# Asset Based Financing in the Space Industry – Facilitating Space Financing through the Space Protocol of the Cape Town Convention.

A summary document on the Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets – Prepared jointly by UNIDROIT and BHO Legal.

I.	Ι	introduction	2
II.	Ι	mportant Features	3
1		Scope	
2		International Interests	
3		Registry, Priority, and Insolvency Mechanisms	
4	٠.	Debtor's Rights	
5	· .	Default Remedies and Insolvency Remedies	6
6		Salvage	6
7		TT&C Enforcement Mechanism	6
III.		Financing Mechanism	7
1		Asset Financing Scheme	7
2		Example of a Transaction in Space Assets under the Space Protocol	10
IV.		FAQs	11
1		What are the identification criteria for space assets to be registered in the Space Registry?	11
2		What is the status of physically linked assets?	11
3		Does the Space Protocol impact already existing models of space financing?	12
4		When will the Space Protocol enter into force?	12
V.	ι	Jseful Resources	13

### I. Introduction

National laws on secured financing vary widely from one country to another. Some jurisdictions are highly supportive of security interests, while others are more restrictive. Security interests may lose their validity when high value mobile equipment is moved from one country to another, or is launched into outer space (where it may be under the jurisdiction and control of another State rather than that who's law applies to the security interest), as security interests are governed by the law of the State where the property is located. It was anticipated that an autonomous international interest may decrease the risks and costs associated to the financing of high value mobile equipment.

Accordingly, the Cape Town Convention establishes an autonomous international interest in relation to several types of high value mobile equipment such as aircraft equipment, railway rolling stock, and space assets which is protected by registration in an International Registry. It also provides clarity about the applicable law and protection against loss of the security interest when there is a change of jurisdiction.

The Cape Town Convention, which lays down the general rules was adopted in Cape Town, South Africa, on 16 November 2001. The last of the so far three asset-specific Protocols to the Cape Town Convention, the Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets (Space Protocol),<sup>[1]</sup> was adopted by 40 States at a Diplomatic Conference on 9 March 2012 in Berlin, Germany. It adapts and specifies the general rules laid down in the Cape Town Convention, considering the distinctive features of space financing and the special environment in which space activities are undertaken.

The Cape Town Convention system operates by reducing a creditor's risk and by enhancing legal predictability in the transactions covered under it thereby enabling more secure transactions of high value assets to take place with reduced costs. Its Protocols are tailored to address the specific financing needs of individual industries, and as such, the Space Protocol is designed to enable more secured transactions in space assets. The Cape Town Convention system functions through the creation of different international registries under each Protocol to enable the creation, registration, and enforcement in Contracting States of priority rights in high value assets of a registrable nature. This improves predictability of asset-based financing and leasing within these industries allowing financiers to lend with confidence and at lower rates.

The primary objectives of every Protocol of the Cape Town Convention are:

- 1. To facilitate the acquisition and financing of economically important items of uniquely identifiable mobile equipment by providing for the creation and publicity of an international interest which will be recognised in all Contracting States;
- 2. To provide the creditor with a range of basic default and insolvency-related remedies and, where there is evidence of default, a means of obtaining speedy relief pending final determination of its claim on the merits;
- 3. To establish an electronic international registry for the registration of international interests which will give notice of their existence to third parties and enable the creditor to preserve its priority against subsequently registered interests and against unregistered interests and creditors in the debtor's insolvency;
- 4. To ensure through the relevant Protocol that the particular needs of the industry sector concerned are met.<sup>[2]</sup>





### **II. Important Features**

This section looks at the important features of the Space Protocol within the Cape Town Convention System.

### 1. Scope

A 'Space Asset' is defined in Article I(2)(k) of the Space Protocol as:

- (k) "space asset" means any man-made uniquely identifiable asset in space or designed to be launched into space, and comprising
  - (i) **a spacecraft**, such as a satellite, space station, space module, space capsule, space vehicle or reusable launch vehicle, whether or not including a space asset falling within (ii) or (iii) below;
  - (ii) **a payload** (whether telecommunications, navigation, observation, scientific or otherwise) in respect of which a separate registration may be effected in accordance with the regulations; or
  - (iii) **a part** of a spacecraft or payload such as a transponder, in respect of which a separate registration may be effected in accordance with the regulations,

together with all installed, incorporated or attached accessories, parts and equipment and all data, manuals and records relating thereto.

The aforementioned definition is inclusive of all space objects which are commonly used by companies in the space industry. It is also cognisant of technological advancements and developments within the space industry, and hence, has given discretion to the Regulations of the International Registry (hereinafter 'Space Registry Regulations'), to be established under the Space Protocol, to decide upon the inclusion of types of payloads, and parts as appropriate, upon consultation with the industry.<sup>[3]</sup>

The first version of the Space Registry Regulations has been finalised at the fourth session of the meetings of the Space Preparatory Commission, which was set up through Resolution 1 of the Diplomatic Conference in Berlin.<sup>[4]</sup> This distinguishes 'transponders or other communication equipment' and other payloads and parts, namely 'observation payload,' 'navigation payload,' 'scientific payload' and 'other parts of a spacecraft or payload'. For the fourth types of assets, Annex 1 to the Space Registry Regulations includes an Explanatory Note to the extent that the bankability of these types of assets is yet to be tested. This means that the Space Registry will start accepting registrations only in spacecraft and transponders or other communication equipment until revisions are made to the draft Space Registry Regulations. This corresponds with the current practice of financial leasing within the space industry, which is limited to satellites, and satellite transponders; however, this may be adjusted in the future as required through the Space Registry Regulations.<sup>[5]</sup>





### Space Assets in terms of the Space Protocol

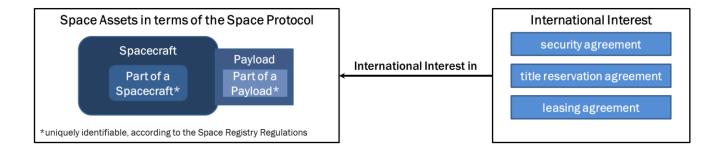


\*uniquely identifiable, according to the Space Registry Regulations

### 2. International Interests

An International Interest is defined by Article 2(2) of the Cape Town Convention as:

- 2. For the purposes of this Convention, an international interest in mobile equipment is an interest, constituted under Article 7, in a uniquely identifiable object of a category of such objects listed in paragraph 3 and designated in the Protocol:
  - (a) granted by the chargor under a **security agreement**;
  - (b) vested in a person who is the conditional seller under a title reservation agreement; or
  - (c) vested in a person who is the lessor under a leasing agreement.

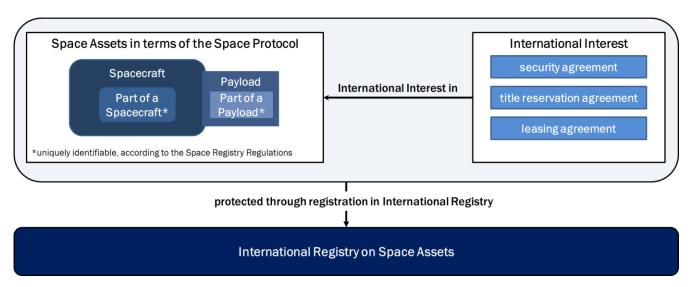




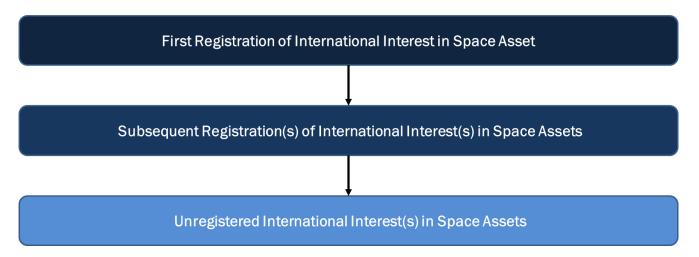


### 3. Registry, Priority, and Insolvency Mechanisms

The Cape Town Convention system is dependent upon the registration of international interests in international registries as established under each Protocol. [6]



Under the Cape-Town regimen, a registered interest has priority over any other interest subsequently registered and over an unregistered interest.



Registration has, accordingly, a considerable impact on the priority of the interest. Hence, the incentive to have rights safeguarded by registration in an international registry can be very strong.

### 4. Debtor's Rights

Due to the impracticability of physically repossessing an asset while in outer space, creditors attach value to the revenue streams in relation to the asset in question. Therefore, the Space Protocol contains (in contrast to the other Protocols to the Cape Town Convention) detailed provisions on the assignment of debtor's rights, starting with a rather wide definition of the term under Article I(2)(a) of the Protocol which covers:

[...] rights to payment or other performance due or to become due to a debtor by any person with respect to a space asset;





However, always provided that these rights are related to the space asset in question, therefore reflecting the nature of the asset based security instrument.

### 5. Default Remedies and Insolvency Remedies

Upon default, a creditor may rely upon the default and insolvency remedies available in the Cape Town Convention System to exercise its rights over the asset. These include interim relief, such as the preservation of the asset in the period it takes to exercise the full remedies, taking control of the object charged to, sell or grant a lease of the object or collect or receive any income or profit arising from the management or use of such an object. Under the Space Protocol, Contracting States can opt for one of two Alternatives for the final enforcement of the right to repossession of the asset. These alternatives vary in their timeliness and procedural aspects of enforcing repossession, or curing the default. [7]

Space assets are often used for the provision of essential public services. In order to ensure the continuation of these services, it was agreed that a creditor shall not enforce its remedies in a way that would make the public service unavailable prior to the expiration of a certain period (between three and six months to be declared by Contracting States at the time of ratification). It is left to national laws of each Contracting State to determine which services are needed for the provision of a public service. If, under the laws of the relevant Contracting State, a service is recognised as such, the service provider or the Contracting State may file a public service notice in the International Registry which may limit the exercise of default remedies as described above. [8]

It is acknowledged that space assets subject to a security interest may be physically linked to other space assets. The Protocol provides that default remedies may not be enforced as to impair or interfere with the operation of the other asset, if the latter is subject to an international interest or sale with priority to the interest being enforced. Priority may be achieved by registering the other assets within three years from the effective date of the Convention (including the Protocol), which will be deemed to constitute an interest at the time of. This allows for achieving effective protection for already existing assets.

### 6. <u>Salvage</u>

'Salvage' is a legal or contractual right or interest in, relating to or derived from a space asset that vests in the insurer upon the payment of a loss relating to the space asset.

Insurance is an important consideration in the financing of space assets. The Space Protocol seeks to ensure that this aspect of the industry remains unaffected by the Protocol. To this end Article IV(3) explicitly states that nothing in the Convention or Protocol can affect any legal or contractual rights of an insurer to salvage in accordance with the applicable law.

As such, salvage rights, including rights by subrogation, are not affected by the Convention or Protocol, so that any priority dispute between salvage rights and creditor rights will be resolved by the applicable law.<sup>[9]</sup>

### 7. TT&C Enforcement Mechanism

The Space Protocol was drafted specifically keeping in mind the logistical difficulties of physical repossession of space assets. Hence, the drafters paid particular attention to the Tracking, Telemetry and Control (TT&C) of space assets which can be found within the command codes associated to it. Satellite command codes are encryption keys which give control over the satellites. Article XIX allows the parties to an agreement to specifically agree to the placement of command codes and related data and materials with a third party in order to afford the creditor





an opportunity to establish control over or operate the space asset remotely in order to efficiently exercise its rights, as granted under the Space Protocol.<sup>[10]</sup>

However, Article XXVI(2)(c) restricts Article XIX in that laws and regulations of Contracting States can prohibit, restrict, or attach conditions to the placement of command codes with third parties.

### III. Financing Mechanism

With the size of the global space economy now over 350 Billion USD in 2017, the amount of capital required to finance space related projects has exponentially increased in the recent past. The Space Protocol introduces an additional mechanism of attaining finance which presently is seldom used in the space industry. This mechanism has already proven its usefulness in the aviation industry through the Aircraft Protocol of the Cape Town Convention which has brought billions in benefits since entering into force in 2006.<sup>[11]</sup>

Investing in the space industry has a much higher degree of risk associated to it than investing in other industries, keeping in mind the volatility of space and the generally high requirement of capital for any space venture, often starting with expensive research and development activities. One way to reduce investor risk and uncertainly is to ensure uniform rules governing investments through the introduction of a security package that can be perfected and enforced at low costs. This will mitigate the default risk and enhance the creditor's confidence in recovering its investment.<sup>[12]</sup>

This section looks at the asset financing model as an alternative means of financing for the space industry and highlights its benefits, particularly for the NewSpace sector.

### 1. Asset Financing Scheme

The space industry has recently had a large influx of start-ups and new entrants broadly categorised as NewSpace. These companies are mostly small enterprises with robust business models that intend to derive a profit from using space applications or conducting space exploration. Their products depend upon the use of advanced and innovative technologies that would be used in outer space to offer services to their customers.

For a commercial enterprise to grow and become profitable, it has to first spend money on various necessities to establish its business, and this usually means that it must borrow money from an available source. When deciding whether to extend credit, the potential lender or creditor will first try to ascertain whether their money is likely to be repaid. For this, they will look towards the credibility of the company and will undertake a risk analysis for their investment.

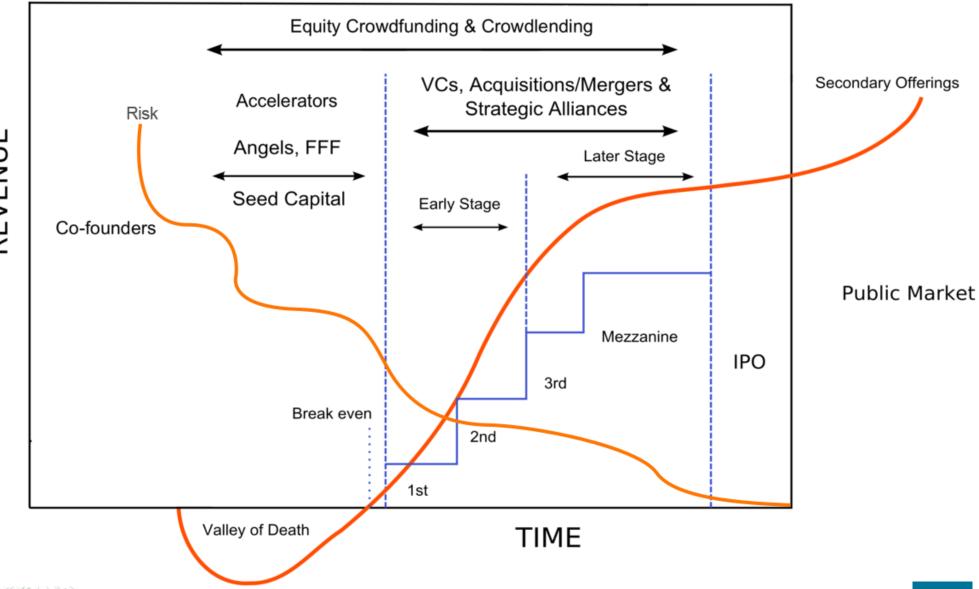
Most NewSpace start-ups do not possess the AAA credit ratings which their traditional, already well-established space counterparts possess and hence creditors are not willing to lend to them at affordable rates. The following chart plots the normal financing cycle of a start-up, such as the ones found in the NewSpace industry, against the risk associated with investing in such start-ups (Note: Risk line is not plotted consistent with revenue – risk decreases as revenue increases):[13]





# REVENUE

## **Startup Financing Cycle**

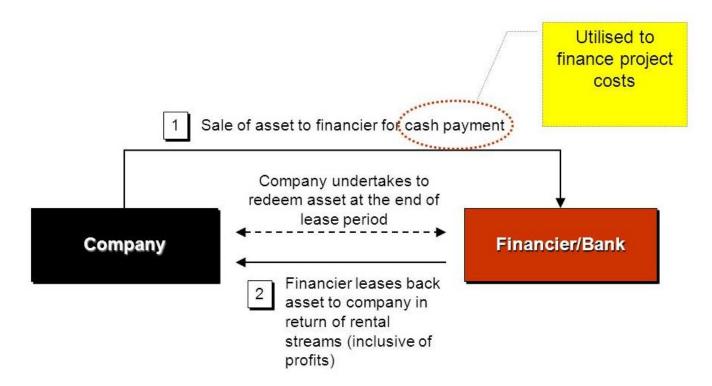






Asset financing allows companies to leverage their assets, and attain finance by giving creditors rights in those assets. The benefit of asset backed financing is that, in the case where the debtor cannot repay its debt to the creditor, the asset itself, or interests in the asset, may come under the ownership and/or control of the creditor. In this manner, the creditor will be paid back some of the credit they have extended to the debtor. This is more desirable to a creditor than offering the profits of the enterprise, especially when the enterprise fails and the creditor would therefore receive little or no return on their outlay.<sup>[14]</sup>

In the financing cycle outlined on the previous page, the Space Protocol has the capacity to greatly reduce the investor's risk at the stage when the idea has attained fruition and can be seen in the form of an asset. When the start-up reaches the stage where it can show investors its technology, and can produce this technology, either with the help of external manufacturers, or internally, creditors may then be willing to acquire rights within this technology (asset), in exchange for lenient lines of credit. According to the circumstances of the project and the preferences of the parties, asset-based financing may be more desirable than other methods of accumulating capital. The following chart displays the structure of a very simplistic sale and leaseback transaction which start-ups, and other companies may be able to engage in upon the complete development of their products:



The Space Protocol highly facilitates these types of transactions such that it reduces the riskiness of the extension of credit, by making it more likely that the amount loaned will be repaid if the debtor becomes insolvent; and that the creditor reduces their burden of monitoring the debtor absconding with the credit, because the creditor now only has to monitor the asset securing the loan, and not the overall business and profitability of the debtor's enterprise.

By creating an international registry where interests in space assets can be recorded and perfected, the Space Protocol offers increased security and confidence to lenders to invest in the space industry. The fact that the Space Protocol additionally introduces a strong set of internationally recognised and thus enforceable remedies





in the case of a default further secures the investment and allows creditors from all across the world to invest capital in space assets, including and particularly in case of cross border movements and entities from different States, as is common for space projects.<sup>[15]</sup>

The Space Protocol ensures that a standard set of international rules apply to such secured transactions. This ensures that the creditors do not have to be wary of a multiplicity of rules when internationally investing in space industry projects. Moreover, this also ensures that the presence of the asset in space has no substantial legal bearing on the financing contract. Furthermore, as most start-ups only have their idea or asset to leverage, and set as collateral, it allows companies to also rely upon their work and technology to secure financing as opposed to divesting their stocks or securing loans with very high interest rates. This offers many benefits to NewSpace companies, and entrants into the space industry from developing countries who have trouble accessing the traditional types of funding available for space related ventures.

The primacy and safety of their interests in space assets, alongside the application of a strong system of remedies makes asset financing a very attractive option for investors looking to contribute capital to the space industry. It removes the issues of a multiplicity of conflicting rules applying to secured transactions of an international nature, and issues related to rights over assets. Moreover, future creditors within the same asset can also easily search the online registry to ensure that they are making investments clear of already existing third-party interests.<sup>[16]</sup>

### 2. Example of a Transaction in Space Assets under the Space Protocol

The following is a fictitious example of a transaction under the Space Protocol:

ABC is a NewSpace company based in a developing country which has ratified the Space Protocol of the Cape Town Convention. ABC is developing small satellite technology and intends to launch a constellation of 10 satellites into lower earth orbit (LEO) for earth observation purposes. They have managed to use commercial off the shelf (COTS) components to develop their first satellite and have conducted tests on this satellite in a laboratory and in a near space environment. Their initial developmental and testing phase was funded by an angel investor who has acquired a 30% stake in their company. They now require an injection of additional capital to manufacture their fleet and launch it into outer space.

XYZ Bank is a commercial bank in a highly developed country which is not a signatory to the Space Protocol. It has a portfolio of investments in space industry projects but typically only lends to AAA rated companies from developed economies who have a strong history in space exploration and strong financial backing.

The cost of development and launch of each small satellite is 35 Million Euros. ABC prepares a proposal to set up 10 separate Special Purpose Vehicles (SPVs) to finance each satellite individually through loans from XYZ Bank repayable over the course of 5 years. ABC offers XYZ a secured interest in each of their satellites up until the full repayment of the loans.

The deal is agreed. XYZ Bank registers International Interests in the International Registry in all 10 of the satellites at the stage of manufacturing when the satellites could be clearly identified. The parties agreed in writing that ABC is at default in terms of the Cape Town regimen when it has not paid back its debt to the XYZ bank for more than two months.





### Scenario 1:

ABC launches all ten of their satellites 6 months after the agreement and continues to pay back its debt to XYZ Bank. Overall, the business of ABC is developing well. However, close to the break-even ABC is running low in cash, though late payments by ABC have not yet triggered default. Most recently, ABC has agreed on a deal with a future anchor client. Accordingly, it anticipates major revenues. In order to meet its obligations towards the XYZ Bank, ABC decides to assign debtor's rights, namely the right of payment by its future anchor client, to XYZ Bank. The assignment is recorded in the International Registry against the asset and claims priority over any future assignments to other parties. Through the assignment of these future debtor's rights ABC is able to meet its obligations towards XYZ Bank until the break-even while continuing the operations.

### Scenario 2:

In this scenario, ABC was not able to pay its debt for more than two months. A default notice is filed in the International Registry which entitles XYZ Bank to exercise any of the remedies available under the Cape Town regimen, i.e. take possession or control, sell or grant a lease, or collect or receive any income or profits. XYZ Bank may take control through the documentation and data to be provided by ABC, namely including TT&C command codes and operational procedures, and by taking operational services from commercial ground control service providers or by terminating the debtor's right of use on a contractual basis. Once XYZ has taken control, it may sell the services in the market or grant a lease to another operator. Collecting or receiving any income or profits generated through the operations of the assets seems to be the most viable option, taking into account that future revenues can be anticipated.

### IV. FAQs

### 1. What are the identification criteria for space assets to be registered in the Space Registry?

In order to ascertain the identifiers for Space Assets, the Space Protocol referred this task to the Space Registry Regulations. The present version of the Space Registry Regulations require all assets to be associated to a 'unique identification number'. The process for the issuance of this number is detailed in Annex 2 of these Regulations. The owner of a space asset may request issuance of a unique identification number by providing the Registrar with (a) the name of the owner, (b) the name of the manufacturer, (c) the manufacturer's contract reference number and (d) the category of space asset. If it appears that a unique identification number already exists for a particular asset, then the Registrar must use this. Furthermore, The Registrar shall then create a 'unique identification file' for each space asset for which the unique identification number is issued and record the unique identification number in the file. It is in this file that an international interest, when effecting its registration, is recorded. Additional information to be used for reference, though not for determining priority, is also recorded in the same file.

Additional information such as the UTC time of the launch of the object, the frequency allotted to it, or any other COSPAR unique identifier associated to it may also be entered into the file.

### 2. What is the status of physically linked assets?

Often, spacecraft are comprised of different modules that are physically linked together (e.g. the International Space Station). Article XVII(3) prescribes a significant restriction on the exercise of remedies related to physically





linked assets. A creditor may not enforce an international interest in a space asset that is physically linked with another space asset so as to impair or interfere with the operation of the other space asset.

There are two limitations on the Article XVII(3) rule:

- A creditor or buyer of the physically linked space asset must have registered its interest in the space asset before the interest of the enforcing creditor was registered.
- Article XVII(3) only takes effect subject to any agreement to the contrary between the two parties concerned (i.e. it is not a mandatory provision).

This rule is not strictly a priority issue, as the two interests relate to different space assets which are physically linked, rather than two interests in the same asset.

### 3. Does the Space Protocol impact already existing models of space financing?

The Space Protocol has no impact on already existing means of space financing. It introduces an additional mechanism of attaining finance for those companies which cannot presently secure a line of credit for their work at reasonable rates, and creates a new avenue for already existing space companies to find capital for projects from a more international investor pool. It further provides effective means of protection for already existing assets, should they eventually be linked to other space assets subject to a security interest.

### 4. When will the Space Protocol enter into force?

For the entry into force of the Space Protocol, a minimum of 10 ratifications, as well as a fully operational International Registry is required. As of August 2018, 4 States (Burkina Faso, Germany, Saudi Arabia, and Zimbabwe) have signed the Space Protocol.





### V. Useful Resources

- Official Unidensity Website at <a href="https://www.unidroit.org/instruments/security-interests/space-protocol">https://www.unidroit.org/instruments/security-interests/space-protocol</a> or email us at <a href="mailto:info@unidroit.org">info@unidroit.org</a>.
- Official Commentary on the Convention on International Interests in Mobile Equipment and the Protocol
  thereto on Matters specific to Space Assets by Professor Sir Roy Goode CBE, QC, UNIDROIT 2013, ISBN
  88-86449-21-6 at <a href="https://www.unidroit.org/space-protocol-official-commentary">https://www.unidroit.org/space-protocol-official-commentary</a>
- Cape Town Convention Academic Conference Paper: 'Comparative analysis of aircraft, rail and space international registries and their regulatory provisions.' Rory McPhillips, Howard Rosen, Souichirou Kozuka, Stuart Kennedy (2016) Available at:
  - https://www.law.ox.ac.uk/sites/files/oxlaw/comparative analysis of aircraft rail and space international registries and their regulatory provisions.pdf
- 'Financing space ventures' in Handbook of Space Law edited by Frans von der Dunk and Fabio Tronchetti
   Mark Sundahl Edward Elgar Publishing 2015 ISBN 978 1 78100 035 9
- The Cape Town Convention: Its Application to Space Assets and Relation to the Law of Outer Space (Studies in Space Law) - Mark J. Sundahl - Martinus Nijhoff (September 9, 2013) Martinus Nijhoff (September 9, 2013) - ISBN 9004208917
- Contracting for Space: Contract Practice in the European Space Sector Lesley Jane Smith, Ingo Baumann
   Ashgate Publishing, Ltd., 2011 ISBN 1409419231
- Financing for Commercial Space: Asset-Backed Financing, International Space Law and the UNIDROIT Draft
   Protocol on Space Assets Thesis by Christopher Daniel Johnson Available at:
   <a href="https://swfound.org/media/205388/financing\_commercial\_space.pdf">https://swfound.org/media/205388/financing\_commercial\_space.pdf</a>





### References

[1] See Protocol to The Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets (Berlin, 9 March 2012) at <a href="https://www.unidroit.org/instruments/security-interests/space-protocol">https://www.unidroit.org/instruments/security-interests/space-protocol</a>.

[2] See Stanford, M.J, Completion of a first draft of UNIDROIT's planned future Convention on International Interests in Mobile Equipment [in English and French], in: Uniform Law Review / Revue de droit uniforme, NS 1 (1996), 274-283; Sundahl, M.J, The "Cape Town Approach": A new method of making international law, in: Columbia Journal of Transnational Law, 44 (2006), No. 2, 339-376.

[3] For the Regulations see Appendix III of the Report of the Fourth Session of the Preparatory Commission for the Establishment of the International Registry for Space Assets Pursuant to the Space Protocol at <a href="https://www.unidroit.org/english/documents/2015/depositary/ctc-sp/pcs-04-07rev-e.pdf">https://www.unidroit.org/english/documents/2015/depositary/ctc-sp/pcs-04-07rev-e.pdf</a>

[4] Members of the Space Preparatory Commission include Brazil, the People's Republic of China, the Czech Republic, France, Germany, India, Italy, the Russian Federation, Saudi Arabia, South Africa and the United States of America. Additional industry and regulatory such as the ITU are also actively involved in the meetings of this Commission. For more see <a href="https://www.unidroit.org/work-in-progress/space-prepcom">https://www.unidroit.org/work-in-progress/space-prepcom</a>

[5] See McPhillips, R , Rosen, H, Kozuka, S & Kennedy, S, Comparative analysis of aircraft, rail and space international registries and their regulatory provisions, Cape Town Convention Journal, 5:1, 29-67, (2017) DOI: 10.1080/2049761X.2016.1252258

<sup>[6]</sup> For a discussion on the Priority Regime see: De La Peña, N, Reforming the legal framework for security interests in mobile property, in: Uniform Law Review / Revue de droit uniforme, NS 4 (1999), 347-360; Deschamps, M, The perfection and priority rules of the Cape Town Convention and the Aircraft Protocol: a comparative analysis, in: Cape Town Convention Journal, 2013, pp. 51-64.

[7] See Van Zwieten, K, The insolvency provisions of the Cape Town Convention and Protocols: historical and economic perspectives, in: Cape Town Convention Journal, 1 (2012) pp. 53-77.

[8] See Cakir, T, The Public Service Exemption in the Space Protocol in light of that found in the Luxembourg Protocol, IAC-16,E7,1,9,x33965 (2016); Rosen, H, Public service and the Cape Town Convention, in: Cape Town Convention Journal, 2013, pp. 131-147.

[9] For more on salvage rights see: Hughes, N, HFW Briefings, UNIDROIT Draft Space Assets Protocol at: http://www.hfw.com/UNIDROIT-Draft-Space-Assets-Protocol

[10] For more on the enforcement mechanism under the Space Protocol see: Stanford, M, and Porras, D, Transfer of Possession and Control under the Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Space Assets, in Corinne M. Jorgenson (ed), Proceedings of the International Institute of Space Law 2012 (Utrecht: Eleven international Publishing, 2013), p 801-810; Gerhard, M, Transfer of Operation and Control with Respect to Space Objects; Problems of Responsibility and Liability of States" (2002) German Journal of Air and Space Law, p 571-581.

[11] See Saunders, Anthony and Srinivasan, Anand and Walter, Ingo, Innovation in International Law and Global Finance: Estimating the Financial Impact of the Cape Town Convention (2006). NYU Working Paper No. FIN-06-037

[12] See GOODE, R. – The Cape Town Convention on International Interests in Mobile Equipment: a driving force for international asset-based financing, in: Uniform Law Review / Revue de droit uniforme, NS 7 (2002), 3-15.

[13] See Golej, R. Selected Determinants of Mezzanine Financing in Poland. Journal of Entrepreneurship, Management and Innovation, [online] 12(3), pp.57-84 (2016). Available at: <a href="http://www.jemi.edu.pl/vol-12-issue-3-2016/selected-determinants-of-mezzanine-financing-in-poland">http://www.jemi.edu.pl/vol-12-issue-3-2016/selected-determinants-of-mezzanine-financing-in-poland</a>; Ingomar, S, and Soren. P, Performance Assessment of Design Driven New Entrepreneurial Ventures. International Design Conference (2016).

[14] Linetsky, V, Economic Benefits of the Cape Town Treaty, (2009) at: http://www.awq.aero/assets/docs/economicbenefitsofCapeTown.pdf

[15] Kozuka, S, Taniguchi, F, An economic assessment of the space assets protocol to the Cape Town convention, in: Uniform Law Review / Revue de droit uniforme, 2011, 16 (2010) 4, pp. 927 941.

[16] For more details on the text of the Space Protocol see Official Commentary on the Convention on International Interests in Mobile Equipment and the Protocol thereto on Matters specific to Space Assets by Professor Sir Roy Goode CBE, QC, UNIDROIT 2013, ISBN 88-86449-21-6 at <a href="https://www.unidroit.org/space-protocol-official-commentary">https://www.unidroit.org/space-protocol-official-commentary</a>



