

# **Update on the Space Protocol of the Cape Town Convention on International Interests in Mobile Equipment: Perspectives of the Space Economy**

United Nations/Chile Conference on Space Law and Policy:  
Governance and Legal Perspectives on Space Activities in Earth Orbit and Beyond  
10-12 May 2022 (Virtual)

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# Why the Cape Town Convention and its Protocols?

- **Starting point:** growing global need for financing (including private capital) in the acquisition and use of high value mobile equipment
- Particularly evident, initially, in the **aviation sector**:
  - Exponential growth of air traffic and aviation industry
  - Reduction of public financial support, need to attract private capital
  - Positive externalities of acquisition and use of new equipment (e.g., greater safety of air travel)

## BUT:

- **LEGAL OBSTACLES** in using asset-based financing and leasing, particularly in cross-border transactions, without uniform law:
  - Traditional conflict-of-laws approach not always suited to moving assets
  - Legal systems vary in their approach to recognition of security interests, the process for enforcement, and the remedies available



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# Basics of the Cape Town Convention Treaty System

## SOLUTION:

- Uniform legal regime created by treaty to **facilitate financing and leasing** of certain types of uniquely identifiable, mobile high value equipment used in specific industry sectors:
  - **Aviation industry** (airframes, aircraft engines and helicopters)
  - **Rail industry** (railway rolling stock from high-speed trains to commuters to trams or undergrounds)
  - **Space industry** (satellites and other space assets)
  - **Mining, agricultural and construction sectors** (high value equipment used in these sectors)



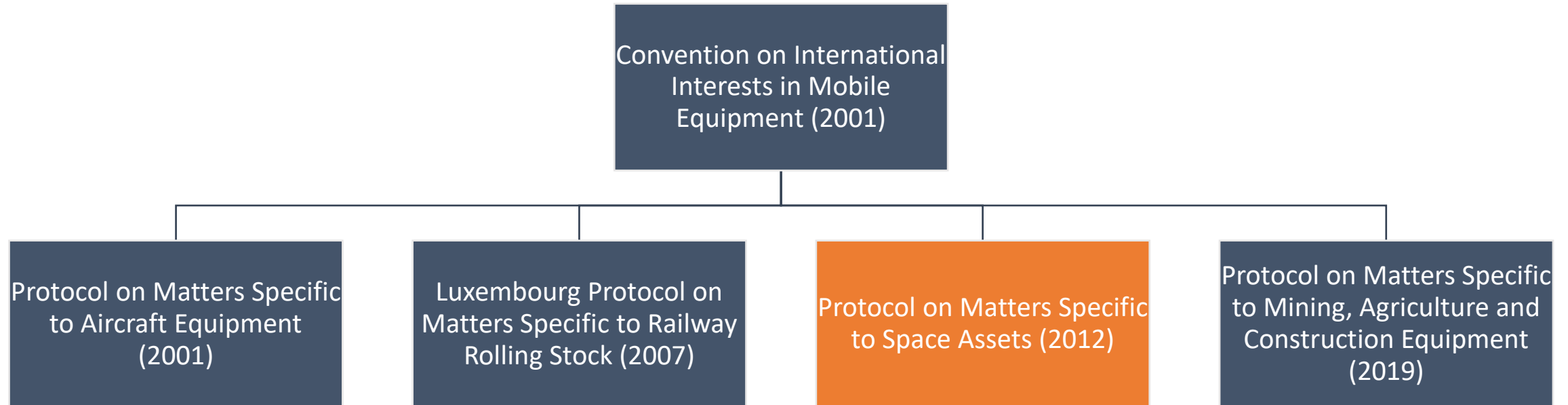
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# The Cape Town Convention System

The Cape Town Convention treaty system's primary aim is to facilitate asset-based financing and leasing for specific types of high value, mobile, and uniquely identifiable pieces of equipment.

This is accomplished through a two-tier umbrella structure with the Convention being supplemented by individual Protocols for specific industries:



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# Main Objectives

1. To facilitate **the acquisition and financing of economically important items of mobile equipment** by providing for the **creation 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**;
5. To grant Contracting States a **degree of flexibility** in adhering to the international regime, by allowing, to a well-defined and limited extent, **policy choices through declarations**, while preserving the basic uniformity of the legal regime;
6. By these means to give intending **creditors greater confidence** in the decision to grant credit, **enhance the credit rating of equipment receivables** and **reduce borrowing costs and credit insurance premiums** to the advantage of all interested parties.

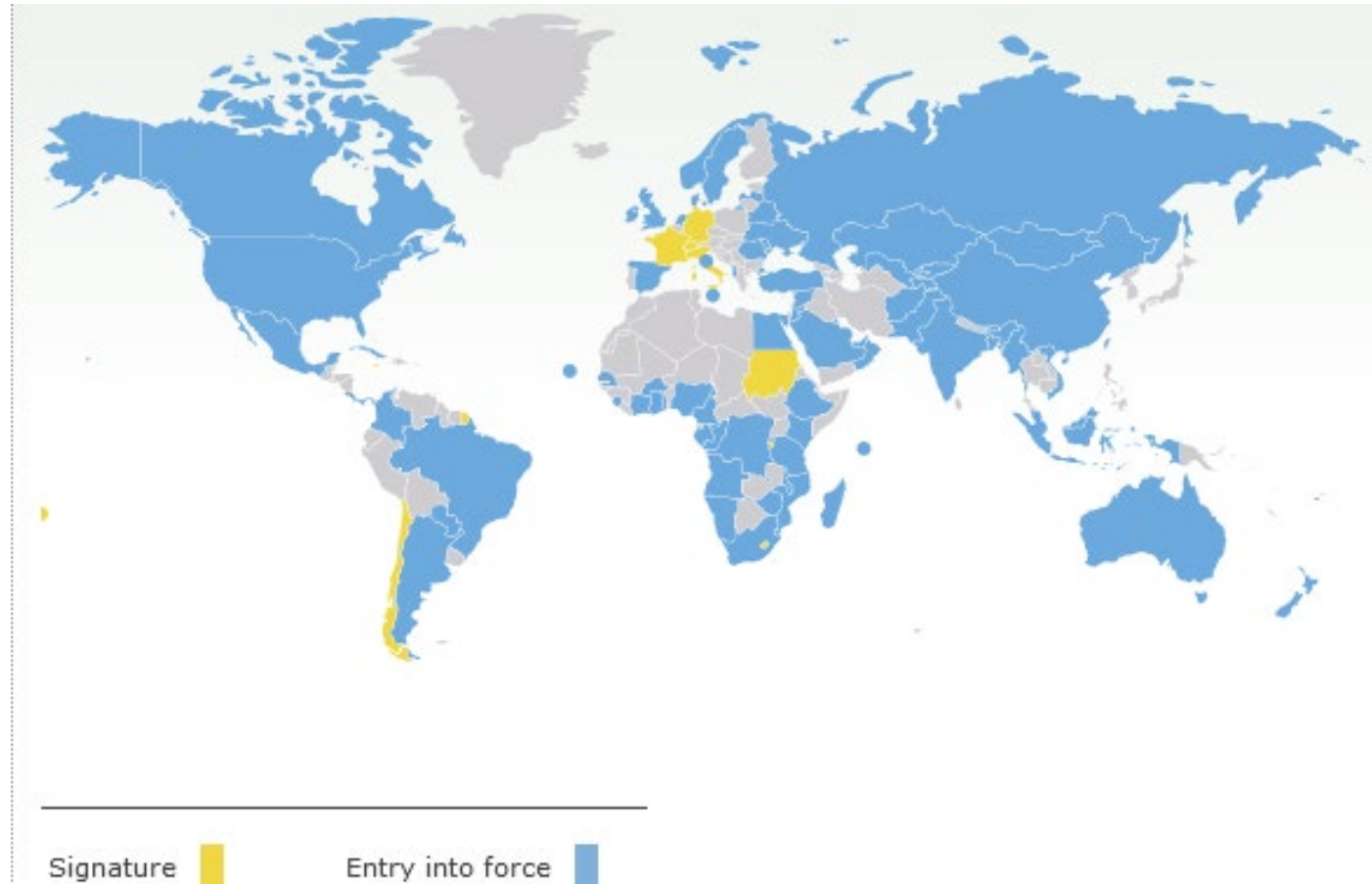


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# The Cape Town Convention: Status Map

The Convention currently has 83 contracting States and has been approved by the European Union.

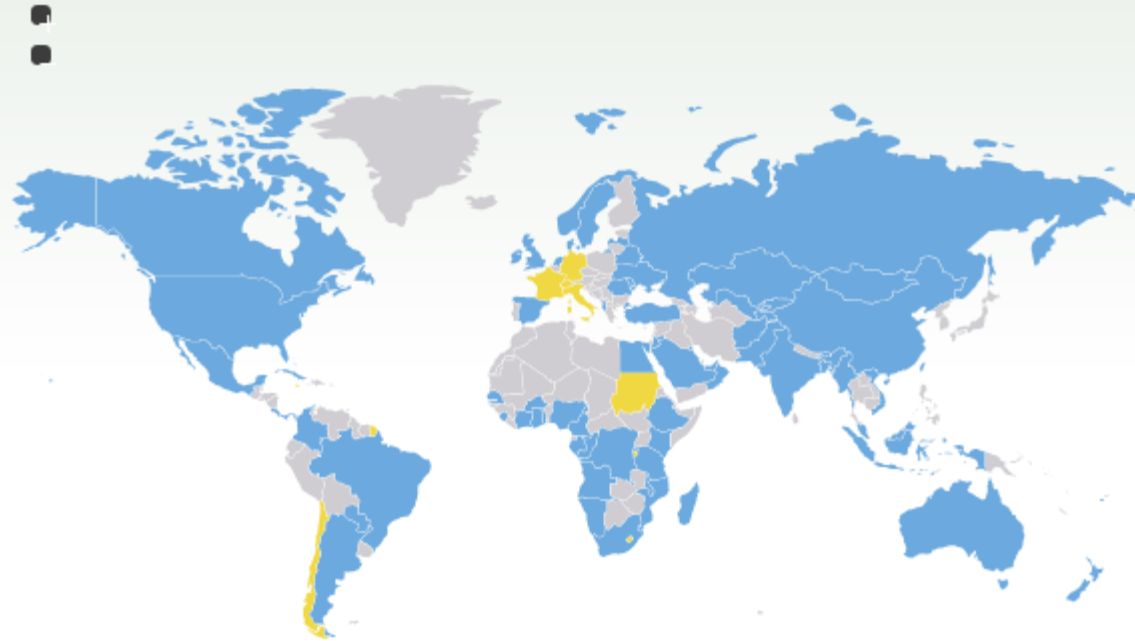


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# Aircraft Protocol: Status and Economic Impact

STATUS MAP OF THE PROTOCOL TO THE UNIDROIT CONVENTION ON INTERNATIONAL INTERESTS IN MOBILE EQUIPMENT ON MATTERS SPECIFIC TO AIRCRAFT EQUIPMENT - SIGNATURES, ENTRY INTO FORCE



Signature ■ Entry into force ■



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## Political acceptance:

- **CTC: 83 contracting States + 1 REIO (European Union)**
- **AP: 80 contracting States + 1 REIO (European Union)**

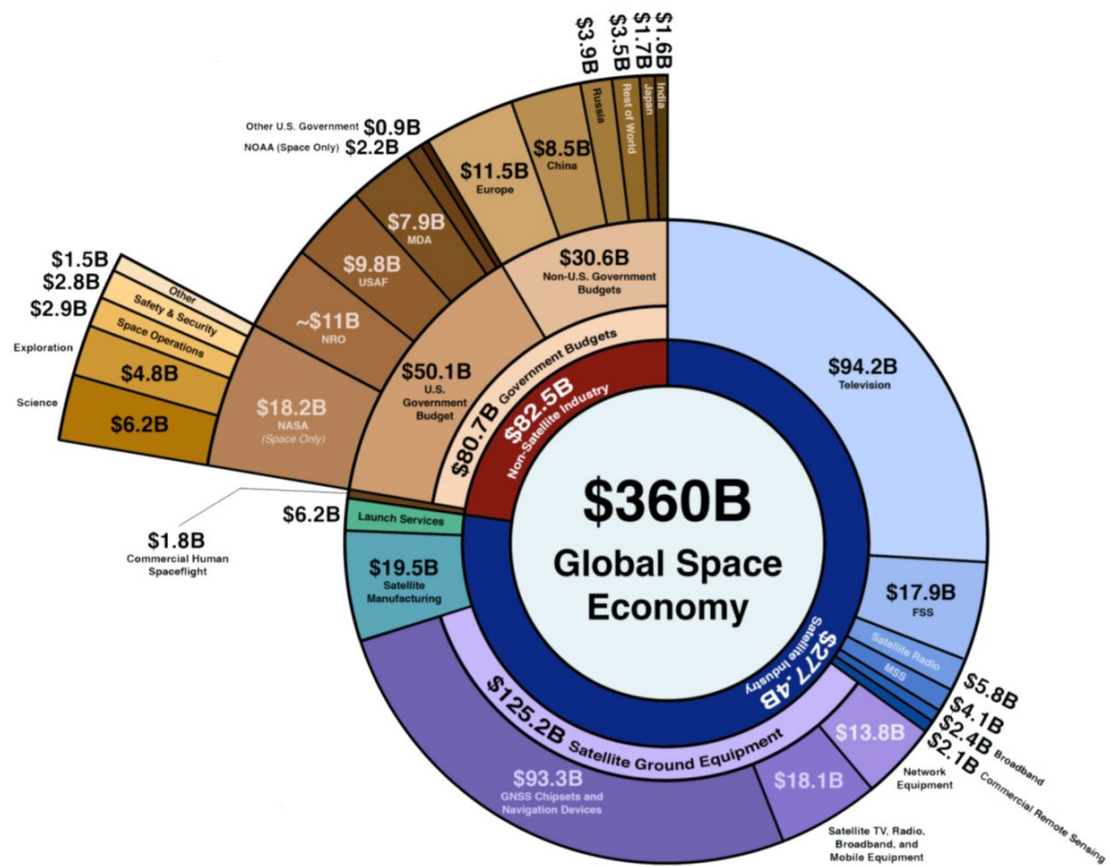
## Volume of transactions:

- **More than 1.3 Million registrations in the AP Registry since 2006**
- **Estimated value of collateral 650 billion US\$**

## Other Protocol predicted to have same benefits:

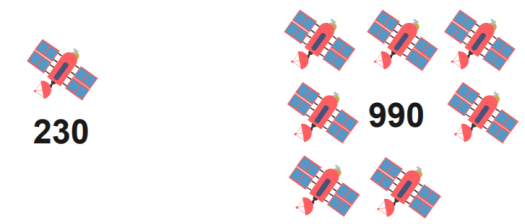
- An economic assessment of the MAC Protocol estimates that over a ten year period, **the MAC Protocol may increase the stock of MAC equipment in developing countries by \$90 billion**. The MAC Protocol is predicted to have a positive impact of **\$23 billion on GDP in developing countries and of \$7 billion in developed countries**, for a total impact on GDP equivalent to \$30 billion a year.

# The Space Economy and the increasing number of satellite launches

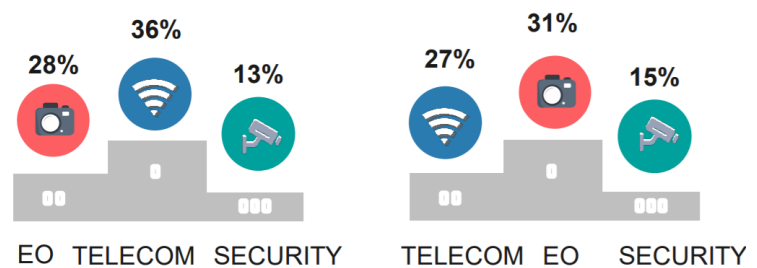


2009 -----> 2018      2019 -----> 2028

Average number of satellites launched per year



Top 3 applications (satellite manufacturing and launch value)

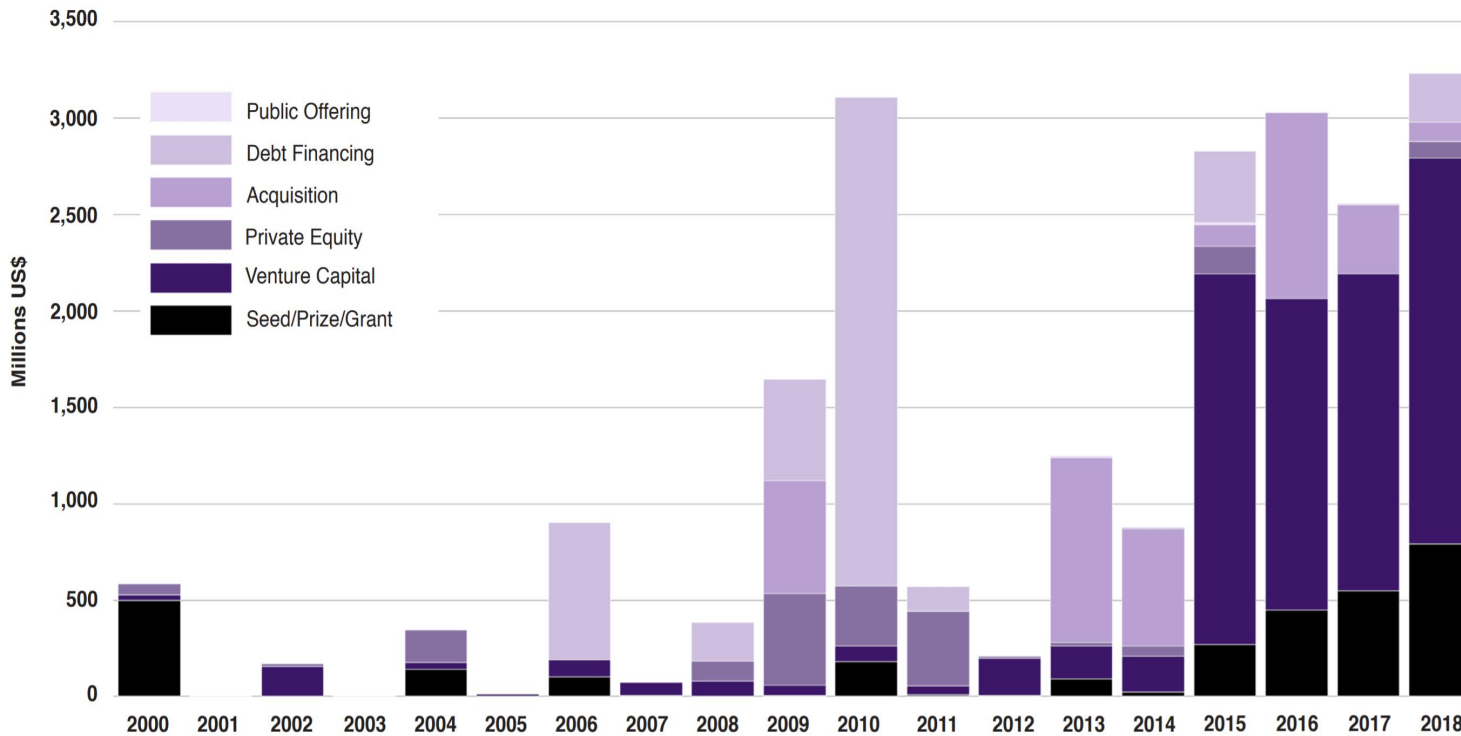


Source: Bryce Space Report on: 2019 State of Satellite Industry

Source: Euroconsult: 2019 Research Report on analysis & forecast of satellite manufacturing & launch services



# Present Private Investments in Space Activities



Investment Type	2000-2006 (millions)	2007-2012 (millions)	2013-2018 (millions)	Total 2000-2018 (millions)
Seed/Prize/Grant	\$742.0	\$201.9	\$2,170.3	\$3,114.2
Venture Capital	\$327.9	\$519.6	\$7,543.5	\$8,390.9
Private Equity	\$234.2	\$1,300.8	\$301.0	\$1,835.9
Acquisition	\$0.0	\$584.0	\$3,098.3	\$3,682.3
Public Offering	\$0.0	\$0.0	\$23.4	\$23.4
<b>Total Investment</b>	<b>\$1,304.1</b>	<b>\$2,606.3</b>	<b>\$13,136.4</b>	<b>\$17,046.8</b>
Debt Financing	\$710.0	\$3,388.4	\$637.8	\$4,736.2
<b>Total with Debt</b>	<b>\$2,014.1</b>	<b>\$5,994.6</b>	<b>\$13,774.2</b>	<b>\$21,782.9</b>

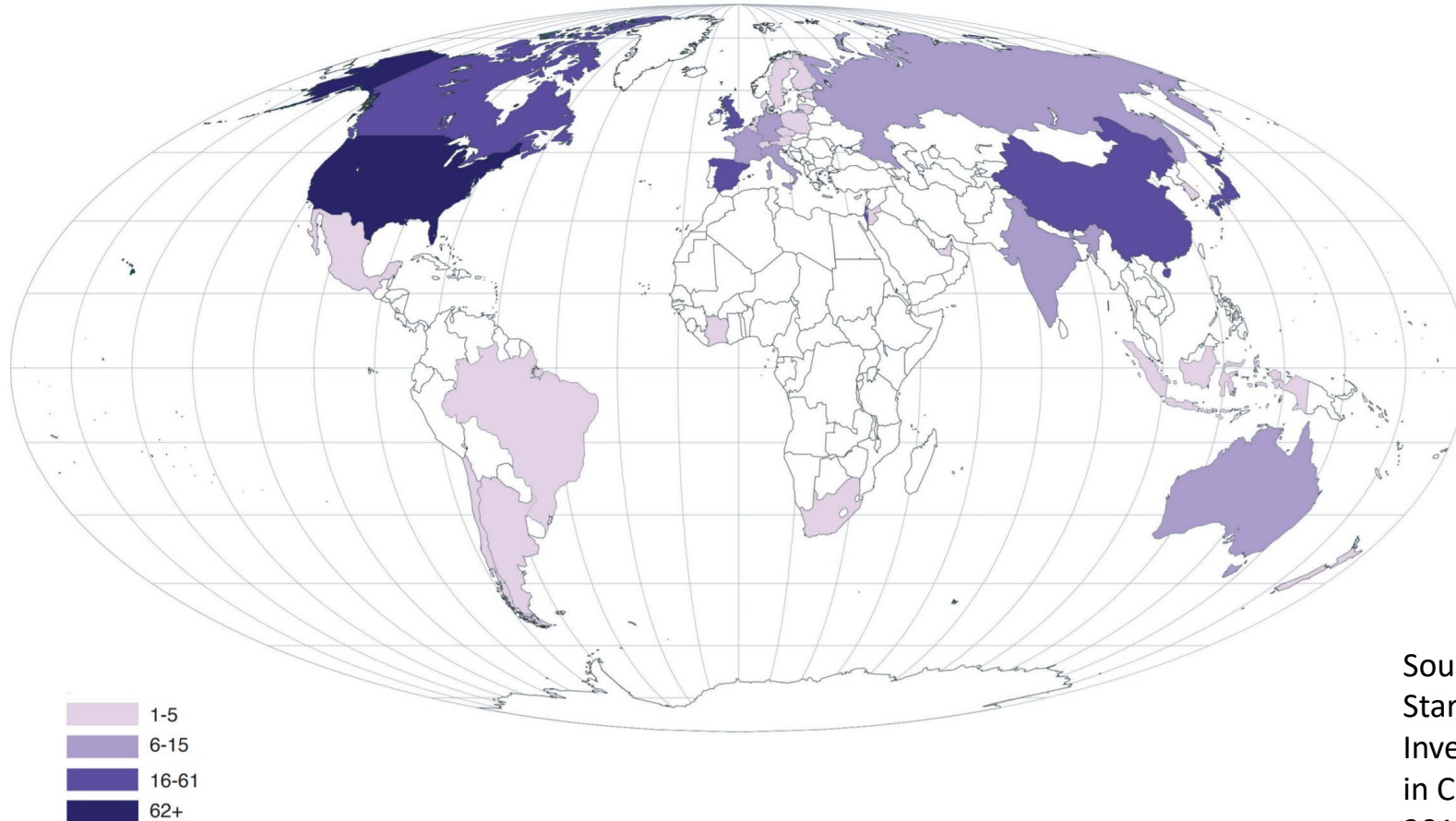
Source: Bryce Space Report on Start-Up Space: Update on Investment in Commercial Space Ventures 2019



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# Present Private Investments in Space Activities



Source: Bryce Space Report on Start-Up Space: Update on Investment in Commercial Space Ventures 2019



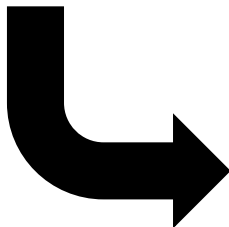
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# How is the space economy financed?

Besides receiving government funding and grants, or relying upon the financial capacity of their founders, private entities typically rely upon the following mechanisms of attracting investment for their operations:

- Equity Finance, mostly through venture capitalists or angel investors;
- Unsecured lending, based usually on the creditworthiness of the entity;
- Project Finance, primarily through debt financing, hence creating a situation whereby lenders buy the debt, or the cost of a project and then are paid off using revenue generated from the project.



- Traditionally, the space industry has comprised of triple-A rated companies which have relatively easy access to capital due to their financial stability and creditworthiness.
- Companies which have relied on obtaining either equity or project finance from lenders at an acceptable rate keeping their balance-sheets or on-ground assets as collateral.
- Also very often been heavily financed by governments who deal with them favourably considering their importance to the States to which they belong or to the governments themselves.



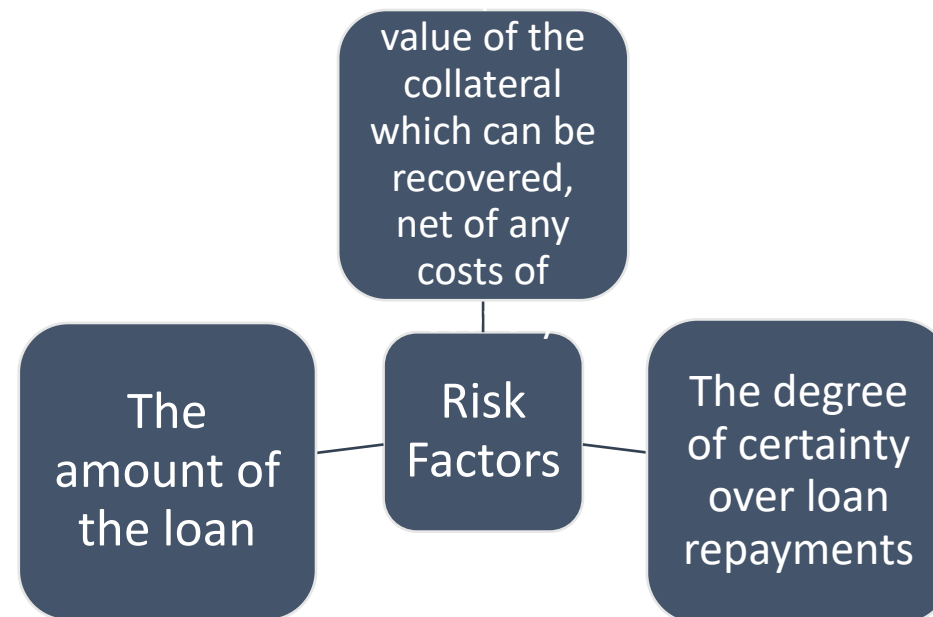
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# Risk Reduction

If a loan is granted, secured on a piece of equipment, the risk to the lender depends on a number of factors.

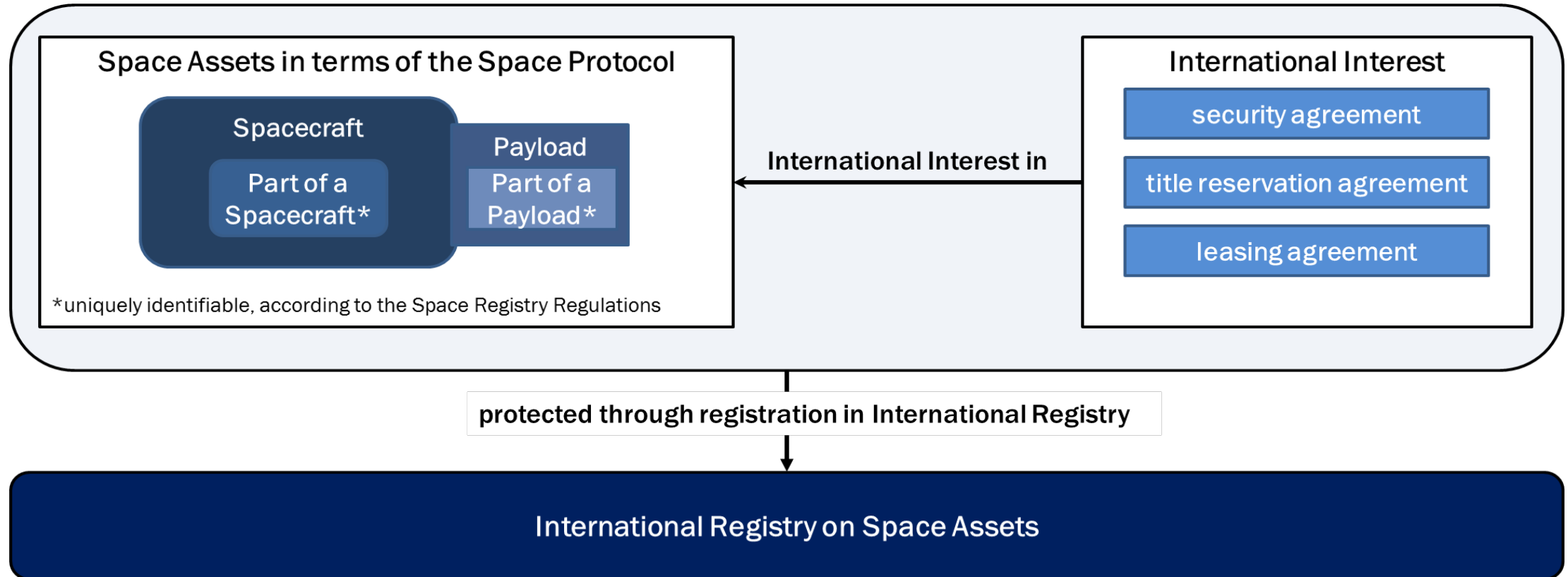
The Space Protocol impacts on the 'collateral value' factor by seeking to increase the expected value of the recovered asset, firstly by **making recovery more certain and quicker** and secondly **by allowing the creditor to realise that asset value by redeploying it wherever there is demand**.



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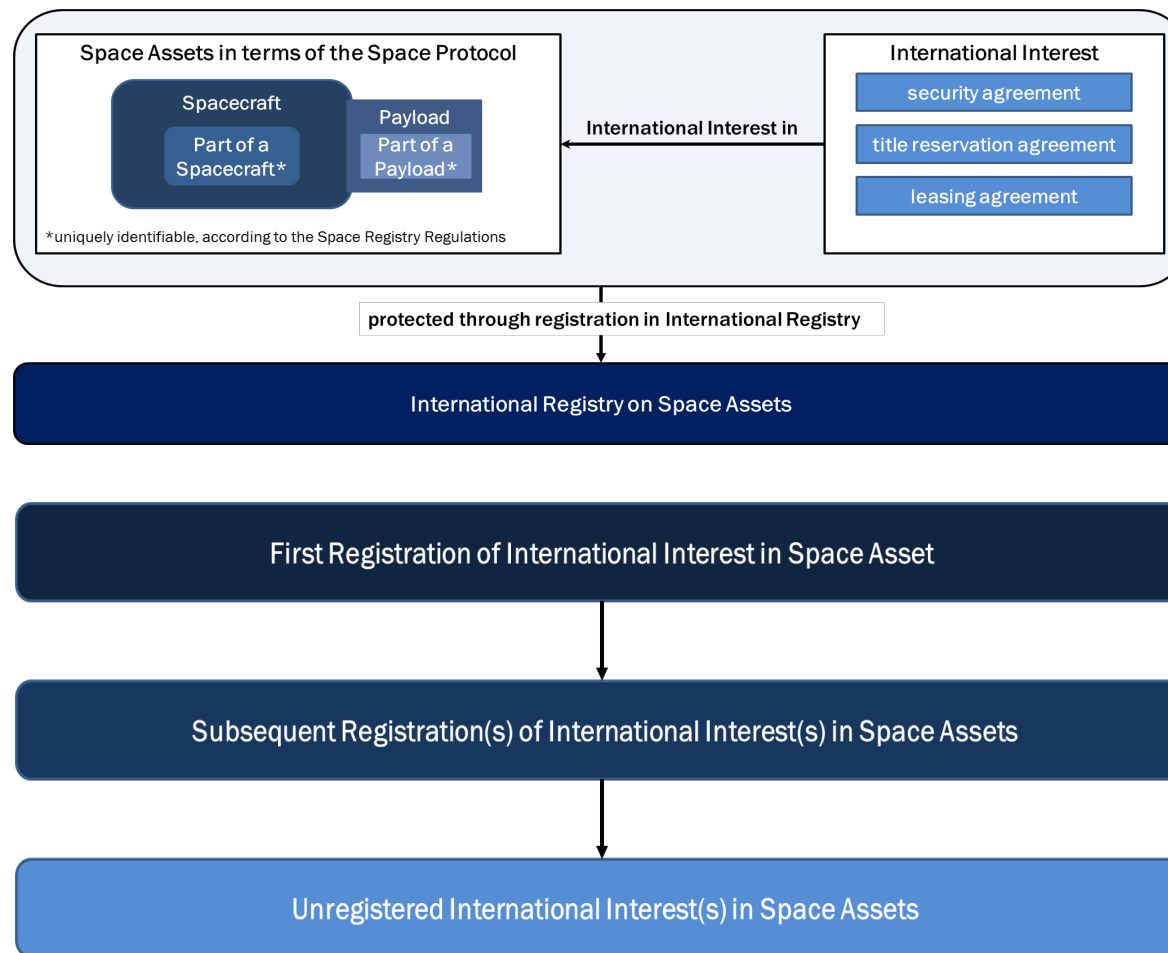
# Scope of the Protocol



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# How does it work & system of priority



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# Space Industry Specific Features

The Space Protocol has many features specific to the space sector which ensure its compatibility with the industry. These include:

- Assignability of debtor's rights
- Tracking Telemetry & Control Enforcement mechanism
- An exception for Public Services
- Clause relating to salvage rights for insurers
- Provisions on physically linked assets
- Mechanisms for identification of space assets
- And many others



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# Insolvency Mechanism

## How is it possible for creditors to exercise their remedies under the Space Protocol?

The Protocol takes into account the physical impossibility of repossession in two ways:

- Assignability of debtor's rights

The Protocol recognises the Importance of revenue streams in relation to the space asset for the creditor, and it contains detailed provisions on the assignment of debtor's rights, broadly defined as “[...] **rights to payment or other performance** due or to become due to a debtor by any person with respect to a space asset”.

- TT&C Enforcement mechanism

Moreover, the remedies section of the Protocol contains a provision on the **Tracking, Telemetry and Control (TT&C)** of space assets which can be found within the command codes associated to it (encryption keys which give control over the satellites).

Article XIX Protocol allows the parties to specifically agree to the placement of command codes and related data and materials with a third party so that the creditor may establish control over, or operate the space asset.

As a safeguard, however, laws and regulations of Contracting States can prohibit, restrict, or attach conditions to the placement of command codes with third parties.



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# Possible Benefits to NewSpace Financing

- Asset-based financing allows for actors within the space industry to create a **'new level of risk for financiers'** and the Space Protocol greatly facilitates this. It creates **'a uniform regulatory regime for the recognition and protection of security interests in space assets,'** – this ensures that issues such as those of conflict of laws or differing insolvency remedies, that are normally encountered in asset-based financing, are surpassed.
- 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 as compared to offering the profits of the enterprise, especially when the enterprise fails and the creditor would therefore receive little or no return on their investment.
- 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 vary 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.
- The primacy and safety of their interests in space assets, alongside the application of a strong system of remedies makes asset financing an attractive option for investors looking to contribute capital to the space industry. Moreover, the provisions also ensure that **future creditors within the same asset can also easily search the online registry to ensure that their investments are free of already existing third party interests**.



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# Conclusion

With many NewSpace companies being unable to get access to the typical forms of space financing, especially at later stages in their development, **the ability to leverage assets in exchange for favourable lending terms may prove to be very important to allow companies within the NewSpace sector to get access to capital.** Furthermore, as most start-ups only have their idea or asset to leverage, and set as collateral, **it allows companies to 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 use of new technologies within NewSpace results in the production of innovative products meant for use in outer space, most of which may fall within the broad definition of 'space asset' noted in the Space Protocol, this allows these innovative technologies to be the sole basis for attaining finance as opposed to having to rely upon creditworthiness which at times may not be present due to the volatile and high-risk nature of spatial projects and the inherent characteristics of new business entrants within any industry.



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# Conclusion and Global Cooperation

The space industry has seen tremendous growth which is expected to multiply in the near future, Morgan Stanley estimates that the revenue generated by the global space industry will increase to **\$1.1 trillion or more in 2040, up from \$350 billion in 2016**. To facilitate this growth and allow for access to space to be open to all sorts of companies from developing and developed States, it is important to allow access to finance to companies of all sizes and capacities. The Space Protocol seeks to do this by allowing for **capital to be injected into a company based primarily upon its work**.

Prior to the Space Protocol, there existed no international legal framework providing for asset-based financing within the space industry. To assist in the development of the space industry, **an efficient international regime needed to be developed and this is exactly what the Space Protocol provides**. The Space Protocol provides a **stable and secure legal environment** for transactions in space assets based on the **tried and tested mechanism** of asset-based financing.

At present, UNIDROIT is working towards finalisation of the framework for the operation of the International Registry. We are closely working with Governments, International Organisations, Experts, and Industry to increase the understanding, and use of asset-based financing in the space industry.

Ratification by States, and greater involvement by industry will allow the Space Protocol to start benefitting the global space economy, and creating a more inclusive space industry, as it was originally drafted to do so.



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Any Questions?**

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