

IISL-ECSL Symposium Celebrating the 30th Anniversary of the Outer Space Treaty
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APPLICATION AND IMPLEMENTATION OF THE 1967 OUTER SPACE TREATY^{1*}

by

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Introduction

It is a matter of great pleasure and honor for me to be present at this internationally organized Legal Symposium Celebrating the 30th Anniversary of the 1967 Outer Space Treaty² - the constitution of outer space. I congratulate the convenors of the Symposium and express my deep appreciation to Dr. Ernst Fasan and Dr. Nandasiri Jasentuliyana for extending me an invitation to participate in this Symposium.

Anniversaries of important events and institutions are always good occasions to critically appreciate as well as to take stock of their achievements. In this context, I would like to join those scholars from all over the world who have almost unanimously been declaring the 1967 Treaty a big success in creating an appropriate order in outer space. I will say it has been perhaps the finest achievement of diplomacy and statesmanship of those involved in its negotiation and drafting, especially during the height of cold war when the world was deeply polarized in two diagonally opposed political and economic systems. In those very tense days, when the human civilization was almost at the brink of extinction, the 1963 Resolution of the UN General Assembly on outer space which eventually was transformed into the 1967 Treaty, showed a ray of hope that the human beings are capable of finding peaceful solutions to global problems. The Legal Subcommittee of the UN Committee on Peaceful Uses of Outer Space (COPUOS) should be congratulated for the conclusion of this very significant piece of international legislation on outer space.

Probably, the most important

achievement of the 1967 Treaty, in my opinion, has been that it laid down *a priori* a fundamental legal principle of freedom of exploration and use of outer space by all States. At the same time it categorically and unambiguously denied the application of sovereignty, especially the traditional territorial sovereignty, to outer space and celestial bodies. I am sure that the learned audience does not need to be reminded that territorial sovereignty has been, and to a large extent even today, the main cause of almost all catastrophic wars that were fought by the so-called "social animals". Undoubtedly, this principle has been well respected over the last thirty years. In my opinion, there is no apparent serious threat to this principle at least in the near future, though a very small minority of authors attempt to interpret some provisions of the 1967 Treaty allowing indirect appropriation of outer space or a part of it. I will discuss this issue shortly.

The list of the achievements of the 1967 Treaty is long and I do not intend to describe them. I believe that the best way to celebrate the 30th anniversary of the 1967 Treaty is to point out the areas where improvements must be made so that it can serve its purpose for the next thirty years and beyond. As pointed out earlier, the Treaty has been successful during the past thirty years. The question now arises whether the Treaty in its entirety will remain useful and valid in the future. The answer to this question is obviously in the negative and certainly not in its present form. One apparent reason for this is that the magnitude and nature of the space activities at the time of conclusion of this Treaty, and those envisioned at that time, have changed and will alter dramatically and

significantly in the future. In the beginning space activities were carried out by States and that too by a very limited elite group of States. The number of space-faring nations is quickly increasing. But what is more important is that in the space arena States are rapidly being replaced by private entities in pursuant to new politico-economic trends of privati-zation, commercialization and globalisation of almost all human activities and space activities are not an exception. Therefore, the international treaty (i.e. the 1967 Treaty), which was concluded essentially to govern the activities of the States and that too essentially of scientific and exploratory nature, is under question whether it still remains relevant in the new era of space activities. In my view, if the basis of a law has changed, the law itself must change in order to remain valid and useful.

Since the areas for improvements of the 1967 Treaty as well as the other space treaties³ are extensive and can not be adequately covered in the limited time at my disposal, I will concentrate only on some of those issues which directly relate to the subject of my presentation; i.e. the application and implemen-tation of the 1967 Treaty. These issues essentially are : where, to whom and to what does the 1967 Treaty apply ? How is the 1967 Treaty applied and implemented ?

Where does the 1967 Treaty apply ?

It is obvious that the Treaty applies to activities in outer space, the Moon and other Celestial bodies. However, what has not been settled in the Treaty is where does outer space begin. The boundary between air space and outer space, both having different and inconsistent legal regimes (exclusive soverei-gnty over air space and freedom of outer space), has been the longest unresolved legal problem. This problem has been discussed in-side and out-side the UN, it is still on the agenda of the Legal Sub-committee and there is no sign of any clear resolution either. The issue has been discussed exten-sively in the Subcommittee and in legal literature for about four decades. Some authors are of the opinion that the height of the lowest perigee of a satellite (or 100 or 110 Kms above the sea

level) is being recognized under customary international law as the demar-cation line between air space and outer space. However, this is still controversial. There are mainly two schools of thought on this issue. The advocates of the first (spatialists) stress the need of a clear internationally agreed upon demarcation between air space and outer space, thereby activities would be regulated according to the legal regime application to the "place" where they occur. On the other hand, supporters of the second approach (functionalists) see no need for such demarcation because all activities should be regulated according to their nature and purpose rather than the "place" of their occurrence. In my view, both sides have some convincing arguments to support their positions. However, as space activities increase and new techno-logies develop to place various new devices in outer space at the height lower than the lowest peri-gee of a satellite, it would become inevitable to have a clear under-standing of where does outer space begin.

To whom does the 1967 Treaty apply ?

The 1967 Treaty is the most adhered to treaty that governs outer space and outer space activities. There are over ninety States Parties to the Treaty. It is needless to say that the Treaty applies to this group of States which comprise of space-faring and non-space-faring countries. How-ever, a question arises whether or not the legal principles of the Treaty have become a part of customary international law and thereby apply to all States ? This remains a controversial issue.

Normally, when a treaty applies to a State it is considered also applicable to both public and private persons belonging to that State. A large majority of legal scholars believe that the 1967 Treaty applies to, and regulate the activities of, private entities in accordance with Article VI of the Treaty. The Article in part provides that :

States Parties to the Treaty shall bear international responsibility for national activities in outer space, including the moon and other celestial bodies, 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 set forth in the present Treaty. The activities of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty.

However, a small minority of authors⁴ argue that private entities can appropriate outer space or a part of it though their States are prohibited to do so essentially because Article VI, in their view, "mainly concerns national activities in outer space" and Article II of the Treaty prohibits only "national appropriation".

Without going into too detailed analysis of these two schools of thought, one can say that the views of the minority are not legally tenable. Firstly, the negotiating history and the wording of Article VI make abundantly clear that private entities can not do what their States are prohibited to do. The Soviet Union while negotiating this Treaty accepted the involvement of private entities in the exploration and use of outer space only once it was assured that these entities will participate only once authorized by appropriate States which will continuously supervise their activities.⁵ Without such an assurance agreement on this issue would have not been possible. Secondly, the States Parties to the Treaty are under clear obligation to ensure that space activities of the private entities are in conformity with the provisions of the Treaty.⁶

Thirdly, by allowing private entities to appropriate outer space or its part would defeat the very purpose of Article II which contains comprehensive provisions prohibiting appropriation. Moreover, any act of public or private entity which is contrary to Article II will defeat the purpose of Article I par. 2 which lays down the most fundamental principle of space law; i.e. the freedom of outer space. Finally, State practice as expressed in the appropriate national laws of some of the important space-faring nations, like the Russian Federation, South Africa, Sweden, the United Kingdom and the United

States⁷, contain clear provisions assuming State responsibility in ensuring that the activities of their private entities are carried out in accordance with the provisions of the applicable international treaties, including the 1967 Treaty.

In my opinion, though the minority view holds no legal basis, the existence of this controversy implies that the provisions of the Treaty with respect to its application to private entities are not beyond doubt. Secondly, what could become more controversial is the level and legal mechanism of "authorization and continuous supervision" by appropriate State since these terms are not defined in the Treaty and are open to different interpretations. Thirdly, there is a confusion about the terms "launching State" and "appropriate State".

Under Article VII of the 1967 Treaty, the "launching State" is internationally liable for damage caused by its space objects. The Article does not actually define the term "launching State", but contains the same criteria for being a launching State as in Article I (a) of the Registration Convention and Article I (c) of the Liability Convention; i.e. the term "launching State" means (1) a State which launches or procures the launching of a space object and (2) a State from whose territory or facility a space object is launched. In analyzing this term, one author correctly states that "even more than four 'launching' states may be involved with regard to one space object if one state launches from the facility of another state which is on the territory of yet another state and if several states are considered to 'procure' the launching".⁸ Similarly, the term "appropriate State" is not defined in the 1967 Treaty and is open to various interpretations. The earlier quoted Article VI of the 1967 Treaty holds the "appropriate State" responsible for "authorization and continuous supervision" of non-governmental entities. There is possibility of multiple "appropriate States" with respect to a particular private entity and "appropriate State" would not necessarily be the "launching State" of a space object of that entity.⁹ This brief discussion shows that since the subjects of the 1967 Treaty are not well defined, its application would not be effective.

To what does the 1967 Treaty apply?

Obviously the 1967 Treaty applies to space objects and their component parts. However, the term "space object" is nowhere defined in the Treaty and thus is open to various interpretations.¹⁰ There remain numerous and important questions unanswered. What is a space object? What is a component part of a space object? Is space debris a space object? Is it only when an object is actually launched into outer space becomes a space object? What about the objects or things manufactured in outer space with or without the composition of space objects taken from the Earth? These issues need to be resolved clearly before one can expect an effective application of the 1967 Treaty.

How is the 1967 Treaty implemented and applied?

The implementation of the 1967 Treaty is being effected both at the international and national levels. At the international level, the Legal Sub-committee has elaborated several general legal principles contained in the Treaty in four international agreements and several resolutions. It is not the purpose of my presentation to analyze the provisions of these agreements and resolutions. In fact, they have already been extensively discussed in legal literature and deliberated in numerous fora. However, I would like to make only the following observations:

(1) Firstly, the most important and relevant treaties for the conduct of commercial space activities by private entities are the 1972 Liability Convention and the 1979 Moon Agreement. Both these treaties contain provisions which are confusing, inconsistent and inadequate; thus are not particularly encouraging for any significant private investment. The ineffectiveness of the Liability Convention was shown in the case of COSMOS 954 accident. The confusion of terms like "launching State" and "appropriate State" is another factor. The Moon Agreement, though drafted nearly two decades ago, has been ratified only by nine States and none of them is a major space-faring nation. This is so because of a number of reasons, one of which is that the Agreement contains

not fully defined concepts like "common heritage of man-kind".

(2) Secondly, the UNGA resolutions dealing specifically with legal regimes of direct TV broadcasting¹¹ and remote sensing¹² can hardly be said to create any solid, comprehensive and effectively implementable legal regime for the regulation of relevant space activities. This is so not only because they are simply non-binding resolutions but also on crucial issues their provisions are such that they create more confusion than resolving them. The latest resolution on the sharing of outer space benefits¹³, in my opinion, from a legal point of view is in fact a step backward. It could be interpreted to have transformed the provisions of Article I par. 1 of the 1967 Treaty¹⁴ into non-binding resolution without any legal mechanism and guidance in the sharing of the benefits of the exploration and use of outer space.

(3) Thirdly, the international process of elaboration and implementation of the 1967 Treaty is too slow and cumbersome.

At the national level, the 1967 Treaty has been implemented and is being applied through national legal systems. Some of the States have adopted specific laws that give effect to the 1967 Treaty and also provide detailed procedures for the application of its provisions to particular space activities. The United States is undoubtedly the leader in the adoption of appropriate national legislation. As noted earlier, the Russian Federation, South Africa, Sweden, and the United Kingdom have promulgated specific laws implementing their international obligations under the 1967 Treaty. Depending upon their legal systems, some other States rely on their existing laws to give effect to the 1967 Treaty. However, one general observation can be made that States Parties to the 1967 Treaty in general are slow in enacting their national laws, even when such legislations are necessary under their constitutional law. For example, in Canada an appropriate domestic law is necessary to implement an international treaty to which Canada is a party. Without such a law the provisions of that treaty can not be applied or enforced domestically. At present, no such law exists in Canada. Similar situation prevails in

a large majority of States, including some of the space-faring countries.

Conclusions and recommendations

In my presentation, I tried to enlist briefly some of the issues that need to be resolved. It is in fact a small inventory of issues which must be resolved to maintain law and order in outer space and consequently certainty of legal regime. This certainty is a pre-requisite for commercial activities, especially those by private entities.

The main purpose of the 1967 Treaty was to establish fundamental legal "principles" that would govern space activities of the States. It has, in my view, succeeded in that mission. One must not try to find in the Treaty what was not intended to be included; i.e. legal "rules" to regulate all aspects of space activities. However, in order to effectively regulate space activities, specific, clear and sufficient legal rules are needed to be agreed upon. The 1967 Treaty is inadequate to address the relevant and fundamental issues involved in the new wave of space activities. The Treaty needs to be updated either by amending it or by supplementing it through additional protocols. Such task should be undertaken by the Legal Subcommittee. However, the activities of the Legal Subcommittee in the drafting of legally binding instruments for the last almost two decade have been less encouraging. Unless the Legal Subcommittee or its parent committee (i.e. the COPUOS) significantly transforms itself to become more active and efficient body, one can not hope quick revision of the 1967 Treaty through this body. Alternatively, one may look at the International Law Commission for such a task. But that body too is overburdened with drafting some of the important legal instruments. There prevails, in general, a negative feeling about convening special conferences, like the Law of the Sea Conference which negotiated and drafted the 1982 Law of the Sea Convention. Perhaps, a small group of scholars representing major space-faring nations and various regions of the world could be entrusted with the task of examining all the space

treaties and eventually to create a comprehensive draft treaty which should include (1) the fundamental legal principles which are already adopted and well respected, (2) clear rules of law that would govern all space activities, (3) unambiguous definitions of the terms used, (4) an efficient dispute settlement mechanism and (5) sufficient provisions for its amendment. Such a draft treaty would then be presented to the Legal Subcommittee or a specially convened Conference on the Law of Outer Space for finetuning and adoption. That approach, perhaps, could produce some desirable results in a relatively short period of time and hopefully salvage the last frontier from becoming a bone of contention, and a source of devastating pollution. It is my wish that outer space should remain and be fully respected and used as an enhancer of the quality of life for everyone on our planet called Earth. May be it is a wishful thinking!

ENDNOTES

- 1/ Copyright (c) 1997 by Ram S. Jakhu. Released to AIAA to publish in all forms.
- 2/ Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies; entered into force on 10 October 1967. At present, there are 93 States Parties to this Treaty.
- 3/ Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (1968), entered into force on 3 December 1968; Convention on Registration of Objects Launched into Outer Space (1975); Convention on International Liability for Damage Caused by Space Objects (1972), entered into force on 1 September 1972, Agreement on the Activities of States on the Moon and other Celestial Bodies (1979), entered into force on 11 July 1984.
- 4/ See Wassenbergh, H., "Responsibility

and Liability for Non-Governmental Activities in Outer Space”, in ECSL Summer Course on Space Law and Policy : Basic Materials, Martinus Nijhoff Publishers, 1994, pp. 197 et seq. Also, Gorove, S., “Interpreting Article II of the Outer Space Treaty”, in 37, *Fordham Law Review*, 1969, p. 349 at p. 351.

5/ For details see, Matte, N.M., *Aerospace Law*, Sweet & Maxwell Limited, London, 1969, at p. 309.

6/ Under Article VI of the 1967 Treaty, “a nation which becomes a party to the treaty agrees to be responsible for space activities carried on by one of its governmental agencies as well as by any nongovernmental entity. For the United States, this means that the government would accept responsibility for the activities of NASA as well as those of the Communications Satellite Corporation (COMSAT), etc. Furthermore, the government would see that such activities conform to the treaty’s provisions, and also authorise and continuously supervise the space activities of nongovernmental entities. The relationship between the US Government and COMSAT is already defined in the U.S. Communications Satellite Act of 1962 (Public Law 87-624 (76 Stat. 419)) and in the President’s Executive Order of January 4, 1965 on carrying out provisions of the COMSAT Act of 1962 concerning government supervision, including international aspects and the role of the Secretary of State. This article is designed to ensure responsibility for space activities, inherently international in nature, at the governmental level” : the Staff Report on the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies: Analysis and Background Data (1967, pp. 27-28) that was prepared to provide information on the legislative evaluation of the provisions of the 1967 Treaty for the Committee on Aeronautical and Space Sciences of the US Senate and to be used by the Senate during its consideration of the Treaty for the purpose of advising the US President whether or not to ratify the Treaty. See also Dembling, Paul G., “Treaty on Principles Governing the

Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies” in Jasentuliyana, N. and Lee, R. (eds.), *Manual on Space Law*, vol. 1, (1979), p.1, at p. 17.

7/ The Law of Russian Federation on Space Activity (20 August 1993) Article 4 (1) of which states that “Space activity shall be carried out in conformity with the following principles: international responsibility of the state for space activity under its jurisdiction”. Under section 11 of the 1993 Space Act of South Africa (Act no 14917 of 23 June 1993), a licence is required for “the participation by any juristic person incorporated or registered in the Republic [of South Africa], in space activities : (i) entailing obligations to the State in terms of international conventions, treaties or agreements entered into or ratified by the Government of the Republic”. Furthermore, “A licence shall be issued subject to such conditions as the Council may determine for that particular licence, taking into account :(c) the international obligations and responsibilities of the Republic”. The Swedish Act on Space Activities (1982:963) in its Section 6 specifies that “If the Swedish State on account of undertakings in international agreements has been liable for damage which has come about as a result of space activities carried on by persons who have carried on the space activity shall reimburse the State what has been disbursed on account of the above-mentioned undertakings, unless special reasons tell against this”. The Decree on Space Activities (1982:1069), which was issued under this Act, in its Section 4 states that “The National Board for Space Activities shall keep a register of the space objects for which Sweden is to be considered the launching State in accordance with Article 1 of the Convention on registration of objects launched into outer space of 14 January, 1975”. The 1986 United Kingdom Act on Space Activities (1986 Ch. 38) was enacted “to confer licensing and other powers on the Secretary of State to secure compliance with the international obligations of the United Kingdom with respect to the launching and operation of space objects and the carrying on

of other activities in outer space by persons connected with this country". Under section 3.(1) of the Act, "A person to whom this Act applies shall not, subject to the following provisions, carry on an activity to which this Act applies except under the authority of a licence granted by the Secretary of State". Section 5 of the Act specifies that, a licence may be granted subject to such conditions, as the Secretary of State thinks fit, and in particular, may contain conditions (e) requiring the licensee to conduct his operations in such a way as to ..(iii) avoid any breach of the United Kingdom's international obligations". The US Act to Facilitate Commercial Space Launches, and for Other Purposes of 1984, as Amended 1988 (Public Law 98.575, 98th Congress, H.R. 3942, October 30, 1984. 98 Stat. 3055), in its Section 6 (a) (1) states that "No person shall launch a launch vehicle or operate a launch site within the United States, unless authorised by a license issued or transferred under this Act". Section 16 of the Act requires "Each person who launches a launch vehicle or operates a launch site under a license issued or transferred under this Act shall have in effect liability insurance at least in such amount as is considered by the Secretary to be necessary for such launch or operation, considering the international obligations of the United States". Further more section 21 (d) states that "The Secretary shall carry out this Act consistent with any obligation assumed by the United States in any treaty, convention, or agreement that may be in force between the United States and any foreign nation. In carrying out this Act, the Secretary shall consider applicable laws and requirements of any foreign nation".

8/ Bockstiegel, K.-H., "The Term 'Launching State' in International Space Law", Proceedings of the thirty-seventh Colloquium on the Law of Outer Space, 1994, p. 80 at p. 81.

9/ For details, see Bockstiegel, K.-H., "The Term 'Appropriate State' in International Space Law", Proceedings of the thirty-seventh Colloquium on the Law of Outer Space, 1994, pp. 77 et seq. and Wirin, W.B., " Practical

Implications of Launching State - Appropriate State Definitions", Proceedings of the thirty-seventh Colloquium on the Law of Outer Space, 1994, pp. 109 et seq.

10/ For a detailed discussion, see Gorove, S., "Definitional Issues Pertaining to 'Space Object'", Proceedings of the thirty-seventh Colloquium on the Law of Outer Space, 1994, pp. 87 et seq., Cheng, B., "Nationality for Spacecraft ?", in ECSL Summer Course on Space Law and Policy : Basic Materials, Martinus Nijhoff Publishers, 1994, pp. 67 et seq.

11/ Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting (1982), UNGA Resolution No. A/RES/37/92.

12/ Principles Relating to Remote Sensing of the Earth from Outer Space (1986), UNGA Resolution No. 41/65.

13/ Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interests of All States, Taking into Particular Account the Needs of Developing Countries, UN Doc. A/AC.105/L.211 (11 June 1996).

14/ For a detailed analysis of Article I par. 1, see Jakhu, Ram S, "Developing Countries and the Fundamental Principles of International Space Law", in Girardot, R.G., et al (eds.), New Directions in International Law, (Frankfurt, 1982), pp.351-373.