

## WHY AND HOW TO DEFINE "GLOBAL PUBLIC INTEREST"

José Monserrat Filho  
Brazilian Society of Aerospace Law (SBDA)  
Brazilian Society for the Advancement of Science (SBPC)  
Rio de Janeiro, Brazil

*"The law of outer space, by its very nature, is anthropocentric."*

Manfred Lachs \*\*

### 1. Introduction

The intensive process of commercialization and privatization of space activities, which strongly underlines the post Cold War era and tends to grow more and more in the next coming years, rises as a logical and natural counterpart the need to clearly define in a detailed manner the concept of global public interest related to this specific field of activities.

The formulation of this concept would serve as a safe and objective reference for an indispensable evaluation of the limits and nature of space commercial and private entrepreneurship, which today multiplies with no criteria properly defined and accepted by the whole world community.

The amount and weight of such business, indeed, are quickly growing. For the period 1993-2001, the launch of 656 was predicted, mostly state owned. Now, for the period 2000-2009, there is an estimation of three times more launches: 2,147, mostly commercial. In the present estimate, no less than 65% of the

satellite belong to private telecommunication companies. (1) For the first time in 1996, the budget of commercial space undertakings was superior to governmental expenses in the area. It is said that space commercialization is growing at a rate superior to 20% per year. And someone predicts a growth of 57% per year for very soon. (2) The future worldwide space revenue has been estimated to grow to US\$ 577 billion from 1998 to 2002, with telecommunication services accounting for US\$ 218 billion of that total. (3)

What are the reflexes of this on the basis of the international legislation in force today on space activities, which has on the highest account the interest of all countries and all mankind? I expose in this paper some reflexions on this concern, based on the examination of commercialization and privatization concepts and experiences, mainly in the essential areas of commercial launchings, satellite telecommunication and remote sensing.

### 2. The impact on the international space law

The consequences of the mentioned process in the current international regulation system of space activities cannot be underestimated.

"The growing measure of private participation and the growing desire to actively stimulate such participation presents a clear challenge to the public interests involved in space activities as well to the public character of space law", warns Netherlands professor F. G. von der Dunk. (4)

In fact, the private interests in space utilization of extreme importance are moving forward quite rapidly, prevailing over the public interests which is represented by state

---

Copyright © by José Monserrat Filho. Published by the AIAA with permission.

\* Member of the Board of Directors of the International Institute of Space Law, Master of International Law, Vice-President of the Brazilian Society of Aerospace Law (SBDA), Invited Professor of the Law School of University of Rio de Janeiro (Uni-Rio) and Editor of the *Jornal da Ciência* (Journal of Science), published by the Brazilian Society for the Advancement of Science (SBPC). Address: Av. Oswaldo Cruz, 73/701, Flamengo, Rio de Janeiro, RJ, CEP 22250-060, Brazil. Phones: 55 21 552-9036 and 552-6073. E-mail: <monserrat@ax.apc.org>

\*\* Lachs, M., *The Treaty on Principles of the Law of Outer Space, 1961-1962*, Netherlands International Law Review, 1992, Vol. XXXIX – Issue 3, pp. 300-301.

organizations. This impetuous advancement tries to give direction more and more to the processes of the regulation for the sector. This challenge probably is the central political-legal question of present space activities.

This can explain why the expression “global public interest” ended up arousing exactly in the realm of Space Law. And even why it deserved place in an historical text as the Report of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (Unispace III), held in Vienna, Austria, in July 1999. (5)

This term appears in the Unispace III Report section on “International Space Law” (II. V. H. 2) as in the following recommendation: “The concept of ‘public service’ and its various manifestations should be developed further, paying particular attention to the **global public interest** (the emphasis is mine – JMF) and to the needs of developing countries.”

These wordings were proposed by the participants of the Workshop on Space Law in the Twenty-first Century, organized by the International Space Law as an Unispace III technical forum. (6)

The Workshop concluded that “the rapid expansion of private activities in and related to outer space requires examination of many aspects of existing space law”. Among these aspects I stress two in particular: “(b) The impact of commercialization and privatization of space activities on the public service aspects of such services; and (f) The protection of the environment, where private entities are currently not held directly accountable.”

However, the notion of “global public interest” in the theory of space law was created many years before the Unispace III. I believe it was introduced by another Netherlands jurist, Henri A. Wassenberg, in his book “Principles of Outer Space Law in Hindsight”, published in 1991. More than ten years ago he foresaw that “eventually the present freedom under existing space law will be limited by the requirements of a ‘global public interest’”. And reminded that “when man reached and became active in ‘outer space’, State sovereignty was limited in the ‘international public interest’”. (7)

Today not only the State have to be limited. It seems evident that the current preoccupation with the global public interest arises in direct connection with the vigorous growing of the private interest in space activities. After all,

this indicates that between both orders of interests there is strong and indispensable mutual relation.

Yet how this relation is regulated by the current International Space Law?

Are the public and private interests in the same level and in equivalent positions? Or one of them has precedence and priority over the other? Who is competent for setting up the limits between them and how can it be done?

To answer these questions, after all it is necessary to have a very precise notion about what is public interest in this area, which certainly has to be international or global, by the own nature of space activities implications.

### 3. The wording and the spirit of the Outer Space Treaty

I think that international space law already has the necessary base to formulate the concept of global public interest. This base is the well known “common benefit clause”, as expressed in the Article I (I) of the 1967 Outer Space Treaty (OST) (8), the main code of the space activities: “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.” (9)

Some authors see in this article only a moral obligation, not a legal one. Bin Cheng, for instance, wrote: “Insofar as the preparatory work of the treaty is concerned, the discussions which took place on several articles of the treaty clearly showed that its draftsmen hardly intended this part of the Article I to be anything more than a declaration of principles from which no specific rights of a legal nature were to be derived, even though it might give rise to a moral obligation.” (10)

It happens that a principle declaration, turned into a treaty, creates rather more than a moral obligation. It creates, indeed, a legal obligation, even if for that it has to be better specified. If from it did not clearly derive yet an specific right, it is not because the principle does not contains a legal obligation, but only because the correspondent obligation it is still yet to be properly explicit.

Also it cannot be lost of sight the spirit and coherence of the document as a whole. The OST is strongly impregnated with the idea of

mankind interest. It emerges from the first lines of its Preamble, which recognizes “the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes” and considers that “the exploration and the use of outer space should be carried on for the benefit of all peoples irrespective of the degree of their economic or scientific development”.

Moreover, the OST defines outer space as a *res communis omnium* (common good) of all countries as it is evident from the Article I (II) and Article III, integrated both as faces of a same coin: On one side, outer space “shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality”; on the other side, it “is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means”. So, open to all countries and not passive, thus, of any appropriation form, this space, logically, cannot be another thing rather than common heritage of all mankind.

The Article III 3° reinforces this idea, determining that the space activities must be carried out “in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international cooperation and understanding”. Peace, understanding and cooperation – as the Charter of the United Nations says very clearly – are the major aspirations of all mankind, to whom “the scourge of war twice in our lifetime has brought untold sorrow” (11)

The Article V, on its turn, when it defines astronauts as “envoys of mankind in outer space”, is emphasizing that their activity respond to interests which largely transcend national, private or state objectives of the launching countries.

The Article IX, equally envisages the more general interest when it establishes that space activities must “avoid harmful contamination and also adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter”. This Article also predicts a process of consultation among States in order to prevent those space activities by one State that could be harmful for the space activities of other States.

Finally, within the major concern with the common benefit and interest, is good to enhance the Article XI, which instituted the duty of States “to inform the Secretary-General of the

United Nations as well as the public and the international scientific community, to the greatest extent feasible and practicable, of the nature, conduct, locations and results of such activities”. And it also establishes that “on receiving the said information, the Secretary-General of the United Nations should be prepared to disseminate it immediately and effectively”.

Thus, it is not much to affirm that the OCT enhances the benefit and the interest of all countries, of all people and of all humankind in *condictio sine qua non* for any space activity. And that, consequently, it does not admit any form of exploitation and use of the outer space capable of causing bad and damage to a country and to people, to the whole humankind or to part of it, as well as hurting their legitimate interests.

I understand that the proclaimed general interest of all countries, all peoples and all mankind in the space activities can and have to be seen as an expression of a wider domain — the global public interest. And that this concept is fundamental and it should be clearly recognized and delineated proportionally to its importance, especially in this era of accelerated privatization of space activities.

#### 4. The supremacy of the public interest

F. G. von der Dunk, already quoted, seems to see parity relation between public and private interests. He writes that the “public interests, reflected in international space law, have to be preserved and balanced against the justified interests of private enterprise in having fair and efficient legal and regulatory systems within which to operate”. He even assumes the task of “bringing the best of these two words into some feasible conformity with each other”. (12) His parity vision becomes more transparent when he asks: “Are private enterprises’s interests sufficiently heeded by the body of international space law? Are the interests of public at large sufficiently protected against the undesirable (side-) effects of private enterprises’s entry into the space arena?” (13) The same notion is present in the “substantive approach”, exposed by F. G. von der Dunk in this way:

“... the question should be raised whether the current body of international space law, by way of the rules, right and obligations it defines, takes into due account both the valid and

justified interests of the private sector itself, and the specific consequences of private involvement in space activities upon the whole human endeavour in space, in other words upon the valid justified interests of other players as well as society and humanity at large.” (14)

He still emphasizes that “a balance will have to be established between the interests of private enterprise and other—public—interests in outer space and space activities”. (15)

Henri A. Wassenberg also understands that it is necessary to look for a common denominator between the States interests and the private enterprises interests. He remarks: “To shape the future law of outer space, the interests of individual States as the ‘justiciables’ of that law as it stands today and the interests of private enterprise, which presently will be come the direct subject of outer space law as well, will have to be carefully measured to distil the common interests of all States and private enterprise.” (16)

So far nothing seems to indicate and even less to guarantee that the private company will be able to equal States, raising itself to the sovereign position of Space Law direct subject, although its influence on States and government policies and conducts is growing more and more, at the point, no rare, of placing them directly at its service.

This does not implies to deny *in limine* the possibility and the convenience of partnership between State and private company, preserved the functions and obligations of State as an instrument of all society.

For this reason, I do not believe that it should be parity, equivalence or symmetry between public and private interests, in general, and particularly in space activities. Public interests are hierarchically superior, since they represent the interests of the whole group of nations, of all people and, thus, of humanity.

This does not mean to unrecognize, disqualify, reduce or even minimize the value and legitimacy of private interests, that, in space sector, as it can be presently confirmed, has an important role to play. It means only to place them in the right spot that belongs to them in the arena of interests that are being played, permanently supervised by the control of public interests, thus to prevent distortions and aberrations which can be of damage to the whole system.

It is necessary to set up a stable hierarchy among private, state and public interests in

international space law as space “is ruled by the Machiavellian realisms of power politics” (17) and now also by the market purposes of private enterprises. In reality, the interests of some States and private enterprises move with extreme dynamism in the use of outer space, looking for a maximum attendance of their specific objectives, which can end up creating dangerous *faits accomplis*, also unsustainable, questionable, undesirable or of doubtful legal and/ or ethical support.

In this context of possible uncertainties and facing the absolute imperative of predictability in the space area, there is enough reason to foresee the notion of global public interest as the only alternative of a criteria genuinely impartial, objective, responsible, rational and constructive for the qualification of space activities. Moreover, this concern is certainly essential to any international serious effort to be undertaken in order to stop the extension to space and to the celestial bodies of perversities and destruction generated in our planet by oligarchical state and private interests, selfish, immediate and, obviously, apart from the general public interest. It cannot be forgotten that space activities are essential to the security and development of all people and countries, as well as in general to the effective evolution of human species. (18)

To Manfred Lachs the “supreme task of Law” is “to avoid that man becomes prisoner of the forces liberated by himself and, eventually, turns into his own victim”. He came to this conclusion in 1972, when he already alerted, with a wide vision of the future, that “inevitably we must face the threat created by non-controlled industrial power and by its insidious secondary effects”. (19) The recommendation also is valid with relation to the anomaly that can be generated by space commercialization and privatization.

It must be remembered that, in December 16, 1966, that when exposing to the Political Committee of the United Nations General Assembly the then recently elaborated OST, of which he was one of the craftsmen, Lachs addressed historic message to governments and leaders of the future. His words remain updated before the problems we face up today, more than 30 years after: “... man carries with him all the frailties and shortcomings of his own into outer space. However, in spite of this, we can succeed if we remain faithful to the very objective of the law of the outer space,

that it should serve the interests of all nations and the protection of life, terrestrial and extraterrestrial and serve international peace and security. With that in mind while adopting what we have achieved today, we should continue with our work tomorrow. In doing so we shall create a whole system of rules and regulations concerning outer space: a *corpus juris spatialis*. The Treaty presented to you today is a first chapter of this great book of the law of tomorrow... Man's venture into space should increase his sense of responsibility." (20)

At the present time, with the fast privatization of space activities in essential areas, it became as much necessary as it is difficult to implant and maintain the supremacy of global public interest.

There lays the importance for us to look at some cases that seem to me to be emblematic.

### 5. Public and private interests in telecommunications

Telecommunications by satellite have been the most developed and highly commercialized space application. If worldwide revenues in 1998 from space activities reached US\$ 97,6 billion, a third part of it were accounted by the satellite telecommunications services — US\$ 33,6 billion. (21) That is why, for sure, they represent an area of confrontation – not yet solved – between public and private interests.

Francis Lyall, professor of Public Law at the University of Aberdeen, Scotland, UK, asks "whether the present international arrangement satisfactory secures the general world public interest in the provision of global telecommunications services open to all without discrimination". (22) He presents five reasons for his question:

"First, the approach of commercial business is directed to the maximization of profit and the reduction and often excision of non-commercial activities. This is not well adapted to the UN Stated, and widely accepted, notions of telecommunications as a public service.

Second, although competition is a watchword much touted, there is a tendency towards the establishment by companies of dominant positions in markets. As a matter of fact, in many States competition has to be secured and monopoly and dominance diminished by suitable governmental supervision. The USA has the Federal

Communication Commission (FCC), the UK has the Office of Telecommunications (OFTEL) and the Monopolies Commission. The European Union monitors and preserves competition as one of its aims. These bodies serve a useful function. However, such supervision is lacking at the international level.

Third, *ex natura* the decision of a State as to a space system has global effect, but in grants of licenses to telecommunications entities, each State seeks to secure the interests of its own nationals, without necessarily taking into consideration the welfare of the world as a whole.

Fourth, and allied to the immediately previous point, there is insufficient separation between the technical supervision and facilitation of international telecommunications and the politics and economics involved. The size and content of delegations (and their hangers-on) to ITU conferences, and the lobbying for commercial advantage that seems to be involved, proves the point.

Fifth, where an element in a delegation is devoted really only to a part of the agenda of a conference, the overall result of the conference can be distorted and unsatisfactory. "

To Lyall "many of these difficulties could be alleviated, if not entirely met, by the creation of an international regulator and supervisor, which would license civilian space telecommunications activities". As he underlines, "in licensing the regulator should deal with technical requirements and act in the **best interests of the world as a whole** (author's underline – JMF), taking into account the well-being of both the developed and the less developed States".

Ram Jakhu, Associate Professor of the Institute of Air and Space of the Faculty of Law of the McGill University, Montreal, Canada, has a similar position, in relation not only to the satellite telecommunications but also to broadcasting. He stresses "there still remain about two third of world's population without a reasonable access to basic telephone service" and recommends that "the Legal Subcommittee of Copuos should start considering the drafting of a new declaration, which would:

"a) reiterate the United Nations General Assembly Resolution 1721 and thus re-enforce the principle of universal service to be provided by telecom satellite systems irrespective of the fact that they are operated by intergovernmental

organization or private international service providers;

b) stipulate that the States should undertake to start considering, and eventually adopting an international treaty, in cooperation with World Trade Organization (WTO), ITU and other international organizations, for the purpose of the creation of an international regulatory body in order to effectively manage and insure equitable access to the radio frequency spectrum and efficiently adjudicate related disputes (international regulatory regime could still continue being established by the ITU and WTO within their mandates);

c) specify the measures the States must take to effectively prohibit and control "Cyber-terrorist" activities, particularly those that are committed via telecom satellites;

d) include undertakings by States that they would not, during the times of crises of war, damage, telecom satellites, particularly those systems that have notified and registered with the ITU;

e) recommend that States negotiate an international treaty prohibiting the use of Direct Broadcasting System (DBS) for offensive purposes. In this regard, the 1936 Broadcasting Convention and the European Agreement of International Television Broadcasting could be used as guide for the drafting of this recommended treaty.

Jakhu believes that "such a declaration, which could eventually be transformed into a treaty, is necessary for the continuous expansion of satellite telecoms and broadcasting and for the avoidance of serious controversies so that this technology could continue bringing real economic and cultural benefits to the whole mankind".

Jakhu, as Lyall, defends the need of an international regulator body for telecommunications because the privatization of this sector, if left totally free, could generate disastrous deviations, having in sight what he himself enhances: "The primary, if not the only, goal of private enterprise is always to maximize their profits. Therefore, they could be expected to concentrate only on high profit-generating countries or routes and to ignore unprofitable areas or thin traffic routes. This development would be contrary to the principle of universal service." (23)

Lyall equally emphasizes that the private company, by its own nature and its internal dynamics turned to the constant and ever

growing income generation, has enormous difficulties to attend non-profitable public interests. At the same time, the more prosperous, the more it looks in all ways, to eliminate competitors, in order to assume a monopoly position and of total domain over the market.

"The present competition is no longer the old competition, above all because it arrives eliminating any form of compassion. Competition has war as a rule. It demands, at any cost, that one has to surpass the other, smashing him, to take over his place", observes geographer Milton Santos. (24)

If in some national markets, thanks to efficient State mechanisms, the private company is obliged to restrain itself, in the worldwide arena it practically does not find institutional obstacles to reach an uncontrolled expansion. And this usually gets total support from its original country and from other countries, where governments not only accept but also support the merge of State and private interests in the name of national interests.

The present globalization reinforces in a large scale the already immense power of giant private or mix companies. This process, as noted by Carlos Lessa, "preserved and even amplified an heterogeneous world system, with economical, political, technological, military and doctrinaire hegemony crystallized in an empire that, with few small partnerships, commands the world market and financial networks, while it is well marked the periphery position, more and more subordinate and distant from the patterns of the system center." (25)

How to face the deformations and perversities imposed by such powerful forces if not through the clear identification of the global public interest, capable of serving as an unpolluted and consistent ethical, political and legal argument?

## **6. Public and private interests in space launching**

To the launch industry, first stage of any space project, also applies "the central and decisive question of the globalized economics", which is formulated by the General-Secretary of the United Nations Conference on Trade and Development (Untad), Ambassador Rubem Ricupero: "Which is the legitimate and desirable role of competition, what are the

efficiency gains that it promises and the reasonable limits to be imposed to it by higher human and social values?" (26)

The legitimate function and – I would say – indispensable to competition in this fundamental area is to stimulate the offer of launching services more and more reliable and safe. This is of interest not only to the insurance companies, but also to the whole space industry, State or private, particularly this last one, as it must guarantee and optimize its own costs.

The launch industry today faces large obstacles which make difficult its expansion and the attendance to market growing demands. The Netherlands professor H. Peter van Fenema has undertaken valuable research in respect to this subject, marked by exemption and independence. He remarks that "the limited number of countries with launch industries creates a vulnerability of the industry *in toto* for disruption of services to their customers". This is a permanent threat. "It is not uncommon to have lengthy post-accident investigation, pending the outcome of which the launcher or even the complete launch family remains grounded... This may seriously affect the continuity of feasibility of those (planned) activities/services which depends on the launch industry, such as the global telecommunications and meteorological services industry", notes H. Peter van Fenema. (27)

And why there are such few launch options, in contrast with the intensification and diversification of space activities? Why the launch industry continues to be considered by the USA and other world powers only as a strategical-military activity and a matter of national security? Satellite launch vehicles are always seen as missiles capable of carrying weapons. The rocket technology is dual, indeed. But the close, exclusive and unilateral way that it has been controlled by the countries which dominate it does not contribute with the construction of a solution equally dual of the problem, capable, at the same time, of avoiding the proliferation of means capable of carrying mass destruction weapons and also stimulate the emergence of new and better alternatives of space launch.

The Guidelines of the Missile Technology Control Regime (MTCR), which has been created in 1987 under the U.S.<sup>a</sup> leadership, establishes that they "are not designed to impede national space programs as long as such programs could not contribute to delivery

systems for weapons of mass destruction". (28) This norm seems to be positive. In practice, however, it is insufficient, precarious and potentially unfair, because, as H. Peter van Fenema notes, it depends entirely on the "national interpretation", in this case mostly from the USA. Indeed, the Dutch jurist notes that, in the American view, "there is no such thing as certainty about peaceful, national space launch programs remaining totally innocent in the MTCR sense of the word". (29) The idea that there is no country reliable enough in this field is very comfortable for someone who is in a dominant position and does not want to see not even a scratch in this privilege.

Zhan Boke, senior fellow at the China Academy of Launch Vehicle Technology, has elements, thus, to describe the MTCR as "a discriminate, exclusive and unequal regime". In his view, this is most evident in U.S.<sup>a</sup> cooperation on missile projects with Israel, Taiwan and Japan. He argues that although it is important to prevent the proliferation of delivery vehicles of weapons of mass destruction, it is necessary that it is done in an equal and reasonable manner with no allowance for double standards. (30)

Addressed as matter of war and national security, the launch industry, in the midst of the globalization era, is condemned to an isolation with seven keys within national frontiers. Around it there is no international cooperation. In this very risky field, launching countries, which are not many, remain distant from one another, in certain way as it used to be during the Cold War. There is no regular interchange of experiences, even though no one can deny that this is indispensable to learn better and faster the lesson of failures and disasters.

How much tardiness and damages this situation has generated to space activities? It can hardly be calculated, but the losses certainly are not small. It is valid to place here one more suitable observation by H. Peter van Fenema: "In an environment which is unfriendly to more countries possessing launch abilities, innovative ideas, which could perhaps lead to new launch technology concepts, more reliable and versatile vehicles and/or cheaper operations, cannot come to fruition by exposure to, or challenges by, expert industries of the 'traditional' launch countries. This stifles progress and oligopolizes the launch industry, both as a technology and as a trade in services." (31)

The conclusion cannot be other and it comes from H. Peter van Fenema himself: "The development of the launch industry should not continue to be artificially restricted to, or oligopolized by, the launch companies of one country or of a very limited number of countries. Neither should it remain fundamentally dependent on and subjected to national security-inspired both in reality largely nationalistic laws, policies and practices which also address other, not security-related interests and concerns." (32)

Can we doubt the urgent necessity to chance this unreasonable situation in the name of the common benefit and of the general development of space activities, including and particularly through a more precise definition of what constitutes in this case the global public interest?

### **7. Public and private interests in remote sensing by satellite**

The private interests have been strongly stimulated in developed countries to promote business in satellite remote sensing areas, disregarding the public interest with a correspondent international protection.

At the moment, the global market for satellite images is worth a mere US\$ 154 million, compared with US\$ 2.4 billion for aerial photography, according to Ron Stearns, an analyst with Frost & Sullivan. But the satellite firms are betting that one-meter imagery – till recently exclusive of the Armed Forces – will open up a vast new market. Tom Watts of Merrill Lynch believes that global sales of satellite images will be worth US\$ 2.5 billion by 2005, while Mr. Stearns puts the figure at a mere US\$ 420 million. The satellite firms know that governments are likely to be the keenest customers, at least in the short term. The USA Department of Defense plans to increase spending on commercial services, including satellite imagery, by US\$ 1 billion over the next five years. (33)

In fact, the satellite remote sensing activities are far from being a business so attractive as the telecommunication ones. However, they have been commercialized and privatized in growing scale (although restrictive national export control policies – once again – may delay this evolution). Nevertheless, they are waiting yet for an international regulation at a height of their strategic, economic, social and

cultural relevance, as well as their multiple uses.

These activities continues to be regulated by a single Declaration of the United Nations General Assembly, that has only a recommendation character, thus not been unquestionably obligatory for States. It is the Resolution 41/65, of December 9, 1986, containing the Principles Relating to Remote Sensing of the Earth from Outer Space (34). Adopted unanimously as a compromise solution, it was born already condemned to be excessively generic, not clear enough, and sometimes with double sense and insufficient. It is enough to note that it ignores at all the military uses of satellite remote sensing. And today it is very far from all the remote sensing technology developments and practices evolved during the past 15 years.

It is evident that such a legal deficiency doesn't attend the global public interest, which certainly favors the elaboration of an international instrument specific, wide, complete, clear, detailed and reliable — able this way to prevent distortions, damages and injustice seldom irreparable and/or of great gravity.

Besides the already mentioned "common benefit clause", adopted in Article I of OST, is reproduced in Principle II (Principle I is dedicated to the definitions of the main terms used in the document): "Remote sensing activities shall be carried out for the benefit and in the interest of all countries, irrespective of their degree of economic, social or scientific and technological development, and taking into particular consideration the needs of the developing countries."

Add to that the unmistakable effort of Principle IV: "Remote sensing activities shall be conducted in accordance with the principles contained in Article I of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the moon and Other Celestial Bodies, which, in particular provides that 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 stipulates the principle of freedom of exploration and use of outer space on the basis of equality. Those activities shall be conducted on the basis of respect for the principle of full and permanent sovereignty of all States and peoples over their



own wealth and natural resources, with due regard to the rights and interests, in accordance with international law, of other States and entities under their jurisdiction. Such activities shall not be conducted in a manner detrimental to the legitimate rights and interests of the sensed States.”

Thus, besides reiterating that satellite remote sensing shall be carried out for the benefit and in the interest of all countries, the resolution also adds that the rights and interests of sensing States cannot be harmed any way. This can only mean that, in this case, the common benefit clause includes the respect and interests of remote sensed countries. And from where it can be concluded that the guarantee of common well necessarily passes through the attendance to the legitimate interests of sensed countries.

As the highest norm is very clear, it is opportune to ask: How have been attended the sensed States interests in these 15 years, since the adoption of the Principles? The answer is simple: this question never has been assessed in the United Nations and there is now any sign that it will be. Hence probably the conflict of interests existing in this sector.

Gabriella Catalano Sgrosso, professor of the University of Rome, giving a lecture at the Copuos Legal Subcommittee, has defended the necessity of “an appropriate regulation” of the satellite remote sensing activities “as the interests at stake are considerably divergent”. She stressed that “industrialized countries are in fact able to play an active roll in the development of space activities, while developing countries, not holding the necessary technology, more or less passively witness such activities”. (35)

Indeed, the 15 years hard discussion at the Copuos Legal Subcommittee that preceded the adoption of the 1986 UN Remote Sensing Principles stood out by the confront between two groups of countries. Developing countries defended the principles of national sovereignty, of prior consent of the sensed State, and of some control by or preferential rights to the sensed State on the distribution of data obtained from its own territory. At the same time, developed countries sustained the principle of unconditional freedom for satellite remote sensing of another State and for sale the obtained data.

Even considering that the resolution is a compromise agreement, there prevailing the thesis of those who had and continue to have

advantage of technological domain, the sensor countries. The prior access of the sensed countries to data on their territories, so much requested by developing countries, ended up been refused by developed countries. The text, at the end approved by consensus, does not offer any preferential right to the sensed State. Nor it offers any concrete guarantee that the data will not be used against its own interests.

It is true that, according to the Principle XII, “as soon as the primary data and the processed data concerning the territory under its jurisdiction are produced, the sensed State shall have access to them on a non-discriminatory basis and on reasonable cost terms”. But this item has very little practical meaning towards the defense of sensed State interests. The more logical and fair would be to recognize, in some way, the right to be the first to receive the information related to its own territory. Developed countries alleged that it would undermine the free flow and exchange of information regime and remote sensing imagery open market they wanted and eventually succeeded to establish. This way, as regarded to data on its own territory the sensed State ended up been treated as any other State, even because the concept of “reasonable cost terms”, elastic and imprecise, depends above all of the so called “market laws”.

Concerning to analyzed information, the access of sensed State can become even more difficult and uncertain. Such a information tends to belong to not to the sensor State but to private companies, that prepares it in a way to turn it into a “product” for sale. This can only complicate the proclaimed access in non-discriminatory basis and in conditions and reasonable terms. The analyzed information, as any commerce valuable object, has its own rules. In this context, the promise of “taking particularly into account the needs and interests of developing countries” has not any real sense.

What means in practice access to the primary, processed and analyzed data on a non-discriminatory basis? According to the current interpretation, it means that these data have to attend some requirements:

- 1) To be always available, even if for sale – and, in this case, they cannot be arbitrarily taken out of the market;
- 2) To be always available in equal conditions for all interested, in right of use and price;
- 3) Cannot be offered with exclusivity to a

sole buyer; and

4) Cannot be sold at prices that make difficult its purchase by less developed countries.

Although sensible and convincing, these requirements are not found in any document of recognized international validity. Thus, it lacks in this matter an international agreement preventing unilateral and arbitrary decisions. Not by chance, during the 1990-91 Gulf War, the French enterprise Spot-Image and the American Eosat, obedient to their own countries, interrupted the sale of images not only to Iraq but also to other Arabian countries. (36)

In the fragile current legal framework governing these activities the sensing State Governments have not only the technology world hegemony but also the free hands to take the measures they consider convenient for them, because of the non-existence of an effective legal system in international level.

Therefore, developing States have solid reasons to demand a wide international agreement on satellite remote sensing, although in the current world circumstance this proposal has no chance to be accepted by developed countries.

Jeanne Irene Gabrynowicz, professor of Department of Space Studies of the University of North Dakota, USA, considers that "the Principles, as part of the international body of space law, also contain all the public good characteristic that are part of that law: mutual cooperation of nations, equity, equality, and the use of outer space for the benefit and the interests of all countries". That is why certainly she asserts, right after, that "the Principles must be defined to preserve and clarify these public good norms as well to help define the rights, interests and obligations of public, private and hybrid entities".

Gabrynowicz notes moreover that "the stable, orderly extension of global remote sensing services into the 21<sup>st</sup> Century requires formally recognizing that the Principles are legally accepted". In her view, "Copuos ought to be encouraged to fulfill the intent of the Principles drafters by transmitting their terms into a treaty". (37) The same idea was reiterated during the Unispace III, but unfortunately it was not approved to appear in the Conference final declaration.

It is possible that the commercial success of the 1 meter resolution images and even more precise may widen the clamors for an effective regulation of the sector, in face of the strong

problems with human and industrial activities that are been raised. The satellite remote sensing, for instance, is now presented as a resource especially efficient in "competitive intelligence" actions envisaged to "assessing the layout of a competitor's building during construction and to determine the class, function and possible output levels of equipment being installed; observing the emissions stemming from a plant to determine production capacities; spotting new types of shipping containers or an increase in trucks or rail used to distribute a product; monitoring a competitor's progress while installing a communications network". (38)

Even more worrying are the political and military implications of the commercialization, use and manipulation of height resolution images. An American presidential directive signed in 1994 allows the imposition of short-term "shutter control" to restrict the availability of images (such as one-meter images) that might compromise national security. In 1997, a law was passed to forbid American companies from taking or selling satellite images of Israel, "unless such imagery is no more detailed or precise than satellite imagery that is routinely available from commercial sources". It means that satellite remote sensing, despite its international nature, has been ruled by the internal law of some countries, what shows to be an aberration. Several news organizations, which have already made use of lower-resolution satellite imagery, plan to challenge the shutter-control legislation in the courts as soon as it is invoked, on the grounds that it contravenes freedom of speech (First Amendment of USA Constitution). (39) This action maybe solves the question in the USA, but not in the world.

In fact, the issue is not only national, but it above all is of interest of all countries. And as such it must be faced, by means of notions and multilateral actions of global reach. Otherwise, the absolute majority of countries will be in risk, in practice, of becoming dependent on the legislation of the USA and other space powers.

On the other hand, it is possible that the present monopoly of the USA might be surpassed soon, as it is already presumed, by the emergence of other countries with the capacity to generate high resolution images such as Russia, France, India, China, Japan and South Korea. The anomalous situation would be solved – if and when it happens – by

the emergence of competitors on the commercial race, in other words, by the market laws, and not by laws planned and created by countries having in sight the benefit of all.

However – and this question returns even more challenging – should we entrust the responsibility of regulating space activities to the oscillating and amoral commercial market?

## 8. Some conclusions

One of the peculiar and positive aspects of these globalization times is that, maybe for the first time in history, we can think of global community as any unique community that shares common interests, and, thus, we must and need to worry with what happens with everybody, since, after all, we are part of the same process, or better, “we are all in the same ship”.(40)

This global community already has a series of absolute and necessarily common: the maintenance of peace and order; the preservation of species and genetic diversity; the respect to human rights; the rational and well planned use of finite resources; the need for economical development and social progress; the struggle against hunger, contagious diseases, pollution, greenhouse effect, desertification, drugs traffic, organized crime, weapons illegal trade, terrorism, and many others.

These are very important common interests, but still not sufficient. It urges to discover, make explicit and evaluate many other community interests essential to human evolution in the new and challenging open paths to the species intelligence, for example, in the immensity of biology and cosmic space.

It was this perspective that took me to this present work.

Conscious to be light-years away from concluding this subject, I believe, nevertheless, to have placed together some useful elements and maybe even instigating to debate the need to define the concept of global public interest in space activities, which impacts are global by its own nature.

This concept seems to me essential as a clarifying and mobilizing parameter of public opinion all over the world for political and legal decisions with planetary effects, to be necessarily adopted in this dawn of the 21<sup>st</sup>. century, when we see the intensification of the use and exploration of outer space, thanks

especially to the growing commercialization and privatization of space activities.

Nevertheless, I reaffirm that when emphasizing the global public interest I am in no way proposing to make difficult, unaffordable, or support less private space activities. On the contrary, I think that a better defined notion of global public interest can only serve as an effective incentive to the widest and secure utilization of financial and technological resources, and of the private entrepreneurship productive dynamics, always on the most rational way possible and on the benefit of the whole society. Public, state and private interests can and must objectively work together and generate social benefits. But for that it is essential the existence among them of an unmistakable hierarchy of values, positions and attributions, where the public interest has the central role on the processes of regulation, evaluation and control of the enrolled activities.

I also believe that the concept elaboration of global public interest stimulates the construction of an universal ethics, that, as said by Sergio Paulo Rouanet, “can only be thoroughly efficient when interested ones can really participate on the respective deliberative processes”, or better, “when national democracies are complemented by a worldwide democracy”. (41)

Finally, I suspect that to clearly specify global public interest in the fantastic humankind space adventure, is also to contribute in a way that our memorable democratic conquests are not limited to our planet, and even less to just a small part of it.

## References

(1) “Worldwide Mission Moder 2000-2009”, April 3, 2000, Teal Group, Virginia, USA, Spaceviews, April 10, 2000 (<<http://www.spaceviews.com/2000/0410/>>).

(2) ProSpace, USA non-governmental organization linked to space industry. See <<http://www.prospace.org/issues/SpaceCommerce/indez.htm>> Se also *The way to go in Space*, Scientific American, February 1999.

(3) Report by International Space Business Council and Space Publications, in ISIR Newslines Digest 2.20, May 18, 1999, quoted by Jakhu, Ram, in *Emerging Legal Issues of Satellite Telecommunications and Broadcasting*, paper presented at the 2000 International Institute of Space Law (IISL) and European Center for Space Law (ECSL) Symposium on “Legal aspects of commercialization of space activities”, on the occasion of the 39<sup>th</sup> Session of the Legal Subcommittee of the United Nation Committee on the Peaceful Uses of Outer Space, Vienna, Austria, March, 27, 2000.

(4) Dunk F. G. von der, *Private Enterprise and Public Interest in the European ‘Spacepace’ – Towards*

*Harmonized Nacional Space Legislation for Private Space Activities in Europe*, Tese de doutorado defendida em 17 de setembro de 1998 e publicada pelo International Institute of Air and Space Law, Faculty of Law, Leiden University, The Netherlands, 1998, p. 2.

(5) Report of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space, Vienna, 19-30 July 1999, A/Conf.184/6, United Nations.

(6) Proceedings of Workshop on Space Law in the Twenty-first Century, organized by the International Institute of Space Law with the United Nations Office for Outer Space Affairs, Unispace III, Technical Forum, July 1999, ST/SPACE/2, United Nations, New York, 1999.

(7) Wassenbergh, Henri A., *Principles of Outer Space Law in Hindsight*, The Netherlands: Kluwer Academic Publishers, 1991, p. 20.

(8) Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and other Celestial Bodies, adopted by UN General Assembly in 19/12/66. Opened for signature: 27/1/67. Entry into force: 10/10/67. Ratified by 93 States and signed by 27 others.

(9) It is the Brazilian representative who has proposed to include in the Article I (I) the wording "irrespective of their degree of economic and scientific development" [A/AC.105/C.2/SR.64 (21.7.66), p.9]. This fact is mentioned by Bin Cheng in his article *The 1967 Space Treaty*, published in the book *Studies in International Space Law*, United States: Oxford University Press, New York, 1997, p. 234.

(10) Bin Cheng, *Studies in International Space Law*, United States: Oxford University Press, New York, 1997, pp. 234-235.

(11) Basic Documents in International Law and World Order, selected and edited by Burns H. Weston, Richard A. Falk and Anthony A. D'Amato, St. Paul, Minn, West Publishing Co., 1980, pp. 6-23.

(12) Dunk F. G. von der, id. Ibid. p. 2.

(13) Dunk F. G. von der, *Public Space Law and Private Enterprise – The Fitness of International Space Law Instruments for Private Space Activities*, Proceedings of the Project 2001 – Workshop on Legal Issues of Privatising Space Activities, 19 July 1999, Vienna, Austria, pp. 12-13.

(14) Dunk F. G. von der, id. Ibid. p. 13.

(15) Dunk F. G. von der, id. Ibid. pp. 21-22.

(16) Wassenbergh, Henri A., id. *ibid.*, p. 14.

(17) Meyerson, H., *Space exploration policy: towards an operational vision*, Space Policy, 11 (1995) 162.

(18) Monserrat Filho, José, *Private, state and international public interests in space law*, Space Policy, February 1996, pp. 59-69.

(19) Lachs, Manfred, *El derecho del espacio ultraterrestre*, México: Fondo de Cultura Económica, 1977, pp. 193-4.

(20) Lachs, Manfred, *The Treaty on Principles of the Law of Outer Space*, 1961-62, Netherlands International Law Review, 1992, Vol. XXXIX - Issue 3, pp. 300-301.

(21) Jakhu, Ram, see note 3.

(22) Lyall, Francis, *Expanding global communications services*, Proceedings of the Workshop on Space Law in the Twenty-first Century, organized by the International Institute of Space Law with the United Nations Office for Outer Space Affairs, Unispace III, Technical Forum, July 1999, ST/SPACE/2, United Nations, New York, 1999.

(23) Jakhu, Ram, see note 3.

(24) Santos, Milton, *Por uma outra globalização: do pensamento único à consciência universal* (Toward another globalization: from the unique way of thinking to universal conscience), Rio de Janeiro: Record, 2000, p. 46.

(25) Lessa, Carlos, *Globalização e crise: alguma esperança?* (Globalization and crisis: some expectations?), review *Ciência Hoje* (Science Today), July 2000, pp. 40-46.

(26) Ricupero, Rubens, *Quanto vale uma vida?* (A life: how much it costs?), *Folha de S. Paulo*, 4/6/2000.

(27) Fenema, H. P. van, *Expanding global launch services*, Proceedings of Workshop on Space Law in the Twenty-first Century, organized by the International Institute of Space Law with the United Nations Office for Outer Space Affairs, Unispace III, Technical Forum, July 1999, ST/SPACE/2, United Nations, New York, 1999, pp. 35-47.

(28) Missile Technology Control Regime Guidelines <<http://jya.com/mtrc.htm>>

(29) Fenema, H. P. van, idem *ibid.*; Monserrat Filho, José, *The place of the Missile Technology Control Regime (MTCR) in international space law*, Space Policy, 1994 10 (3), pp. 223-228.

(30) Boke, Zhan, *MTCR and US Missile Anti-Proliferation Policies*, US-China Conference on Arms Control, Disarmament and Nonproliferation, Beijing, China, September, 23-25, 1998. <[www.cns.miis.edu/cns/projects/eanp/beijing/index.htm](http://www.cns.miis.edu/cns/projects/eanp/beijing/index.htm)>

(31) Fenema, H. P. van, idem *ibid.*

(32) Fenema, H. P. van, *The International Trade in Launch Services – The effect os U.S. laws, policies and practices on its developments*, International Institute of Air and Space Law, Faculty of Law, Leiden University, The Netherlands, September 30, 1999, p. 371.

(33) *The Economist*, 6/5/2000, *Private eyes in the sky*.

(34) United Nations Treaties and Principles on Outer Space, United Nations, Vienna, 1999, pp. 35-38.

(35) Catalano Sgrosso, Gabriella, *Remote Sensing*, Proceedings of the 2000 IISL/ECSL Symposium Legal Aspects of Commercialization of Space Activities, on the occasion of the 39<sup>th</sup> Session of the Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space, United Nations, Vienna International Centre, March 27, 2000.

(36) Monserrat Filho, José, *Interests and needs of developing countries in Space Law*, Revista Brasileira de Direito Aeroespacial, n° 77, July 1999, pp. 2-12.

(37) Gabrynowicz, Joanne Irene, *Expanding Global Remote Sensing Services*, Proceedings of Workshop on Space Law in the Twenty-first Century, organized by the International Institute of Space Law with the United Nations Office for Outer Space Affairs, Unispace III, Technical Forum, July 1999, ST/SPACE/2, United Nations, New York, 1999, pp. 97-124.

(38) Space News, May 3, 1999. *New images might reveal corporate secrets – Use of high-resolution data raises privacy concerns*.

(39) *The Economist*, 6/5/2000, *Private eyes in the sky*.

(40) Lohbauer, Christian, *Global Governance: rules to put in order a chaotic world*, in *Global Governance – Reorganization of Politics in all levels of action*, published by the Centro de Estudos da Fundação Konrad-Adenauer-Stiftung, São Paulo, 1999, p. 43.

(41) Rouanet, Sergio Paulo, *Da pólis digital à democracia cosmopolita* (From the digital polis to cosmopolitan democracy), *Mais!*, *Folha de S. Paulo*, 21/5/2000.