

# THE LAW OF OUTER SPACE IN THE GENERAL LEGAL FIELD (COMMONALITY AND PARTICULARITIES)

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## 1. Revealing the contents of certain terms

As is well known, practical legal questions arose immediately after the launch of the first sputnik. Due to the vast political, military and economic implications of the advent of space technology, a new law emerged in a historically short time span. After a brief period of somewhat differing designations of the new legal discipline, the term “the law of outer space” (or “space law”) acquired general recognition. But in using this seemingly clear term do we uniformly perceive its meaning and the complexity of its content? I am afraid this is not always the case.

Legal science and the law itself are expected to operate with precisely defined terms. However in reality all too often the terms used in legal discourse either have no universally agreed definitions or are defined very broadly and hence allow for different interpretations. The law of outer space is not an exception in this sense. In common parlance this term is often used to denote the regulation of space and space-related activities through the amalgamation of all possible rules – binding and non-binding, legal and political. However this all-encompassing approach fails to provide a sound understanding of the term for those in the legal profession.

Professors Francis Lyall and Paul Larsen in their recently published treatise perceptively compare the broadest use of the term “space law” with a “label attached to a bucket that contains different types of rules and regulations rather than as denoting a conceptually coherent single form of law”.<sup>(1)</sup>

Let us try to sort out the contents of that “bucket”. To do this we need some reference points, if not in the form of agreed definitions, then at least in terms of a basic level of understanding. The expression “the law of outer space” contains two elements: one is purely juridical – the law; the other is closely related to natural sciences – outer space. To start with the latter, the notion of outer space is not defined in natural sciences. Scientists continue to argue whether the Universe is finite or not, eternal or not, and even generally whether there exists one single Universe or several of them. As the story goes, Albert Einstein used to say that only two things were infinite, the Universe and

human stupidity, but then he would add that he was not sure about the former.

Although the law of outer space presumes the absence of an “outer limit” of outer space, in view of the current state of space technology, it does not purport to regulate human activity beyond the solar system (see Article 1 of the Moon Agreement). As for the boundary between air space and outer space it remains to be seen whether the recently announced discovery of new physical data evincing the existence of such a boundary in nature lying at a height of 118 km above the earth will be recognized by the scientific community (2) and whether this will help overcome the political unwillingness of some States to legally formalize a boundary between the two spaces whose legal regimes are fundamentally different.

Meanwhile, the inextricable link between law and technology makes itself felt in the wording of a number of provisions of space law agreements which implicitly confirm that the drafters proceeded from the assumption that a satellite placed in any sustainable orbit around the earth, including the lowest one, must be seen as situated in outer space (see Article IV of the Outer Space Treaty or Article II of the Convention on Registration).

Turning to the first part of the expression “the law of outer space”, one has to admit that the state of general legal theory does not make it easy to separate “law” from “non-law”. This complicates our task of sorting out the different kinds of rules we find in the above-mentioned “bucket” labeled “space law”. Postmodernist legal theory and legal philosophy are awash with different concepts vis-à-vis the nature of law and its definitions. The same is true of the related categories of legal norms, legal relations and so forth. For some scholars, law encompasses every normative order, irrespective of its recognition as law by States and whether or not it is binding and enforceable. For others, the very notion of a legal norm is untenable. They conceive law as a permanent process of decision-making.

Difficulties in understanding the nature of law and legal obligations have always existed in legal history. It was not by chance that Wolfgang Friedmann observed that “over thousands of years the most powerful minds of all nations have been unable to agree on a universal definition of law”.<sup>(3)</sup> What cannot be denied however is the fact that the binding force, consistency, stability, and hence predictability, of law as well as the legal consequences in

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terms of the responsibility incurred for its violation make law distinguishable from other social orders. The distinction between law and non-law is strictly observed by States and their organs, and by national and international courts and tribunals.

Another undeniable fact relevant to the understanding of the term space law is the division of law in general terms into two largely autonomous systems: national law (or rather the plurality of national laws) and international law, with multiple complex links and significant interaction between them. Accordingly, the law of outer space does not exist as a single coherent and comprehensive body of legal principles and rules relating to space activities. These legal principles and rules either lie within the international law system, where they form a separate branch (international space law), or within the system of national laws of different States. Thus, from the point of view of its normative contents the term space law in its broadest sense is everything and nothing at the same time, like a general without an army. In a narrow sense this term is often used to denote public international space law.

An important caveat should however be made. The separate regulation of space activities within international and national frameworks does not detract from the importance of having an integrated perception of this regulation in scholarly research and teaching, provided we do not forget that we are dealing with two interrelated but largely autonomous legal systems.<sup>(4)</sup> For these purposes, a subject-oriented or territory-oriented approach to different types of activities has been widely and effectively used in different legal disciplines, such as air law, the law of the sea, environmental law and some others.

As one of various specific areas of law, space law “borrows” from law in general not only its tools, general categories and notions, but also its unresolved problems. Of equal relevance to space law as to other areas of law are problems such as the nature of law generally and international law in particular, the relationship between national and international law, between law and politics and between so-called hard law and soft law. Some of these issues will be discussed later.

## **2. On some specific features of public international space law**

Since initially the only actors in outer space were States and interstate organizations, space law inescapably emerged as part of public international law. It was elaborated within the UN with the help of a specially established body – UNCOPOUS (the United Nations Committee on the Peaceful Uses of Outer Space). The fundamental basis of this new branch of public international law was and remains the 1967 Treaty on Principles

Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies (Outer Space Treaty), which to date is binding on 100 States. Four other UN space agreements can be seen as implementing and developing the relevant provisions of this Treaty.<sup>(5)</sup> According to the Outer Space Treaty, the freedom of exploration and use of outer space and celestial bodies is not unlimited. It is subject to a number of conditions and restrictions such as nonappropriation, authorization and supervision of private activities, concrete prohibitions of certain military uses and others. The most general guiding principle, expressed in Article III of the Treaty, provides that activities in the exploration and use of outer space must be conducted “in accordance with international law, including the Charter of the United Nations”.

Clearly, this is but another affirmation of the well-established tenet of international law that human activities anywhere beyond national jurisdiction are governed by international law. Problems arise when we turn to the different conceptions of international law by positivists, realists, constructivists and proponents of other schools of thought. Certainly, I cannot deal with these theories in the time frame of this lecture. I will proceed from what in my view can be taken as the mainstream position, namely the widely held approach which places emphasis on the distinctive role of law among other normative orders, on the unity of international law, as a system, and on the universality of its basic principles and at the same time which fully recognizes the existence of specialized legal regimes within this law.

The international legal regime of outer space features a number of peculiarities. Among these, the most frequently singled out has been the unique regulation of matters of State responsibility for activities carried out by private actors in outer space.<sup>(6)</sup> However I would now like to dwell on another salient feature of the law of outer space that is sometimes defined as “revolutionary”, although, in one form or another, it has already been present in international law for a certain time.<sup>(7)</sup> The technological revolution that led to the unprecedented expansion of human activity into boundless space coincided historically with another revolution – in the political setting of the world. The swift growth of newborn States as a result of decolonization and the needs and demands of these States have left a significant imprint on the newborn law.

The very first article of the Outer Space Treaty directs that “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”. (Emphasis is added). It is true that from the

very outset there has been a wide range of different views and interpretations among States and publicists as to the legal significance of this provision. For some it is no more than a statement of general purpose or moral principle, conversely for others it is an erga omnes obligation or even a peremptory norm of international law (*jus cogens*).

In any case, however, it cannot be denied that these and related concepts and provisions (such as the “common heritage of mankind” in the Moon Agreement) and the constant reference in many documents to the necessity to take “into particular account the needs of developing countries” have exerted a strong influence on the content of international space law and have given an impetus to the further development of the notion of solidarity in international law generally.

However the practical implementation of these praiseworthy concepts and provisions has proved to be less than successful. Suffice it to recall the fortune of the Moon Agreement. The expectations of “distributive justice” have never materialized. Moreover, with the much-claimed global triumph of free market ideology, the prospects for the implementation of these innovative concepts in space law have become ever more distant. Commercialization and privatization are now the catchwords of space policy in space-faring nations, although the trust in invisible rational market is waning in the wake of the recent financial and economic crises.

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. Let us hope, to use a metaphor of Judge Bedjaoui, former President of the International Court of Justice, that even if the “revolutionary” concepts and principles of space law “undergo a gradual eclipse”, they will not disappear “like a comet”.<sup>(8)</sup>

### **3. On national space legislation and the relationship between space law and private international law**

It is often said that the “golden age”, or “*la grande époque*”, of public international space law was very short-lived. There have been no new UN space treaties or agreements since 1979. The failure to elaborate new legally binding international instruments of general application can be contrasted with the current burgeoning of national space legislation that now exists in about 20 States. In domestic law (maybe with the exception of a very few States) space-related legislative acts have not yet acquired the status of a

separate branch of national law. Many of those acts do not ensure comprehensive regulation of national space activity, but concern only some of its aspects which in the view of the legislator are of direct relevance to the given State (e.g. licensing, certification, insurance or other).

The growth in the transborder circulation of people, goods and services in the era of globalization, among other things, requires the harmonization and unification of the respective domestic legal regulation. National space and space-related activities, especially due to their rapid commercialization and privatization, are now part of this global process. This brings into the picture the issue of the relationship between space law and private international law.

The UNIDROIT Protocol on Matters Specific to Space Assets, although it is as yet only at a preliminary draft stage, can serve as an example of a private international law instrument specifically designed for space activities, in particular for mitigating the risks involved in the private financing of these activities. The system constituted by the Cape Town Convention on International Interests in Mobile Equipment (9) and the Space Protocol attached thereto is aimed at the unification of domestic law legislation relating to asset based commercial space financing. These problems directly concern all key players in commercial space activities: manufacturers, operators, financiers and insurers. The above-mentioned preliminary draft Protocol still needs to be further harmonized so as to take into account the basic principles of public international space law whose primacy over the provisions of the Protocol is assumed.

It would be wrong or at least premature to claim the existence of a distinct private international space law. However general private international law, with all the tools that it has developed, has been widely applied by international private and public-private space enterprises. Therefore one can say that space-related activities are governed not only by public international space law but also by private international law. On the other hand, the huge investments required for space activity and the risks involved have had a direct impact on a number of traditional facets of national and private international law, for example, risk allocation provisions in contract law, insurance, intellectual property rights and others. The obligations flowing from public international space law are of undeniable importance and should be taken into account by the parties to an enterprise, when dealing with such issues as property rights in outer space, jurisdiction and control over space objects or third party liability.

Growth in the economic uses of space technology and the privatization of such uses have led not only to the wider application of private international law, but also to the scholarly construction of so-called “branches” of space

law, such as space economic law, space telecommunication law, space transportation law. In reality these “branches” are simply confluences of binding and non-binding rules originating from different sources (national and international) and assembled around a certain subject connected with space activities. They can have pedagogical value and in some practical respects be useful, provided that we do not lose sight of the diverse nature of these assembled rules and the varying consequences that flow from their violation. The differences between law and non-law, international and national law, public and private law, despite their increasing interaction and even appearance of “hybrid” forms of regulation, should be kept in mind when we are confronted with the maze of regulation of public and private space activities in the era of globalization or with the efforts of the private sector to reshape space law to its liking.

In connection with the real or imaginary fragmentation of space law, I cannot help but mention an interesting theory I recently came across while reading the proceedings of the 49th Colloquium on the Law of Outer Space. The authors – Doctors U. Bohlman and L. Martinez – call it a “proto-theory”. They envisage a future with the evolution of space law heading towards a split into two distinct regimes depending on the area of its application – space exploration or near-earth space activities. In the view of the authors, space exploration law would see space-faring powers preserving or regaining their “hegemonic” role as actors and law-makers, and would be applicable in particular to the new large-scale space exploration initiatives concerning the Moon, Mars and beyond. On the other hand, the law that concerns near-earth space activities would witness the gradual abandonment of control by space powers and States generally for the sake of an “increasingly diversified and commercialized space sector”.(10)

At the same time the authors of this “proto-theory” rightly point out that “space is too important to entrust its development and governance to the profit motives of the commercial space sector”.(11) I would think that, despite the growing diversification of formerly purely governmental space activities, the basic principles formulated in the Outer Space Treaty (including the principle of “authorization and supervision”) cannot be easily abandoned. Moreover, it was convincingly shown by a number of prominent space law experts that these principles correspond not only to the interests of states, but also to the interests of private actors. No activities in outer space can be left unregulated by public international space law, if only for security and safety considerations. This is especially true of the near-earth space so critically important for life on earth.

I would like to add my voice to those warning against the revision of the Outer Space Treaty that today

continues to duly reflect the balance of interests of all States and of all sectors of space activities. The process of adjusting and further clarifying various terms, concepts and provisions of this Treaty and other space law agreements can be achieved by other means, as evidenced, for instance, by the work of UNCOPUOS resulting in the adoption by the UN General Assembly of the resolution on the application of the concept of the “launching State”.(12)

#### 4. “Hard” law versus “soft” law

As noted earlier, over the past 30 years there has been a dearth in new international instruments relating to the general regulation of space activities, and those that did appear were not in legally binding form. This trend in space regulation and in particular the recent initiative of the European Union concerning the draft of a voluntary Code of Conduct for Outer Space Activities, in large part due to its claim to “lay down the basic rules to be observed by space-faring nations”,(13) has led to a resurgence of theoretical and practical interest in the notion of “soft” law. Of course this problem is anything but new either for international law generally or for international space law in particular.

At the beginning of the space age it was actively discussed mainly in the context of the role of UN General Assembly resolutions as a source of international law. The result of this academic debate was not conclusive, but it was not contested that some General Assembly resolutions, although not legally binding, played a singular role in the origin and further evolution of international space law.(14) It is recalled that the precursor of the Outer Space Treaty of 1967 was the 1963 Declaration of Legal Principles unanimously adopted in the form of a UN General Assembly resolution.(15) Some of the principles stated in that Declaration and in a number of earlier General Assembly resolutions arguably became customary law even before the entry into force of the Outer Space Treaty.

Nevertheless, it is also useful to recall that the UN Office of Legal Affairs in 1981 advised that “in the practice of the United Nations a declaration is a formal and solemn instrument suitable for those occasions when principles considered to be of special importance are being enunciated. Apart from the solemnity and formality associated with a declaration there is legally no distinction between a declaration and a recommendation which is less formal”.(16)

In the years from 1982 to 1996 most of the sets of principles relating to concrete space applications and space cooperation were adopted in the form of UN General Assembly declarations. At that time, States evidently proceeded from the clear assumption that they were voting on or consenting to legally non-binding documents. This

basic assumption cannot be dispelled, although it is tempered by the weight and significance of those principles, their thorough and protracted drafting by the authorized representatives of the States and by the fact that some of them were accepted by consensus.

Certainly some of those principles in the same or modified form can acquire a legal character either through a treaty-making procedure or by way of formation of customary rules. Internally, within a State, they can become legally binding at any given moment under national procedure. Those principles can also serve as evidence of State practice in the legal discourse on the interpretation of certain rules of national and international law. From this perspective one can speak of their “legal relevance”.

However the formal distinction between law and non-law cannot be bridged simply by characterizing these principles as “quasi-law”, “pre-law” or “soft-law”. No court of law would render its judgment in a dispute and determine the legal responsibility of a party basing itself solely on such a category of “law”. This does not exclude the fact that in certain circumstances a court or arbitration tribunal can deduce from resolutions of the UN General Assembly and other material the existence of a customary rule of international law or an evidence of the emergence of such a rule.

Some authors use the term “soft” law also in respect of provisions of legally binding instruments that are vague, imprecise or very broadly formulated and for this reason do not conform to their understanding of “hard” law. The case law of the International Court of Justice does not support the view that such provisions of a treaty in force do not constitute formal legal obligations, although depending on the particular circumstances of a case, these kinds of provisions, taken in isolation, may prove to be insufficient, for example, to ground the Court’s jurisdiction *ratione materiae*.<sup>(17)</sup>

By making a distinction between legally binding and legally non-binding regulation of space activities it is not to say that the latter is not important. Space and space-related activities, along with human activities in other fields, are ordered not only by legal rules and principles, but also by legally non-binding instruments, whether or not we call them “soft” law. Instances of this kind of regulation include the aforementioned declarations of principles, Space Debris Mitigation Guidelines,<sup>(18)</sup> the Recommendations on the Practice of States and International Organizations in Registering Space Objects <sup>(19)</sup> or the UN General Assembly resolution on the application of the concept of the “launching State”.<sup>(20)</sup> In many cases those instruments, whose titles vary, deal with specific, often technical, matters – but this does not diminish their significance for outer space regulation.

Moreover, the drafting history of Article IV of the Outer Space Treaty shows that legally non-binding arrangements can pave the way for firm treaty commitments even in matters of such magnitude as military uses of outer space. Since the Draft Code of Conduct for Outer Space Activities was introduced by the European Union as a voluntary non-binding instrument in the Conference on Disarmament, it would be logical to look at this document precisely from this perspective. However before that I would like to say a few words on the issue of the relationship between space law and space policy.

## 5. Space law versus space policy

The doctrines and national policies of the most concerned States often give impetus to the formation and strongly influence the contents of new areas of legal regulation. Even before the launch of the first sputnik, the United States had started to formulate its national space law policy. <sup>(21)</sup> Somewhat later, in the former Soviet Union, under the auspices of the Ministry of Foreign Affairs, an inter-ministerial Commission on political and legal questions relating to the exploration and use of outer space was also established. The political and legal positions of these two major actors in the field of space activities played a singular role in the elaboration of the first instruments of international space law.

With the increase in awareness of the current and potential benefits of space applications, more and more States, international organizations and institutions

of regional integration started to formulate their space law policies and actively participate in the elaboration of legal rules governing space activities. The body of such rules has significantly accrued through interstate cooperative agreements and constitutive instruments of international space organizations.

However, once a new international legal document has come into force no State on which it is binding can invoke against it its own divergent space policy. Law takes precedence over policy. 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.

Certainly, international law is not a frozen system of binding norms defined once and for all. It is a living organism that should adequately reflect the exigencies of international life. There exist lawful ways or the termination

or modification of legal obligations. At the same time, according to the well-established jurisprudence of the International Court of Justice and of its predecessor, the Permanent Court of International Justice, even the national law of a State may not be invoked as justification for its failure to fulfill its international obligations.<sup>(22)</sup> It goes without saying that this principle is also applicable to a national space policy or to another executive decision of a State.

## 6. On two areas of concern over space policies

Twelve years ago Professor Bin Cheng in his lecture devoted to the thirtieth anniversary of the Outer Space Treaty highlighted four areas of concern existing in people's minds at the beginning of the space age. In the words of Bin Cheng those concerns were the following:

- “(i) The arms race and the military use of outer space;*
- (ii) Possible scramble for colonies or resources;*
- (iii) Worries over responsibility and control, as well as over potential harm or damage; and*
- (iv) International cooperation and mutual assistance”.*<sup>(23)</sup>

I would like to single out and speak from the current perspective to the first and the fourth of those concerns, and will do so in reverse order.

We are all very well aware that the principle of international cooperation in the exploration and use of outer space permeates the Outer Space Treaty and all other instruments of international space law. The debate over the legal nature and consequences of this principle was a typical feature in the early literature and in different forums on space law. Thanks to my former direct involvement on the legal side in a number of significant space projects and programmes, I clearly remember the impressive evolution of international space cooperation from the mere exchange of results of scientific experiments carried out in outer space to the joint work on the building and operation of the International Space Station and the creation of a number of international space organizations providing indispensable services to all people on earth.

It is encouraging that nowadays governments and private enterprises envisage new important projects and space agencies of different nations have established regular meetings and consultations on matters of common interest. But on the other hand, it is disquieting that the breath-taking plans of future human flights to the moon and beyond, requiring tremendous material and intellectual resources, are sometimes seen in terms of the competition of old between the space actors rather than cooperative

endeavours built on the accumulated experience of multinational space projects. The trendy slogan “back to the moon” is often presented as a “race” of different players, including the United States, Russia, China, India, Japan, ESA and the private sector. It would be extremely regrettable, if political, military and commercial interests of individual States and private corporations were to prevail and anew put competition ahead of cooperation.

Much more worrisome than the “moon race” would be an arms race in outer space. This would be manifestly inconsistent with “the common interest of all mankind in the progress of exploration and use of outer space for peaceful purposes” and with “the strengthening of friendly relations between States and peoples” as directed in the Outer Space Treaty.<sup>(24)</sup> By recalling those lofty purposes of the Treaty I do not intend to prolong the perennial polemic on the meaning of the terms “peaceful uses” or “peaceful purposes” in the text of that Treaty.<sup>(25)</sup> The application of space technology for military and so-called “dualuse” purposes has become a fait accompli.

However, up to now outer space has remained free from weapons as such. The situation would radically change should the plans for space-based weapons go ahead and trigger a new spiral in the arms race both in outer space and on earth.

Even the deployment of “conventional” weapons in outer space, which is not formally and specifically prohibited by any treaty in force, could ultimately make of outer space a “fourth battlefield”. The gloomy prospect of a war in outer space would be in no-one's interest. It remains to be seen whether the pledge of President Barack Obama, during his election campaign, to seek a ban on space weapons will lead to a substantial change to this effect in the 2006 U.S. National Space Policy formulated by the Bush Administration. That policy was widely viewed as giving a green light to U.S. weapons in space and in the past was translated into the inexorable refusal of the American delegation in the Conference on Disarmament even to start negotiations on a treaty which would secure nonweaponization of outer space. Such negotiations were labelled “pointless and unneeded”.<sup>(26)</sup>

It is against this backdrop that one has to assess the significance for the regulation of outer space military uses of the new proposal announced in the Conference on Disarmament by Bin Cheng are nowadays even more apparent since the plans for space weaponization are sometimes presented as a kind of “peaceful” use of outer space.

As noted before, the mere fact that the EU Draft Code of Conduct for Outer Space Activities was introduced in the Conference on Disarmament suggested its close connection with the problem of military uses of outer space. Indeed, many other elements of that proposal,

relating to the security of space activities in the broadest sense of the term, such as measures on space debris control and mitigation or registration of space objects, are already being dealt with or could be dealt with by relevant expert bodies, for example UNCOPUOS.

But what was actually proposed in the E.U. Draft with regard to military activities in outer space? 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”. Elsewhere, the authors explain this away by reference to their unwillingness to duplicate or compete with other initiatives to this effect. However there is little persuasive force in this argument.<sup>(27)</sup>

Enhancement of the security of space activities against the risks posed by space debris, collisions and all kinds of harmful interference is a real and important task of space regulation. This was dramatically demonstrated by the collision of two space objects on 10 February 2009. However the main threat to the security of space activities would be an unbridled arms race provoked by space-based weapons. Therefore the enhancement of space security, transparency and confidencebuilding measures announced as the main objectives of the proposed EU Code are incompatible with any kind of neutrality towards the placement of weapons in outer space. Even if non-binding, a multilateral document that claims to be a code of “basic rules to be observed by space-faring nations”<sup>(28)</sup> cannot neglect this obvious concern.

## 7. Concluding remarks

Solid foundations for the law of outer space were laid down at the dawn of the space era. There may be some truth to the nostalgic view that the “golden age” of international space law is over. Currently, we are witnessing the development of mainly national laws, in large part relating to private space activities. However the future evolution of space law, as of any other area of law closely connected with science and technology, depends on the character and pace of progress in the respective field of human

activity. One of the great prophets of the space era, Sir Arthur Clarke, on his 90th Birthday some two years ago, said, among other things, referring to the past 50 years: “We’ve accomplished a great deal in that time, but the ‘Golden Age of Space’ is only just beginning”.<sup>29</sup> This prophecy infuses us with confidence in the continuing need for strengthening and improving the legal framework of space and space-related activities.

When one reads the papers presented at the annual colloquia on the law of outer space by young lawyers – some of them still students – or hears their cogent arguments at the moot court competitions before the Judges of the World Court, there can only be one conclusion: the future progress of this exciting legal discipline is in safe and reliable hands.

## References

- (1) Francis Lyall and Paul B. Larsen, *Space Law: A Treatise*. Ashgate Publishing Ltd., 2009, p.2.
- (2) Scientists Pinpoint the “Edge of Space”.  
[http://www.eurekalert.org/pub\\_releases/200904/uocspt040909.php](http://www.eurekalert.org/pub_releases/200904/uocspt040909.php).
- (3) W. Friedmann, *Legal Theory*, London, 1949, p. 422.
- (4) This does not make space law an “integrated” legal system encompassing both international and national legal rules as has previously been suggested by some authors. See DeSaussure, *An Integrated Legal System for Space*, 6 *J. Space L.* 253 (1978); Dutheil de la Rochère, *Les sources du droit de l’espace*. In: *Droit de l’espace* 11 (1988).
- (5) The Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, 22 April 1968 (672 UNTS 119); the Convention on International Liability for Damage Caused by Space Objects, 29 March 1972 (961 UNTS 187); the Convention on Registration of Objects Launched into Outer Space, 12 November 1974 (1023 UNTS 15); the Agreement Governing the Activities of States on the Moon and other Celestial Bodies, 5 December 1979 (1363 UNTS 3).
- (6) See G.P. Zhukov, *40 Years of the Treaty on Principles Governing the Activities of States in the Explorations and Use of Outer Space, Including the Moon and Other Celestial Bodies*. In: *The Contemporary Problems of International Space Law*. Moscow, Peoples’ Friendship University of Russia, 2008, pp. 91-112.
- (7) See M. Bedjaoui, *Classicism and Revolution in the Elaboration of the Principles and Rules of Space Law*. In: *Perspectives on International Law*. Ed. by N. Jasentuliyana. Kluwer Law Int., 1995.

- (8) M. Bedjaoui, note 8 p. 461.
- (9) The Convention came into force on April 1, 2004. UNTS, 118 Stat. 1095 (2004). For a recent analysis of the Preliminary Draft Protocol see the papers by Fabio Tronchetti, Bernhard Schmidt-Tedd, Isabelle Arnold and Martin Stanford in Proceedings of the International Institute of Space Law, 2008, pp. 60-78 and 90-94. Published by AIAA in 2009.
- (10) U. Bohlman and L. Martinez, Fly Me to the Moon: Legal and Political Considerations of the Space Exploration Initiatives. In: Proceedings of the 49th Colloquium on the Law of Outer Space. Published by AIAA 2007, pp. 117-130.
- (11) Ibid. p. 120.
- (12) UNGA Res. 59/115 of 10 December 2004.
- (13) See EU Statement on “PAROS” of 12 February 2009 in the Conference on Disarmament.
- (14) See V. Kopal, The Role of the United Nations Declarations of Principles in the Progressive Development of Space Law. *Journal of Space Law*, v. 16, n 1, 1988. M. Ferrazzani, Soft Law in Space Activities. In: *Outlook on Space Law over the Next 30 Years*. Ed. by G. Lafferranderie, 1997, pp. 429-447. Andrei D. Terekhov, UN General Assembly Resolutions and Outer Space Law. In: *The Contemporary Problems of International Space Law*. Op. cit., note (7), pp. 274-296.
- (15) UN General Assembly Res.1962 (XVIII) of 13 December 1963.
- (16) United Nations Juridical Yearbook 1981, p. 149.
- (17) See The Case Concerning Oil Platforms (Iran v. US), Judgment on Preliminary Objection of 12 December 1996. I.C.J. Reports 1996 (II), p. 815, paragraph 31.
- (18) Space Debris Mitigation Guidelines of the UN Committee on the Peaceful Uses of Outer Space as stated in UNGA Resolution 62/217.
- (19) UNGA Resolution 62/101.
- (20) See note 13.
- (21) Exploring the Unknown. Selected Documents in the History of U.S. Civil Space Program. Volume I: Organizing for Exploration. J.M. Logsdon Editor with L.J. Lear, J. Warren Findley, R.A. Williamson, D.A. Day. Washington D.C., NASA History Office, 1995.
- (22) I.C.J. Reports 1988, Headquarters Agreement (Advisory Opinion), pp. 34-35, para. 57. This principle is also reflected in the Vienna Convention on the Law of Treaties (Article 27) and in the Vienna Convention on the Law of Treaties between States and International Organizations or between International Organizations (Article 27).
- (23) Cited from the author’s adapted version of his lecture: Bin Cheng, The 1967 Outer Space Treaty: Thirtieth Anniversary. In: *Air and Space Law*, Kluwer Law International. Vol. XXIII, N. 4/5, October 1998, p. 158.
- (24) See Preamble of the Outer Space Treaty.
- (25) On the persuasive argument that the interpretation of the word “peaceful” to mean “non-aggressive” and not “non-military” is wrong and potentially noxious for international law see Bin Cheng, *Studies in International Space Law*, Oxford, 1997, Chapter 19.
- (26) See UN Doc. GA/DIS/3371. Sixty-third General Assembly. First Committee, 12th Meeting (AM). The draft treaty in question is the draft proposed by Russia and China at the Conference on Disarmament in February 2008 on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects. (Document of the Conference on Disarmament - CD/1847). European Union.
- (27) Draft Code of Conduct for Outer Space Activities. As approved by the Council on 8-9 December 2008. Annex to E.U. Statement on “PAROS” (12 February 2009). Conference on Disarmament 1st Part, Geneva, 19 January-27 March 2009.
- (28) See note 14.
- (29) Arthur C. Clarke’s 90th Birthday Internet Message of 29 January 2008.