IISL-92-085

ABOUT THE LEGAL DEFINITION OF INTERNATIONAL COOPERATION IN THE EXPLORATION AND USE OF OUTER SPACE

José Monserrat Filho *
Brazilian Association for the Advancement of Science (SBPC)
Brazilian Society of Aerospace Law
Rua Joaquim Murtinho, 772/404, Santa Teresa
Rio de Janeiro, RJ, 20.241, Brazil
Fone: (021) 252-6781. Fax: (021) 541-5342

"The prime objective is to assure, in a lasting way, the means for a dignifying existence to all the passengers of the spaceship named Earth, to those who already inhabit it and to those who will come after... In case of failure, the Earth spaceship, as Fellini's 'La nave' will continue in its route to meet catastrophe".

Ignacy Sachs1

Abstract

This paper deals with the need for a new and broader legal definition of international cooperation, especially in the field of outer space activities, which allows and encourages the real participation of most nations, if not all of them, in the use and exploration of the outer space in the interest of the social-economic advancement of the whole world.

Moral engagement

1. The starting point, as Judge Manfred Lachs wrote, is "the moral engagement that the internationalist jurist assumes to contribute to give the world a more human configuration", and the preventive function of law. This function is even more vital today, when "economical and political relations among States require a new world order to eliminate the abyss that separate the rich from the starved people, and that the international law must be converted into an effective instrument for equality and selfdetermination of nations, and for the establishment of a fairer world economic order".²

The South is financing the North

2. The gap between the few rich countries (North) and the legion of poor countries (South) increases rapidly. The dominant position of the North in the market, technology, information and financial systems has increased the drainage of resources from the South.

According to studies of the United Nations Development Program (UNDP), the protectionism of the North, the higher interest rates, the restrictions to the access of technology and to the migration cost US\$ 500 billon annually to the South, i. e. 20% of the gross national product of 4 billion human beings.³ The latest report of UNDP reveals that the Third World countries lost in 1989, due to protectionisms toward textile products, US\$ 50 billion.

Copyright ©1992 by author. Published by the American Institute of Aeronautics and Astronautics, Inc. with permission. Released to AIAA to publish in all forms.

Member IISL, Master of International Law, Director of the magazine "Ciência Hoje" (Science Today).

To this amount one should add US\$ 100 billion lost because of the protection to the agriculture in the North; also in 1989 the South transferred US\$ 50 to 60 billion from the economic debt.

In the 80's, while the rich countries spent US\$ 6 trillion, including wastage, the aid to the South fell US\$ 4 billion. Furthermore, the net flow of resources, including payments of the debt, was unfavorable to the poor countries, and the accumulated loss caused by the degradation of the economic exchanges, reached in that period US\$ 1 trillion, an amount larger than the debts of these countries.⁵

Therefore, it is the South that is financing the North. It is not suprising that about 70% of the world trade and more than 80% of international investments involve the industrialized economies.⁶

The wagons of the South remained disengaged from the growth in the North. The South is inhabited by 77% of the world population, but it earns only 25% of the world income. ⁷ The share of Latin America in the world trade dropped from more than 10%, in 1950, to less than 5%, today.⁸

All this explains the growing marginalization of the South in all relevant fields, including in the space activities.

Ordered cooperation

3. Wolfgang Friedmann had understood this situation still in 1971, when he wrote: "Among the many challenges that face mankind in the remaining decades of the twentieth century, two stand out as of crucial importance for the very survival of civilization. One is the ecological problem of man's ability to cope with an environment of his own creation, which now threatens to overwhelm him. The other is the political problem of choosing between a competitive race of nations for power and wealth — a race that can only lead to the ultimate confrontation of a few superpowers — and ordered cooperation, in which countries can combine their purposes, their ingenuity, and their resources in an international order that envisages mankind as a whole"."

Particular historic context

4. There is no doubt about the binding character of the principle of international cooperation defined in the UN Charter, as well as of a specific principle of international space cooperation, recorded in the Outer Space Treaty (OST).¹⁰

But its legal content was formulated in a particular historic context and in such general terms that it no longer answers the great needs and demands of our time. They have already been tested and showed to be insufficient to conciliate interests facing the global problems which challenge the world community at the end of this century. They do not satisfy the deepest and urgent

needs of mankind in order to assure cultural achievements, ascending development and survival.

Thus, one of the most relevant duties that we must face, considering nowaday's critical reality, is to create a new concept of international cooperation, strengthening and enlarging the present concept referring to general international relations and especially to the relations concerning the exploration and use of outer space, mainly because space actitivies concentrate the most advanced creations, inventions and discoveries made by man.

Legal content of the principle

5. The Art. 1.3 of the UN Charter has proclaimed as one of the purposes of the United Nations "to achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian character".

According to the 1970 Declaration on Principles of International Law, which has developed the principles of the UN Charter, "States have the duty to cooperate with one another, irrespective of the differences in their political, economic and social system in the various spheres of international relations in order to maintain international peace and security and to promote international economic stability and progress, the general welfare of nations and international cooperation free from discrimination based on such differences".

The Declaration also stresses that "States should cooperate in the promotion of economic growth throughout the world, especially that of the developing countries".

The 1975 Final Act of the Conference on Security and Cooperation in Europe went a bit further, proclaiming that the States "will take into account the interest of all in the narrowing of differences in the levels of economic development, and in particular the interest of developing countries throughout the world". But this is not a binding document.

Vague legal wording

6. The history of the second half of the 20th century clearly demonstrates that the general principle of international cooperation, as defined in the UN Charter and developed in the 1970 Declaration, has failed in helping to solve the most decisive international problems and to stimulate the achievement of international economic stability and progress, the general welfare of nations and international cooperation free from discrimination based on their political, economic and social differences, as well as of the economic growth throughout the world, especially that of the developing countries. The social, economic and ecological situation of our planet has deteriorated up to the point that generic and vague legal wording, without setting out rights, obligations and responsibilities, results entirely ineffective and impotent to shift the course of the facts.

OST - General and particular aspects

7. Almost the same can be said about the principle of international space cooperation. The text of OST contains six times the word cooperation, comprising its general and particular aspects."

Its Preamble speaks about the desire of States to promote broad cooperation in relation to both scientific and legal aspects of the exploration and use of outer space for peaceful purposes. By Art. I, States will encourage international cooperation in scientific research. Art. III mentions the promotion of international cooperation and understanding.

Art. IX enjoins States Parties to the Treaty to be guided by the principle of cooperation and mutual assistance. It also establishes the duty of States to take into account the interests of all other States in their space activities and not to cause potentially harmful interference in other States' activity. Art. V complies the States to render all possible assistance to astronauts of other States. Art. X determines all States to consider, on an equal basis, the requests of other States to have the opportunity of observing the flight of space objects. And Art. XI imposes that spacefaring States inform all other States about the character, course, place and results of their space activities.

Concept far from the demands

8. V. Vereschetin assesses that "the principle of cooperation in space law must be treated above all as the duty of states to cooperate with one another in maintaining international peace and security in outer space", and in second place as "the duty of states to promote the development of broad contacts and the joint exploration and use of outer space for peaceful purposes". He sees the "real content to the principle of cooperation" in "the mutual agreements and understanding recorded in treaties" concluded by States and intergovernmental organizations which concretise their rights and duties in the sphere of scientific and technical cooperation in space. For him "the States specify the character and degree of their participation in international space projects and programs proceeding from their needs, interests and possibilities".¹²

Indeed, the OST dispositions about cooperation can be realistically defined in such limits. But to be realistic, also with regard to the perverse tendencies of the present world, we must say that the objective of maintaining international peace and security in outer space, although fundamental, is not enough today. In the same sense, it is not enough to attribute exclusively all the tasks of space cooperation to the free-will of States, without considering the global needs which are growing dramatically.

This concept of space cooperation looks narrow and far from the demands of overcoming the increasing inequality among people and States. In fact, nowadays, 35 years after the beginning of the Space Era, very few nations — only about 6% of the world's population of nations — operate space systems, launch space exploratory missions, conducting programs of space technology development on an exclusively national basis.¹³

Not what can be done, but what must be done

9. The main tendency in all this period has been space cooperation oriented by military and geopolitical objectives, or involving mainly commercial exchanges, with little if any technology transfer in both cases. A report of the Nasa Advisory Council Task Force on International Relations in Space asserts that "Cooperation is intended to create a win-win situation". This approach, limited by its immediatism and narrowness, does not admit long term investment with unable or unprepared partners, carrying out programs and projects comprising interests which extend beyond its own border. Within the logic of the win-win situation, the Earth seems to be hopelessly condemned to the disease of inequality, of planetary dimension, and never will come up with the indispensable global balance so much needed among nations.

The militarism and the monopoly of advanced technology in few countries have obstructed an increase in the number of spacefaring States. To change this situation the international community must transcend the rigid framework of old practices and thinking, by looking at our planet as a place for cooperation and shared activities. We must seek and find ways of cooperation based on the idea of solidarity among nations. It is not an easy task, of course. However, the question, from now on, in an increasing urgence, will not be what can be done but what must be done. More

than ever it is necessary to remember that "the international cooperation is not mere rhetoric, but an essential means for global survival". ¹⁵ Earth, as much as the moon and other celestial bodies, or even more than those, has to be treated as a common heritage of mankind. ¹⁶

Cold war leaderships

10. In the first decades of the Space Era there was a space empire with cold war leaderships, which was a strict bipolar orbital system of space cooperation. Space cooperation was defined as to maintain some links with the USA or the USSR, the only two space powers in that times. Few States, as "satellite countries", received from one or the other some assistance. The space cooperation was cultivated between USA and USSR mainly as a source of security and information to their own military strategies and as propaganda to the world public opinion. The two major powers only admitted definite forms of international space cooperation, which did not include sensitive areas, and demanded total loyalty from the partners.

A legal portrait of that times is the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water, proposed and signed by USA and USSR in 1963. This Treaty did not prohibited underground explosions, leaving open the possibility of nuclear tests for the development of new mass destruction weapons and therefore giving continuity to the arms race. From that same period is the agreement to forbid the orbiting around the Earth of space objects carrying nuclear weapons or any other massive destruction weapons, disposition added later to the 1967 OST. However, the 1963 treaty, as the 1967 OST, did not prevent the transit in outer space in non-orbital flight by nuclear missiles. Therefore, the nuclear war through outer space was not prohibited. And that was what international cooperation looked like at that time.

Partners instead of "satellites"

11. The space cooperation under partnership instead of "satellites" appears in the seventies, today the end of the cold war and of the military confrontation between the USA and the USSR has created better conditions for the development of the partnership system. The idea of partnership is interpreted as "an action based on mutual trust, fairness and equality in basic rights combined with efforts clearly to maximize common interests". It is a more profitable and open system, mainly to share the increasing expenses that arise from the more ambitious space projects. Now there are a few more spacefaring States. It is a better time than that of absolute leadership, but also it does not reveal the needed willingness and availability to cope with the global problems. International cooperation cannot be only the result of symmetric partnership, a bargain in which each side seeks exclusively something it values. It does not fit for the North-South relations.

The clause of common benefit

12. The 1967 OST was created above all in conformity with the interests of the USA and the former USSR. These countries certainly did not look for a higher level of international cooperation, nor considered it viable or necessary for the near future. To consolidate the leadership of each one in their respective blocks and areas of influence, they have agreed to appear to the world as countries committed to the best ideals of civilization and humanism, while at the same time they were competing fiercely between themselves and creating for the first time in history the concrete possibility of destroying life on Earth.

Probably that is why they approved the clause of com-

mon benefit, explicited in the Art. I. 1 of the OST. According to this clause, "the exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind".

Equitable sharing and equitable access

13. Today we must thank for the existence of this disposition because it is a very strong starting point for a new concept of international cooperation. It means at least that future international agreements concerning the utilization of space resources have to take into particular consideration the interests of developing countries. They may not exclude the opportunity for theses countries to use their resources and moreover they maybe have to grant the participation rights to enable them for such use.¹⁸

It is true that the specific legal regimes for the utilization of geostationary satellites¹⁹ and moon resources²⁰ have asked, respectively, for an equitable access and an equitable sharing in order to benefit the underdeveloped States.

The equitable access clause was a demand of these States in order to introduce an a priori planning system of the distribution of frequencies and orbital positions, replacing the traditional first-come-first-served method, which only benefits the technologically and economically developed countries.

On the other hand, the equitable sharing clause represents an effort of developing countries to prevent the exploration of moon resources by only a few countries which have the necessary financial and technological tools to do so (the same approach appears in the 1982 Sea Convention).

Both initiatives were positive to the extent that they tried to avoid the repetition of the history of mankind in the venture of entering outer space, as well as an increase of the gap between developed and underdeveloped countries. But they were insufficient to grant some direct form of enabling the underdeveloped countries to have an active participation in space activities.

Avoiding prejudice to the majority

14. Professor Henri A. Wassenbergh says that "the best law can do, for the time being, is to recognize existing inequalities and avoid prejudice to the weak respectively favour to the strong". It seems from the global point of view that by now if the law sometimes has succeeded in recognizing existing inequalities among states, it has not succeeded in avoiding harm to the majority of the countries, which are getting more backward.

Development of indigenous capability

15. If the exploration and use of outer space shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind, therefore, the primary objective of international cooperation in outer space should be the development by all states of indigenous capability in space science and technology and in their applications, as proposed in the draft resolution presented in April 1991 to the Legal Subcommittee of United Nations Committee for Peaceful Uses of Outer Space (Copuos) by nine developing countries.²²

This draft resolution opens new opportunities for discussion on the improvement of the legal framework of international space cooperation.

To carry out the exploration and use of outer space "for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development" certainly means not to cause any damage to other States and not to conduct space activities in the pure interest of one single State or few of them, but on the contrary, to benefit and to take into account the interest of all States, rich or poor, developed or underdeveloped, having or not having space programs.

What would be the common benefit for all States? And about what kind of interests can we speak? It is more likely to be related to the main benefit and fundamental interest, which is common to all nations and is concentrated in at least two essential rights: peace and development, referred to in Art. 55 of the UN Charter.

And who must speak about countries' benefits and interests? Naturally, before anyone, the State itself, singular and sovereign entity, owner of specific history, experiences and problems, with a growing tendency to rely in the sovereign and democratic rights of its people. The genuine cooperation has as a starting point the respect for the sovereign equality of all States.

Thus, the most complete way to make the benefit and satisfy the interests of all States, is to intensively collaborate to allow and stimulate them to acquire competence in those areas of unquestionable relevance, that will lead them to the achievement of peace and development. For this reason, it is impossible to deny the need of each State for internal competence, always and whenever the main target is to benefit all of them.

That is also why States with relevant space capability should bear a special responsibility in the promotion and fostering of international space cooperation, and developing States should benefit from special treatment in this field.

Denying any idea of cooperation

16. Since 1987, the seven most industrialized countries (G-7) keep an informal agreement, the Missile Technology Control Regime (MTCR), which blocks the access to sensitive space technology to developing countries. The alleged reason is the decision to stop missile proliferation.

But the MTCR, for instance, has embargoed the acquisition of components for the construction of the Brazilian space rocket VLS — part of the peaceful program Complete Brazilian Space Mission (MECB) — still unconcluded, as reported by J. Boscov, Head of VLS Project, in the 42nd Congress of the International Astronautical Federation, held in October 1991 in Montreal.²³

India is also being punished, because of the rocket it has bought from Russia to launch its communication satellite.²⁴

Therefore the MTCR represents an arbitrary, one-sided and discriminatory judgement, through which some States pass a sentence upon others, without any open legal procedure. It denies any idea of cooperation.

Special treatment does not mean donation

17. Special treatment to developing nations, however, does not — and it must not — mean donation or money falling from the sky. These nations are not beggars, nor should be considered as such.

They must give unquestionable demonstration that they have ability and are determined to fulfill commmitments assumed by special cooperation agreements, that will lead them to achieve indigenous capability.

They should be aware of their special responsibility for the efficient and rational use of the scientific and technological space knowledge transferred to them.

To a World Space Organization

18. A wider cooperation process, directed to the fulfilment of unique tasks, more embracing and in the interest of a large number of States, if not for all of them, certainly will require much more complex and strict international organizations and mechanisms than the existing ones.

A remarkable step in this direction is retaking the project of the creation of a World Space Organization to ensure that all states would be granted access to scientific and technical achievements in the exploration an use of outer space. ²⁵ To this purpose the creation of Regional Space Organizations would also be very useful.

Assuming special responsibilities

19. Professor Stephen Gorove wrote that "the basic aim of the developing nations which motivated their policies has been to reduce the technological and economic gap between themselves and the developed countries, not at the slow pace of their own ability but with the developed countries' effective assistance which they regarded as obligatory".²⁶

In fact, as rapid as possible the reduction of the gap between developed and developing countries would be of paramount importance for the later ones. But it would not be of less importance for the developed countries, simply because no one has a good future in the present social and economic arrangement of the world. "Today, global economic cooperation — and thus interdependecies as well — are inescapable in many sectors... for the industries affected, they have become vital", says Edzard Reuter, Chief Executive Officer, Daimler-Benz AG. He defends "the resolve to create the appropriate conditions and institutions to support worldwide economic networks". ²⁷ This demands concrete programs for integrating not only European countries but also all other countries as partners in international cooperation.

As to the developed countries'effective assistance to developing countries, it is not yet obligatory. It will be obligatory only when both groups of countries will assume together their special responsibilities in the cooperative endeavour to improve the world, i. e, when there will be close and mutual cooperation between them in the fields of law, science and technology. This might be the most equitable way to bring about a legal framework that would ensure the closest possible international balance of capabilities and participation in outer space activities.

In the first decades of the 21st century

20. Thus, without a new concept of international cooperation, the more likely to happen is that in the first decades of the 21st century, when few States will arrive to Mars, most of the others will still be striving for survival as in the past centuries.

It is not by accident that this question is regarded as the most important challenge for international space law.

References

- (1) Ignacy Sachs, Qual desenvolvimento para o século XXI, in Terra, Patrimônio Comum (Earth, Common Heritage), coord. Martine Barrère, S. Paulo, Brazil: Nobel, 1992, p. 129.
- (2) Manfred Lachs, Le Monde de la Pensée en Droit International, Paris: Ed. Economica, 1989, pp. 228-232.
- (3) Aldo Ferrer, The fundamental element in the emerging of a new world order, in Gazeta Mercantil, S. Paulo, Brazil, 29/7/92, p. 5.
- (4) Ignacy Sachs, ibid, p. 120.
- (5) Havelock R. Bremster, Third World prospects in the world economy in the 1990s, TW Economics, 16-31 july 1991, in Celso Furtado, Brasil: A Construção Interrompida, Rio de Janeiro: Paz e Terra, 1992, p. 27.
- (6) Aldo Ferrer, ibid.
- (7) Ignacy Sachs, ibid, p. 119.
- (8) Aldo Ferrer, ibid.
- (9) Wolfgang Friedmann, The Future of the Oceans, 1-8 passim, 1971.
- (10) Defined in the 1945 UN Charter and developed in the 1970 Declaration on Principles of International Law Concerning Friendly Relations and Cooperation Among States in Accordance with the UN Charter {U. N. G. A. Res. 2625 (XXV), 25 U. N. GAOR, Supp. (N° 28) 121, U. N. Doc. A/8028 (1971)} and in 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 (OST) {Jan. 27, 1967, 18 U. S. T. 2410, T. I. A. S. 6447, 610 U. N. T. S. 205 (effective Oct. 10, 1967)}.
- (11) Michel Bourely, Coopération Internationale et Droit de L'Espace, in Droit de L'Espace, sous la direction de Jacqueline Dutheil de la Rochere, Paris: Editions Pedone, 1988, p. 48.
- (12) V. Vereshchetin, E. Vasilevskaia, E. Kamenetskaya, Outer Space Politics and Law, Moscow: Progress Publishers, 1987, pp. 91 e 92.
- (13) Stephen E. Doyle, Legalities, practicalities and realities of the use of outer space by developing countries, 1989 IISL Colloquium.
- (14) Ian W. Pryke, International Space Cooperation, lecture in International Space Univertity, 1989 session, Strasbourg, France.
- (15) Chikako Iguchi, International Cooperation in Lunar and Space Development Japan's Role, IAA-91-709, 42nd Congress of the International Astronautical Federation (IAF), 1991/Montreal, Canada.
- (16) Aldo Armando Cocca, Antecedentes y Desarrollo de la Doctrina Argentina del Patrimonio Comum de la Humanidad en el Moderno Derecho International, in Liber Amicorum, Colección de Estudios Jurídicos en Homenaje al Prof. Dr. D. José Pérez Montero (Separata), Universidad de Oviedo, Oviedo, 1988.

- (17) Kunihiko Tatsuzawa, Studies on Space Law, in Chikako Iguchi, International Cooperation in Lunar and Space Development Japan's Role, IAA-91-709, 42nd Congress of the IAF.
- (18) Stephan Hobe, Commercial space activities versus outer space as the province of all mankind?, ST-90-007, 41st Congresso of the IAF, 1990/Dresden, Germany.
- (19) Resolution 3 of the World Administrative Radio Conference (WARC) 1979, International Telecommunication Union Regulations, 1982, Resolution 3. Final Acts of the WARC on the Use of the Geoestationary Satellite Orbit and the Planning of Space Services Utilizing It, Geneva 1988. Milton L. Smith, International Regulations of Satellite Communications, Utrecht Studies in Air and Space Law, Dordrecht, The Netherlands: Martinus Nijhoff Publishers, 1990.
- (20) Art. 11 of Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (The Moon Agreement or Treaty), {U. N. GAOR, 34th Sess. (1979), Supp. N° 20 (Doc. A/34/20), (effective July 11. 1984)}.
- (21) Henri A. Wassenbergh, Principles of Outer Space Law in Hindsight, Dordrecht, The Netherlands: Martinus Nijhoff Publishers, 1991, p. 123.
- (22) Argentina, Brazil, Chile, Mexico, Nigeria, Pakistan, the Philippines, Uruguay and Venezuela: Working Paper (A/AC.105/c.2/L.182 of 9 April 1991).
- (23) J. Boscov, A. F. Palmerio, The Brazilian Satellite Launcher (VLS), 00171, 42nd Congress of the IAF.
- (24) Space News, vol. 3, n° 26, July 20-26, 1992; Aviation Week & Space Technology, July 27, 1992, p. 57.
- (25) Gennady M. Danilenko, The progressive development of Space Law: New opportunities and Restraints, in Space Law: Views of the Future, Tanja L. Zwaan (editor-in chief), Deventer, The Netherlands: Kluwer Law and Taxation Publishers, 1988, p.
- (26) Stephen Gorove, Developments in Space Law Issues and Policies, Utrecht Studies in Air and Space Law, Dordrecht, The Netherlands: Martinus Nijhoff Publishers, 1991, p. 120.
- (27) E. Reuter, Problems on Earth Solutions from Space?, speech on 29 march 1992 at the Munich Space Forum, ESA Bulletin, n° 70, may 1992, p. 15.
- (28) Ida Bagus Rahmadi Supancana, The contribution of the developing countries to the legal formulation of future space law, in Space Law: Views of the Future, ibid, p. 124.