

## DEVELOPING COUNTRIES AND THE UNIDROIT PROTOCOL ON SPACE PROPERTY

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### ABSTRACT

Outer space has become a prosperous area for business. The commercialization of space activities would increase if countries or companies received more financial support. Space activities involve a high level of risk, however, which is why financial institutions are reticent to advance credit. The International Institute for the Unification of Private Law<sup>1</sup> (UNIDROIT) is interested in finding legal ways to satisfy commercial and financial needs by improving creditors' guarantees. A draft protocol on matters concerning space assets has been proposed to be considered at the Convention on International Interests in Mobile Equipment. The following paper explains why this UNIDROIT draft protocol has been included as an item on the agenda of the Legal Subcommittee of the United Nations Committee on Peaceful Use of Outer Space (COPUOS), showing why this subject has attracted the attention of both developing and developed countries.

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### INTRODUCTION

Space activities involve a high level of risk. There are risks when a space object is launched, when damage may occur due to vibration and the extreme launch conditions. There is further risk when a space object is being put into its orbit, and the rocket or the on-board computer may not work. There are additional risks when a space object is in orbit; if it does not work well, there is not much that may be done to fix it. Insurance is required and insurance premiums are prohibitive. The total cost of development and launching is, therefore, usually in the millions of dollars. Most private companies and world governments in developing countries need outside financing.

There is currently little credit available. The standardization of private national laws is desirable in order to provide more stable commercial relationships, thereby reassuring creditors through increased trading confidence and legal guarantees.

Lack of credit obviously affects developing countries the most. Yet, it would be wrong to conclude that developed countries have nothing to gain from improved credit conditions. Companies from developing countries are

not able to carry out a whole space project technically or financially. If there were a line of credit, companies from developing countries could contract the specialized services of companies from developed countries. Developed countries would benefit directly through the commercialization of components and satellites, thus increasing jobs, profits, and subsequent tax revenues. Thus, all countries would benefit from improved financing conditions.

Financial institutions, however, are loathe to assume the high risks of space ventures. Besides the technical risks, there is the added risk that governments or companies will default on payments in a loan agreement. Creditors obviously want to be surrounded by guarantees in order to assure the assets are reclaimed and fines are paid in the event of a breach of contract. All of these risks have to be considered in a financial operation. Financial institutions would feel more confident to lend money if there were a solid international legal framework to protect them.

This legal framework has been successfully introduced through the UNIDROIT statute in the area of aeronautics. Article 7 of the 1988 UNIDROIT Convention on International Financial Leasing *“enshrines a rule recognizing the enforceability of the lessor’s real rights – which, in most cases, that is other than in cases typically involving sub-leases, will mean the lessor’s ownership – in a leased asset against the trustee in bankruptcy and unsecured creditor of his lessee”*<sup>2</sup>.

The UNIDROIT Governing Council approved a proposal to elaborate a new draft UNIDROIT Convention on International Interests in Mobile Equipment at its 76th session, held in Rome from 7 to 12 April 1997. To carry out this decision, the UNIDROIT

Governing Council also decided to establish work groups in order to prepare three different protocols which would be linked to the Convention, namely: a) a protocol on airframes, aircraft engines and helicopters; b) a protocol on railway rolling stock; and c) a protocol on space assets.

### THE CAPE TOWN DIPLOMATIC CONFERENCE

The text of the Convention on International Interests in Mobile Equipment was finalized, adopted, and opened for signature in 2001 at the diplomatic conference that was convened under the co-sponsorship of UNIDROIT and the International Civil Aviation Organization (ICAO) in Cape Town, South Africa, from 29 October to 16 November 2001. Delegations from sixty-eight States and fourteen international organizations attended the conference. This Convention created a legal document of international scope for the three categories of mobile equipment. As of August 2002, twenty-two States had already signed the Convention.

At least three States must adhere to the Convention before it may be considered a binding UNIDROIT document. According to Article 49.1, the Convention goes into effect on the first day of the month following the expiration of three months after the date of the deposit of the third instrument of ratification, acceptance, approval or accession. It is important to remark that a State may initially adhere merely to the Convention, although the Convention will only enter into effect in that State when it also adheres to one protocol. While the Convention helps create a basic international legal framework, it does not provide specific regulations that are set up in the protocols. States frequently wait

to sign the Convention when they are in agreement with at least one protocol. This explains the importance of each protocol and the necessity of a careful analysis of their terms.

It was, therefore, a significant advancement in Convention proceedings when the text of the aircraft objects protocol was approved and opened for signature at the Cape Town Conference. Twenty-two States have already signed this protocol<sup>3</sup>. The railway rolling stock and the space assets protocols are still being discussed in their respective forums.

### **THE SPACE ASSETS PROTOCOL**

The President of UNIDROIT invited Mr. Peter D. Nsgos<sup>4</sup> to organize and chair the space assets work group to prepare the preliminary draft Protocol on matters specific to space assets. This work group (hereafter called "Space Work Group") has already had five meetings, the first in Los Angeles on 1 July 1997, the second in Rome on 19 and 20 October 2000, the third in Seal Beach, California, on 23 and 24 April 2001, the fourth in Evry Courcouronnes, near Paris, on 3 and 4 September 2001, and the fifth in Rome, on 30 and 31 January 2002<sup>5</sup>.

At the fourth meeting of the Space Work Group, the expression "property", often used in civil law, was considered too broad a term because it included authorization, licenses, and mechanisms to protect intellectual property, as well as non-disclosure information. The UNIDROIT protocol on space assets (hereafter called "Protocol") aimed to protect only the commercial relationship between a creditor who has given financial support and the debtor who wants to have a space asset. Moreover, "space assets" is the expression adopted in space treaties. Thus, the expression

"space asset" was considered more suitable than "space property"<sup>6</sup>.

According to Article I.2 (f) of the Protocol, "space assets" means: "(i) any separately identifiable asset that is in space or that is intended to be launched and placed in space or has been returned from space; (ii) any separately identifiable component forming a part of an asset referred to in the preceding clause or attached to or contained within such asset; (iii) any separately identifiable asset or component assembled or manufactured in space; and (iv) any launch vehicle that is expendable or can be reused to transport persons or goods to and from space".

The Protocol tries to provide ample guarantees for creditors. In case of breach of contract, the creditor is able to require either the repossession or the control of a space asset from the Contracting State where the debtor is located (see Article XI). In practice, however, the current text of the Protocol provides no legal mechanism for repossession where there are multiple creditors.

The following scenario illustrates the problem. Suppose that the satellite's transponder was financed by one creditor; the payload was financed by another creditor; and the infrared camera by a third. Suppose the debtor did not honor its commitment and the transponder's creditor wants to take possession of the satellite to sell it to a third party.

When this situation occurs with aircraft, the creditor just requires the removal of the financed equipment and the plane is grounded until the problem is solved. This procedure cannot be adopted when the satellite equipment is in outer space. Its retrieval from space would be so expensive that it would probably be cheaper to produce another one.

Although the Protocol foresees the possibility of a creditor taking possession of the space asset, the rights of the other creditors cannot be infringed upon. Article XI, item 6, alternative "B" of the Protocol stipulates that: "The space asset shall not be sold pending a decision by a court regarding the claim and the international interest". "International interest" refers to different international creditors, as specified in Article 2 of the UNIDROIT Convention. So, in the above example, the creditor would not be able to sell the satellite to get its money back.

The cooperation of Contracting States is also an important issue. In case of insolvency, the role of administrative authorities from the Contracting State where the debtor is located is fundamental to assure the creditors' rights. According to Article X (6.b) of the Protocol, the administrative authorities shall cooperate and assist the creditor in the exercise of its rights. The judicial court of the Contracting State where the debtor is located also shall cooperate to obtain a speedy resolution to the problem (Article XII.2 of the Protocol).

The Protocol will only be well accepted when creditors have due protection of their rights. In order to assure the creditors' rights in cases of insolvency, the process must be expedited. Furthermore, the possession of the financed asset should be assured to the creditor *inaudita altera pars*. In this step, UNIDROIT needs to establish censure for those Contracting States which put up obstacles to the exercise of creditors' rights. If there are no harsh measures to avoid insolvency, the Protocol probably will not obtain the desired number of adherences.

It is important to establish a clear difference between "Launching State" and "Contracting State". The first - "Launching State" - according to the

definition from space treaties, is the national government responsible for space activities that are carried out either by its governmental or non-governmental entities<sup>7</sup>. In case of any damage caused by space objects, the "Launching State" will be fully responsible for the payment of any indemnity, even when a private company undertakes the launching<sup>8</sup>. The second - "Contracting State" - is the national government of the country where the debtor or creditor(s) reside which has adhered to the UNIDROIT Convention. The Contracting State is not bound to pay any debts to the creditor, when the debtor is a private company. In this case, the Contracting State is only bound to obtain "speedy relief" to solve the problems, as is mentioned in Article XIII of the UNIDROIT Convention.

In 2000, UNIDROIT considered that the draft of the Protocol was ready to be submitted to COPUOS, because the approval of the UN Committee would lend substance to the Protocol and make it more effective.

The discussion of the Protocol was inserted in the agenda of the COPUOS Legal Subcommittee as a decision of said Committee in its 43<sup>rd</sup> Session, in 2000<sup>9</sup>.

In conclusion, the mission of the UNIDROIT Space Work Group is still not finished, because its members are following the discussions in the COPUOS Legal Subcommittee and updating the Protocol's text.

### **THE DISCUSSION IN THE COPUOS LEGAL SUBCOMMITTEE**

Some countries believed that such a subject should not be examined by COPUOS, because it was related to private commercial interests. However, this position was rejected by the majority of COPUOS member States who believed

any subject involving space activities should be discussed by COPUOS. It is important to mention that such an understanding is consonant with item 7 of the United Nations 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<sup>10</sup>, *in verbis*: "The Committee on Peaceful Use of Outer Space should be strengthened in its role, among others, as a forum for the exchange of information on national and international activities in the field of international cooperation in the exploration and use of outer space".

At its 40<sup>th</sup> session, from 2 to 12 April 2001, the COPUOS Legal Subcommittee agreed to the establishment of an ad hoc consultative mechanism to review the issues related to the preliminary UNIDROIT draft Protocol, in accordance with a proposal introduced by the delegation of Belgium<sup>11</sup>. The mechanism would make it possible to undertake, if necessary, intersessional work group meetings at the convenience of interested member States. As of the first semester of 2002, two meetings had been held, the first one in Paris, France, from 10 to 11 September 2001, and the second in Rome, Italy, from 28 to 29 January 2002.

In the Paris work group meeting, the main items on the agenda were: (i) the relationship of the proposed new international regime to the existing body of space law; (ii) the nature and framework of the international registration system; (iii) the role of COPUOS and its Legal Subcommittee in the future development of the project; (iv) the form and manner by which the COPUOS Legal Subcommittee would

transmit its views, findings, and recommendations to UNIDROIT; and (v) the future status of the item on the agenda of the COPUOS Legal Subcommittee.

By the time of the Rome work group meeting, the UNIDROIT Convention had already been approved and opened for signature. Thus, the main items on the agenda were: (i) the follow-up on the work group meeting in Paris; (ii) further consideration of the compatibility of the preliminary draft Space Assets Protocol and space law; and (iii) consideration of the preparation and content of the recommendations to be submitted to the COPUOS Legal Subcommittee at its 41<sup>st</sup> session, which was to be held in Vienna, Austria, from 2 to 12 April 2002.

At this 41<sup>st</sup> session of the COPUOS Legal Subcommittee, item 8 of the agenda, regarding the UNIDROIT Protocol, was, incontestably, the topic that caused the most debate because the question of incompatibilities between the Protocol and the current legal framework in existing space law was raised. In the 42<sup>nd</sup> session, in 2003, this subject will certainly engender new and intense discussions.

Actually, the Protocol has brought a little bit of vitality to the agenda of the COPUOS Legal Subcommittee, which has been immobilized by the stalemate regarding changes in the texts of the five space treaties currently in effect.

COPUOS, which had a fundamental role in the cold war period, once again has the opportunity to do a great service to mankind, especially to developing countries by suggesting improvements in the wording of the Protocol and supporting reform in the UN space treaties.

## **POSITIONS FROM SOME DEVELOPING COUNTRIES**

Most developing countries have agreed with the discussion of the Protocol by COPUOS; however they have examined the terms of that instrument carefully. The following countries are cited because their statements made during the last two sessions of the COPUOS Legal Subcommittee summarize the basic issues under debate.

### **Brazil's Position**

Brazil sustains that COPUOS is the appropriate forum for the discussion of the Protocol as well as any other subject regarding space activities, including those carried out by private entities. At the 41<sup>st</sup> session of the COPUOS Legal Subcommittee, in 2002, the representative of Brazil, Mr. Leite da Silva, said, *"It is also important to stress that the discussion of this subject has to aim toward the prevention of any conflicts between the UNIDROIT Protocol and the five United Nations Treaties. In the case of any conflict, the dispositions of the five United Nations Treaties should always prevail"*.

Brazil considers that *"the question of transfer of space objects is the central issue to be solved in the relationship between the Registration Convention and the UNIDROIT Protocol on Space Assets"*. Brazil believes that *"it would be quite adequate and convenient that to be registered according to UNIDROIT Protocol any space object should first be registered according to the Registration Convention, which must be considered as the general and superior register of all objects launched into outer space"*.

The Brazilian Space Agency has issued rules regarding authorization and licensing to carry out space activities in

Brazilian territory<sup>12</sup>, in accordance with this legal philosophy, although the Protocol does not present any conflict with such rules. If Brazil adheres to the Protocol and if a Brazilian company receives the financing of a space asset, only the Brazilian company, which will be responsible for the space activity, will be held liable under the requirements established by the Brazilian Space Agency. No requirements will be imposed on the foreign entity which will give financial support to the Brazilian company. In other words, only the party carrying out space activities in the Brazilian territory is bound to Brazilian Space Agency regulations.

### **China's Position**

At the 40<sup>th</sup> session of the COPUOS Legal Subcommittee in 2001, China's representative, Mr. H. Huikang, presented several substantial remarks about the Protocol. The first question brought up by the Chinese representative was a question of definition of terms and how to determine the actual commercial value of an asset.

*"How to define the concepts of space equipment or space property in legal terms for the purpose of financing and providing collateral and security for space activities? In a broader sense, space equipment belongs to the mobile equipment category and, therefore, may become a subject for the readjustment of the legal regime on international interests in mobile equipment. However, space equipment as property in the sense of civil law is different in many respects from ordinary mobile equipment like railroad rolling stock or aircraft. Apart from the unique character of their location in outer space, the commercial value of space equipment often depends*

*on their functions and usage and their orbital positions”.*

The second issue dealt with the difficulties of mixing public and private legal regimes. The Chinese representative said, *“How to harmonize a securities regime which is of a private law character with international space law which is public law in nature and avoid inconsistency with the latter’s basic legal principles? Here, a basic conceptual issue is involved, namely, is the proposed new regime based on private international law and civil and commercial law or international space law. Specifically, is it based on the proposed aircraft protocol or existing treaties governing outer space? And different lines of thinking will lead to different conclusions”*<sup>13</sup>.

At the end of his statement, the Chinese representative concluded that the Protocol was not ready for the examination by COPUOS and recommended that the Secretariat of that Committee, in liaison with UNIDROIT, present a new draft of the Protocol to be examined in the next session of the Legal Subcommittee, in 2002. At the 41<sup>st</sup> session of the COPUOS Legal Subcommittee, in 2002, China, once more, said that the Protocol should be reviewed because its text was still not ready for a critical analysis.

### **Mexico’s Position**

Mexico supports the debate of the Protocol by COPUOS, stressing that the integrity of the five United Nations space treaties should prevail over the Protocol. At the 41<sup>st</sup> session of the COPUOS Legal Subcommittee, in 2002, the representative of Mexico, Ms. M.T. Rosas Jasso, said her delegation recommended that the United Nations act as the Supervisory Authority through its Office for Outer

Space Affairs (OOSA). Her delegation also recommended that the OOSA Secretariat examine the principles of the supervisory and/or registrations authority in order to determine the financing structure as well as operational and registration proceedings. Ms. Jasso stated it would be convenient to have a legal opinion from OOSA Secretariat regarding whether a COPUOS mandate would be legally binding as a Supervisory Authority. At that session, Mexico emphasized the need to consider the legal effects of transferring space assets, according to existing law.

### **CONFLICT WITH THE EXISTING LEGAL FRAMEWORK**

At the end of 2001, OOSA sent a list of questions to the COPUOS member States in which it asked them if there were any conflicts between the Protocol and the five United Nations space treaties<sup>14</sup>. As of the 41<sup>st</sup> session of the COPUOS Legal Subcommittee, in 2002, four States had answered the questions; namely, Australia, Austria, the Czech Republic, and the Netherlands. Three of these four States understood that the Protocol did not present any apparent contradictions with the five space treaties.

However, in that same session, the representative from Belgium, Mr. J.F. Mayence, identified the point of conflict, namely, differences in the registration systems of the UNIDROIT documents and the UN Registration Convention. In the UNIDROIT registration system, the ownership of a space object may be changed whenever it is required. So, if there is a breach of contract, the creditor may transfer the possession of a space object to a third party, which will be liable for that space object. This transfer is registered in the UNIDROIT system. This kind of transfer is unforeseen in the

UN Registration Convention. There is no mention of a Contracting State because at that time only national governments and private entities within their boundaries were considered. Thus, in the UN Registration Convention the Launching State remains liable for the space object even if it has been sold to a third party, presumably also from an entity within national boundaries<sup>15</sup>.

Actually, it is still not clear how the registration system foreseen by UNIDROIT will work. It presupposes any space asset which has been bought through a financing operation must be registered. Thus, it can be said that registry is a *sine qua non* condition for a creditor to exercise its rights in the case of a breach of contract<sup>16</sup>. Nevertheless, different creditors may finance different parts of the space object. So, according to the UNIDROIT registration system, a satellite, for instance, may have many registry parties. Multiple registries do not occur in the UN Registration Convention, where only one State is admitted as the Registry State<sup>17</sup>. To integrate both registration systems, a change of the text in the Protocol could be proposed in which the Contracting State where the company controlling the satellite is located would be the sole register.

A second problem in the two registration systems involves the definition of what should be registered. According to the Protocol, an object qualifies as a space asset whether or not it has actually been placed in orbit. So, it should be registered in the UNIDROIT system, even if it is not launched to outer space. This system differs from that which is used in the UN Registration Convention where only a space object that has been launched to outer space may be registered<sup>18</sup>.

There are many obstacles to the integration of both registration systems.

The simultaneous registry in the UN Registration Convention and in the Protocol would only be feasible if there were just one creditor. However, it becomes impossible when the ownership of a space object is changed, because one system admits the transfer of ownership and the other does not. In fact, the UN Registration Convention must be changed in order to foresee the possibility of transferring ownership of a space object. Considering the current development of space activities, there are no weighty reasons to maintain this stalemate. The commercialization of satellites now happens frequently, but the UN Registration Convention makes no legal provision for such transactions.

The question has been raised as to whether it would be possible for both registration systems to operate independently. Separate registration systems would mean that space assets registered under the UNIDROIT system would not have to be registered under the UN Registration Convention. If such an understanding prevailed, the UN Registration Convention would be unable to fulfill its primary objective which is to assure the pacific and equitable exploration of outer space. Commercial ventures would fall entirely outside of the UN Registration Convention. And these are arguably the most important space objects to supervise. So, the idea of both systems operating independently of each other is not viable.

### SOME CONCLUSIONS

It is undeniable that the Protocol provokes interest from developing countries that want to have improved financing mechanisms in order to pursue their space activities. The Protocol also sparks interests from developed countries, which foresee the opportunity to increase



the business of their aerospace industries. Moreover, financial entities are interested in the Protocol's approval as long as guarantees can be provided in case of a breach of contract.

From the statements made in the two last sessions of the COPUOS Legal Subcommittee, it may be concluded that developing countries are, nonetheless, concerned about discrepancies between the Protocol and the existing legal framework. They believe the Protocol should be subordinate to the UN space treaties through some form of integrated registration system which currently is not feasible because the treaties are outmoded.

The existing impasse between the registration system proposed by UNIDROIT and that system which is established in the UN Registration Convention could be solved if the text of the UN Registration Convention were modified.

Some governments have expressed the opinion that any change in the texts of the five space treaties is impossible. Dr. Yuri M. Kolosov, Professor of International Law in Moscow, Russian Federation, explained and countered this position when he said: *"Most probably the restrained attitude towards the initiative to develop a new 'Space Bible' is caused by fears of some States that this process might lead to the revision of the basic principles that have proved their viability. There are, of course, certain safeguards to avoid such situation. First of all, it can be ensured by the principle of consensus, which will remain the cornerstone of the future negotiation process. Secondly, a 'package-based' procedure may be widely applied to the negotiation process."*<sup>19</sup>

At the 41<sup>st</sup> session of the COPUOS Legal Subcommittee, in 2002,

Mr. S. Leite da Silva, on behalf of Brazil, supported the Russian proposal to establish a single UN space convention that would update the texts of the five existing space treaties. The Brazilian representative said: *"The world has changed and we can't be leashed to the past, proceeding as if nothing new had been happen in these last decades"*.

Without any doubt, COPUOS is the appropriate forum to discuss the Protocol. Its Legal Subcommittee needs to work toward international consensus in international law and commerce. Even countries without space assets should participate in the discussion and support necessary reforms to UN space treaties so that the current ad hoc commercialization of space does not persist. Without a sound legal framework, space will remain the domain of the financially privileged.

## References

<sup>1</sup> See "www.unidroit.org"

<sup>2</sup> Stanford, Martin – "The Creation of a New International Regimen Governing the Taking of Security in Space Assets: A Window of Opportunity for the Financing of Commercial Space Activities" – paper presented in the 10<sup>th</sup> International Space Insurance Conference (London, 8 July 2002).

<sup>3</sup> Data available in August 2002

<sup>4</sup> Expert consultant on international space finance matters (Milbank, Tweed, Hadley & McCloy, New York).

<sup>5</sup> Data available in August 2002

<sup>6</sup> In the title of this paper the expression "space property" was maintained just to retain the terms which were being used in the agenda at the 41<sup>st</sup> session of the COPUOS Legal Subcommittee, in 2002. At the end of that session, "space assets" officially replaced the expression "space property".

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<sup>7</sup> See Article VI of the Outer Space Treaty.

<sup>8</sup> See Article II of the Liability Convention.

<sup>9</sup> See the United Nations Official Records of the General Assembly, Fifty-fifth Session, Supplement # 20 (A/55/20), and paragraph 167.

<sup>10</sup> Approved by the United Nations General Assembly Resolution # 51/122.

<sup>11</sup> See document prepared by OOSA reference A/AC.105/763, paragraph 94 ([www.oosa.unvienna.org](http://www.oosa.unvienna.org)).

<sup>12</sup> See “[www.agespacial.gov.br](http://www.agespacial.gov.br)”

<sup>13</sup> See document prepared by OOSA reference COPUOS/LEGAL/T.649 pages 4/6.

<sup>14</sup> See document prepared by OOSA reference A/AC.105/C.2/2002/CRP.4.

<sup>15</sup> For more about the Registration Convention read the author’s paper “Brazil and the Registration Convention” published by the American Institute of Aeronautics and Astronautics in the Proceedings of the Forty-Fourth Colloquium on The Law of Outer Space, pages 78/86.

<sup>16</sup> For more about the UNIDROIT Space Assets Protocol, read the paper “The Prospective Unidroit Convention on International Interests in Mobile Equipment as Applied to Space Assets” written by Dara A. Panahy.

<sup>17</sup> See Article II.2 of the Registration Convention.

<sup>18</sup> See Article II.1 of the Registration Convention.

<sup>19</sup> In his paper “Is It Time to Develop a Universal Comprehensive Convention on The Law of Outer Space?”