



**Assessing the Support for the Space Assets Protocol to the
UNIDROIT Cape Town Convention**

Study Report

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Introduction

Increased density of space traffic is driving reflections on regulatory frameworks. Space Traffic Management (STM) is one of the emerging ideas, but also implementation of the Cape Town convention on space assets is presently discussed. UNIDROIT has taken the initiative to propose a legal framework for space assets in accordance with the latter convention. Although the principle has been welcomed by many parties, in particular the space operators have expressed individual reservations. The purpose of this study was to seek for a common view on such reservations on the basis of a questionnaire. In view of the highly specialised topic, a well-distributed but restricted group of respondents was approached with this questionnaire. Although statistically this leads to a rather limited database, on the other hand it guarantees well-informed feedback.

The International Institute of Space Commerce (IISC) is an independent think-tank created in cooperation between the International Space University (ISU) and the Isle of Man government in order to provide a service to the commercial space sector. As such it provides a neutral forum for studies and workshops and the present topic was considered well-fitted in accordance with its mission.

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Executive Summary

Following the discrepancy between the largest 3 satellite operators (SES, Inmarsat and Intelsat) and the International Institute for the Unification of Private Law (UNIDROIT) as to the level of industry support that exists for the Space Assets Protocol to the Cape Town Convention on International Interests; the International Institute of Space Commerce (IISC) developed a questionnaire, which asked top level questions as to the perceived utility and benefit of the Protocol with the aim of making recommendations to the UNIDROIT Committee of Governmental Experts. The questionnaire comprised of 12 short questions designed to be answered in 15 minutes was sent to a selection of satellite operators, manufacturers, financiers, insurers, legal experts and academics. 14 responses were received and processed and the opinions collected form the basis of this report. The breakdown of respondents follows:

- 5 academics
- 3 satellite operators
- 2 financial institutions
- 1 space insurer
- 1 space services company
- 1 satellite manufacturer
- 1 unstated

Responses to the IISC questionnaire highlighted that there could be less support for the UNIDROIT Space Assets Protocol than is currently perceived and as stated by a respondent there could be a misrepresentation occurring as UNIDROIT credits silence and simple attendance at meetings as support for its efforts.

Whilst 7 respondents expressed their lack of support for the Protocol, 3 respondents expressed partial support and the only full support came from 4 respondents from academia. This is most apt considering that respondents from industry were of the opinion that the whole exercise is purely academic and theoretical and that the majority of drafters are individuals that are neither expert in the satellite business or space financing. Whilst this latter statement may not be entirely correct, bearing in mind such participants as Peter Nesgos, leading satellite finance expert of noted law firm Milbank, Tweed, Hadley & McCloy, L.L.P who served as coordinator of the UNIDROIT Space Working Group, it is claimed that relevant experts such as himself are no longer involved with the process considering the way the Protocol has evolved. The effect therefore, according to a respondent, is that instead of creating something that the industry need and want, certain participants are pushing for it just to have a finished product.

Respondents pointed out some of the potential negative effects that could arise if the Protocol were to be adopted. It was stated that it could have the reverse impact from that which is intended including that the regime;

- Could increase risk related to financing and make it more difficult to find lenders willing to assume these risks.
- Introduces uncertainty through an additional layer of supra national legislation, which in many areas is more likely to create conflicts and make space financing more difficult.
- Will add expensive layers of broad, undefined rules on ownership and security interests.
- Provides for additional costs for the operators and/or financiers meaning start ups will need to borrow more and large fleet operators will need to outsource filings to law firms.
- Could actually limit the availability of financing by the introduction of the public service provision.
- Will harm commercial satellite transactions.

The overwhelming opinion according to the respondents of the IISC questionnaire seems to be that UNIDROIT is attempting to provide a solution where there is no problem and even if there were problems when UNIDROIT first began deliberating the utility of the Protocol; those problems have long since been diffused.

According to a view from academia there are more pressing issues for the space community to be concerned with such as space debris. Respondents from industry suggested that UNIDROIT should be focused on areas of the space sector that need regulating such as space tourism. Yet another proposal was that UNIDROIT could look at the financing of satellite ground assets and equipment as opposed to the satellites themselves such as VSAT and USAT dishes. Each of these proposals have their own unique problems and either way, respondents were of the view that financial institutions will not be persuaded by the Convention to commence or expand lending to the space sector and even if they were, the market share may not be set to increase as a result of the effort due to the unique nature of space business.

The satellite operators propose that deliberations should stop, or at least there should be delay in finalization of the Protocol until such a time as the issues associated with the draft Protocol are resolved to industry's satisfaction. Whilst the proposal to stop deliberations may be unrealistic, further analysis should be undertaken to determine who exactly is set to benefit from such a regime and if the benefits outweigh the perceived negative points as highlighted in this report. That UNIDROIT are keen to complete a project should not be the rationale for creating a new regime if the industry does not want it. On the other hand, if it is supported by industry then greater effort must be made by UNIDROIT and those who support the Protocol to more widely articulate its benefits in practical terms.

Assessing the Support for the Space Assets Protocol to the UNIDROIT Cape Town Convention

Introduction

Under the auspices of the International Institute for the Unification of Private Law (UNIDROIT), the Cape Town Convention on International Interests in Mobile Equipment seeks to create a new international legal regime to govern the creation, perfection and priority of security, title retention and leasing interest in high value mobile equipment. The Convention sets forth general rules and is made effective alongside equipment specific protocols, which vary its rules to suit the market conditions for that specific type of equipment, namely the Aircraft Protocol in relation to airframes, aircraft engines and helicopters; the Railway Rolling Stock Protocol in relation to trains and the Space Assets Protocol, which while encompassing a wide variety of space objects applies primarily to satellites. The primary purpose of the new international regime is to overcome the problem of obtaining secure and readily enforceable rights in mobile equipment based on the fact that there are widely differing approaches of legal systems to security and title reservation rights, which purportedly;

- creates uncertainty to intending financiers
- inhibits extension of finance and
- increases the cost of borrowing

The goal of the regime is thus to make financing available where it is not and, where it is, to permit one to buy and sell more cheaply through financing that minimizes the risks of financial loss.

Following successful entry into force of the Aircraft Protocol in March 2006, it is reported that in the aviation sector, the regime has increased the ability for countries, mostly developing countries, to buy more planes because essentially at its commercial core, it's about buying and selling and making efficient use of mobile equipment. This harmonizing regime follows the US system where there is a progressive law of secured transactions in the form of Article 9 of the Uniform Commercial Code, which allows for easy creation of security interests in all assets. Boeing and Airbus, as the leading aerospace manufacturers and set to benefit from the regime, which provided for their customers, pushed for the Convention and Aircraft Protocol.

The Space Assets Protocol on the other hand, which has been over ten years in the drafting stage has not followed a similar life cycle with respect to its development, perhaps due in part to the fact that space assets share few similar characteristics with other classes of mobile equipment, which are moveable assets. Instead, 3 of the largest global satellite operators, potential beneficiaries of the regime, have come out in open opposition to UNIDROIT's efforts towards completion of the proposed draft

Space Assets Protocol. Believing that not enough of the commercial satellite sector has played an active role in the drafting process, they have called for a cessation to deliberations or delay in finalization of the Protocol until such a time as the issues associated with the draft Protocol are resolved to industry's satisfaction. The effect of such a call could thwart the efforts of UNIDROIT towards desired timeous completion of the Protocol.

Despite repeated calls by UNIDROIT for industry participation in the deliberations, the satellite operators assert that the hope among many members of the satellite sector was that the lack of participation by the key commercial stakeholders would cause the effort to fall away as an academic exercise, with the world's major satellite operators having successfully financed a global industry in the ten years UNIDROIT has been deliberating the need to help them do so. From UNIDROIT's perspective, whilst the operators views have been considered, they maintain that all those engaged in ongoing work, in particular satellite manufacturers, insurers and financial institutions were clear that the Space Assets Protocol would serve a vital need and should be brought to a successful completion expeditiously. Following this discrepancy, the International Institute of Space Commerce (IISC) sought to gain an overall view as to the level of support (or lack of) that the Space Assets Protocol currently has within the space industry with the aim of making recommendations to the UNIDROIT Committee of Governmental experts. To this end a questionnaire was created, which asked top level questions as to the perceived utility and benefit of the Protocol.

Methodology

The questionnaire comprised of 12 short questions designed to be answered in 15 minutes and was sent to a selection of satellite operators, manufacturers, financiers, insurers, legal experts and academics. The questionnaire questions are attached as Annex I. 14 responses to the questionnaire were received and the collective opinions form the basis of this report. The following sectors are represented:

- 5 academics
- 3 satellite operators
- 2 financial institutions
- 1 space insurer
- 1 space services company
- 1 manufacturer
- 1 unstated

The result of the number represented is that the opinions set forth herein can not be said to be fully representative of the industry opinion but represent a small and important cross section of it. Henceforth, in the course of this paper, use of the term "UNIDROIT Convention" denotes the Convention as read alongside the Space Assets Protocol.

Results

Based on the findings of this questionnaire, the benefits of the proposed new regime seem slight. On a positive note one respondent from a financial institution expressed that capital intensive industry needs all the investor protections it can create and whilst not useful as a replacement to US laws and courts, the regime could be good for countries with no established creditor protections. Another respondent from academia asserted that the benefit of the regime was that it would reduce some business risk factors and yet another view is that it could increase the pool of investors. But besides these stated benefits, the overwhelming opinion is that collateralization of satellites is challenging and due to the infrequent nature of their use and the unique nature of satellites and their regulation, will not bring about the opening up of credit sources as desired, even if same is encouraged through a new regime. In fact, a respondent from a financial institution went as far as to say that financial institutions will not be persuaded by the Convention to commence or expand lending to the space sector.

It is recognised that finance for space projects is arranged on a project finance basis and the overriding issue seems to stem from the fact that the fundamentals of the space sector are cash flow driven, derived from revenue from the asset rather than based on the asset itself. According to a respondent from a financial institution, the financing industry is pricing credit according to the predicted future cash flows of a company or project and as the Convention will not reduce this risk, the pricing of such risk will not be reduced. One respondent from the space insurance industry stated that revenue streams over a satellite life are likely to exceed the satellite value by a ratio of 8:1, which makes securing rights over the commercial business a great deal more attractive. The collateral value of satellites alone thus is deemed rather low particularly in an event of insolvency / auctions and as one respondent pointed out, history suggests that insolvent space company's assets (Iridium, Globalstar) have a rather low recovery value. The value is comprised of the combination of any future contracts, ground segment and space segment, and the ability of lenders to sell such combination at a price that covers their loans outstanding.

These views do not seem to take into consideration that not only does the Convention apply in relation to space assets but also to the assignment and reassignment of debtor's rights. Debtor's rights are defined in Article 1(2) b of the draft Protocol as "all rights to payment or other performance due to a debtor by any person with respect to a space asset." Subject to this, any kind of right vested in the debtor is covered. The addition of the concept of debtor rights as well as concepts of related rights and the still deliberated associated rights are designed to ensure that protection is not limited to the hardware alone but also to essential things associated with it. That said the view still stands, as observed by one respondent, that securing rights over the commercial business avoids the potential pitfalls associated with licensing and the use of orbital slots.

Despite the push towards increased commercialization of outer space, the market characteristics of certain parts of the space sector will never be fully commercial and

are prone to Government intervention as space technology is regarded as strategic assets to countries or regions. This is reflected in the Space Assets Protocol whereby Governments are given a menu of wide ranging and broad options with respect to protection for the continuation of public services through the right to limit the exercise of default remedies. Notwithstanding the issue with the ambiguous nature of what constitutes a public service (any service could be said to be a public service), it was agreed by all respondents that of all the outstanding policy issues, the public service provision is the biggest challenge to completion of the Protocol with one financier stating that for financiers the public service provision should be deemed as a deterioration in their position from the current position and another asking the question “Why should Governments who don't pay their bills be treated any differently than any other paying customer?” As stated by Sky Perfect JSAT Corporation in their comments to UNIDROIT, “the wider the choice is to be tabled in order to command the broad level of consensus, the vaguer the message about the direction where the international commercial space and financial communities should go might become.”¹

Whilst 7 respondents expressed their lack of support for the Protocol, 3 respondents expressed partial support and the only full support came from 4 respondents from academia. Interesting that support came from academia as more than one industry view expressed that the whole exercise was purely academic and theoretical and that the drafters are individuals that are neither expert in the satellite business or space financing. Whilst the chairman of the drafting committee Professor Sir Roy Goode is indeed a noted academic, it is an incorrect assertion to say that experts in the above mentioned areas were not consulted. The individuals of the Space Working Group (SWG), the task force assigned the responsibility of preparing the preliminary draft protocol were mandated due to their familiarity with the day-to-day nature and objectives of such transactions and could thus indicate the sort of regime needed to make asset-based financing more accessible to commercial space financing transactions. Whilst the SWG was coordinated by leading satellite finance expert Mr Peter Nesgos of noted law firm Milbank, Tweed, Hadley & McCloy, L.L.P., It was stated by a respondent that even though such noted experts were involved in initial stages, some are no longer involved based on the way the deliberations have evolved. This information is not verified by the IISC but the view of one satellite operator is that despite such names, not enough of the relevant industry players were involved in the drafting of the Protocol, due to lack of interest or need.

This issue of lack of need for the Protocol was expressed by several respondents whilst UNIDROIT's view, as expressed in a radio interview² with Dr Mark Sundahl of the SWG

¹ **PRELIMINARY DRAFT PROTOCOL TO THE CONVENTION ON INTERNATIONAL INTERESTS IN MOBILE EQUIPMENT ON MATTERS SPECIFIC TO SPACE ASSETS** (as revised by the Committee of governmental experts at its first session (Rome, 15/19 December 2003)) and **ALTERNATIVE TEXT OF THE PRELIMINARY DRAFT PROTOCOL, IMPLEMENTING POLICY ISSUES REFERRED TO AND EXAMINED BY THE STEERING COMMITTEE** (prepared, at the request of the Steering Committee, for presentation to the Committee of governmental experts, by Professor Sir Roy Goode (United Kingdom) and Mr Michel Deschamps (Canada): **COMMENTS AND PROPOSALS**, C.G.E./Space Pr./3/W.P. 9, November 2009

² Radio interview with Dr David Livingstone of The Space Show dated 17 November 2007. Accessible at <http://www.thespaceshow.com/detail.asp?q=835>

is that even if there is no pressing need for it, this Convention is a building block of modern finance and will not harm the space industry and so should be supported. This rational reinforces the strong opinion held by one respondent that it appears that certain participants are pushing for it just to have a finished product and not because industry is clamouring for it. One respondent stated that with vocal support lacking, such language is not necessary in the satellite context at this time and rather, the Protocol is a solution in search of a problem. According to 2 respondents, this lack of vocal support creates a different kind of problem in that UNIDROIT credits silence and simple attendance at meetings as support for its efforts. Whilst the satellite operators are the only entities that have expressed open opposition to the Protocol, one satellite operator is of the view that more of the commercial space industry shares their concerns stating that “thus far, we have not heard of many commercial entities that have come out formally in support of the current draft language. At best, some have suggested that the goals of the Protocol are worthy of support but beyond that tepid statement, we have not seen entities demonstrate support for the current language.” This is in stark contradiction to UNIDROIT’s position that support exists for the Protocol.

Respondents pointed out some of the potential negative effects that could arise if the Protocol were to be adopted. It was stated that it could have the reverse impact from that which is intended including;

- It could increase risk related to financing and make it more difficult to find lenders willing to assume these risks.
- It introduces uncertainty through an additional layer of supra national legislation which in many areas is more likely to create conflicts and make space financing more difficult.
- It will add expensive layers of broad, undefined rules on ownership and security interests.
- It provides for additional costs for the operators and/or financiers meaning start ups will need to borrow more.
- There will be an increase in expenditure due to the cost of filings. Given the fact that every filing has the potential to impact on the ability to continuing using the satellite, operators are going to need to outsource filing to law firms. Satellite leases vary tremendously and can be for an hour, day, month or year depending on the commercial need. The impact for large fleet operators will be tremendous.
- It will harm commercial satellite transactions.
- The proposed wording could actually limit the availability of financing by the introduction of the public service provision.
- The imposition of supra-national law will adversely affect the satellite industry and will adversely affect financing of space objects.

These concerns stem from the position that there is no perceived problem with the status quo. As a respondent from the insurance industry put it, the markets and structures are already well established and effective and with less than 1% of satellite

financings being asset based, respondents do not seem to be aware of any failures due to impediments over the granting of security interests. As one respondent stated UNIDROIT started as a well meant and good idea over a decade ago but since then the satellite industry has moved on and UNIDROIT is regulating for an issue that no longer exists.

According to the view of academia there are more pressing issues for the space community to be concerned with such as space debris. 2 Respondents suggested that UNIDROIT should be focused on areas of the space sector that need regulating, such as space tourism. Yet another proposal is that UNIDROIT could look at the financing of satellite ground assets and equipment as opposed to the satellites themselves such as VSAT and USAT dishes. Being that the purpose of UNIDROIT is to study needs and methods for modernising, harmonising and co-ordinating private and in particular commercial law between states and groups of states, the issue with some of these proposals could be that they may not be in line with UNIDROIT's mandate, though Dr Sundahl suggested that the Protocol could be useful to the space tourism industry.

Conclusion

This report arose from the need to investigate the discrepancy between UNIDROIT and the largest satellite operators as to the support that exists for the Space Assets Protocol; the latter having officially expressed their disapproval and withdrawing from deliberations claiming that it will do more harm than good to the industry. The effect of the satellite operators' withdrawal from deliberations has not gone unfelt despite UNIDROIT'S efforts to downplay this. With 7 respondents declaring that the satellite operators are right to withdraw and 3 saying they are partially right; respondents expressed that their absence will likely delay any forward movement significantly and according to a respondent from the manufacturing industry, it demonstrates that the Convention has little utility. Another stated that it may limit effectiveness to less developed countries willingness to join an international convention and considering one respondents view that the principal aim of the UNIDROIT Convention is to aid in start up and developing nation satellite financing, the assertion is a serious one. Bearing in mind that deliberations have still continued without them, one respondent stated that it will be commensurately less effective and relevant for serving their needs.

As the regime is not currently in force it is difficult to determine if the suggested risks as expressed by several respondents are as grave as proposed. After all, as previously stated, the regime is aimed at developing countries who have no suitable regime protecting creditors and as such any development should be an improvement in that regard. It could be said that the satellite operators are also not considering that the regime could be of benefit to start ups because they themselves are so well capitalized stemming from their history and are not in need of more sources of finance. Also in a protectionist sector encouraging more competitors may not be a welcome agenda but they maintain that there is no issue of big company versus small company in their views and that they will be effected negatively even if the regime is not directed at them.

In line with the view of these satellite operators, following the collation of a cross section of views from the space and satellite industry, the IISC questionnaire has highlighted that there could be less support for the UNIDROIT Space Assets Protocol than is currently perceived. Whilst expecting deliberations to stop, as the satellite operators propose could be unrealistic, further analysis should be undertaken to determine who exactly is set to benefit from such a regime and if the benefits outweigh the perceived negative points as pointed out in this report including that the regime;

- Could increase risk related to financing and make it more difficult to find lenders willing to assume these risks.
- Introduces uncertainty through an additional layer of supra national legislation which in many areas is more likely to create conflicts and make space financing more difficult.
- Will add expensive layers of broad, undefined rules on ownership and security interests.
- Provides for additional costs for the operators and/or financiers meaning start ups will need to borrow more and large fleet operators will need to outsource filings to law firms.
- Could actually limit the availability of financing by the introduction of the public service provision.

As one respondent mentioned, the market share may not be set to increase as a result of the effort due to the unique nature of space business and if not it needs to be determined if the status quo is a better position. That UNIDROIT are keen to complete a project should not be the rationale for creating a new regime if the industry does not want it. On the other hand, if it is supported by industry then greater effort must be made by UNIDROIT and those who support the Protocol to more widely articulate its benefits in practical terms.

ANNEX I

Questionnaire Questions

The questionnaire consisted of the following questions;

1. Please indicate your sector
2. What do you see as the principal aim of the UNIDROIT Convention?
3. In your opinion is the UNIDROIT Convention applicable to the current state of space financing?
4. In your opinion can the UNIDROIT Convention help with the current conditions for access to commercial space financing?
5. In your opinion will the UNIDROIT Convention help lower the cost of obtaining credit and how?
6. To what extent are space assets currently used as collateral and how significant a part should they play?
7. How will encouraging more space asset finance develop the space industry
8. How will a new legal regime help space financing in the future?
9. Which of the outstanding issues do you think poses the biggest challenge to the completion of the Protocol?
10. What is the effect of the satellite operators' opposition to the Protocol and withdrawal from deliberations?
11. Are the satellite operators right to withdraw from deliberations?
12. Do you support the UNIDROIT Convention?