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**Information on the activities of international intergovernmental and non-governmental organizations relating to space law**

# Information on the activities of international intergovernmental and non-governmental organizations relating to space law

## Note by the Secretariat

## I. Introduction

The present document was prepared by the secretariat on the basis of information received from the following international organizations: the Secure World Foundation and the International Law Association.

## II. Replies received from international intergovernmental and non-governmental organizations

### Secure World Foundation

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The Secure World Foundation (SWF) has been continuing discussions with Beihang University of Aeronautics and Astronautics (BUAA) in China about

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creating an institute of space policy and law in China to increase the input of Chinese scholarship on the development of international law in the space sector.

Secure World Foundation has had a good working relationship with BUAA since 2007, but most of its joint endeavours there have been focused on technical aspects of sustainable use of outer space. This past year, however, we began discussions with representatives of the University about the possibility of establishing an institute of space policy and law there. These conversations are ongoing and have led to the addition of a space policy and law panel for student papers at our next sustainability conference scheduled for November 2012 in Beijing. This partnership has also led to our supporting the presence of one of our Chinese interlocutors at policy and law workshops held in Washington, District of Columbia, United States of America, at the end of April 2012, where we also sponsored the presence of experts from Africa, Latin America, India and Japan.

Moreover, in an effort to ensure that young lawyers from North America are versed in international space law, the Secure World Foundation continues to support the regional competition of the Manfred Lachs Moot Court each year. This year SWF also worked closely with organizers to extend an invitation to students from Latin America as well, in the hope that this would stimulate interest there until there were enough Latin American schools participating to support their own regional competition.

# International Law Association[1]

[Original: English]
[17 January 2013]

## A. Background information

### 1. Introduction

This year the International Law Association (ILA) is celebrating its one hundred and fortieth anniversary. Since its creation it has been active in the study, clarification and development of international law, public and private, in accordance with its statutes and objectives. The ILA headquarters are in London and Lord Mance, Justice of the Supreme Court of the United Kingdom of Great Britain and Northern Ireland, is the Chair of the Executive Council. Professor Alexander Yankov of Bulgaria is currently the World President and the ILA Director of Studies is Professor Marcel Brus of the Netherlands, who succeeded Professor Christine Chinkin of the United Kingdom.

The ILA Space Law Committee was set up in New York in 1958 and has worked and met without interruption to date. Its officers are Professor Maureen Williams (headquarters) as Chair, and Professor Stephan Hobe (Germany) as General Rapporteur. The Committee is honoured to be, since 1900, a permanent observer of the Committee on the Peaceful Uses of Outer Space and both its Subcommittees, to which it reports annually.

[1] Report by the Chair of the Space Law Committee of the International Law Association.

## 2. Objectives

The international committees are the central point of the ILA activities. They reflect a cross section of specialists around the world in the various disciplines. There are currently 21 committees and 9 study groups, all of them working permanently in-between the biennial conferences, of which 75 have been held to date. The seventy-fifth ILA Conference took place in Sofia on 26-30 August 2012 under the general theme "Law for a peaceful world", and both public and private international law subjects were well represented on the occasion. The Committee reports, study group reports and resolutions adopted may be found on the ILA website (www.ila-hq.org) and on the Conference website (www.ila2012.bamp.bg). As customary following each biennial conference, a book including the presentations and working sessions held in Sofia should be out in early 2013 and be available from the ILA office in London.

At the Sofia Conference, the ILA Space Law Committee submitted its fifth report addressing the "Legal aspects of the privatisation and commercialisation of space activities: remote sensing and national space legislation", adopted by the Conference. Following this, the Committee was given a new mandate, to extend over the next four years, as stated in section C.4. ("Future mandate for the ILA Space Law Committee (2012-2016)"), below. The seventy-sixth Conference of ILA will take place in Washington, D.C., on 8-12 April 2014.

A traditional practice of the Space Law Committee is to liaise with other committees and study groups of the Association dealing with questions of common interest in the field of international law. Likewise, the ILA regular practice includes cooperation with the activities of international intergovernmental organizations, inter alia, the following:

(a) The International Law Commission of the United Nations, with which the ILA Study Group on Responsibility of International Organisations worked closely in the period 2006-2012.[2]

(b) The Permanent Court of Arbitration (PCA): ILA Space Law Committee members were invited to form part of an advisory group of experts entrusted with the elaboration of Optional Rules for Arbitration of Disputes relating to Outer Space Activities (hereafter referred to as the "PCA Outer Space Rules").[3] The Rules became effective on 6 December 2011 following their approval by the PCA Administrative Council. They were introduced to the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space at its fifty-first session by Fausto Pocar, Chair of the PCA Advisory Group and made available to the Subcommittee in a conference room paper, and were the object of comments by the Chair of the ILA Space Law Committee on that occasion (see A/AC.105/C.2/100).

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[2] The International Law Association Study Group on the Responsibility of International Organisations, chaired by Eduardo Valencia Ospina, of which the Chair and Rapporteur of the ILA Space Law Committee were members, submitted a final report on the subject to the seventy-fifth ILA Conference, held in Sofia. The text of the Report is available from the ILA website (www.ila-hq.org) and the conference website (www.ila2012.bamp.bg).

[3] The official text of the Optional Rules for Arbitration of Disputes Relating to Outer Space Activities, in English and French, is available on the website of the Permanent Court of Arbitration (www.pca-cpa.org).

During 2012, the PCA Outer Space Rules were introduced to different institutions around the world by members of the PCA Advisory Group and the ILA Committee.

(c) Within the Committee on the Peaceful Uses of Outer Space, the ILA Space Law Committee is taking part in the work of the expert group on the development of an education curriculum in space law.

With respect to non-governmental international organizations, the ILA Committee participates, among others, in the activities of the International Institute of Space Law, the International Academy of Astronautics, the European Centre for Space Law and the Ibero-American Institute of Aeronautic and Space Law and Commercial Aviation, an institution bringing together Spanish-speaking and Portuguese-speaking specialists and which holds annual conferences on the subject. The Institute was introduced to the Committee on the Peaceful Uses of Outer Space in 2012 when it applied for and was granted the status of permanent observer.

## B. Activities of the ILA Space Law Committee during 2012: 75th ILA Conference

As anticipated in the ILA presentation to the Legal Subcommittee in 2012, the present ILA report addresses the results and conclusions of the work of the Space Law Committee in accordance with its mandate. The fifth and final report of the ILA Space Law Committee, as mentioned above, on "Legal aspects of the privatisation and commercialisation of space activities: remote sensing and national space legislation", was submitted to the ILA Conference held in Sofia on 26-30 August 2012 and adopted by the Conference without dissent.

The two main pillars of the ILA report, i.e. remote sensing and national space legislation, were considered closely to be interrelated. In turn, space debris and dispute settlement, both under permanent review by the ILA Committee, are strongly linked to each other as well as to those two main pillars. Registration issues appear to be a common denominator to them all. These are, therefore, the central areas on which the Committee has been focusing over the last five ILA conferences.

As customary, the topics in part I of the report (remote sensing and satellite data in court, dispute settlement and space debris) are addressed by the Committee Chair and, in part II (national space legislation), by the General Rapporteur of the ILA Space Law Committee. Section C below summarizes the essential features and findings of part I of the ILA report to the Sofia Conference. Part II, containing the Sofia Guidelines for a Model Law on National Space Legislation, together with explanatory notes by the General Rapporteur, will be made available to the Legal Subcommittee in a conference room paper.

## C. Part I of the report as adopted by the 75th ILA Conference

### 1. Remote sensing: satellite data in court

The ILA Committee believes that, in spite of being light years away, as regards technological development, from the time of the adoption of the 1986 United Nations Principles Relating to Remote Sensing of the Earth from Outer Space, state practice, in some ways, has reflected those principles.

We observed further that one of the most controversial principles in the early stages, namely Principle XII, on the right of access to information, was now losing momentum due to the gradual access of developing States to remote sensing technology. Moreover, developing States were steadily becoming "sensing States" as well. And this trend continued to develop, as could be seen in many examples of the time. Therefore, complaints of breach of sovereignty for "being spied on" by those using advanced technology were subsiding, and claims of sovereignty were steadily giving way to the advance of the commercial aspects of Earth observation satellites.

The general stance of the Committee is that remote sensing technologies have been faring well, and no major claims have so far arisen. Some privacy issues remain outstanding, and it is expected that they will take different shapes as technology develops. Google Earth is a clear example. Furthermore, the issue becomes rather sensitive where data protection, transborder data flow and the right of individuals to privacy are concerned. In this respect, a current trend is being detected in certain countries, the United Kingdom for example, where freedom of the press was sometimes overridden by the protection of privacy (see the editorial appearing in *The Times*, London, of 21 April 2011).

The use of Earth observation satellites (EOS) is growing fast. Among its most frequent applications, ILA has highlighted the advantages of remote sensing technologies for monitoring the compliance with international obligations, particularly in connection with the protection of the environment and to strengthen the legal aspects of the verification of international agreements embodying disarmament measures.

Likewise, the applications of Earth observation satellites for issues related to water management and the protection of fresh water as a resource essential for life should take pride of place. These are critical issues that, in the view of ILA, are of major importance and an area in which space technology has a vital part to play. More details on this matter were provided in the 2012 ILA report to the Legal Subcommittee.

**Satellite data in international litigation**

ILA is proud to announce the recent publication of a book, possibly the first on this topic, as observed in the preface of *Evidence from Earth Observation Satellites: Emerging Legal Issues*[4] to which members of the Space Law Committee contributed.

The matter is no doubt controversial. In previous reports to the Legal Subcommittee, ILA drew attention to the questions arising from the use of satellite imagery in court, describing the major issues involved. Raw data as such cannot be modified, and problems arise when satellite data, as an end product, are submitted as evidence in court after a long string of interpretations. This is a particularly sensitive issue in cases of boundary disputes, where sovereignty claims over land and water are usually at stake.

[4] Ray Purdy and Denise Leung, eds., *Evidence from Earth Observation Satellites: Emerging Legal Issues* (Leiden, Martinus Nijhoff, 2013).

The question was recently on the agenda of the United Nations/Argentina Workshop on Space Law on the theme “Contribution of space law to economic and social development”, held in Buenos Aires on 5-8 November 2012 with the support of the European Space Agency (ESA) and the National Commission on Space Activities (CONAE) of Argentina and discussed at length with an audience coming from the Latin American region. The proceedings of the United Nations/Argentina Workshop on Space Law can be found on the website of the Office for Outer Space Affairs.

However, the application of these technologies is much clearer now, and the outlook more encouraging than in 1986 (in fact, the time of adoption of the United Nations Principles Relating to Remote Sensing of the Earth from Outer Space) when, in the Burkina Faso/Mali boundary dispute, the International Court of Justice held that digital maps were not binding documents nor territorial titles by themselves, whatever their precision and technical value, unless the parties to the dispute had previously agreed on the value of that means of evidence.

In the first place, the ILA Committee would like to point out that, even if guidelines were to be adopted, as sometimes suggested, concerning the production of satellite imagery in court, the court would always remain the final authority to decide on the validity of such evidence.

To sum up, international lawyers and judges still have conflicting views on the value of satellite data as evidence in court and, at times, serious doubts on its credibility. This runs counter to the enormous benefits, such as precision, provided by remote sensing technologies. Satellite data appear less controversial in national courts where the submitted data have already been certified by the local authority, which is not the case on the international level. Should disputes arise over these topics, it is considered that the PCA Outer Space Rules, for reasons to be highlighted later, have an important role.

On the basis of the current situation, some recommendations and perceptions on this question are outlined below:

**General conclusions and perceptions on the value of satellite data in court**

1. The point of substance is that, unlike traditional photography, where changes or manipulations are easy to establish, data collected by remote sensing technologies may be manipulated with no possibility of detecting ex post facto changes.

2. For that reason, strict control of the whole process of data collection and interpretation is essential, from the moment the data are obtained (raw data) until they become an end product for submission to court.

3. An international body should be in charge of, and be made responsible for, the accreditation and certification of satellite data. Authentication, in this context, is a key word.

4. Following a traditional practice in other legal areas, it is recommended to have a list of experts of international prestige from which the parties to a dispute and judges/arbitrators may be able to choose.

5. A helpful step would be the sealing of archives containing the raw data once collected, and to which it would always be possible to return in controversial situations.

6. The training of the legal sector in the development of these technologies is first priority given the current unawareness as to what this technology can offer and its limitations. Capacity-building is essential in this area.

7. The issues surrounding satellite data in international litigation, and their development, should be kept under permanent review by ILA, with particular emphasis on the production of satellite data in international boundary disputes where sensitive situations arising from claims of sovereignty are more likely to occur.

## 2. Dispute settlement in light of the PCA Optional Rules for Arbitration of Disputes relating to Outer Space Activities

Section C of the information submitted in the ILA report to the Legal Subcommittee at its fifty-first session (A/AC.105/C.2/100) analysed the new rules adopted by PCA on 6 December 2011. Members of the ILA Committee were invited to contribute to the PCA work on dispute settlement related to space activities, and the report of the Legal Subcommittee on its fifty-first session in 2012, for its part, expressed its satisfaction for the information provided on the matter (A/AC.105/1003, para. 62).

More recently, this subject was part of the agenda of the above-mentioned United Nations/Argentina workshop. On that occasion, the Chair of the ILA Committee addressed the most salient aspects of the PCA Outer Space Rules as a follow-up to last year's presentations to the Legal Subcommittee and other developments, such as the Sofia Conference conclusions and those of the 55th Annual Colloquium on the Law of Outer Space in Naples, Italy (International Institute of Space Law, October 2012).

The following conclusions and recommendations, drawn during 2012, would reflect the predominant view on this topic today:

### General conclusions on dispute settlement

1. There is much to be said for the great flexibility of the PCA Outer Space Rules and their procedural nature. Moreover, they have covered a number of gaps left by the United Nations treaties on outer space on the matter. In fact, the dispute settlement mechanisms envisaged in the space treaties have not been able to prove their effectiveness so far.

2. The PCA Outer Space Rules are partly inspired in the ILA Convention on the Settlement of Disputes related to Space Activities which, in its original version (Paris, 1984) and later on, in the revised text of that Convention adopted in 1998, include a specific article providing that dispute settlement procedures specified in that instrument shall be open to entities other than States and international intergovernmental organizations unless the matter is submitted to the International Court of Justice (article 10 of the revised text).

3. In following that example, the PCA approach is easing the way to dispute settlement mechanisms and minimizing the risk of a sovereign immunity exception being raised, upsetting the normal course of dispute settlement proceedings.

4. Moreover, the PCA Outer Space Rules are consistent with today's scenarios in that they clearly apply to disputes other than those between sovereign States, unlike the 1972 Convention on International Liability for Damage Caused by Space Objects or any other of the United Nations treaties on outer space in force.

5. The PCA Outer Space Rules nearest precedent, i.e. the PCA Optional Rules for Arbitration of Disputes Relating to Natural Resources and the Environment, applies to a field that is very close to space activities.

6. The ILA Committee notes, in turn, that space law and environmental law are highly influenced by technological development, of which glaring examples are the use of satellites for monitoring compliance with international agreements ("treaty behaviour"), particularly concerning climate change and the protection of the ozone layer. In the latter example, space technologies, because of their extreme precision, are a powerful tool in establishing the alterations in the ozone layer in different parts of the stratosphere and at any time of the year.

7. Should disputes arise over these questions, the PCA Outer Space Rules appear the most appropriate means of settlement, given their extreme flexibility and procedural nature.

8. Therefore, a fruitful interaction between both sets of PCA Rules is expected in the not-too-distant future.

9. The PCA Outer Space Rules are likely to have a constructive role in revitalizing and enriching the existing procedures embodied in the United Nations treaties on outer space.

The new PCA Outer Space Rules are being introduced to a variety of institutions around the world — intergovernmental and private — and law firms dealing with space law issues in different countries.

### 3. Space debris in the ILA Sofia Conference

As announced in the 2012 ILA report to the Legal Subcommittee, space debris and its legal aspects as a "single item for discussion" continued under study with a view to reporting our perceptions to the Sofia Conference. The idea was to review the consistency in today's world of the Buenos Aires Instrument on the Protection of the Environment from Damage Caused by Space Debris (adopted by ILA at its 66th Conference). To this end, we considered of special interest the view of the scientists. In this sense, opinions were more or less coincidental in that, even though the scientists considered that premature definitions should be avoided, they understood, at the same time, the need for ILA to have a definition in the framework of that Instrument, which was a document of a legal nature. Hence the definition in article 1 of the Instrument was considered appropriate and consistent in the present international context.

Among the issues discussed under this heading were the problems arising from unidentifiable debris and the risk of collisions. ILA considered that the 2009 collision involving Iridium 33 and Kosmos 2251 opened a new chapter in

the approach to space debris raising questions related to the space environment and liability.

A number of conclusions on space debris and its legal aspects were agreed upon in the ILA Sofia report and are summarized below:

**General conclusions on space debris and its legal aspects**

1. Overall, the general opinion concurs that, among the major threats to space security today, space debris is at the top of the list, together with an arms race in outer space and the presence of natural near-Earth objects (NEOs), such as asteroids and meteorites, entailing a risk of collision with planet Earth. All three issues are a serious challenge from a legal standpoint.

2. The topic should, therefore, continue under study by the Space Law Committee of ILA, including the 1994 ILA international instrument on the matter. No changes, however, are recommended to this document for the moment.

3. As to collision risks and their consequences relating to space debris, it seems important to move forward in the exploration of certain terms such as “fault liability” and “due diligence” as applied to the new fields.

4. Consequently, space debris on the agenda of the Legal Subcommittee as a “single item for discussion” is by all means helpful but should go beyond a mere duty to inform on the domestic measures taken by States for mitigation.

5. In these circumstances, there are strong reasons to recommend that the specific topic of space debris and its legal implications be brought together as a set of United Nations principles within the framework of a United Nations General Assembly resolution following the proposal of the Czech Republic in its recent submissions to the Legal Subcommittee (A/AC.105.C.2/L.283).

6. The Czech document appears a sensible idea and a reasonable compromise in the current political moment — most importantly, because General Assembly resolutions containing principles of the kind are not in themselves binding unless, of course, they are declaring customary international law in accordance with article 38 of the Vienna Convention on the Law of Treaties.

7. The stage of treaty and principle adoption by the United Nations may be over now, and the political moment may not be the best to move towards more precise legal rules. Yet nothing precludes a reopening of that procedure in the case of threats with untold consequences such as the alarming figures of space debris today.

8. Finally, and in the light of the preceding comments, the outstanding issue of debris caused by military satellites remains a matter of concern. This challenge should be looked into by the ILA Committee as part of its renewed terms of reference for the period 2012-2016.

### 4. Future mandate for the ILA Space Law Committee (2012-2016)

The ILA Executive Council, in its meeting of 9 November 2012 in London, approved the following terms of reference:

> "This Committee has an established relationship with the United Nations institutions on space law, including permanent observer status with COPUOS. In addition to its ongoing work with these bodies, during the next mandate period it will work on dispute settlement relating to outer space activities and the 2011 PCA Optional Rules for Arbitration of Disputes Relating to Outer Space Activities; suborbital flights and their legal implications (a new modality of modern space technology increasingly used by industrialised and developing countries); satellite data in international litigation and the legal aspects of space debris; and to keep a general watching brief over further developments in space law that may occur during the four-year mandate of the Space Law Committee (2012-2016)."