

**THE DEVELOPMENT OF THE OUTER
SPACE TREATIES AND LEGAL
PRINCIPLES FROM A THIRD WORLD
PERSPECTIVE**

by

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I. Introduction

Three days and forty years ago the Space Age was launched. In the years that began the second-half of this century, and even later, when the Americans went to the Moon, space was seen as something esoteric, something beyond the grasp of all but two or three of the most powerful nations of the world. However, space was also seen as yet another environment in which the power-brokers of the world could carry on their race for military superiority. It was also seen as an area of colonial conquest by the powers, for their own use and exploitation. The developing countries, especially, were concerned that the Moon and other celestial bodies would be exploited, to their disadvantage.

The international community therefore realized that it was essential to formulate international rules and regulations for the conduct of human activities in outer space because this new frontier was outside the bounds of existing international law. The responsibility to regulate this new environment fell upon the United Nations, which had been established to "maintain international peace and security" and charged with the task of "encouraging the progressive development of international law and its codification".¹ Thus, it became the focal point for international co-operation in outer space and for

the development of international space law.²

In 1958, the United Nations General Assembly created the Committee on the Peaceful Uses of Outer Space (COPUOS), which was requested to study and report on, *inter alia*, "the nature of legal problems which [could] arise in the carrying out of programmes to explore outer space".³ COPUOS was initially set up as an 18-Member State *ad hoc* body. Gradual increases over the years has brought the membership of COPUOS to 61 States. The Committee, in turn, created two Sub-committees, the Legal Subcommittee (LSC) and the Scientific & Technical Subcommittee (S&T), at its second session in 1962.⁴

The first significant step in the development of space law was made in 1963, when the General Assembly adopted the "Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space".⁵ This important resolution formed the basis of what is sometimes called the "Magna Charta" of outer space law, the Outer Space Treaty of 1967. In the years that followed, COPUOS developed four other multilateral treaties to regulate human activities in outer space. These are the Rescue Agreement of 1968, the Liability Convention of 1972, the Registration Convention of 1976, and the Moon Agreement of 1979. Each of these instruments, with the exception of the Moon Agreement, has been signed by over 100 countries. In addition, the General Assembly has adopted four additional legal principles relating to outer space. These are the Direct Television Broadcasting, Remote Sensing, and Nuclear Power Sources Principles and the Declaration on Outer Space Benefits.⁶

In elaborating and negotiating provisions for all the treaties and principles, the countries of the Third World have played—from the outset—a leading role. Mr Krishna Rao of India, in one of the first UN legal meetings held on space, noted that "outer space was a new field and there were no vested interests to prevent the international community from embarking on a régime of co-operation rather than of conflict."⁷

It is this dual perspective of cooperation and non-conflict, for the benefit of all humanity, that has been at the forefront of thought of the developing countries, from the very beginning of the formation of space law by the United Nations.

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II. The Treaties and the Role of the Third World

Before going on to a specific discussion on the major contributions made by the Third World to the development of space law, I would like to briefly highlight some aspects of the role they played during the drafting of the space treaties.

In elaborating and negotiating provisions for the Outer Space Treaty, the developing countries played an effective role in its drafting. They especially fought for, with others, in having nuclear weapons banned from space and for the inclusion of such issues as liability of damages caused by space activities.

The demilitarization issue was one of the most controversial during the negotiations for the 1967 Outer Space Treaty. However, only partial demilitarization of space was achieved in the Treaty, and many countries, especially the developing countries were disappointed that the "Magna Charta" of space did not totally demilitarize outer space.⁸ India pointed out that the omission of the words "outer space" from the second paragraph of Article IV "was likely to be interpreted to mean that outer space could legitimately be used for military manoeuvres and the like".⁹ The expression "outer space, including the moon and other celestial bodies", employed "throughout the treaty, was not used in [the article] and the inference was that the treaty could be interpreted ... as giving legal licence for the use of outer space for non-peaceful purposes."¹⁰

Developing countries also played a major role in having a liability provision added to the Treaty. This was Article VII of the Treaty, which deals with the liability of launching States, for damage caused to other State Parties to the Treaty. India went further in making its interpretation clearer, when she stated that the term "internationally liable" would only be acceptable to her delegation, if it meant "absolutely liable".¹¹

The Treaty, in addition, was one of the first multilateral instruments in which the generally applied principle of sovereignty of States gave way to the modern concept of the internationalization of the Global Commons. Its "province of mankind" principle, though controversial, became the watch-word for international relations, especially in the fields of

space law and the law of the sea. The Treaty still provides a strong basis for the regulation of space activities, and its presumed "flaw" of vagueness is now turning out to be a major strength, as space activities are becoming more defined and certain. The Treaty's broad parameters encompass all space exploration and utilization, and they can serve as the foundation on which more detailed rules of space law, covering more specific fields of activity, can be built.

During the negotiations of the Rescue Agreement, many developing countries pressed for compensation for expenses incurred by a State Party that fulfilled its obligations under the Agreement in recovering and returning space objects of another Party, found in its territory.¹² Although the Rescue Agreement does not provide for dispute settlement, many States, especially developing countries, made an attempt to have such a provision included.¹³ However, a provision to this effect was later included in the Liability Convention.

When the Legal Subcommittee took up consideration of the issue of liability for damage caused by space objects in 1964, the active participation by several developing countries, ensured that the absolute liability for damage caused by a space object of a launching state, was expressly included in the Convention.¹⁴ Developing countries also successfully lobbied for the inclusion of a dispute settlement provision which was not included in the Rescue Agreement despite the strong efforts of many States.

With regard to the Registration Convention, its weakness lies in the fact that a launching State is only required, "as soon as practicable", to provide information regarding an object it launches into space and certain minimum details of the launched object.¹⁵ Developing countries fought, unsuccessfully, to have Article IV strengthened, so that the launching State would be required to provide greater, and more specific information.¹⁶

III. The "Common Heritage of Mankind"

As space technology developed, especially in the 1960s, developing countries began to take a more positive and prominent role in the development of space law, so as to ensure that their interests would not be adversely affected. They made a particular impact on space

law when, in the late 1960s, their lawyers proposed and developed, for the first time,¹⁷ the concept of the Common Heritage of Mankind (CHM). In June 1967, the Ambassador of Argentina, Aldo Armando Cocca, introduced the concept of the Common Heritage of Mankind in the discussions being held in the COPUOS Legal Subcommittee.¹⁸ Then, a few months later, the Maltese Ambassador to the United Nations, Arvid Pardo, applied the principle to the law of the sea when he stated that the seabed was the "Common Heritage of Mankind".¹⁹ The concept was formalized in a treaty first in the 1979 Moon Agreement,²⁰ and subsequently in the 1982 Law of the Sea Convention.²¹

The developing countries, in applying the CHM principle to space, call on "... advanced States, which benefit from a de facto quasi-monopoly, to enrich human knowledge by undertaking space activities that are regarded as in the general interest, particularly scientific research ...".²² In addition, the CHM, as applied to space law has a specific meaning in the "economic sphere, in that it protects the interests of all countries which do not have access to space resources due to a lack of technology; it implies an equitable sharing of what are considered common resources."²³

However, the concept of the CHM, as applied to the Moon, has been given a very specific meaning in Article 11 of the Moon Agreement in which the article tries to balance both the needs of developing countries, and the interests of those developed countries that contribute to the exploration of the moon.

As Earth-oriented application satellites were developed and became operational in the early 1970s, remote sensing and direct broadcast satellites emerged. These technologies offered new tools for national resource management and national communications, but also threatened to expose countries to foreign eyes and foreign influence in a way they had never been before. Outer space as an open international realm began to pose problems in addition to offering new opportunities. The presence of remote sensing and telecommunications satellites only a few hundred kilometres overhead reinforced the general sense of vulnerability of Third World countries to economic and cultural exploitation, and provoked a strong demand for controls on such space technology.²⁴

It is in areas such as these, i.e., direct broadcasting, remote sensing, international cooperation in outer space and satellite communications, that the Third World has created the greatest impact in the law-making process for outer space.

IV. Principles on Direct Broadcasting by Satellite (DBS)

Work on the study of the technical feasibility of communications by DBS began in 1968.²⁵ The issue was controversial. The opposing views of member States concerning the free flow of information and State sovereignty appeared to be irreconcilable. The divergent views in COPUOS, on particular issues like prior consent, programme content and signal overspill, reflected some of the contested issues in the North-South political debate occurring at that time.

Negotiations continued in COPUOS. By 1982, full agreement on the set of principles had not yet been reached, but it seemed that a basis for consensus would emerge, at least by the next round of negotiations, based on a Canadian-Swedish compromise proposal.²⁶ More progress was expected to be made in the negotiations. However, pre-empting further discussions in COPUOS, delegations from some developing countries, strongly supported by the former Soviet Union and its allies, who felt that the United States and some western countries were unreasonably dragging their feet, took the set of principles, along with the Canadian-Swedish proposal, for a vote in the General Assembly, where they were adopted by a majority vote. Hence, for the first time in the history of space law-making a set of legal principles was not adopted in COPUOS by consensus and instead adopted by the General Assembly with a majority vote.²⁷

V. Principles on Remote Sensing

With regard to the principles of remote sensing, the matter was first formally raised by Argentina when, in 1970, it submitted to the Legal Subcommittee a draft international agreement on activities carried out through remote sensing satellite surveys of earth resources.²⁸ Of the developing countries, Argentina, Brazil and India

played a prominent role in the development of the Principles which were adopted in 1986.

The elements relating to the needs of developing countries, technical assistance to interested States to enable them to interpret remote sensing data themselves, and access to data by sensed States were included in the Remote Sensing Principles because of the insistence of developing countries, as these elements were particularly important in those countries' plans for national development.

Similar to the DBS debate, the member States were divided on fundamental issues of international law. The developing countries were concerned about national sovereignty protection, prior consent and control by the sensed State over the distribution of data retrieved over their territories.²⁹ On the other hand, the developed countries, particularly the United States, championed freedom of use and non-discrimination of dissemination of space-derived information.³⁰ The debate on remote sensing, however, took a more positive turn than the DBS principles and the Legal Subcommittee was able to reach a consensus on the draft principles. There were several reasons for such approval. One of the more important reasons was that over the years of negotiation, there were changes both in the perceptions of the impact of remote sensing and in the general atmosphere of international relations.

VI. Outer Space Benefits³¹

Another item largely initiated and developed by some of the developing countries members of COPUOS, was "Consideration of the legal aspects related to the application of the principle that the exploration and utilization of outer space should be carried out for the benefit and in the interests of all States, taking into particular account the needs of developing countries".

The item on "*Outer Space Benefits*",³² as it was familiarly called, was placed on the agenda of the 28th session of the Legal Subcommittee, in 1989.³³ This item was placed on its agenda because many countries felt that there was a lack of any legal effort to ensure that space exploration and application of space technology benefited all countries. The item, therefore, aimed at the development of a legal regime that would embody

and promote the principle of Article I of the Outer Space Treaty, that the exploration and utilization of outer space should be carried out for the benefit and in the interests of all States, taking into particular account the developing countries. Thus, Member States looked at moving beyond Article I of the Outer Space Treaty, possibly to codify the rights and responsibilities of countries with respect to international cooperative space activities, and not let the Article stand, as some States viewed it, merely as an artifact or a moral appeal to the space-faring nations.

For several years, initially, a set of principles co-sponsored by several developing countries had formed the basis for discussions on this agenda item.³⁴ They were aimed at meeting the concrete needs and expectations of all countries, particularly those of developing countries. The central thrust of the draft Principles was that of the means of access by all countries - especially the developing countries - to the benefits of space technology, and this, ultimately, was a question of the nature of international co-operation among States. In a more general sense, the co-sponsors were saying that they believed that the technological gap between the developed and the developing countries had become too vast and that they wished to reverse the trend, at least to some degree, by the application of these Principles. They also seemed to say that they had lost their confidence in the moral appeals as embodied in the spirit of Article I of the Outer Space Treaty, and that the remedy laid in the establishment of an international legal framework regulating space co-operation and requiring the developed countries to co-operate within specified limits.

Having first refused to discuss the issue at the earlier sessions, at the 1994 session of the Legal Subcommittee, the developed countries indicated their willingness to discuss the matter, though somewhat reluctantly. On the basis of discussions, and further consideration of the matter during the following year, France and Germany submitted a working paper at the 1995 session of the Subcommittee.³⁵ The paper rested on two basic considerations: (i) States were free to determine all aspects of their cooperation, whether it was bilateral or multilateral or whether it was commercial or non-commercial, including, of course, development cooperation; (ii) States should have the choice of selecting the most

efficient and appropriate mode of cooperation in order to allocate resources efficiently.³⁶

The paper was divided into three short parts, the first which laid out general elements of international cooperation in the peaceful uses of space, the second which described the modes of such cooperation, and the third which listed possible areas in which this cooperation could be carried out. At the 1996 session of the Legal Subcommittee, the developing countries and France and Germany submitted revised versions of their working papers.³⁷ The Franco-German paper more-or-less reflected the previous version. However, the paper presented by the developing countries was different, in that it substantially resembled the French and German document. This, perhaps, was the catalyst that provided a breakthrough in the debate on the matter. It indicated a willingness of the developing countries to allay the concerns of the developed countries and strike a compromise to resolve the issue. After a paragraph-by-paragraph discussion of both papers, and intensive informal discussions by the sponsors of the papers, they succeeded in agreeing to a Chairman's consolidated text, with only a few disputed elements that were placed in square brackets. The text was submitted as an informal working paper of the Chairman of the Working Group, and annexed to the report,³⁸ with the hope that it could be adopted at the next session of the Legal Subcommittee, or at the June 1996 session of COPUOS.

During the course of the Committee session in June 1996, the Chairman of the Working Group on the item conducted informal consultations with members of the Committee which took up the those paragraphs of the text on which the Legal Subcommittee's Working Group could not agree. After exhaustive discussion and negotiation on the remaining paragraphs, the Committee agreed on a new text appropriately amended to reflect the agreement reached.³⁹ The Declaration was subsequently adopted by the General Assembly, at its fifty-first session, in G.A. Resolution 51/122.

VII. The Geostationary Orbit and the Regulation of Satellite Communications⁴⁰

Another important issue for developing countries which continues to be discussed in the

Legal Subcommittee, has been access to the geostationary orbit (GSO) for their communications satellites. The international regulatory regime for satellite communications has long been working on a "first come, first serve" basis which has primarily benefited the industrialized countries. Despite the general legal principle of equal access,⁴¹ a country wishing to put a communications satellite into the geostationary orbit has had to ensure that it did not interfere with any system previously registered with the International Telecommunication Union,⁴² essentially placing a burden on the proposed new system. Since the technologically advanced countries were the first ones to set up communication satellite systems, the developing countries felt that the current registration procedures inequitably restricted their access to the geostationary orbit.

The developing countries' concerns over accessibility are based on the natural limitations of the Geostationary Orbit (GSO) and frequency spectrum. Within the geostationary orbit, satellites rely on the radio frequency spectrum for radio communications to transmit or relay information. Thus a satellite in orbit is easily affected by radio frequency interference from other satellites that use the same operating frequency. To avoid interference, limitations need to be imposed on the distance between satellites using a particular frequency. Due to the fact that the frequency spectrum can only be used by a certain number of satellites to avoid problems of congestion and interference between satellite communication systems, access to the radio-frequency spectrum can present a major constraint on the use of the GSO by late-comers. In addition, the technology required to ensure the avoidance of these problems can be very costly.

The existing regulatory regime gave priority to existing satellite systems, and the non-space faring nations, mostly developing countries, saw it as limiting their access to the GSO and the frequency spectrum. Although the developing countries did not have any financial and technical resources to utilize satellite technologies, they wanted to ensure that they would not be precluded from access in the future.

One approach that several developing countries decided to take was that they declared their sovereignty over portions of the GSO. In 1975, Colombia announced a claim of sovereignty

over a portion of the geostationary orbit above its territory. In 1976, a meeting of the equatorial States was convened, and representatives from Brazil, Colombia, Congo, Ecuador, Indonesia, Kenya, Uganda and Zaire signed the Bogotá Declaration,⁴³ proclaiming their sovereignty over their respective portions of the orbit. Needless to say, these claims were rejected by the developed countries and did not receive much support from other developing countries. This issue was first raised in the United Nations General Assembly and was subsequently introduced in COPUOS where it still continues to be discussed in the Legal Subcommittee in the context of the question of the definition and delimitation of outer space.⁴⁴ Lack of support from other countries has led the equatorial countries to moderate their views on this matter, and most equatorial countries have moved away from the position stated in the Declaration.

Two opposite view-points are also prevalent on this issue. The first is put forward by developing countries or countries which have not had the financial or technical resources to place a communications satellite in orbit. They say that the geostationary orbit requires a special legal regime to regulate access to and utilization of the orbit. As noted earlier, some countries, particularly those whose national territories lie along the equator, have claimed that they should have special access or a reserved right to this orbit. The opposing view is that the legal regulations of the geostationary orbit are inseparably linked with the ITU which has the sole competence for the coordination and regulation of the radio frequency spectrum. In addition, it has been argued that any type of reservation or an *a priori* claim to the geostationary orbit would amount to an appropriation of outer space which is prohibited under Article II of the Outer Space Treaty.⁴⁵

At the last session of COPUOS and its Legal Subcommittee in 1997, in an attempt to break the deadlock in the discussions, Germany submitted a working paper entitled "Draft resolution: request to the International Telecommunication Union: ensuring equitable access to the geostationary satellite orbit". However, on the basis of exhaustive discussions held at both the Legal Subcommittee and the Committee, the working paper was withdrawn as it became evident that the differing viewpoints

remained which did not allow for a consensus compromise to be reached.

The primary - and most successful - thrust of Third World action has been at the International Telecommunication Union (ITU), the specialized United Nations agency that coordinates orbital slots for communication satellites and registers radio frequency assignments to avoid harmful interference between radio signals.⁴⁶ Although the ITU does not have authority to enforce coordination of orbit positions or radio signals, it does provide the framework for establishing the procedures for coordination agreed upon at specialized conferences known as World Administrative Radio Conferences (WARCs). It is at the WARCs in particular that Third World countries have sought to change regulation procedures so that they would be guaranteed access to GSO.⁴⁷ One major milestone in the effort made by developing countries to bring positive change to ITU regulations was, for example, achieved in the adoption of Article 33 of the 1982 ITU Nairobi Convention.⁴⁸ The Article laid down the principle that "radio frequencies and the geostationary satellite orbit are limited natural resources and that they must be used efficiently and economically ... so that countries or groups of countries may have equitable access to both, taking into account the special needs of developing countries and the geographical situation of particular countries".⁴⁹

Another major milestone of the work of the developing countries during the WARCs was the addition to the international regulatory regime for radio communications that provided for an allotment plan for predetermined arcs and bands. At the 1988 WARC where this plan was adopted, the countries present reviewed and revised existing resolutions and recommendations associated with international radio regulations and adopted new Resolutions and Recommendations in the Final Act.⁵⁰ These Acts, which entered into force on 16 March 1990, marked an important step for the developing world in regulating the use of the frequency spectrum and the geostationary orbit.

VIII. Conclusions

The United Nations, from the very beginning, has been the primary law-making

instrument in the field of outer space, to ensure that the wealth of space is shared by all nations, and not just a few. Space is no longer dominated by a mere handful of countries. Over 150 nations, most of these from the Third World, now directly or indirectly use space technology for national development.

The initial thrust and emphasis of space-law making by the developing countries was two-fold: to ensure that space was not used for military purposes and that the space powers did not extend their colonial ambitions to the new environment.

As space applications began to develop, the Third World countries became concerned that this new technology, over which they had very little control, could be used to dominate them socially and economically. For instance, they felt that direct broadcasting satellites operated by the space powers would amount to cultural imperialism, and remote sensing satellites would result in exploitation of their natural resources. Therefore, their space law-making emphasis grew, to limit the use of this technology.

However, increasing cooperation between the space powers and developing countries have long laid rest to these fears, and the Third World is becoming involved in all aspects of space exploration and use, and increasingly so in the development of space law.

From the view-point of the developing countries, the more recent underlying drive behind their law-making efforts, whether relating to the geostationary orbit or international space cooperation, has been to reduce the ever-growing technological gap between them and the developed countries. By reversing the trend, at least to some degree, they could share in the benefits of space activities.

For those countries that have not implemented their own space activities, the possibility of preclusion from launching satellites and from realizing the benefits of the technology represent a major handicap in their future national development. The countries of the Third World, by actively participating in the law-making process of space law, have sought to mitigate these disadvantages as far as possible, thereby ensuring that their current, and future, interests in space are safeguarded.

Looking to the future, it is certain that the developing countries will continue to place emphasis in space law-making on issues such as

sharing of space benefits. However, those countries, coming from the Third World, that now have space capabilities of their own, for instance as satellite owners or with launch capability, will develop a different set of priorities and have different points-of-view, in areas, for example, such as space debris. This could possibly lead to a technological gap within the Third World countries themselves, which will have its own emphasis in the motivation of developing countries in space law-making. An additional point to be considered is that an increase in the complexity of space technology has led to a parallel increase in the complexity of space law-making, for example, in fora such as the ITU. There is a possibility that many developing countries, because of a paucity of technical experts, have been unable to put forward their points-of-view and contribute in the law-making process in these highly specialized fields. Hopefully, this will not happen, and the countries of the Third World are as active in the development of space law in the 21st century, as they were in this century.

ENDNOTES

1. *Charter of the United Nations*, Done at San Francisco on 26 June 1945, entered into force on 24 October 1945, 24 U.S.T. 2225, T.I.A.S. No. 7739, at Art. 13(1)(a).
2. The role of the United Nations in the progressive development of space law began with its resolution 1721 (XVI)A of 20 December 1961, in which the General Assembly stated, for the guidance of States in their exploration and use of outer space, that international law, including the Charter of the United Nations, applied to outer space, and that it was free for exploration and use by all States and not subject to national appropriation.
3. *See*, Resolution 1348 (XIII) of 13 December 1958. The General Assembly, "[c]onsidering that an important contribution (could) be made by the establishment within the framework of the United Nations of an appropriate international body for cooperation in the study of outer space for peaceful purposes", set up the Committee, requesting it to report on, *inter alia*, the following: The activities and resources of the United Nations, of its specialized agencies and of other international bodies relating to the peaceful uses of outer space; ... and, the future organizational arrangements to facilitate international

co-operation in this field within the framework of the United Nations.

4. See, the Statement by the Chairman of the Committee, made on 29 March 1962: Doc. A/5109 of 30 March 1962 at para. 4 and Doc. A/5181 of 27 September 1962 at Annex I [hereinafter *Doc. A/5109* and *Doc. A/5181*, resp.]. The S&T held its first session in May/June 1962: see, Doc. A/AC.105/5 of 3 July 1962, "Report of the Scientific and Technical Subcommittee on the Work of its First Session (28 May-13 June 1962)" [hereinafter *S&T 1st*]. The LSC also held its first session in this period: see, Doc. A/AC.105/6 of 9 July 1962, "Report of the Legal Subcommittee on the Work of its First Session (28 May-20 June 1962)" [hereinafter *LSC 1st*].

5. G.A. Res. 1962 (XVIII), adopted on 13 December 1963. The draft proposals for this text submitted to COPUOS by several States are reproduced in the *Official Records of the General Assembly*, 17th Session (1962), Agenda Item 27: see Doc. A/5181, Annex III A and E, Doc. A/C.1/879 and Doc. A/C.1/881, for the USSR, UAR, UK and US proposals, respectively. See also, LSC 1st, *id.* at para. 11 (1) for the Soviet proposal, Doc. A/AC.105/12 of 6 May 1963, "Report of the Legal Sub-Committee on the Work of its Second Session (16 April - 3 May 1963) to the Committee on the Peaceful Uses of Outer Space" at Annex E, F and G for the UAR, UK and US proposals, resp. [hereinafter *LSC 2nd*]. A discussion of these drafts continued for these two sessions of the LSC, and the General Assembly adopted the 9-paragraph Declaration at its 18th session later in the year.

6. These Principles, in addition to the "Declaration" Principle of 1963 and the five outer space treaties can be found in Doc. A/AC.105/572/Rev.2, *United Nations Treaties and Principles on Outer Space*.

7. UN Doc. A/AC.105/C.2/SR.29-37 at 78.

8. For the contribution that developing countries made to the debate on this question, see, in particular, UN Doc. A/AC.105/L.6 of 14 September 1962, the Working Paper, "Draft Code of International Cooperation in the Peaceful Uses of Outer Space", submitted by the UAR (as Egypt was then called). Also see the statements made by the delegations of Argentina (Doc. A/AC.105/C.2/SR.60), the UAR (Doc. A/AC.105/C.2/SR.62), India, Brazil and Iran (Doc. A/AC.105/C.2/SR.71 and Add. 1) and Tanzania and Ceylon (as Sri Lanka was then called) (Doc. A/PV.1499).

9. UN Doc. A/C.1/PV.1493.

10. Statement of Mr Krishna Rao, A/AC.105/C.2/SR.71 and Add. 1.

11. See, Doc. A/AC.105/C.2/SR. 71 and Add. 1, Statement of Mr Krishna Rao, and A/C.1/PV.1493, statement of Mr Parthasarthi.

12. See, e.g., Argentina's draft proposal, WG.I/24/Rev.1, reproduced in N. Jasentuliyana and R.S.K. Lee (eds.), *Manual on Space Law: Vol. III* (Dobbs Ferry, NY: Oceana Publications, 1981) at 125 [hereinafter *Manual III*]. Article 5 (5) of the Agreement provides that, "Expenses incurred in fulfilling obligations to recover and return a space object or its component parts ... shall be borne by the launching authority.

13. For example, the delegate of Mexico, Mr. Francoz Rigalt, proposed that an arbitration commission should be established to determine, in the event of controversy, whether a launching of a spacecraft, whose crew was to be returned, had been in accordance with the "Declaration" on legal principles on outer space (G.A. Res. 1962 (XVIII) of 13 December 1963).

14. And so it does. See, Liability Convention, at Article II which states: "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 in flight."

15. Article IV.

16. See for example, the statements made by Ambassador Cocca in the Legal Subcommittee, Doc. A/AC.105/C.2/SR.201 and SR.203, reproduced in *Manual III*, *supra* note 12 at 675 and 680.

17. See, statement of Ambassador Cocca in Doc. A/AC.105/C.2/SR.250, in N. Jasentuliyana and R.S.K. Lee (eds.) *Manual on Space Law, Vol. IV* (Dobbs Ferry, NY: Oceana Publishers, 1981) at 151 [hereinafter *Manual IV*], where he recalls that the concept, "which had gained ground in other spheres of international law, had been expounded and used for the first time by the Legal Subcommittee".

18. See, Doc. A/AC.105/C.2/SR.75 of 13 November 1967.

19. See, Doc. A/C.1/PV.1515 of 1 November 1967 and Doc. A/C.1/PV.1516 of 1 November 1967.

20. Article 11(1), which states: "The moon and its natural resources are the common heritage of mankind ...". *But also see, infra*, the Bogotá Declaration of 1976, which was the first official outer space document to apply the CHM Principle.

21. *United Nations Convention on the Law of the Sea*, Opened for signature at Montego Bay on 10 December 1982, entered into force 16 November 1994, (1982) 21 ILM 1261; Cmnd. 8941 [hereinafter *UNCLOS*]. Article 136 states: "The Area and its resources are the common heritage of mankind."

22. *Id.* at 459.

23. *Id.*

24. *See*, I.A. Vlastic, "Remote Sensing of the Earth by Satellites" in N. Jasentuliyana and R.S.K. Lee, *Manual on Space Law, Vol. I* (Dobbs Ferry, NY: Oceana Publications, 1981) at 311 [hereinafter *Manual I*]. *See also*, M. Benkő *et al*, *Space Law in the United Nations* (The Netherlands: Martinus Nijhoff, 1985) 18-29.

25. G.A. Res. 2453 (XXIII) of 20 December 1968 approved the creation, by COPUOS, of the Working Group on Direct Broadcast Satellites.

26. "Elaboration of Draft Principles Governing the Uses by States of Artificial Earth Satellites for Direct Television Broadcasting", A/AC.105/C.2/L.117 of 15 February 1979. Their approach took account of existing technical regulations and balanced the concept of free flow of information with the principle of sovereignty of States; they had tried to allow for potential beneficial contributions, while giving appropriate consideration to the concern about undue unilateralism or abuse; one of the corner-stones of their draft was the principle that international cooperation should form the basis for all direct television broadcasting by satellites; if such a principle were strictly observed, there would remain little cause for international concern about undesirable broadcasting; in addition, true cooperation implied beneficial effects for all States interested in an orderly development of the technology: *see*, the statement by the Swedish delegation, Doc. A/AC.105/127, 133 and 134; A/AC.105/C.2/L.102, reproduced in *Manual IV*, *supra* note 17, at 279-80.

27. All treaties and principles are adopted by COPUOS by consensus and then recommended to the General Assembly, which normally adopts them, also by consensus. Since all regions of the world are represented in COPUOS, its recommendations are

generally accepted by the General Assembly. For a detailed examination of the consensus principle, *see*, N. Jasentuliyana, "A Survey of Space Law as Developed by the United Nations" in N. Jasentuliyana (ed.), *Perspectives on International Law* (The Hague: Kluwer Law International, 1995).

28. *See*, Doc. A/AC.105/C.2/L.73 of 26 June 1970. The paper can be found in Doc. A/AC.105/85 and 133. On 1 February 1974, Brazil submitted a draft of its own (Doc. A/AC.105/122). On 15 October 1974, these two papers were replaced by a joint Argentina-Brazil working paper submitted to the General Assembly: Doc. A/C.1/1047.

29. *See, e.g.*, the statements by the delegates of Brazil and Argentina in the Legal Subcommittee: A/AC.105/C.2/SR.220, and by Mongolia: A/AC.105/C.2/SR.263, reproduced in *Manual IV*, *supra* note 17 at 402, 407 and 444, respectively. For example, Mr. de Seixas Correa of Brazil stated that international remote sensing implied, in essence, the effective transfer of information on such matters as natural resources between two or more points of the earth's surface. The actual transfer of such information necessarily involved elements relating to the political, military or economic security of the States concerned. In those circumstances, the permanent sovereignty that States exercised over the natural resources of their territory clearly embodied the right to control not only access to information relating to such resources, including data gained through the process of remote sensing, but also the dissemination of the information thus obtained. *Id.* at 403.

30. *See for example*, the American statement in the Legal Subcommittee, Doc. A/AC.105/C.2/SR.222, reproduced in *Manual IV*, *supra* note 17 at 409. Mr. Stowe of the United States observed that some States had expressed concern regarding remote sensing, and that they feared that the communication of data about their natural resources to third States might jeopardize their economic interests or security. It had therefore been suggested that the international community should establish a system under which the communication of data concerning a particular State would be subject to the prior consent of that State. In the opinion of his delegation, such a system would have many disadvantages; it would in no way protect the interests of States which did not have their own remote sensing system, and it would impede the development of international cooperation. If States which conducted remote sensing activities by satellites were not authorized to share freely the data obtained, they would in the end be the only States to derive genuine benefit from the considerable advantages of remote sensing. In many cases, full benefit could be derived from data

only if they were studied on a regional or even global basis. He also noted that it had been said that, in international law, a State was entitled to exercise permanent control over the dissemination and use of any information concerning the natural resources of that State, no matter where that information was gathered, disseminated or studied. In the opinion of his delegation, that had never been the law in the past and could not become the law then.

31. See generally, N. Jasentuliyana, "Article I of the Outer Space Treaty Revisited" (1989) 17 *J. Space L.* 129.

32. The full title of this agenda item was: "Consideration of the legal aspects related to the application of the principle that the exploration and utilization of outer space should be carried out for the benefit and in the interests of all States, taking into particular account the needs of developing countries". For a detailed historical and drafting background of the Outer Space Benefits Principles, see generally, *id.*, and N. Jasentuliyana, "Ensuring Equal Access to the Benefits of Space Technologies for all Countries" (1994) 10 *Space Policy* 7 (1994).

33. The Legal Subcommittee, at its 26th and 27th sessions in 1987 and 1988, resp., had considered and finalized the choice of this new item. See, U.N. Docs. A/AC.105/385, 411 and 430, being the reports of the 26th to 28th sessions of the Legal Subcommittee.

34. See, Report of the 34th session of the Legal Subcommittee, U.N. Doc. A/AC.105/607 of 19 April 1995, for the Working Paper jointly co-sponsored by Brazil, Chile, Colombia, Egypt, Iraq, Mexico, Nigeria, Pakistan, Philippines, Uruguay and Venezuela, "Principles Regarding International Cooperation in the Exploration and Utilization of Outer Space for Peaceful Purposes" (U.N. Doc. A/AC.105/C.2/L.182/Rev.2 of 23 March 1995) [hereinafter *LSC 34th*]. Cuba joined as a co-sponsor of the Paper at the 34th session. In the Working Paper, Principle I, after partly re-stating Article I, paragraph 1, of the Outer Space Treaty, urges all States with space capabilities to promote cooperation with countries with less developed space capabilities. Principle II addresses the issue of ensuring equal access to the applications of space technology. Principle III primarily addresses the question of promoting indigenous capabilities in space science and technology application in developing countries through international cooperative mechanisms and Principle IV refers to the conditions under which such cooperation should be established and implemented. The need to utilize space technology and applications as a vehicle to protect and preserve the Earth and space environments is covered by Principle V. The next

Principle deals with the role of the United Nations and its Programme on Space Applications in international space cooperation.

This Working Paper had its genesis in a Group of 77 paper (U.N. Doc. A/AC.105/C.2/L.162 of 1 April 1987) submitted at the 26th session of the Legal Subcommittee: see, report of the 26th session, *id.* The first version of Working Paper L.182 was submitted at the 31st session of the Legal Subcommittee: see, report of the 31st session, U.N. Doc. A/AC.105/514 at 50. The first revision, L.182/Rev. 1, was submitted in 1993, at the 32nd session (U.N. Doc. A/AC.105/544 at 32). Rev. 2, above, was submitted at the 34th session.

35. The paper, entitled, "Consideration of the legal aspects related to the application of the principle that the exploration and utilization of outer space should be carried out for the benefit and in the interests of all States, taking into particular account the needs of developing countries" (U.N. Doc. A/AC.105/C.2/L.197 of 27 March 1995) is reproduced in *LSC 34th, id.*

36. The statement by the German delegation at the 34th session of the Legal Subcommittee.

37. A/AC.105/C.2/L.182/Rev.3 and A/AC.105/C.2/L.197/Rev.1, respectively. See, the Report of the Legal Subcommittee on the Work of its Thirty-Fifth Session (18-28 March 1996), U.N. Doc. A/AC.105/639 of 11 April 1996, at Annex III, Part B and Part C [hereinafter *LSC 35th*].

38. See "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", U.N. Doc. A/AC.105/C.2/L.202 of 27 March 1996, in *LSC 35th, id.* at 36.

39. The text can be found in U.N. Doc. A/AC.105/L.211 of 11 June 1996.

40. See for example, "The Physical Nature and Technical Attributes of the Geostationary Orbit" (Doc. A/AC.105/203 of 29 August 1977 and the addenda thereto; and Doc A/AC.105/404 of 13 January 1988); R. Jakhu, "The Legal Status of the Geostationary Orbit" (1982) VII *Annals Air & Space L.* 333; P. Abdurrasyid, "The Outer Space Treaty and the Geostationary Orbit" (1987) XII *Annals Air & Space L.* 131.; M.A. Ferrer, "The Use of the Geostationary Orbit" (1977) 20 *Coll. L. on Outer Space* 216; and J.F. Galloway, "Telecommunications, National Sovereignty and the Geostationary Orbit" (1977) 20 *Coll. L. on Outer*

Space 226.

41. The second para. of Art. 1 of the Outer Space Treaty states that, "Outer space, including the moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies."

42. Art. 45, para. 1, of the Constitution and Convention of the International Telecommunication Union, Geneva, 1992, reads as follows: "All stations, whatever their purpose, must be established and operated in such a manner as not to cause harmful interference to the radio services or communications of other Members or of recognized operating agencies, or of other duly authorized operating agencies which carry on a radio service, and which operate in accordance with the provisions of the Radio Regulations." The 1992 Geneva Constitution replaced and superseded all previous Conventions of the ITU.

43. *Declaration of the First Meeting of Equatorial Countries*, signed in Bogotá, 3 December 1976. Reproduced in N. Jasentuliyana & R.S.K. Lee (eds.), *Manual on Space Law, Vol. II* (Dobbs Ferry, NY: Oceana Publications, 1979) at 383 *et seq.*, and (1978) 6 *J. of Space L.* 193 *et seq.* In the Declaration, the equatorial countries, stating that the geostationary orbit was not part of outer space, proclaimed their sovereignty over those segments of the orbit that were above their territories.

44. In this regard, the Bogotá Declaration states that, "[t]here is no definition of outer space that is valid and satisfactory for the international community such as might be cited to support the argument that the geostationary orbit is included in outer space." *Id.* at section 4.

45. See, the Outer Space Treaty at Art. II, which states that, "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."

46. See, for example, R. Jakhu, "The Evolution of the ITU's Regulatory Regime Governing Space Radiocommunications Services and the Geostationary-Satellite Orbit" (1983) VIII *Annals Air & Space L.* 381; F. Lyall, "Law of Satellite Communications", in N. Jasentuliyana (ed.), *Space Law: Development and Scope* 114 (Westport, Conn.: Praeger Publishers, 1992); D.M. Leive, *International Telecommunications and International Law: The Regulation of the Radio*

Spectrum (Leiden: A.W. Sijthoff, 1970); and, J.G. Savage, *The Politics of International Telecommunications Regulation* (San Francisco and London: Westview Press, 1989).

47. For greater details, see, N. Jasentuliyana, "The International Regulatory Regime for Satellite Communications: The Meaning for Developing Countries" (1994) 2 *Asian Yearbook of Int'l L.* 49.

48. International Telecommunication Convention, Final Protocol, Nairobi, 1982.

49. *Id.* at Article 33 (2), now Article 44 (2) of the Constitution and Convention of the International Telecommunication Union, Geneva, 1992, which supersedes and replaces all previous Constitutions of the ITU.

50. Final Act, adopted by the Second Session of the World Administrative Radio Conference on the Use of the Geostationary Satellite Orbit and the Planning of the Space Services Utilizing It (ORB-88), Geneva 1988.