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International Legal Framework Governing space activities - Current Status and Trends

THE DECLARATIONS AND LEGAL PRINCIPLES ON OUTER SPACE TODAY

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I Introduction

When the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies[1] (or Treaty on General Principles, as usually referred to) came into force, the United Nations began the progressive development and codification of a new branch of international law which departed, in many ways, from the traditional principles of international law applied on Earth. Highly influenced by the advances of science and technology it may be assumed that the changes introduced thereby are modelling, inter alia, a modern concept of sovereignty far more consistent with the world of today. In fact, the only time the term 'sovereignty' is mentioned in the 1967 Space Treaty is to deny, in no uncertain terms, any possibility of claims of sovereignty based on use or occupation, or by any other means[2]. I shall come back to this later but it should be said from the outset that this was an effective way of minimising a powerful source of international tension.

The language of the Space Treaty, and its substantial principles, is reminiscent of the 1959 Antarctic Treaty, i.e. no claims of sovereignty, non appropriation, peaceful purposes, international cooperation, freedom of access and scientific investigation, demilitarisation, international responsibility and so forth. Yet, unlike the Antarctic system which applies to an area south of 60° South latitude, the Space Treaty extends its force to unlimited areas outside national jurisdiction, such as outer space, the moon and other celestial bodies. Moreover, no time limits are set in the Space Treaty, along the lines of article XII, 2, (a) of the Antarctic Treaty which envisages a Conference of the Parties -for reviewing its operation- to be held as soon as practicable, at the request of any of them, thirty years after the entering into force of the Treaty [3]. Finally, and unlike the drafting of the Antarctic system, the Space Treaties were negotiated and adopted in the framework of the United Nations.

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[1] Hereinafter the "1967 Space Treaty", the "Treaty on General Principles" or, simply, the "Space Treaty". The text of this Treaty was embodied in UNGA Resolution 2222 (XXI) of 19 December 1966.
[2] This provision is supplemented by article I of the Space Treaty proclaiming freedom of access to all areas of celestial bodies.
[3] This possibility, however, never materialised.

II The Background

All in all the Treaty on General Principles meets, if not entirely today, the main legal issues arising from the use of outer space. It enshrines the legal principles invoked in previous UNGA Resolutions on outer space, particularly the 1963 Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, adopted by UNGA Resolution 1962 of 13 December 1963 which, by the way, is the only one to use the term "legal", as applied to the principles, in its title.

The feeling that a more precise legal framework was needed for the general principles proclaimed by the 1967 Space Treaty eased the way for the adoption of four subsequent treaties, currently in force[4], three UN sets of Principles on DBS, Remote Sensing and NPS, and other Resolutions as well. Of particular importance is Resolution 51/122 of 13 December 1996 adopting a Declaration on International Cooperation in the Exploration and Use of Outer Space for the benefit and in the interest of all states, taking into particular account the needs of developing countries.

1. The Treaties

The Astronauts Agreement (usually referred to as the Rescue Agreement) followed shortly after the 1967 Treaty and is in force since 1968. It developed further article V of the 1967 Space Treaty whereby States Parties shall regard astronauts as the 'envoys of mankind' who should promptly and safely be returned to the State of registry of their space vehicle. The Rescue Agreement has strong humanitarian implications with most of its duties incumbent upon states with the appropriate technology for doing so. Its principles may provide a useful basis if and when the drafting of rules governing NEOs is decided. It should be noted that the expression 'envoys of mankind' was not repeated in the Rescue Agreement in any of its sections.

The adoption of all five Space Treaties was not devoid of political pressures and one should not escape the realities of the political scene in which they were negotiated and adopted. This is particularly so with respect to the two first Space Treaties concluded prior to man's first landing on the moon, after thorny negotiations.

The situation was not too different regarding the following space treaties, namely the 1972 Convention on International Liability for Damage caused by Space Objects, which took eight years of patient elaboration, the 1975 Convention on the Registration of Objects Launched into Outer Space , and the 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.

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[4] These treaties are the 1968 Agreement on the Rescue of Astronauts of 19 December 1968, the Return of Astronauts and the Return of Objects launched into Outer Space (UNGA Resolution 2345 (XXII) of 19 December 1967), the 1972 Covention on International Liability for Damage Caused by Space Objects, (UNGA Resolution 2777 (XXVI) of 29 November 1971), the 1975 Convention on Registration of Objects Launched into Outer Space (UNGA Resolution 3235 (XXIX) of 12 November 1974, now supplemented by UNGA Resolution 62/101 of 17 December 2007) and the 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (UNGA Resolution 34/68 of 5 December 1979).

During the process of negotiation of these treaties the political winds were blowing in every direction in the international arena. All these Space Treaties were adopted, and entered into force, during the time of the Cold War. This implied a significant step forward in the field of treaty-adoption having in mind the harsh differences which then separated the Western and Eastern blocs. However, international cooperation seemed to be aiming at becoming something more tangible than a mere aspiration or expression of ideals in the field - as had been the case in earlier days and so reflected, for instance, in the UN Charter, the Antarctic Treaty, the 1967 Space Treaty and some of the UN Principles on Remote Sensing[5].

The UN Space Treaties, as will be seen, went a long way in elucidating important legal issues but were not a complete answer to new developments.

Moreover, the issue of space debris remained outstanding as article IX of the Space Treaty hardly covered the emerging legal questions except for a vague duty of international cooperation. On this topic the International Law Association (ILA) drafted an International Instrument adopted at its 66th Conference (Buenos Aires 1994) [6] which is possibly one of the first of its kind on the private level and has gained support from the doctrine as a tool for discussing the legal aspects of space debris at governmental level. FurthermoreIn those years the commercial sides of space activities were growing and new space technologies were becoming available to developing countries which, by means of specific agreements based on international cooperation, were creating a unity of action which allowed them, progressively, a position in outer space activities which was, individually, beyond their reach.

The UN Space Treaties were reviewed in 2000-2002 by the Space Law Committee of the (ILA) to establish whether they were still consistent with the new international and regional scenarios. At the time, the international community was well into a phase of exploitation of outer space -of which remote sensing and space communications are good examples- and yet the 1967 Space Treaty had not mentioned the term "exploitation" one single time.

The net conclusion from the ILA was that only minor -perhaps cosmetic- adjustments were required by means of a separate instrument or UNGA Resolution but leaving intact the main principles underlying these Treaties.

2. Principles and Declarations.

(a) Principles governing the Use by States of Artificial Earth Satellites for international direct television broadcasting

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[5] Particularly Principles V (on participation) and VII (technical assistance). Cf. Kerrest, Armel who points out that these two Principles amount to no more than a duty to negotiate but not necessarily to reach agreement. See *REPORT OF THE SEVENTY-FIRST CONFERENCE OF THE ILA,* Berlin 2004, Report of the Space Law Committee on *The Legal Aspects of the Privatisation and Commercialisation of Space Activities - Remote Sensing and National Space Legislation,* pp.733-772, at p. 746.

[6] See REPORT OF THE SIXTY-SIXTH CONFERENCE OF THE ILA, Space Law Committee, Report and Final Text by the present writer, Buenos Aires 1994, pp.305-326. This Instttrument is appended herewith as Annex to this presentation.

Following the adoption of the Moon Agreement -which marked the end of the treaty-making phase of the United Nations- this organisation embarked in the elaboration of sets of Principles addressing specific aspects of activities in space. First came the Principles on international direct television broadcasting in 1982 [7]. On this occasion consensus on the set of Principles was not possible and the draft was put to the vote. It was enthusiastically supported at that year's UN General Assembly by developing countries with the abstention, or negative vote, of the industrialised world. It should be noted that these Principles, unlike the wording of the 1963 Declaration of Legal Principles, were not said to be "legal" principles in their title [8]. Nor does the word "legal", as pointed out earlier, appear in any other UNGA Resolution, whether adopted prior or subsequently to the UN Space Treaties.

(b) The UN Principles Relating to Remote Sensing of the Earth from Outer Space

Four years later, the UN Principles Relating to Remote Sensing of the Earth were agreed upon without dissent [9]. They might not be called "legal" in the title but still their validity is unquestionable and some of them may be seen as part of customary international law today.

In recent years this question gave cause for deep thought to the publicists. For example, the ILA Space Law Committee addressed a number of controversial questions at the Berlin (2004), Toronto (2006) and Rio de Janeiro (2008) Conferences. Likewise the University of Cologne under Project 2001 and 2001 Plus, the National Council for Scientific Research of Argentina (Conicet) in the framework of the University of Buenos Aires and the Space Law Center of the University of Mississippi, among others, were deeply involved. Briefly, the reasoning unfolded as follows[10].

According to Article I of the 1967 Space Treaty, remote sensing from space comes under a régime of complete freedom. Yet, from the first stages a sharp confrontation divided the industrialised and developing world. Whilst the former group of countries generally believed that full freedom was indisputable, developing countries considered that the operation of earth observation satellites over the territory of third states was in breach of the principle of sovereignty and, thus, the prior consent of the sensed state was essential. Such the contention of these countries during the seventies.

In the eighties a feeling began to be sensed whereby the sovereignty issues arising from remote sensing were gradually losing ground as a result of the growing activity of private entities in space. Developing countries -albeit careful not to give up sovereign rights in the new area- began to access the new technology on an increasingly wider scale. The technical aspects of remote sensing and the specific clauses contained in cooperation agreements of regional and bilateral scope appeared to take priority over matters which, in the earlier days, had been highly sensitive. In many ways these agreements were filling

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[7] UNGA Resolution 37/92 of 10 December 1982 adopted the *Principles governing the use by states of artificial earth satellites for international direct television broadcasting.*

[8] Cf. B. Cheng, STUDIES IN INTERNATIONAL SPACE LAW, Clarendon Press Oxford 199, pp.154-5.

[9] UNGA 41/65 of 3 December 1986. This Resolution returned to the consensus procedure.

[10] See the ILA Reports to these Conferences by the present writer in consultation with the members of the ILA Space Law Committee, published in book format in London. These may also be consulted on the ILA website (www.ila-hq.org , click on "committees" and then on "Space Law").

gaps left by the 1986 Principles therefore providing a good example of progressive development of the law.

The nineties were streamlined by a sharp move towards commercial space activities. The activity of private companies in space was now giving way to a more complex but clearer scenario, both from the legal and political standpoint. One of the most welcomed consequences was that, as the principle of state immunity weakened -because of the activity of private entites in space- , dispute settlement procedures were eased. This was no doubt paving the way for future agreements which, in past decades, had been discouraged by the risk of a party -acting *de jure imperii*- invoking a clause of sovereign immunity in the course of the implementation of an agreement.

In industrialised countries the doctrine seemed inclined to avoid premature solutions, particularly in fields where claims had barely been raised. Likewise, the political moment indicated that the idea of introducing changes or binding rules on remote sensing would not be seen with favour. In other words, sovereign states preferred to have guidelines or codes of conduct which could be enshrined in UNGA Resolutions but would not be binding. Unless, of course, they were declaring international customary law.

All of us are aware that the forceful arguments advanced by developed and developing countries for and against having new law on the subject will continue to be. Whatever the outcome, the approach should be cautious and should avoid excessive details and regulations unlikely to survive the times. Nevertheless, it is sensible to think that some of the 1986 Principles need some clarification in order to be useful in the present state-of-the-art.

In this context the prevailing doctiene, in line with results stemming from the -previously mentioned- Universities of Cologne, Mississippi and Buenos Aires, the ILA and others, concurred that international cooperation had an essential role to play, particularly in the ironing out of differences between the industrialised and developing world even though the obligation (or duty) of international cooperation was not altogether clear in some of the Principles.

Unlike Principles V (participation) and VII (technical assistance), Principle XII -on the right of access to information on the part of sensed states- highly controversial in its initial stages- has evolved. Indeed, with the growth of commercial space activities, Principle XII is nowadays less dramatic because developing countries, initially "sensed countries" only, have gradually become "sensing countries".

In this quest for greater legal certainty the doctrine seems to agree, that the political moment is not the best for the introduction of amendments to the Principles and, even less so, for the drafting of a binding international instrument to replace them.

(c) Principles Relevant to the Use of Nuclear Power Sources in Space

The latest set of UN Principles, entitled Principles Relevant to the Use of Nuclear Power Sources in Space[11], was adopted in 1992 and the topic is currently on the agenda of the LSC, as a single item for discussion, for review and possible revision. Having in mind that the STSC has implemented a new three-year work plan on the matter (2007-2010), which carries out its task in close cooperation with the International Atomic Energy Agency, it would appear that, within the LSC, any initiative for revision of the Principles prior to the conclusion and publication of that work plan is premature.

(d) Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States Taking into Particular Account the Needs of Developing Countries

This Declaration was adopted in 1996[12] and carries a key provision in paragraph 2 whereby States are free to determine all aspects of their participation in international cooperation in the exploration and use of outer space on an equitable and mutually accepted basis. Contractual terms in such cooperative ventures should be fair and reasonable and they should be in full compliance with the legitimate rights and interests of the parties concerned as, for example, with intellectual property rights.

This Declaration is paramount for the encouragement of international cooperation where the commercial uses of outer space are concerned.

III The evolving principles of international space law

Whereas certain fundamental principles at the root of any human activity remain unchanged in contemporary international law, for instance *pacta sunt servanda,* good faith and international responsibility (which entails the obligation of full compensation) others are permanently evolving as a result of technological developments.

I shall take some of these principles in turn.

Principle of international responsibility in the 1967 Treaty on General Principles (articles VI and VII)

This is one of the fundamental principles governing activities in space and entails the duty of full restoration and was analysed by the Space Law Committee of the International Law Association (ILA) during 2000-2002. The conclusions and recommendations, as expressed earlier, were adopted at the 70th ILA Conference (New Delhi 2002).

On this basis, only slight changes to the 1967 Treaty were recommended to be by means of a separate instrument which, in addition to reinforcing the Treaty provisions, should provide some clarification on the meaning of certain terms, viz. the common benefit clause,

[11] Resolution 47/68 of 14 December 1992.
[12] Resolution 51/122 of 13 December 1996.

the obligation of registration and the establishment of binding mechanisms for dispute settlement. Minor adjustments were suggested to articles VI and VII -without affecting the general principles upon which the 1967 Treaty was built- stating that States Parties should enact national legislation on authorisation and continuing supervision of space activities carried out by non-governmental entities and that States Parties agreed that the use of outer space and celestial bodies was inclusive of all commercial uses[13].

Non-appropriation, ownership and sovereignty - Freedom of access - Right of access to information

The principle of non-appropriation is again in the limelight. To review the scope and implications of 'ownership' in the 1967 Space Treaty it is helpful to go back for a moment to the time of its drafting.

France, already in those days, was not too happy with the wording of Article II because of the risks of ambiguity between the principle of non-sovereignty -a concept of public law- and that of non-appropriation, which came under private law. The French delegate stated,

Je pense en particulier aux risques d'ambigüité existant entre le principe de non-souveraineté -qui relève du droit public- et celui de la non-appropriation émanant du droit privé (A/AC.105/PV.44, p.41 (19-9-66).

In this context I am strongly reminded of Bin Cheng's views, who followed the drafting process very closely. He considered this ambiguity was not so as the principle of non-appropriation embodied in Article II was the same as that traditionally applied to the high seas. It simply meant that, as among States Parties, none will be entitled to exercise territorial jurisdiction, no matter on what basis, over any part of outer space or celestial bodies[14].

Under the 1967 Space Treaty both outer space and celestial bodies are declared *res extra commercium* (Art. II and Art. I, paragraph 2 and 3) and freedom of those areas for scientific investigation, exploration and use is a mere consequence of their status as *res extra commercium*[15].

It is essential to have in mind that, since there is no territorial jurisdiction in outer space or on celestial bodies there can be no private ownership of parts thereof which presupposes the existence of a territorial sovereign itself competent to confer such titles of ownership. Hence, outer space and celestial bodies are not subject to national appropriation nor are

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[13] *REPORT OF THE SEVENTIETH CONFERENCE OF THE ILA, New Delhi 2002..* See chapter by the *Space Law Committee, Final Report on the Review of Space Law Treaties in View of Commercial Space Activities*, by the present writer, pp. 192-227, at pp.194-6.
[14] Le Traité de 1967 sur l'Espace, Journal de Droit International, Clunet, N°3, 1968, pp. 532-645, at p. 568.
[15] Ibidem, p. 564.

they subject to appropriation under private law[16]. This contention remains valid in the world of today and forms part of a statement issued by the International Institute of Space Law during the 48th Session of the LSC in March-April 2009.

The statement of the French delegation, however, showed concern about the possibility of a semi-permanent occupation of parts of outer space and, particularly, celestial bodies for exploitation purposes, a matter which required further study and, if the example of the continental shelf was taken as a guide, also further regulation[17].

Indeed, the time would now seem ripe to start discussing this kind *of sui generis* 'ownership' mentioned by France - possibly, to avoid confusion, under a different name- as space activities envisaged on celestial bodies are gaining momentum. The IISL and the ILA appear, inter alia, a right forum to start addressing the question and dealing with its intricacies.

However, for the general public and to meet the objective of creating awareness, it is considered that the contents of the original statement by Bin Cheng in 1968, reconfirmed by the IISL in 2009, are clear enough.

As to the long-standing controversy over the right of access to information, as proclaimed in Principle XII on Remote Sensing, and which divided the industrialised and developing countries, it has nowadays lost its intensity as a result of the increasing participation of private entities in space activities. State practice is clearly showing that, by means of cooperation agreements, developing countries are taking an increasingly active part in space activities. Most of them are, today, both "sensed" and "sensing" states at the same time.

International cooperation in outer space as an engine for development [18]

A new specific example of international cooperation is Mission SAC-D/Aquarius. At the time of writing these lines a meeting of this Mission was in progress in Buenos Aires with the participation of experts from the US, Italy, Japan and Argentina.This joint group of specialists is responsible for the development of 41 projects on board the Mission, of which 15 are Argentine projects and, for the first time, subsidised by this country. The rest belong to Italy and Japan.

This satellite, both designed and built in Argentina, is an observatory for the study of oceans, the atmosphere and land and shall orbit the Earth 12 times a day[19]. Most

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[16] In this sense, Belgium had taken note of the interpretation of the term "non-appropriation" advanced by several delegations -apparently without contradiction- as covering both the establishment of sovereignty and the creation of titles to property in private law (A/AC.105/C.2/SR.719 and Add.1 (4-8-1966), p. 7. France spoke of the prohibition of "any claim to sovereignty or property rights in space" (A/C.1/SR.1492 (17-12.66), p.429. Quoted by Bin Cheng p. 574 op.cit. in note 14 *supra*.

[17] Op.cit. in note 14 *supra,* pp. 574-576.

[18] This is the title of a thesis in Spanish *(La cooperación internacional en el campo espacial como motor del desarrollo)*, submitted in 2009 by Ph.D candidate Guillermo Duberti to the University of Belgrano, Buenos Aires, Argentina, and graded with honours.

importantly, it carries a high technology device on board to measure the salinity of sea water and provides a weekly image of all the oceans in the world.

Also in 2009, and in the area of education, the national space agency of Argentina (CONAE) with the support of the Italian Space Agency, is holding courses at the postgraduate level leading to a Master Degree on "early warning for emergencies" [20].

Likewise, the doctrine is an important element to encourage international cooperation. Interesting, for their implications, are the doctoral theses on space law matters from all over the world and increasingly, now, from developing countries.

To close, and drawing from personal experience veering from developing to industrialised countries, Argentina and the United Kingdom in particular, some common denominators and a few points of contention will follow.

IV Perceptions and Conclusions

1. There is more technology and space activity than the layman -or detached observer- may be aware of and less legal knowledge than desirable.

2. In this context, Article III of the 1967 Space Treaty is of major importance when providing that space activities shall be carried out in accordance with international law and the UN Charter. This should be understood in its widest sense, i.e. treaty law, customary international law and general principles of law as enshrined in article 38, paragraph 1, of the ICJ Statute.

3. Whilst certain fundamental principles are at the root of human activity in space, such as *pacta sunt servanda,* good faith and international responsibility -it being a legal absurd to deny or ignore them- other principles are constantly evolving to keep pace with technological development.

4. Clear illustration of evolving principles in their application to space law are, among others, international responsibility, freedom of access, non-appropriation and sovereignty.

5. International cooperation deserves more than one paragraph. It is mentioned in all UN Space Treaties and UN Principles and other UN Resolutions. Suffice it to streamline these instruments to recognise this common denominator with ease.

6. International cooperation today is no longer a vague concept or expression of ideals. State practice is day by day revealing concrete examples thereof which are frequent in the private field as well.

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[19] Cf. *Cumbre científica de la misión SAC-D,* La Nación,a leading periodical in Argentina, p.13, 22 October 2009. See also the website of CONAE, the national space agency of Argentina,on www.conae.gov.ar .
[20]Ibidem.

7. Capacity building is an outstanding example of international cooperation by creating awareness on the legal framework governing space activities. In this light, the work COPUOS is now embarked on, for the elaboration of a curricula for the teaching of space law to non-lawyers serving in the UN regional centres, is praiseworthy.

8. International cooperation has impulsed the preparation of a book on space law in the Spanish language, where the current legal framework governing outer space activities is discussed and analysed and to which a number of specialists of renown from all over the world are contributing. This is an effort to create further awareness in Spanish-speaking countries around the globe. The task, conducted from Buenos Aires, forms part of a project presently underway with the auspices of the National Council for Scientific Research of Argentina (Conicet) and shall be published shortly.

9. The growing number of space law courses presently held around the world is equally illustrative of international cooperation. This fact is reflected in the COPUOS Directory - with information on the teaching of space law in public and private universities and other centres in different regions- and also in the doctoral courses available within those institutions.

10. Space debris mitigation is another instance of international cooperation. On the basis of UNGA Resolution 62/17 (December 2007), member states are reporting to the LSC on the domestic measures implemented to mitigate space debris in response to the UN Guidelines on Mitigation of Space Debris. At the private level, the ILA International Instrument on the Protection of the Environment from Damage Caused by Space Debris (66th ILA Conference, Buenos Aires 1994) aims at filling the gaps left by article IX of the 1967 Treaty on General Principles. In the ILA text, international cooperation is given pride of place and is seen as a general obligation underlying the validity of space activities[21].

11. On the basis of specific cooperation agreements on remote sensing, concluded between developing countries and the industrialised world, developing countries are increasingly acceeding the new technologies in spite of the vagueness of Principles V (on participation) and Principle VII (on technical assistance) allowing them, collectively, to take part in space activities which otherwise would be outside their reach.

12. Finally, international cooperation has a major part to play in minimising differences between the developing and industrialised world within the current legal framework applicable to space activities.

[21] This text is hereunder attached as Annex. It is kept under permanent review by the Space Law Committee of the International Law Association to establish whether adjustments are called for as a result of changes in the international and regional scenarios.

Annex

ILA International Instrument on the Protection of the Environment from Damage Caused by Space Debris
(adopted at the ILA 66th Conference, Buenos Aires 1994)

Article 1: Definitions
For the purposes of this Instrument:
(a) "Contamination/pollution" means a human modification of the environment by the introduction of undesirable elements or by the undesirable use of those elements.
(b) "Contamination/pollution" will be considered as synonyms and are inclusive of all harmful elements other than space debris.
(c) "Space debris" means man-made objects in outer space, other than active or otherwise useful satellites, when no change can reasonably be expected in these conditions in the foreseeable future.
Space debris may result, *inter alia*, from:
Routine space operations including spent stages of rockets and space vehicles, and hardware released during normal manoeuvres.
Orbital explosions and satellite breakups, whether intentional or accidental.
Collision-generated debris.
Particles and other forms of pollution ejected, for example, by sol id rocket exhaust.
Abandoned satellites.
(d) "Environment", for the purposes of this Instrument, includes both the outer space and earth environments within or beyond national jurisdiction.
(e) "Damage" means loss of life, personal injury or other impairment of health, or loss of or damage to property of States or of persons, natural or juridical, or property of international intergovernmental organisations, or any adverse modification of the environment of areas within or beyond national jurisdiction or control.

Article 2: Scope of Application
The instrument shall be applicable to space debris which causes or is likely to cause direct or indirect, instant or delayed damage to the environment, or to persons or objects.

Article 3: The General Obligation to Cooperate
1. States and international organisations parties to this Instrument shall cooperate directly, and/or through the pertinent international organisations, to protect the environment and implement this instrument effectively.
2. States and international organisations parties to this Instrument shall take all appropriate measures to prevent, reduce, and control any damage or significant risk arising from activities under their jurisdiction or control which are likely to produce debris.

Article 4: Obligations to Prevent, Inform, Consult, and Negotiate in Good Faith
States and international organisations parties to this Instrument have, in addition to the duties set forth in Article 3, the following obligations:
(a) To cooperate in the prevention of damage to the environment and make every effort to avoid situations that may lead to disputes.

(b) To cooperate, in accordance with their national laws and practices, in promoting the development and exchange of technology to prevent, reduce, and control space debris.
(c) To encourage and facilitate the flow and exchange of information of a scientific, technical, economic, legal, and commercial nature relevant to this instrument.
(d) To hold consultations when a State, group of States or international organisation parties to this instrument have reasons to believe that activities carried out under their jurisdiction or control, or planned to be carried out, produce space debris that is likely to cause damage to the environment, or to persons or objects, or significant risk thereto. Any State or international organisation party to this Instrument may request to hold consultations when it has reasons to believe that the activity of another State or international organisation party to this Instrument produces space debris that is likely to cause damage to the environment.
Refusal to hold consultations, or the breaking up of such without justification, shall be interpreted as bad faith.
(e) To negotiate in good faith which means, *inter alia*, not only to hold consultations or talks but also to pursue them with a view of reaching a solution.
(f) To give special attention, when promoting these activities, to the needs of developing countries.

Article 5: Compatibility with Other Agreements

The rules laid down in this Instrument shall not be considered incompatible with the provisions of other international agreements concerning activities in outer space.

Article 6: Responsibility and Liability (general rule)

The rules laid down in this Instrument concerning responsibility and liability apply to damage caused by space debris in the space environment and, in the absence of other international agreements on the matter, to damage caused to the earth environment.

Article 7: International Responsibility

The State or international organisation, party to this Instrument, that launches or procures the launching of a space object shall bear international responsibility for assuring that national activities are carried out in conformity with the provisions of this Instrument, the 1967 Space Treaty, and the 1972 Liability Convention.

Article 8: International Liability

Each State or international organisation party to this Instrument that launches or procures the launching of a space object is internationally liable for damage arising therefrom to another State, persons or objects, or international organisation party to this Instrument as a consequence of space debris produced by any such object.

Article 9: Dispute Settlement

1. Disputes concerning the interpretation or application of this Instrument shall be subject to consultation at the request of any of the parties to the dispute with a view to reaching a prompt and amicable settlement.
2. Failing this, if the parties to the dispute have not agreed on a means of peaceful settlement within twelve months of the request for consultation, the dispute shall be referred, at the request of any party thereto, to arbitration or adjudication. In such case, the ILA Draft Convention on the Settlement of Space Law Disputes, which is appended as an Annex to this Instrument, shall be applicable, unless a party to this Instrument has excluded such application, in full or in part, by a declaration as provided in paragraph 3 of this Article.
3. Each Party to this Instrument, when signing, ratifying, accepting, approving or acceding thereto, or formally confirming its acceptance, or at any time thereafter, may declare that

it chooses any of the non-binding or binding settlement procedures envisaged in the Annex to this Instrument, or that it excludes in part or in full the application of the Annex.
4. In these procedures it shall be possible, whenever appropriate, to prescribe interim measures binding on the parties in order to preserve rights or to prevent serious damage to the environment, or persons or objects. These measures shall be implemented by the parties without delay.

Article 10: Signature

1. This Instrument shall be open for signature by all States and international organisations at the United Nations Headquarters in New York. Any State or international organisation which does not sign this Instrument before its entry into force may accede to it at any time.
2. This Instrument shall be subject to ratification or formal confirmation by signatory States and international organisations. Instruments of ratification, instruments of accession and of formal confirmation shall be deposited with the Secretary-General of the United Nations.
3. The Secretary-General of the United Nations shall promptly inform all signatory and acceding States and international organisations of the date of each signature, the date of deposit of each instrument of ratification and of accession and the date of each formal confirmation of the present instrument, the date of its entry into force, and other notices.

Article 11: Entry into Force

1. This Instrument shall enter into force among States and international organisations which have deposited instruments of ratification or formal confirmation thirty days after the deposit of the fifth instrument with the Secretary-General of the United Nations.
2. For States and international organisations whose instruments of ratification or accession, or of formal confirmation, are deposited subsequent to the entry into force of this Instrument, it shall enter into force on the date of the deposit of their instruments of ratification, accession, or formal confirmation.

Article 12: Amendments

Any party to this instrument may propose amendments to the Instrument. Amendments shall enter into force for each party to the Instrument accepting the amendment upon their acceptance by a majority of the parties to the Instrument and thereafter, for each remaining party to the Instrument, on the date of acceptance by it.

Article 13: Reservations

No reservations may be made to this Instrument except as provided in Article 9.

Article 14: Review Clause

Ten years after the entry into force of this Instrument the question of the review of the Instrument shall be included in the provisional agenda of the United Nations General Assembly in order to consider, in the light of past application of the Instrument, whether it requires revision. However, at any time after the Instrument has been in force for five years, the Secretary-General of the United Nations, as depositary, shall at the request of one third of the parties to the Instrument and with the concurrence of the majority of the parties, convene a conference of the parties to review the Instrument.

Article 15: Withdrawal

Any party to the Instrument may give notice of its withdrawal from the Instrument one year after its entry into force by written notification to the Secretary-General of the United Nations. Such withdrawal will take effect one year from the date of receipt of this notification.

Article 16: Authentic Text

The original of this Instrument, of which the Arabic, Chinese, English, French, Russian, and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations, who shall send certified copies thereof to all signatory and acceding States and international organisations.

In witness thereof, the undersigned, being duly authorised by their governments, have signed this Instrument, opened for signature at the United Nations Headquarters in New York, on .....