of any other law, since they are in general terms a set of rules that regulate an activity, a conduct; relationships between individuals, or between countries, as well as with regard to things”.³

After the launch of Sputnik I, on 4 October 1957, it was decided that human activities in space would be subject to legal regulation; besides the presentation of the USSR to the General Assembly of the United Nations (UN) of a project of this new International Law as a convention on the use of Cosmic Space under the control of the United Nations only for peaceful purposes and the prohibition of creating in the space military bases. “States parties to the Treaty shall carry on activities in the exploration and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international cooperation and understanding”.⁴

Then, the years 50’ and 60’ produced a great perspective in technology. The humans explored physically the outer space and man started to observe which phenomena could help the international society in order to reach the development. The Law of Outer Space comes from the principle that “the sovereign right of States to airspace do not extends to outer space” where reigns the principle *Res communis omnis universi*, common thing to all

2 Álvarez Hernández, José Luis, *Derecho Espacial*, Mexico, Editorial Porrúa, Universidad Nacional Autónoma de México, 1997, p. 21.

3 *Ibid.*, p. 49.

4 Article III, Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, Adopted by the General Assembly in its resolution 2222 (XXI) of 19 December 1966. United Nations, *United Nations Treaties and Principles on Outer Space and related General Assembly resolutions*, New York, United Nations Office for Outer Space Affairs, 2008, p. 3.

mankind”⁵⁶ Then, the Law of Outer Space is related to the Law of the Sea, because both of them regulates common spaces of the world.

In this paper we will analyze the relation between the Law of Outer Space and the International Cooperation. We start looking the most principal treaties related to the space, like the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, the Agreement on the Rescue and Return of Astronauts and the Return of Objects Launched into Outer Space, the Convention on Registration of Objects Launched into Outer Space, and the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.

With these treaties we will adapt the analyses with the international cooperation by remembering the activities of the United Nations towards the space activities and the codification of the Law of Outer Space.

International Treaties and Agreements on Outer Space

The launch of Space Law made codifying specifically with international agreements and treaties the different activities that States develop in space, which would be governed by this law and after we will see the relation with international cooperation. Here are explained the most important legal instruments of Space Law.

Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies⁷

Also called Space Treaty, consists of 17 articles, it was signed in London, Moscow and Washington on 27 January 1967 and entered into force on October 10 of that year. The treaty outlines the elements by which proclaims, among these may be noted the great prospects opening up before mankind as a result of man’s entry into outer space. The general characteristics of this treaty can be summarized as follows:

- a. Affirmation of universal interest in the exploration of cosmic space.
- b. Neither space nor the celestial bodies may be appropriated by States or groups of States.
- c. International Law, including the UN Charter, shall apply to activities in space.

5 Osmanńczyk, Edmund Jan, *Enciclopedia Mundial de Relaciones Internacionales y Naciones Unidas*, Mexico, Fondo de Cultura Económica, 1ra ed., 1976, p. 442.

6 *Ibid.*, p. 442.

7 See, Alejandra, “El Acuerdo que debe regir las actividades de los Estados en la Luna y otros cuerpos celestes”, in *Anuario Mexicano de Relaciones Internacionales 1980*, Tomo I, Mexico, Universidad Nacional Autónoma de México, Escuela Nacional de Estudios Profesionales Acatlán, 1ª. Ed., 1981, pp. 257-265; see also Seara Vázquez, Modesto, *Derecho Internacional Público*, México, Editorial Porrúa, 2000, pp. 306-315.

- d. Demilitarization of outer space, including the prohibition of placing in orbit weapons of mass destruction, and to establish military bases on celestial bodies.
- e. Obligation of assistance to astronauts, by all countries.
- f. International responsibility of the State or international organizations, for activities carried out by them in outer space.
- g. Storage by the State, under any circumstances, ownership of objects launched into outer space.
- h. Exploration of space in the interest of humanity, and prohibition of acts that involve altering the natural environment.
- i. Measures to promote international cooperation in space exploration.
- j. Rights of access, by all States, installations, equipment and space vehicles on celestial bodies.⁸

This treaty is the basis for the development of other legal instruments that are explained below.

Agreement on the Rescue and Return of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space

This agreement consists of 10 articles and was signed on 22 April 1968. The objective of this treaty is to provide assistance to the astronauts and keep it safe to receive all the assistance that is needed by all States, when in dangerous situations and be returned to their own country. In addition, the State that made the launch must assume the obligations of paying the expenses incurred for salvage, and must ensure no harm to other countries from thrown artifacts, for example, some satellites are powered by nuclear energy⁹

“Noting the great importance of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (United Nations, Treaty Series, vol. 610, No. 8843), which calls for the 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,

Desiring to develop and give further concrete expression to these duties,

Wishing to promote international cooperation in the peaceful exploration and use of outer space,

Prompted by sentiments of humanity,”¹⁰

8 Seara Vázquez, Modesto, *Op. cit.*, 2000, p. 310.

9 *Ibid.*, p. 311.

10 Preamble of the Agreement on the Rescue and Return of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, United Nations, *Op. cit.*, 2008, p. 9.

As this treaty shows, assistance to astronauts will be given by all countries, in the case that the crew members so require. This treaty is a clear example of international cooperation and assistance between Space Law and international society.

Convention on Registration of Objects Launched into Outer Space

This Agreement consists of 12 articles and was opened for signature on 4 January 1975 and means that all States shall keep a register to record the launch objects into space and also shall disclose to the Secretary General of the United Nations, which will keep its own register. This recognition allows the identification of objects launched into outer space for purposes that may take place. Therefore, it must provide all data, from the name of the State or States launch to registration or identification number, date and place of launch, orbital parameters, etc...¹¹

“When space objects 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. Each launching State shall inform the Secretary-General of the United Nations of the establishment of such a registry”.¹²

Agreement Governing the Activities of States on the Moon and Other Celestial Bodies

The day December 18, 1979 was opened for signing this treaty which has 21 articles. The objectives of the treaty are the exclusive peaceful use, prohibiting all kinds of military activities, and claims that “the exploration and use of the Moon shall be the province of all mankind and shall be carried out for the benefit and in the interest of all countries... (Art. 4.1).¹³

“The provisions of this Agreement relating to the Moon shall also apply to other celestial bodies within the solar system, other than the Earth, except insofar as specific legal norms enter into force with respect to any of these celestial bodies”.¹⁴

The United Nations Organization and the Law of Outer Space

Since its inception in 1945, the United Nations Organization has the mandate under its Charter that is, safeguarding international peace and security; and all activities and relationships that humans have with each other, must be guided by fundamental international instruments. So, if humans have activities on the seabed or outer space, they must be conducted in a climate of

11 Seara Vázquez, Modesto, *Op. cit.*, p. 311.

12 Article II(1), Convention on Registration of Objects Launched into Outer Space, United Nations, *Op. cit.*, 2008, p. 23.

13 Seara Vázquez, Modesto, *Op. cit.*, p. 311-312.

14 Article 1(1), Agreement Governing the Activities of States on the Moon and Other Celestial Bodies, United Nations, *Op. cit.*, 2008, p. 27.

security and peace. As explained in the part of Space Law, the United Nations has a key role in the regulation of these activities as a whole.

The UN is an international organization of universal jurisdiction, by that fact UN has the power to ensure that peace and security are present in various human activities. It is for this reason that the UN creates and manages international agencies with limited competition on a particular sector, such as education, science, culture, health or the environment. Following these powers, by resolution 1348/XII, the international body created within the General Assembly, the Special Committee of the Peaceful Use of Outer Space, and at the same time, recommended that the International Law Commission of the UN itself, the development of “International Law of Outer Space within the framework of the structure of the organization”, which is just seen.

UN also decided to establish the United Nations Office for Outer Space Affairs, which is based in the Vienna International Centre in Austria. This office aims to regulate all matters about outer space that correspond to the organization, for example, codification of the Law of Outer Space, registration and launch of aircraft and artificial satellites of telecommunications and boost research and international cooperation in space.¹⁵ We can see that this international organization plays a key role in outer space affairs.

International Cooperation and Space Law

According to the principles of the Charter of the United Nations since its foundation, international cooperation is necessary to achieve the objectives set by the member states. As we just seen, different space treaties seek that advances in space are for the benefit of humanity. Since the advent of the space age in the years 50s, when the first satellite Sputnik was launched in 1957, the International Society noted that a new era was presented in the scientific and technical development of humanity, when the space age was coming in modern years.

After the advent of the space age, the global community noted that Space Law and international cooperation were closely related. The various space missions of states, apart from exploring the Earth’s orbit and measure the physical processes in astronauts, and many other experiments have also a number of satellite TV on Earth observation. In these missions the countries have climatological and meteorological satellites in orbit, which are used to

15 For a more detailed explanation of the activities of the United Nations in outer space, see for example, Naciones Unidas, *ABC de las Naciones Unidas*, Nueva York, Departamento de Información Pública, DPI/1580, Diciembre 1995; Naciones Unidas, *Carta de las Naciones Unidas y Estatuto de la Corte Internacional de Justicia*, Nueva York, Departamento de Información Pública, DIP/511, Junio 1998; Naciones Unidas, *La ONU en síntesis*, Nueva York, Departamento de Información Pública, DIP/2020/Rev.1.

predict the weather, monitor agricultural crops, and predict natural disasters. With this information, activities that regulate Space Law could benefit international society increasingly.

Thus, cooperation in space is carried out, for example the United States through National Aeronautics and Space Administration (NASA), European countries through the European Space Agency (ESA) and the Russian Space Agency, put satellites in orbit that are operated by other countries as Brazil, Argentina, Mexico, Canada, Australia, among others.

US Space shuttle missions since its opening in 1981 until the program ended in 2011, placed in orbit and repaired many weather and telecommunications satellites belonging to various countries. One such case was the satellite Morelos II in 1985, with the aim of expanding telecommunications and cover remote regions within Mexico. For this example, the cooperation was between Mexico and the United States. Those countries signed an agreement between NASA and Secretariat of Communications and Transportation. The purpose of this bilateral mechanism was put into orbit an artificial satellite and invites Mexico to participate in the mission.

In that sense, international space cooperation is carried out in many areas and is essential when Space Law legislation applies. The treaties that were analyzed at the beginning of this essay contain rules aimed at cooperation. For example, the Treaty of 1967, the universal affirmation in the interest of space exploration is for all countries, which means that space research should be a benefit to the international community. Also, space exploration including research on other celestial bodies should be based on international cooperation. In addition, the obligation to assist astronauts must be provided by all countries if required.

In addition, the Treaty of 1967 speaks of the international responsibility of states carrying out space activities, and cooperation it is present. This argument may be implicit in the treaty, since states cooperate in the search for solutions in relation to space matters. The World space agencies are working on joint projects.

This collaboration is focused on the pursuit of economic and social development of many States. So the question that says, what are the benefits of space exploration for the state and society? There are many practical benefits, for example, instruments for hospitals, computers and many electronic components used in industry and home are the result of space research.

International cooperation in space began to crystallize since the last decades of the Cold War. Due to the high costs of space exploration, countries also had to share the benefits of scientific research in space. The United States

planned to build the *Freedom* Space Station. Subsequently, the project was called *Alpha* Space Station and later International Space Station (IES).¹⁶ For a company of such magnitude, NASA, Canadian Space Agency (CSA), ESA and Japan, collaborated on the Space Station's initial projects. In 1993, Russia was invited to participate. "The station would be used for peaceful purposes, in accordance with International Law, and with a view to improving" shared "the scientific, technological and commercial use of space".¹⁷

Final Remarks

As we have seen, Space Law is a branch of Public International Law that has developed over the years, since the advent of the space age. Thus, Space Law has been codified along with the development and spatial practice of many states. Several scholars of Space Law and an institution dedicated to this branch of law is the International Institute of Space Law (IISL), which is intended to spread space legal knowledge is recognized.

We also note that international cooperation and Space Law are linked, because human activities in space and space exploration require the cooperation of the international community, as it has been evidenced by the International Space Station. Codification of International Space Law has evolved as has advanced science and space technology. The new tools of information and communication as the *internet* use artificial satellites to transmit data several countries around the world and potentiate the development of the States and communities, including remote regions of the globe.

Also, satellites allow weather information to safeguard the security of regions of the Planet Earth. The analyzed legal instruments have increasing application in space activities. As the finished Space Shuttle Program at NASA demonstrates, but also regulates space activities related to the International Space Station, a project of unprecedented international cooperation. The space exploration will continue in the future based in the international cooperation, when for the first time in history, humans explore others planets and will tread the soil of Mars with a great advance of humanity.

16 Velázquez Elizarrarás, Juan Carlos, "Nuevas Interrogantes y Propuestas de Solución sobre los Grandes Problemas del Derecho Cósmico", en Seara Vázquez, Modesto (Coord.), *La Sociedad Internacional Amorfa. Soluciones Inadecuadas para problemas complejos*, Mexico, Universidad Nacional Autónoma de México, Facultad de Ciencias Políticas y Sociales, Universidad del Mar, 2011, p. 434.

17 *Ibid.*, p. 434.

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