Asset-based Financing in the Space Industry


United Nations/Jordan Workshop:
Global Partnership in Space Exploration and Innovation
Developing open and inclusive global space exploration partnerships
Amman, Jordan, Tuesday, 26 March 2019

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The Space Economy

The Satellite Industry in Context
(2017 revenues worldwide, in billions of U.S. dollars)

$348B Global Space Economy

$128.7B Satellite Services

$79.3B Non-Satellite Industry

$119.8B Ground Equipment

$15.9B Launch Industry

$4.6B Satellite Manufacturing

Telecommunications
- Television
- Telephone
- Broadband
- Aviation
- Maritime
- Road and Rail

Earth Observation
- Agriculture
- Change Detection
- Disaster Mitigation
- Meteorology
- Resources

Science
- Earth Science
- Space Science

National Security

Network Equipment
- Gateways
- Very small aperture terminals
- Network operations centers
- Satellite news gathering equipment

Consumer Equipment
- Sat TV, radio, and broadband equipment
- Global navigation satellite systems stand-alone units & in-vehicle systems

Present Private Investments in Space Activities

Source: Bryce Space Report on Start-Up Space: Update on Investment in Commercial Space Ventures 2018
Since 2000, there have been 234 non-U.S. investors in start-up space companies, based in 36 countries. Japan is home to 19 percent of non-U.S. investors (44), followed by the United Kingdom (41).
Present Private Investments in Space Activities

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.
The Cape Town Convention

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:

- Convention on International Interests in Mobile Equipment (2001)
  - Protocol on Matters Specific to Aircraft Equipment (2001)
  - Protocol on Matters Specific to Space Assets (2012)
  - Protocol on Matters Specific to Mining, Agriculture and Construction Equipment (TBC 2019)
The Cape Town Convention

• The Convention currently has 79 contracting states and has been approved by the European Union.
• The Aircraft Protocol, which was negotiated alongside the Convention, is the first and most widely adopted of the existing Protocols with 76 contracting states.
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.
What is the Space Protocol

The Space Protocol’s aim is to adapt the Cape Town Convention model to the specific characteristics of space assets and space activities.

When 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.
How does it work?

Space Assets in terms of the Space Protocol

- **Spacecraft**
  - Part of a Spacecraft*
- **Payload**
  - Part of a Payload*

*uniquely identifiable, according to the Space Registry Regulations

International Interest in

- security agreement
- title reservation agreement
- leasing agreement

Protected through registration in International Registry

International Registry on Space Assets

First Registration of International Interest in Space Asset

Subsequent Registration(s) of International Interest(s) in Space Assets

Unregistered International Interest(s) in Space Assets
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.
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.

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.

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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.

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.
Conclusion and Global Cooperation

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.
Thank you for your attention
Any Questions?

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