Origins, Present Status and Prospective Development of International Space Law

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This paper, the purpose of which is to discuss the origins, present status and prospective development of international space law governing the activities of States and international organizations in outer space and on celestial bodies, consists of three parts. In the first one, the historical conditions under which the first space flights were effected and the need for consideration of legal questions arising from these events emerged) will be briefly elucidated. In the second part, an evaluation of the negotiations on the building up of an appropriate international legal basis for space activities; as they developed in the United Nations Committee on the Peaceful Uses of Outer Space /COPUOS/ and its Legal Subcommittee, and of their up-to-date results will be summarized. And in the third part of this presentation an outline of the prospects of a further growth of international space law will be offered, including the issue of which approach to this aim would be most suitable.

I. Origins of consideration of legal problems relating to space activities in the United Nations

The beginning of the consideration of legal problems of space activities in the United Nations started almost simultaneously with the first space flights, which were effected by launching artificial satellites in orbit around the Earth under the scope of the International Geophysical Year /IGY/. The exploration of outer space by unprecedented means of space technology became an essential part of that comprehensive programme, which was successfully accomplished in 1957 - 1958. Another essential part of IGY was the development of international cooperation regarding the scientific investigation in Antarctica. Its successful implementation led then to the conclusion of the Antarctic Treaty on 1 December 1959. This instrument provided an example how to proceed with problems arising from the progress in science and technology in a special area of international relations. Unlike Antarctica, however, which at that time was a subject of interest of a limited number of States, space activities, their impact on international relations and also the vision of a possible benefit for all nations, initiated from the very beginning the interest of the world community as a whole. Therefore, it was quite natural that the United Nations became the central place for discussions on this issue, notwithstanding the fact that the first space flights were accomplished only by two great powers, which alone commanded the means to do so and m8intained their monopolies in this field for additional years.

Politically, the development of international cooperation among them and their willingness to negotiate on a regulation of space activities was enabled by the thaw of tensions among the then two blocks, which were established during the early period of the so called Cold War. And without doubt, the cooperation in the conduct of space activities and negotiations on legal instruments to govern the peaceful exploration and use of outer space helped to change the state of international relations between the

East and the West from the brink of war towards a peaceful competition and even cooperation.

The establishment of a special body within the United Nations for dealing with the problems of international cooperation in space activities became an essential step for the development of this trend. This body was created first as an Ad Hoc Committee by resolution 1348 /XIII/ of 13 December 1958 and consisted of 18 Member States of the United Nations. According to that resolution, the Ad Hoc Committee was requested to report to the General Assembly on the activities and resources of the United Nations, of the specialized agencies and of other international bodies relating to the peaceful uses of outer space, on future organizational arrangements and also on the nature of legal problems which might arise in carrying out programmes to explore outer space. A substantive report came out from the session of the Ad Hoc Committee, which also included an assessment of legal aspects involved [1]. Nevertheless, since the composition of that body was not considered as balanced by a number of its Member States, that effort did not lead to further discussions on its results.

Fortunately, only one year later, the agreement on the transformation of the Ad Hoc Committee into a permanent body was reached at the fourteenth session of General Assembly by its resolution 1472 A /XIV/ of 12 December 1959. Since then, the Committee on the Peaceful Uses of Outer Space /COPUOS/ has existed am has become the focal point of the United Nations for international cooperation in space activities. Its original membership was 24 Member States, but it was later on expanded several times up to the present 67 members.

In resolution 1721 /XVI/ of 20 December 1961, the programme for multilateral cooperation in the exploration and use of outer space was unanimously adopted by the UN General Assembly. And in the first part of that important resolution, two fundamental principles were commended for guidance of States in their space activities. They were aw follows:

/a/ International Law, including the Charter of the United Nations, applies to outer space and celestial bodies.

/b/ Outer space and celestial bodies are free for exploration and use by all States in conformity with international law and are not subject to national appropriation.

Thus the cornerstones for developing a legal order for space activities were laid down. In the same resolution the UN General Assembly invited COPUOS to study and report on the legal problems which might arise from the exploration and use of outer space. In other parts of that resolution, guidelines were provided for the development of international cooperation in several fields, which were considered as useful and feasible at that time.

Furthermore, the internal structure of COPUOS crystallized. Two Subcommittees of this body, one Legal, the other Scientific and Technical, were created for detailed considerations of specific proposals concerning legal, scientific and technological 1uestions made by COPUOS Member States. Both Subcommittees started their work in Geneva, 1962, and then held their sessions regularly every year. They have been composed of the same Member States as COPUOS itself and have

thus become specialized sessions of the main Committee devoted to issues within their mandates.

Moreover, an important conclusion was reached among the Member States of COPUOS, which was declared in the statement of the Chairman of this body. According to it, the decisions of COPUOS and its Subcommittees should be subject to agreement without need for voting [2]. The adoption of this principle for decision-making, which became later known as the rule of consensus and has been also applied in other UN bodies, was a prerequisite for reaching effective outcomes of all endeavours in the field of international cooperation in space activities and the development of space law.

Finally, within the UN Secretariat, an Outer Space Affairs Division /OSAD/ was set up in the then Department of Political and Security Council Affairs in New York, in order to assist COPUOS, its Subcommittees and working groups in their dealings. However, the Secretariat duties relating to the work on legal matters were allocated to the UN Legal Office. During the first half of the 1990s, OSAD was transformed into the present UN Office for Outer Space Affairs /OOSA/, in which all outer space affairs, including legal matters, have been concentrated. OOSA then moved from New York to the United Nations Office in Vienna.

II. Negotiations on the building up of international legal basis of space activities and its present status

Before turning to space legislation at the intergovernmental level of the United Nations, be it permitted to depart for a while to ideas on this subject raised by some outstanding authors and to the efforts of international non-governmental or organizations prior to the beginning of official negotiations.

Different opinions were advanced about legal considerations and procedures for elaborating international space law. For example, one of the space law pioneers, Professor Eugène Pépin of France, who served for a decade as President of the IAF International Institute of Space Law /IIS1/, suggested immediately after the launching of the first artificial satellite of the Earth that a convention be drafted along the lines of the 1944 Convention on International Civil Aviation, in order to obtain agreement on basic space law. “Its universal acceptance -- he said -- would benefit not only the immediate future of scientific research in space, but also the safety of present circulation within the atmosphere and of the people on the surface; it would also prepare the future of the circulation of man in space” [3].

On the other hand, Professors Myres S. McDougal and Leon Lipson, who published later on a major monograph on The Law and Order in outer Space, disagreed. They held the following view: “A durable agreement by explicit international convention on anything like a code of law for outer space is not, in our opinion, something now to be expected or desired. One may indeed expect with rather more confidence a series of agreements, gradually arrived at, on particular subjects” [4].

A number of non-governmental institutions have played an important role in the development of a space law doctrine and later on, they also supported by their

studies the law making process. In the early period, it was particularly the Institute of International Law /L'Institut de Droit International/, founded in 1873, which considered in greater detail a legal regime for outer space and unanimously adopted a resolution on the subject which deserves still today admiration for its substance and clarity of language [5]. This outcome of a longer consideration of the topic covered the same issues that were discussed at the UN COPUOS Legal Subcommittee and incorporated in the UN Declaration of Legal Principles approved by General Assembly resolution 1962 /XVIII/ on 13 December 1963 [6].

This Declaration, which was unanimously adopted after only one year and a half of negotiation, started the legislative process in COPUOS and its Legal Subcommittee. By formulating legal principles governing activities of States in the exploration and use of outer space, this General Assembly resolution simultaneously resolved the earlier doctrinal issue, how to proceed in establishing a legal order for space activities, in favour of the progressive development of space law. The 1963 Declaration brought a number of important general rules, which could then easily be transformed into legally binding provisions of the 1967 Outer Space Treaty /0ST/, some of them without any change, some other in a more developed language.

The OST became the fundamental instrument of the pres0nt international space law, which dealt with all issues the solutions of which were considered at that period as necessary for creating a sufficient basis for international cooperation in space activities. It was not only adopted by consensus both in COPUOS and the UN General Assembly, but it also reached shortly a high number of Parties which made this instrument for themselves legally binding. This number is growing still today. The OST, notwithstanding more specific provisions in some points, also remained on the level of general legal rules as also evidenced by its title. From among these principles, which would certainly deserve a more detailed analysis, at least some should be specially commented, because they brought a great advance in the whole international law.

It was first a group of principles incorporated in Art. I of OST /the benefit of all countries, the freedom of exploration and use of outer space, the Moon and other celestial bodies by all States and the freedom of scientific investigation and international cooperation in such investigation/. The principle of Art. II, which was already spelled out in the 1963, remained intact and in one brief but comprehensive sentence declared the ban of national appropriation of outer space, including the Moon and other celestial bodies by any means.

Furthermore, special attention should be drawn to Art. VI, which incorporated the principle of international responsibility of States for national space activities, whether such activities are carried on by governmental agencies or by non-governmental entities, and for assuring that national activities are carried out in conformity with the provisions of OST. The wording of that principle, which had also appeared for the first time in the 1963 Declaration, emerged as a compromise formula. This reconciled the then opposing views of those wishing to reserve space activities only to States and intergovernmental organizations, and those advocating the access to outer space activities, in addition to governmental and intergovernmental agencies, to non-governmental entities. The negotiating States agreed to the participation of both the public and private subjects and thus opened the way to the

private sector for developing space activities side by side with States. The significance of this agreement has been confirmed by the growing participation of non-State entities in such activities in recent years. At the same time, however, the respective States assumed a direct responsibility not only for their own space activities, but also for the activities of private persons of their nationality. This concept of national activities in outer space and international responsibility of States Parties to OST must be understood and interpreted in harmony with other principles of the Treaty, particularly its Art. 11 according to which 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.

During the period of twelve years following the entry into force of OST, four other UN Space Treaties were concluded. The finalization of the 1968 Rescue Agreement was accelerated by some tragic events that occurred just around the day of signature of OST. The 1968 Rescue Agreement, however, has dealt almost exclusively with accidents in territories under and outside the jurisdiction of the States Parties and with the return of the personnel and space objects or their component parts, and not specifically with assistance and rescue during the activities in outer space and on celestial bodies, which was consi1ered at that time as too difficult.

The third UN Space Treaty -- The 1972 Liability Convention-unlike similar instruments adopted in the field of air, maritime and atomic law, enacted inter-State methods of the settlement of disputes which prevail even if damage of and compensation to private persons should be at stake. However, the Convention does not provide for a compulsory resolution of disputes relating to claims for compensation for damage, because even if such a claim should be dealt with by a Claims Commission, to be established after the failure of diplomatic negotiations, its decision would be binding only if the parties to the dispute so agreed.

The fourth UN Space Treaty -- the 1975 Registration Convention -- implemented the principles, which had been declared in Art. VIII of OST. In the registration Convention, its States Parties agreed to register their space objects launched into' space by means of an entry in an appropriate registry which they should maintain. Moreover, they agreed to establish a central Register for such objects to be maintained by the UN Secretary-General. In order to enable the UN Secretariat to act accordingly, each State on whose registry a space object is carried shall furnish to the Secretary-General certain information, the format of which has been specified in Art. IV of the Registration Convention. The information requested was chosen to meet the need for satisfactory identification of space objects. It should be also mentioned that the Registration Convention enables each State of registry to provide additional information concerning a space object carried on its registry. This provision is particularly relevant ~n the cases of accidents caused by malfunctioning space objects and also in the cases of transfer of space objects to a different owner. Moreover, each State of registry is obliged to notify the UN Secretary-General of space objects which have been, but no longer are, in Earth orbit.

The drafters of the fifth legal instrument -- the 1979 Moon Agreement -- also elaborated on a number of principles of the 1967 OST relating to the Moon and other celestial bodies. But, when negotiating the Moon Agreement, its drafters were not in a position to rely on OST when dealing with the issue of future economic activities on

the Moon, because in this respect OST remained mostly silent. An attempt to reach a generally acceptable compromise was made by joining the confirmation of the freedom of scientific investigation and the exploration and use of the Moon as a right of all States, with the commitment to establish an international regime governing the exploitation of the natural resources of the Moon, as such exploitation is about to become feasible. However, this solution has failed to attract so far the interest of many nations, as evident from the limited number of signatures and ratifications of the Moon Agreement up to date. The present unhappy status of the Moon Agreement is still more regrettable due to the fact that according to its Art. 1, the provisions of the 1979 Moon Agreement should 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. Up to this date, no special agreement on any other celestial body was negotiated and concluded, notwithstanding the growing exploration of some of them and future plans particularly relating to Mars.

Since 1979, the United Nations has not elaborated and concluded any new Space Treaty. It does not mean, however, that the efforts of COPUOS for the progressive development of the legal regime for space activities have not continued. During the 1980s and 1990s, the United Nations returned to the practice of declaring space legal principles by resolutions of its General Assembly. But while the first such resolutions adopted in the early 1960s rather initiated international cooperation and created a basis for the space legislation process, the adoption of a number of sets of principles by UN General Assembly resolutions after 1979 had to regulate some special categories of space activities. In this way, four sets of principles have been elaborated and adopted by the General Assembly thus far, including: Principles Governing International Television Broadcasting /1982/, Remote Sensing of the Earth from Outer Space /1986/, Use of Nuclear Power Sources in Outer Space /1992/, and the Declaration on International Cooperation for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries /1996/.

These sets of principles are also based on the 1967 OST and, moreover, on some provisions of the Liability and Registration Conventions. Unlike the Space Treaties, however, they are not legally binding. But, principles thus adopted reflect a legal conviction of the present international community on special categories of space activities. These General Assembly resolutions, particularly the majority of them which were adopted by consensus, if followed by a constant practice of States and international organizations, may play a significant role either in establishing customary rules of international law or as a basis for future negotiations on international treaties to regulate the same subjects in a legally binding manner.

III. Prospects of a further growth of international space law

At present, COPUOS and its Legal Subcommittee do not discuss any new topic with a view of drafting another regulatory instrument. It does not mean, however, that these bodies do not have on their agendas any item of a legal significance. The Legal Subcommittee now concentrates on some specific issues of the existing treaties, particularly those relating to the Liability and Registration Conventions as applied by States and international space organizations in the light of new and expected practices in space activities.

So far, one such issue -- the review of the concept of the "launching State" -- passed through a detailed examination of this kind. The conclusions of that discussion were endorsed by COPUOS and inserted in a special resolution, which was adopted by the UN General Assembly in 2004 [7]. In its operative part, it is recommended that States conducting space activities, in fulfilling their international obligations arising from the international space agreements, consider enacting and implementing national laws authorizing and providing for continuing supervision of the activities in outer space of non-governmental entities under their jurisdiction. Furthermore, this resolution recommends that COPUOS invite Member States to submit information on a voluntary basis on their current practices regarding on orbit transfer of ownership of space objects and that States consider the possibility of harmonizing such practices with a view to increasing the consistency of national space legislation with international law. Finally COPUOS has been requested to continue to provide States, at their request, with relevant information and assistance in developing national space laws based on the relevant treaties.

Another item of this category, in the negotiation of which a visible advance has recently been reached in the Legal Subcommittee, is Practice of States and international organizations in registering space objects. The purpose of this exercise is the collection and examination of the reports of States and international organizations on their practices and drafting of recommendations for enhancing adherence to the 1975 Registration Convention and improving these practices [8]. Such recommendations could be also inserted in a special draft resolution to be submitted to the UN General Assembly for its adoption.

Another interesting item has been under discussion in the COPUOS Legal Subcommittee on the initiative of the International Institute for the Unification of Private Law /UNIDROIT/. This intergovernmental organization, the main objective of which has been harmonizing and coordinating the private laws of States and their gradual unification, developed a Convention on international interests in Mobile Equipment facilitating the foreign investments in such equipment, which was adopted in Cape Town in November 2001. The Convention should be accompanied by three Protocols /namely on matters specific to aircraft equipment, which already entered into force, on matters specific to railway rolling stock, and on matters specific to space assets/. Upon the request of the UN General Assembly, COPUOS and its Legal Subcommittee discussed two outstanding issues relating to the draft Space Protocol, namely: /a/ the possibility of the United Nations serving as supervisory authority under the future Space Protocol; and /b/ the relationship between the terms of the draft Protocol and the rights and obligations of States under the legal regime applicable to outer space. On these issues, differing opinions have been held amongst some delegations in the Legal Subcommittee and its special Working Group established for this subject, and the discussion should still continue [9].

The recent items just mentioned evidence the need to overcome the barriers between the traditional areas and means of public international law and private law and to consider the relevant issues in a more complex way. At the same time, the establishment of national space laws appears to be desirable by the nations conducting space activities. Of course, all national laws should remain in full harmony with the international law ob1igations binding the States and international organizations concerned. In this way, a comprehensive system of space law is emerging.

The COPUOS Legal Subcommittee also continues its discussions on a number of "regular items", which have been on its agenda for many years. One of them has been the definition and delimitation of outer space. In recent years, the Subcommittee and its Working Group on this subject concentrated on the examination of possible legal issues concerning aerospace objects, which produced a questionnaire including a number of points relating to this topic. Not all COPUOS Member States have participated in this discussion. In spite of it, the replies received from a number of States to the questionnaire led the Working Group to the conclusion that the consideration of this discussion should still continue. A similar con elusion was reached with regard to the discussion on definition and delimitation of outer space [10].

Since 1996, when the last regulatory instrument in the field of space law was adopted, [11] no major outcome in this category emerged from the work of COPUOS and its Legal Subcommittee. Nevertheless, a number of substantive issues, which should be taken into account in a near or more distant future were proposed by individual Member States or the groups thereof. Usually, such topics are listed in the Reports of the Legal Subcommittee as proposals of new items to be discussed. Such topics did not reach consensus on their inclusion on the agenda of the next session of the Legal Subcommittee, but some of their sponsors request to retain them for possible discussion at subsequent sessions [12]. The problems relating to the impact of space activities on the Earth and protection of the space environment belong to this group of proposals. For several years, a set of problems relating to one of the most impending issue in this field -- the mitigation of the generation of space debris and the application of effective technica1 measures against this pollution of outer space – have already been under consideration by COPUOS and its Scientific and Technical Subcommittee. These considerations were summed up in a Technical Report on Space Debris published by the time of UNISPACE III Conference held in Vienna in 1999 [13]. Thereafter, the discussions on this issue continued in the Scientific and Technical Subcommittee under a new multi-year plan. They have led to the elaboration of guidelines for practice and policies, which should be implemented on a voluntary basis through national mechanisms [14]. While welcoming this progress, a question must be raised, however, whether such measures, which would become from the legal point of view only agreed proposals for unilateral actions, would initiate a sufficient feeling of duty to comply with them, if no international responsibility in cases of non-compliance with such guidelines could be derived from them. This and other legal aspects of space debris should still be considered sooner or later in the Legal Subcommittee, which is a competent body for this task.

Another major issue, which has been raised during the discussions on possible new items for the Legal Subcommittee in recent years, concerns the future development of international space law and the issue of which approach to this aim would be the most suitable. This subject was formulated as "The appropriateness and desirability of drafting a universal comprehensive convention on international space law" [15]. Its realization would mean a codification of space law, which is so far dispersed in several instruments of different legal force. But, according to the proponents of this idea, as spelled out in the last report of the Legal Subcommittee, although the principles and provisions of the UN Space Treaties constituted the regime to be observed, the current legal framework for space activities requires

modification and further development that would reflect advances in space technology and changes in the nature of space activities. These proponents recommended to consider the possibility of developing a universal and comprehensive convention on space law that would restate the fundamental principles contained in the present Space Treaties and also fill the gaps in the current framework [16].

This proposal, however, raised the opposition of another group of delegations in the Legal Subcommittee. They argue that the current legal framework established by the United Nations Space Treaties in force adequately meets the needs of the international community in matters relating to outer space. This legal framework would be strengthened through increased participation in and adherence to the existing UN Treaties and Principles on outer space and the preparation of a comprehensive convention is not desirable [17].

In 2005, the proponents of the above proposal agreed to temporarily suspend its consideration in view of the fact that the Legal Subcommittee would not be in a position to reach consensus on the inclusion of this item on its agenda [18]. Instead of it a Working Paper was submitted by Kazakhstan, the Russian Federation and Ukraine entitled "Questionnaire on possible options for future development of international space law" [19]. This document now offers a possible basis for further thinking about the ways how the United Nations should work for the future development. of international space law and seek constructive conclusions of such consideration [20].

References:

1. See United Nations Ad Hoc Committee on the Peaceful Uses of Outer Space, Report to the United Nations General Assembly, Fourteenth Session, New York, 1959, UN Doc. A/4141 of 14 July 1959.

2. See N. Jasentuliyana, A Survey of Space Law as Developed by the United Nations, in Perspectives on International Law, /N. Jasentuliyana, ed./, Chapter 16, p. 354 s.

3. See E. Pepin, Legal Problems Created by the Sputnik, lecture given on November 6, 1957 to the Canadian Bar Association. Reprinted in Legal Problems of Space Exploration, A Symposium, 85th Congress, 2nd Session, December 31, 1958, Washington, Government Printing Office, 1959, p. V.

4. See M. McDougal and L. Lipson, Perspectives for a Law of Outer Space, reprinted in Space Law: A Symposium, p. 400.

5. See Annuaire de l'Institut de Droit Internatiohal, Session de Bruxelles, Septembre 1963, Vol. 2, Paris, Edition Pe done, 1963, pp. 336-364.

6. All UN Space Treaties and Principles mentioned in this paper are included in United Nations Office for Outer Space Affairs: United Nations Treaties and Principles on Outer Space and other related General Assembly resolutions, United Nations, New York, 2005, UN Doe. ST/SPACE/ll/Rev. 1 and its Addendum on Status of international agreements relating to activities in outer space as at 1 January 2006, UN Doc. ST/SPACE/ll/Rev. 1/ Add. 1.

7. Resolution 59/115 of 10 December 2004. See its text in the source mentioned in the foregoing reference, pp. 60-61.

8. See Report of the Legal Subcommittee on its forty-fifth session in Vienna from 3 to 13 April 2006, UN Doc. A/AC.l05/871 of 14 April 2006, pp. 20-22 and 33-37.

9. Ibidem, pp. 17-20.

10. Ibidem, pp. 30-32. See also Questionnaire on possible legal issues with regard to aerospace objects: replies from Member States, Note by the Secretariat, UN Doc. A/AC.105/635 Add. 1 - 12, Add. 7/Corr. 1 and Add. 11/Corr. 1.

11. Declaration on International Cooperation in the Exploration and Use of Outer Space for the benefit and in the interest of All States, Ta~ing into Particul~ Account the Needs of Developing Countries. See its text in the source mentioned in reference 6, pp. 55-56.

12. See e.g. Report of the Legal Subcommittee on its forty-fifth session, p. 24.

13. See Technical Report on Space Debris. Text of the Report adopted by the Scientific and Technical Subcommittee of the UN COPUOS, United Nations, New York, 1999, UN Doc. A/AC 105/720.

14. See Report of the Scientific and Technical Subcommittee on its forty-third session, held in Vienna from 20 February to 3 March 2006, UN Doe. A/AC.105/869 of 16 March 2006, pp. 18-20 and 39.

15. See Report of the Legal Subcommittee on its forty-fourth session, held in Vienna from 4 to 15 April 2005, UN Ioc. A/AC.105/850 of 28 April 2005, p. 22.

16. See Report of the Legal Subcommittee on its forty-fifth session, p. 9.

17. See Report of the Legal Subcommittee on its fourty-fourth session, p. 22. See also a similar view of those delegations in Report of the Legal Subcommittee on its forty-fifth session, p. 9.

18. See Report of the Legal Subcommittee on its forty-fourth session, p. 22.

19. See UN Doe. A/ACJ05/C.2/L.259 of 14 April 2005. This Working Paper was also cosponsored by Chile, Greece and Thailand.

20. The views presented in this paper are those of the author and do not necessarily reflect the positions of national and international bodies in which he has been active.