

IS THERE A FUTURE FOR SPACE LAW BEYOND “SOFT LAW”?

José Monserrat Filho

Brazilian Association of Air and Space Law (SBDA)
Brazilian Society for the Advancement of Science (SBPC)
E-mail: monserrat@alternex.com.br

Álvaro Fabrício dos Santos

Brazilian Association of Air and Space Law (SBDA)
E-mail: alvaro.santos@agu.gov.br

“What cannot be denied (...) is the fact that the binding force, consistency, stability, and hence predictability, of law as well as the legal consequences in terms of the responsibility incurred for its violation make law distinguishable from other social orders.”

V. S. Vereshchetin¹

ABSTRACT

Facing this challenging question seems to be timely and necessary, even recognising the importance of “soft law” during a certain period in the development of International Space Law. “Soft law” is not necessarily an anathema. It was and is a positive response to various occasions and aspects.

But at the same time, in principle, it cannot be considered the only or a better solution, particularly when we seek to assure the effective and unquestionable commitment of the parties to highly important arrangements, as well as a higher level of efficacy and predictability of the norms referred to it.

At stake here is the very beneficial and contemporary discussion on relative

normativity in General International Law, which should also encompass Space Law.

The present paper starts from the premise that International Space Law cannot be condemned to always be based on non-binding instruments, as has occurred in the last 30 years.

Today a number of extremely relevant legal issues related to space activities need to be judiciously evaluated and very reasonably should deserve a more rigorous legal consideration in view of their short-term consequences, but also and specially due to their possible future deleterious effects.

In this list of pressing issues, we can put in the first place those relating to the security (protection) and the safety of space activities, including the military uses of outer space, the placing in Earth's orbit of new weapons, the rapid growth of space debris numbers, as well as a more comprehensive regulation of remote sensing activities and the increasing necessity for a global system of space traffic management.

It could also be useful to add the subject of regulating the exploration and exploitation of the Moon's resources, since there already are many national plans to create lunar settlements within 20-30 years, but to date, there is not a

Copyright © 2010 by the author. Published by American Institute of Aeronautics and Astronautics, Inc. with permission. Released to AIAA in all forms.

broad agreement on the Moon, supported by the majority of countries.

Is it appropriate and responsible to rely exclusively on “soft law” for such cases?

INTRODUCTION

We live in an extremely dangerous epoch, perhaps as we have never lived before. At the same time, it is full of incomparable discoveries, creativity and productivity, generating almost limitless possibilities, opportunities and prospects. We could solve many of the more serious problems we have today if for it there would be political will and political and legal commitment.

Manfred Lachs warned still in 1992: *“it is essential to enter the twenty-first century with the conviction that the world needs urgent solutions, because it has registered enormous progress, but it also leaves remain particularly severe needs”*². The history of the last 18 years gave him full reason.

Threats to peace and well-being in the twenty-first century not only come from weapons of mass destruction, terrorism, and military conflict – including in, to and from outer space –, but they also involve disruption of the natural systems of the Earth; competition for resources, such as oil and water; and disruption of the Earth's patrimony – the forests, water, air, living things and the most useful of space orbits upon which we depend.³

In this context what is the role and the importance of international law?

The Lachs' answer is unforgettable: *“The lawyers are not the engines of history but we can open the door of the 21st century convinced that the galloping impulse of events underlines the great importance of international law*

*and requires its development in all areas of life, otherwise international relationships – even the most simple – run the risk to become impossible”*⁴.

In other words, *“we still cannot live without law”*, as points out the Brazilian jurist Salem Hikmat Nasser.

Nasser also rightly remarks: *“In the regulatory universe of international relations, find out the place and the role of law is an exercise that today imposes to take into account the phenomena of ‘soft law’”*⁵. These phenomena are multiple and have been the subject of intense legal discussions. Its main question is to define the extension of the utility and the effectiveness of “soft law” in different branches and issues. Here it is given special attention to space law.

THE POLEMICAL “SOFT LAW”

What do we have in mind when we use the expression “soft law”?

Here is the Nasser's attempt to offer the broadest notion of such a – let's say – concept:

“1. norms, legal or not, with their vague language or based on notions of varying or open content, or having the character of generality or principality or preventing the identification of specific and clear rules;

2. norms which provide – for cases of noncompliance, or for resolution of disputes derived from them – mechanisms of conciliation, mediation, or other, except for the adjudication;

3. concerted acts, produced by states, not intended to be mandatory. Under various forms and classifications, these instruments have in common a negative feature; in principle, they all are not treaties;

4. resolutions and decisions of the organs of international organizations, or

other instruments they produced, and which are not mandatory;

*5. instruments prepared by non-state entities, with the intention of establishing guiding principles for the conduct of states and other entities, and tending to the establishment of new legal norms."*⁶

This description clearly shows that Nasser does not see "soft law" as a legal rule. In reality, the expression as well as the concept of "soft law" is quite controversial. The validity *per se* of the idea of "soft law" is questioned.

Is "soft law" a legal rule?

No, it is not, say some authors, like Nasser. Yes, it is, respond others.

We also would say that "soft law", of course, is not a legal rule. But it is not any merit. We are just repeating the opinion of great jurists⁷. However, this correct doctrinal approach definitely does not resolve many important questions in the extremely complex world of 21th Century.

It is a matter of fact that in the international environmental law and space law, "soft law" has played a singular and virtuous role as a recommendation, an orientation, a point of reference for voluntary conduct by the States and the international intergovernmental organizations.

Interesting in this regard is the observation of Schoenbaum: "*A distinctive feature of international environmental law is the development of legal doctrines and principles, which serves as policy guides for more particular, concrete standards and legal norms. These policy guides are too general to constrain conduct and so are regarded as 'soft law', which appears to be a contradiction, because law denotes social rules that are compulsory and are therefore 'hard'. Nevertheless, because of its novelty, international environmental*

*law has made use of halfway, general principles that attract wide assent, avoiding details and standards that bite or reserving them for late"*⁸.

"Soft law" – as stresses Nasser – also may represent a relevant moment in the process of creation of a custom or a conventional norm – a "hard law" as an unquestionably binding rule.

For instance, some of the principles stated in the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space, of 1963⁹, and some of earlier United Nations General Assembly resolutions on space questions became customary law even before the entry into force of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Celestial Bodies (Outer Space Treaty), of 1967¹⁰.

Francis Lyall and Paul B. Larsen have full reason when they consider doctrinaire concepts of law that exclude "soft law" from consideration do "*a disservice to the study of law*"¹¹.

Paulo Borba Casella remarks rightly: "*The soft law expresses the intention of possibly being translated into a supervening consolidation of new international law rules, even though, during its appearance, there are no clarity on these rules neither their specific framing in relation to traditional standards of legality. Its exact normative configuration remains uncertain, but the multiplication of use of this tool, legally indeterminate, responds to a yearning of this same international community regarding the need for affirmation, if not of principles, at least of concerns, which, however incipiently regulated, might be translated into legally effective and appropriate regulation to meet the needs of humanity, faced with its survival.*"¹²

In many cases, “soft law” is the politically possible law and responds to the will and the claims of a great number or even the majority of countries. In this sense, “soft law” acts as a breaker of barriers, opening the possibility of some form or suggestion of regulation in a matter where there is no the necessary consensus of all parties involved.

In an essay published in 1997 for the 30th Anniversary of the Outer Space Treaty, Marco Ferrazzani remarks that “we are living in times when international space community seems to lose track of the development of written space law, because of the reduced initiative of codification both by the United Nations Committee on the Peaceful Uses of Outer Space [UNCOPUOS] and by the so called space faring nations”¹³.

In general it is true, but to say simply “international space community seems to lose track of the development of written space law” does not help very much to clarify the situation.

In this regard, it is worth recalling the difficulties – still today irremovable – of just discussing in the sessions of the UNCOPUOS crucial issues relating to the needed updating of the big five space treaties and of some very important resolutions approved by the General Assembly of United Nations, considered integral parts of space law.

It is important to remember the memorable Manfred Lachs's article published in 1992 for the 25th Anniversary of the Outer Space Treaty, stressing that “*space technology and economic possibilities are continually generating new questions to which law has to find adequate answers*” and that the process of development of the Law of Outer Space “*cannot be arrested – it has to grow at ever greater speed to follow life in order to resolve the many problems*

for the benefit and in the interests of all men”¹⁴.

Francis Lyall and Paul B. Larsen¹⁵ point out the significant role of “soft law”, mainly in space law, but they recognize that “*its content is dependent on compliance rather than enforcement*” and that “*different participants in the process may interpret it differently, leading to a lack of consistency and uniformity of practice*”. To assure transparency and security in space activities consistency, certainty and uniformity of practice are crucial to the legislation destined to regulate the most relevant space questions.

Analysing a “soft law” that should play a highly important role, V. S. Vereshchetin notes: “*The 1996 set of principles relating to space cooperation, despite its impressive title – 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 – in its operational provisions, in view of many, did not advance the practical realization of earlier assumed undertakings, but rather construed them in a less binding and more ambivalent way*”¹⁶.

An intense and comprehensive international cooperation in the present and future space activities is so necessary that arguably it would deserve a much more substantial and effective legal instrument.

Any analysis of the question of “soft law” in our days cannot be made out of the concrete context we live in.

This seems to be true even when we affirm that “soft law” is neither sufficient nor appropriate for regulating the most challenging questions of the present and future space activities.

“Soft law” is not an anathema, but can be a false solution, a kind of a capital

sin, when we face fundamental problems, particularly in space law.

THE SUPPORT OF DOCTRINE

Can this assessment be supported by the doctrinal approach?

The answer is yes, if we take into account the conceptual ideas of some recognisable authors.

Nguyen Quoc Dinh, for instance, calls the attention to the legal consequences of the absence of binding character in non-conventional acts: *"Their non-compliance does not entail the international responsibility for their authors and cannot be appealed judicial role. Not being of international agreements, they are not subject to specific rules of treaty law, both international and internal; they do not shift to be registered with the United Nations Secretariat (...); they cannot be introduced in national legal order according to constitutional norms on the international commitments of the state; they cannot be invoked before national courts, etc."*¹⁷

Jean-Paul Jacqué, in turn, stresses that: *"we cannot say that there are norms more or less binding. It is cited the case of norms that contain indicative models of behavior, reference frameworks etc. If you want to take this action in the context of the distinction between 'lex lata' and 'lege ferenda', there is not difficulty in recognizing that some non-mandatory norms can contribute to the formation of a mandatory norm. But what is the interest in recognizing as legal ones the norms those that are not binding?"*¹⁸

Casella points out that norms of "soft law", although they have a specific importance of political character and can play a role in the formation of custom, they should not however be considered as part of positive law as a legal norm¹⁹.

And last but not least, Catherine Kessedjian observes, *"it would be futile to believe that the 'soft law' can fully replace the rule of law. Even here, 'soft law' may allow to adjust 'hard law', but cannot suppress it. Total area of non-law begets chaos"*²⁰.

How to ignore these reasonable considerations if and when the world community of States decides to construct an international space legislation stronger and securer than today?

EUROPEAN PARLIAMENT'S RESOLUTION ON SOFT LAW

This statement deserves a special chapter. European Parliament adopted in 4th September 2007 a *"resolution on institutional and legal implications of the use of 'soft law' instruments"*²¹, establishing, among others, that it:

"1. Considers that, in the context of the Community, soft law all too often constitutes an ambiguous and ineffective instrument which is liable to have a detrimental effect on Community legislation and institutional balance and should be used with caution, even where it is provided for in the Treaty;

2. Recalls that so-called soft law cannot be a substitute for legal acts and instruments, which are available to ensure the continuity of the legislative process, especially in the field of culture and education;

...

5. Deplores the use of soft law by the Commission where it is a surrogate for EU legislation that is still necessary per se, having due regard to the principles of subsidiarity and proportionality, or where it extrapolates the case-law of the Court of Justice into uncharted territory;

6. Urges the institutions to act by analogy with Article I-33 of the

Constitutional Treaty by refraining from adopting soft-law instruments when draft legislative acts are under consideration; considers that, even under existing law, the requirement arises from the principle of the rule of law under Article 6 of the EU Treaty;

...
 8. *Calls on the Commission to give special consideration to the effect of soft law on consumers and their possible means of redress before proposing any measure involving soft-law instruments;*

...
 19. *Stresses that the expression of soft law, as well as its invocation, should be avoided at all times in any official documents of the European institutions;”*

According to the European Parliament, “soft law” is “*an ambiguous and ineffective instrument*” and it “*cannot be a substitute for legal acts and instruments*”. That Parliament recommends “*refraining from adopting ‘soft law’ instruments*” when “*the requirement arises from the principle of the rule of the law*”. These severe qualifications and guidelines approved by European Parliament may serve as valid warnings for contemporary space law, particularly in relation to space activities involving the security of all countries as well as the sustainability of all space programs.

“SOFT LAW” AND THE UNIDROIT

Another case deserves to be quoted. The International Institute for the Unification of Private Law (UNIDROIT) is interested in finding legal ways to satisfy commercial and financial needs in the space area by giving financial support to Governments and private companies and, at the same time, improving creditor’s guarantees. Taking it into account, UNIDROIT has elaborated a

draft Protocol on Space Assets that aims to protect the commercial relationship between a creditor who has given financial support and the debtor who wants to have a space asset. The Protocol has been discussed in the COPUOS Legal Subcommittee since 2001. According to the most recent version of the Protocol²², its Article XXII can be considered a clear example of the contrast between “hard law” and “soft law”. Article XXII – Remedies on Insolvency - states that:

“1. – This Article applies only where a Contracting State that is the primary insolvency jurisdiction has made a declaration pursuant to Article XL(4).

Alternative A

2. – Upon the occurrence of an insolvency-related event, the insolvency administrator or the debtor, as applicable, shall, subject to paragraph 7, give possession of or control and operation over the space asset to the creditor no later than the earlier of:

- (a) the end of the waiting period; and
- (b) the date on which the creditor would be entitled to possession of or control and operation over the space asset if this Article did not apply.

Alternative B

2. – Upon the occurrence of an insolvency-related event, the insolvency administrator or the debtor, as applicable, upon the request of the creditor, shall give notice to the creditor within the time specified in a declaration of a Contracting State pursuant to Article XL(4) whether it will:

- (a) cure all defaults other than a default constituted by the opening of insolvency proceedings and agree to perform all future obligations, under the agreement and related transaction documents; or
- (b) give the creditor the opportunity to take possession of or control and operation over the space

asset, in accordance with the applicable law.

Alternative "A" may be considered "hard law" and Alternative "B" "soft law". Obviously, the Protocol will only be well accepted when creditors have due protection of their rights. In order to assure creditors' rights in cases of insolvency, the process must be effective and expedited. In this case, it seems that creditors will give credits easily to those States that adopt Alternative "A".

In other words: "hard law" assures much more certainty and predictability than "soft law". If this approach is valid to protect commercial relationship between a creditor and the debtor in space affairs, there are still more reasons to protect countries, international organizations and companies in their dangerous space activities.

"SOFT LAW" AND DISARMAMENT

The complex regulations of the disarmament, mainly in the field of strategic arms, are based on hard, as well as on soft laws.

In this area, according to Rodrigo Fernandes More, "*there are no legal mechanisms enforcing sanctions on States or enforcing obligations, just 'moral' sanctions in politics and in interstate relations that wind up undermining trust in States and governments*"²³.

Yet, More affirms that the issue of disarmament tends to move towards instruments of 'hard law', especially in relation to weapons of mass destruction. Here are some eloquent examples²⁴:

Treaty for the Prohibition of Nuclear Weapons in Latin America, April 22, 1968;

Treaty on the Non-Proliferation of Nuclear Weapons, March 5, 1970;

Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Seabed and the Ocean Floor and in the Subsoil Thereof, February 11, 1971;

Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their destruction, March 26, 1975;

Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, October 5, 1978;

Treaty Between the USA and the USSR on the Limitation of Strategic Offensive Arms, together with Agreed Statements and Common Understandings Regarding the Treaty, June 18, 1979;

The South Pacific Nuclear Free Zone Treaty (Treaty of Rarotonga), December 11, 1986;

Treaty Between the USA and the USSR on the Reduction and Limitation of Strategic Offensive Arms, July 31, 1991;

Agreement between Argentina and Brazil for the Exclusively Peaceful Use of Nuclear Energy, July 18, 1991;

Agreement between Argentina, Brazil, the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials and the International Atomic Energy Agency for the Application of Safeguards, December 13, 1991;

Treaty between the USA and the Russian Federation on Further Reduction and Limitation of Strategic Offensive Arms, January 3, 1993;

The African Nuclear Weapon Free Zone Treaty (Treaty of Pelindaba), April 11, 1996;

Comprehensive Test Ban Treaty, September 10, 1996;

The Chemical Weapons Convention, April 29, 1997;

Treaty between the USA and the Russian Federation on Measures for the Further Reduction and Limitation of Strategic Offensive Arms (New START), April 8, 2010;

Agreement between the USA and the Russian Federation for Cooperation in the Field of Peaceful Uses of Nuclear Energy, May 10, 2010.

This list, although incomplete, shows that when states are really interested in ensuring certain conduct relating to international issues of major importance, they do not save efforts to develop and approve a binding agreement.

Many space matters, as we know very well, are of extraordinary international significance. Then, when the binding agreements – much more efficient and responsible – will return to enrich and consolidate the international space law?

SOFT LAW AND SPACE POLICY

V. S. Vereshchetin defends that “*law takes precedence over policy*”.

It was an excellent idea for the 20th Century and it is a still more remarkable one for our 21st Century.

The author explains: “*The policy of a State must remain within the bounds of and conform to the dictates of international law in force. This is especially true when what is at stake is conduct in outer space, the exploration and use of which is defined in the Outer Space Treaty as the 'province of all mankind'. National space policy must be checked against law, but not vice versa. Designed to serve international community interests, the law cannot be reduced to a position of subservience to the changing policies of one or several members of this community.*”²⁵

This point of view is absolutely correct in our opinion, but it raises an inevitable question: is it valid for “soft law”?

Maybe there is some “soft law” – widely supported – that also can take precedence over policy. However, it seems unquestionable that “hard law” is the appropriate law to accomplish such an important mission.

On the other hand, we must recognise that law – in its initial stage – depends of the political decision.

In the first decades of the space age, the great powers of that time took the political decision to regulate space activities through strong resolutions approved by the General Assembly of the United Nations (soft law) and, especially, through treaties and conventions (hard law).

Once the political decision is taken and the law approved, then the law takes precedence over the policy. It seems to be the dialectic relation between policy and law.

The question that is up to us answer now is what kind of predominant political decision we have today in relation to space law. The preference between “soft” or “hard” law is not just a juridical decision, but, above all, a political one.

It means that if we want to drive the international space law to a more consequent, comprehensive and effective direction we must to change the predominant political decision.

It is not easy, of course. But are not there enough reasons for that?

“SOFT LAW” AND THE FUTURE OF INTERNATIONAL SPACE LAW

Francis Lyall and Paul B. Larsen write, “*The 'law' of science is directed to the explanation of phenomena, and*

allows prediction of the consequences of particular sets of circumstances".²⁶

The phenomena we are trying to examine here is the current prevalence of "soft law" in international space law and the possibility of changing this situation, in view of the necessity to face decisive issues for the future of space activities.

Actually, we have, today and tomorrow, some challenging legal issues to face in the space activities scenario:

1) The security (protection) of space activities, which includes the military uses of outer space in general and in particular, the placing of weapons in Earth's orbit²⁷. This is nowadays, in my view, the central question of long-term sustainability of space activities – a new item for discussion that France proposed at COPUOS²⁸ in 2007. The European Union's Draft Code of Conduct for Outer Space Activities²⁹, although introduced in the Conference on Disarmament (in March 27, 2009), is not a satisfactory solution. It does not say a word about the current danger of weaponization of space³⁰. An effective way to preserve the security of outer space is arguably to negotiate and conclude an international legal instrument ("hard law").

2) The safety of space activities, which includes the rapid growth of space debris numbers. This also is a big question of long-term sustainability of space activities. To Gérard Brachet, it "needs to be addressed by all nations interested in the future utilization of outer space"³¹. Space Debris Mitigation Guidelines of UN Committee on the Peaceful Uses of Outer Space (COPUOS) as stated in United Nations General Assembly Resolution 62/217 is a positive initiative and must be discussed and developed by the Legal Subcommittee of COPUOS. It must be enhanced and strengthened at the inter-national level in order to expressly include a clear

obligation to remove defunct satellites and a right to salvage.³²

3) The increasing necessity for a global system of space traffic management;

4) A more comprehensive international legislation on remote sensing activities from outer space, as the Earth Observation became a huge requirement of security and development for all countries;

5) The regulation of the exploration and exploitation of the Moon's resources, since there already are many national plans to create lunar settlements within 20-30 years, and to date there is not a broad agreement on the Moon, supported by the majority of countries.

Is "soft law" the suitable legal way to fasten the required commitment to give a real solution for such complex cases?

One of the strongest arguments to face these questions is, in the wise words of Manfred Lachs, that "*in today's world, the preventive function of the law is more vital than ever before*".³³

SOME HARD AND SOFT CONCLUSIONS

1) Yes, there is future for international space law beyond the "soft law", because there are many convincing and concrete reasons for this, mainly in the fields of security and safety of space activities, which increasingly need a real guarantee of long-term sustainability as never before. "Hard law" is much more appropriate and effective in these and as well in other many cases, in which the juridical certainty, predictability and responsibility are absolutely needed.

2) The choice between "soft" or "hard" law is not just a juridical decision, but, above all, a political one. What is up to us to do today is to know objectively

why in our days there is a political decision favoring "soft law" and what conditions could lead to a political decision favoring "hard law". It is opportune to remember that the global political map is changing very quickly, and one of its more attractive trends is driven in the sense to strengthening the multilateralism and the democratization of the international relations.

3) "Soft law" is far from being a bad solution. It has a good, rich and flexible potential. It may represent a relevant moment in the process of creation of a custom or a conventional norm – a "hard law". In many cases, it acts as a breaker of barriers, opening the possibility of some form or suggestion of regulation in a matter when there is no the necessary consensus of all parties involved. "Soft law" is also able to face – as a precursor – many of current and futures challenges of international space law.

4) At least in international space law, "soft law" may be the one that struggles to break locked paths, while "hard law" may be the own breaker.

References

- ¹ Vereshchetin, V. S., *The Law of Outer Space in the General Legal Field (Commonality and Particularities)*, Inaugural Nandasiri Jasentuliyana Lecture, 52nd Colloquium on the Law of Outer Space, International Institute of Space law, 13 October 2009, Daejeon, Republic of Korea.
- ² Lachs, Manfred, *Le droit international a l'aube du XX^e Siècle*, Editions A. Pedrone: Paris, Revue Général de Droit International Public, Juillet-Septembre 1992, N° 3, p. 547.
- ³ Schoenbaum, Thomas J., *International Relations – The Path Not Taken – Using International Law to Promote World Peace and Security*, USA, New York: Cambridge University Press, 2006, p. 248.
- ⁴ «Les juristes ne sont pas les moteurs de l'histoire mais nous pouvons ouvrir la porte du XXI^e siècle convaincu que la poussée galopante des événements souligne la grande importance du

droit international et exige son développement dans tous le domaines de la vie, autrement les relations internacionales mêmes quoditiennes risquent de devenir impossible.» Lachs, Manfred, idem ibid, p. 549.

⁵ Nasser, Salem Hikmat, *Fontes e Normas do Direito Internacional – Um Estudo sobre Soft Law*, (Sources and Norms of International Law – An Essay on Soft Law), São Paulo, Brasil: Editora Atlas, 2nd edition, 2006, p. 160.

⁶ Nasser, Salem Hikmat, idem ibid, p. 25.

⁷ Bobbio, Norberto, *Teoria da Norma Jurídica* (Teoria della norma giuridica, G. Giappichelli Editore, Torino, Italia, 1993), Bauru, São Paulo: Ediplo, 2^aed., 2003, p 46.

⁸ Schoenbaum, Thomas J., idem ibid, p. 202.

⁹ UN General Assembly Resolution 1962 (XVIII), of December 1863.

¹⁰ See <www.state.gov/www/global/arms/treaties/space1.html>

¹¹) Lyall, Francis, Larsen, Paul B., *Space law: a treatise*; England and USA: Ashgate Publishing, 2009, p. 52.

¹² Casella, Paulo Borba, *Fundamentos do Direito Internacional Pós-Moderno*, São Paulo: Quartier Latin, 2008, pp. 1378-1379.

¹³ Ferrazzani, Marco, *Soft Law in space activities*, in *Outlook on Space Law over the Next 30 Years – Essays published for the 30th Anniversary of the Outer Space Treaty*, Editor-in-Chief: Gabriel Lafferanderie, The Hague, Netherlands: Kluwer Law International, 1997, p. 430.

¹⁴ Lachs, Manfred, *The Treaty in Principles of the Law of Outer Space, 1961-1992*, Netherlands International Law Review, Volume XXXIX, Issue 3, 1992, pp. 291-302. See also Wassenbergh, Henri A., *Principles of Outer Space Law in Hindsight*, The Netherlands: Kluwer Academic Publishers, 1991, p. 10.

¹⁵ Lyall, Francis, Larsen, Paul B., ib idib, p. 51.

¹⁶ Vereshchetin, V. S., ib idib.

¹⁷ "L'absence de force obligatoire des actes concertés non conventionnels a d'importantes conséquences juridiques: leur non respect n'engage pas la responsabilité internationale de leurs auteurs et ne peut faire l'objet d'un recours juridictionnel. N'étant pas des accords internationaux, ils ne sont pas soumis au respect des règles spécifiques du droit du traités, tant internationales qu'internes: ils n'ont pas vacation a être enregistrés auprès du Secrétariat des Nations Unies (...); ils n'ont pas à être introduits dans les ordres juridiques nationaux conformément aux règle constitutionnelles concernant les engagements internationaux de l'état; ils ne

peuvent être invoqués devant les tribunaux nationaux; etc.” Nguyen Quoc Dinh, *Droit international public* (updated by Patrick Daillier and Alain Pellet, Paris: LGDJ, 5^e ed., 1994, pp. 38-382. (quoted by Casella, Paulo Borba, *Fundamentos do Direito Internacional Pós-Moderno*, São Paulo: Quartier Latin, 2008, p. 1239).

¹⁸ “... on ne peut dire qu'il existe de norme plus ou moins obligatoires. On a évoqué le cas de normes que contiendraient des modèles de comportement incitatifs, de cadres de référence etc. Si l'on veut par ce recours reprendre la distinction de *lege lata* et de *lege ferenda*, il n'existe aucune difficulté à reconnaître que certaines normes non obligatoires peuvent concourir à la formation d'une norme obligatoire. Mais quel est l'intérêt de reconnaître le caractère de norme juridique à des normes qui ne sont pas obligatoires?” Jacqué, Jean-Paul, *Acte et norme en droit international public*, RCADI, 1991-II, t. 227, p. 389.

¹⁹ Casella, Paulo Borba, *Fundamentos do Direito Internacional Pós-Moderno*, São Paulo: Quartier Latin, 2008, p. 855.

²⁰ Kessedjian, Catherine, *Codification du droit commercial international et droit international privé*, RCADI, 2002, t. 300, pp. 388-391. (quoted by Casella, p. 1237.)

²¹ European Parliament's Resolution of 4th September 2007 on institutional and legal implications of the use of 'soft law' instruments [2007/2028(INI)]; C 187 E/76; Official Journal of the European Union, 24.7.2008, Tuesday 4th September 2007 – P6_TA(2007)0366.

²² Text of the revised preliminary draft protocol to the Cape Town Convention on Matters Specific to Space Assets as it emerged from the fourth session of the UNIDROIT Committee of governmental experts for the preparation of a draft Protocol to the Cape Town Convention on Matters specific to Space Assets, held in Rome from 3 to 7 May 2010.

²³ More, Rodrigo Fernandes, *Direito Internacional do Desarmamento – O Estado, a ONU e a Paz (International Law of Disarmament - State, UN and Peace)*, São Paulo, Brasil: Lex Editora, 2006, p. 144.

²⁴) <<http://dosfan.lib.uic.edu/acda/treaties.htm>>

²⁵ Vereshchetin, V. S., ib idib.

²⁶ In Brazil we call this area as “theory of law”.

²⁷ There are already a number of international treaties and instruments with jurisdiction over space activities, but they do not adequately cover the challenges posed by space-based weapons and missile defense. Though some prohibit or restrict

the deployment of weapons or use of force in outer space, the provisions are limited in scope and coverage. None of the existing legal instruments unequivocally prevents the testing, deployment and use of weapons other than nuclear, chemical and biological, in outer space. Nor does any relevant legal instrument cover the use of force or threat of use of force against a country's assets in outer space. The placement of nuclear weapons in space is prohibited under the 1967 Outer Space Treaty, but nuclear-warheads on missile defense interceptors launched from the ground into space are not prohibited. (Acronym Institute for Disarmament Diplomacy: see <www.acronym.org.uk/space/index.htm>)

²⁸ A/AC.105/L.268.

²⁹ See <www.armscontrol.org/act/2009_01-02/eu_issues_space_code_conduct>

³⁰ “The authors satisfy themselves with just mentioning among 'general principles' the responsibility of States 'to take all the adequate measures to prevent outer space from becoming an area of conflict'. This general statement is not supported by any specific commitments, albeit voluntary and non-binding. On the contrary, it is diluted by numerous reservations, scattered throughout the document, which can be read as justifying different kinds of military activities because they are “vital to national security,” or on such grounds as “legitimate defense interests,” 'inherent right of self-defense' or 'imperative safety considerations'. In vain does one try to find in the document one single word concerning the need to prevent space weaponization the most pressing measure required in order to avert outer space from “becoming an area of conflict” Vereshchetin, V. S., ib. idib.

³¹ Brachet, Gérard, *Long-term sustainability of space activities*, published in *Security in Space: The Next Generation – Conference Report*, 31 March–1 April 2008, United Nations Institute for Disarmament Research (UNIDIR), 2008.

³² Jakhu, Ram S., *Iridium-Cosmos collision and its implications for space operations*, *Yearbook on Space Policy – 2008/2009: Setting New Trends*, European Space Policy Institute, Germany: Springer-Verla/Wien, 2010, p. 270.

³³ Lachs, Manfred, *Le monde de la pensée en droit international – Theories et pratique*, Paris: Economica, 1989, p. 230.