

## Enabling the Frontier. Regulatory Challenges for the Utilization of Space

IISL Plenary Session, Valencia, 4 October 2006

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Rapporteur : Marie Helen Pichler – Die Ortega, Madrid

### PANEL DISCUSSION

*Moderator:*

Christopher Stott, President & CEP ManSat, COO Excalibur Almaz Ltd, Hon Rep of the Isle of Man Government to the Space Community

*Participants:*

Art Dula	CEO, Excalibur Ltd
Christian Sallaberger	VP Business Development, MDA
Clayton Mowry	CEO, Arianespace Inc.
John Purvis	General Counsel, SES Global
Frans von der Dunk	Director, IIASL

**First topic: 2006 marks the 10<sup>th</sup> anniversary of the Long March launch vehicle failure that kicked off the changes in 1998 that led to the creation of ITAR, a US agency granting export licences of components to be used in a space craft. The participants discussed the effects of ITAR on the industry and further developments resulting therefrom.**

According to Clay Mowry the industry has experienced a deterioration. There has been a significant increase in government monitoring of the industry. Whereas export licences of components to be used in a space craft were previously being processed within a time period of four to five months it takes now seven to ten months to obtain such a licence from ITAR. Both the State and the Defence Department of the US administration are overwhelmed with the number of licences demands. They are dealing now with 60.000 applications per year.

John Purvis echoed the views of C. Mowry. ITAR's procedure is very bureaucratic. A licence applicant is obliged to furnish extensive

documentation and the procedure does not deal with the genuine underlying security issues. Since the Technical Assistance Agreements (TAA) have been amended even the so-called expedited procedure still takes four months. The resulting delays are in fact punishing the industry. As a result, non-American industries are looking for other sales opportunities.

Christian Sallaberger agreed with the opinions of the previous speakers and amplifies the negative effects felt by the industry, at least from the view from a Canadian company. The procedure has slowed down business with the US since it results in extra costs for US customers. Thus there is a difficulty of implementing joint programmes. Especially back-end delivery programmes are suffering the implications of the time delaying procedure. Commercially funded deep space venture constitute another example: many US investors would be ready to contribute, however US products are not being used to avoid the ITAR procedure.

The Panel then discussed possible remedies.

Frans Von der Dunk stated that from an international law point of view there were no obstacles for a state to impose a trade control regime. It is within the power of the state sovereignty to impose even tighter control. In the long term, the market outside the US might respond to this demand and develop space components outside of the US.

Art Dula, representing the views of a start up company, firmly stated his opposition to tight trade control regimes. In his view, the US is currently interpreting the term "defence services" too extensively to encompass services that are freely available on the market to impose their licence regime. To obtain a US licence might need six months where in other countries it could be obtained within a day.

Chris Sallaberger replied that from an industry perspective one needs to work with the ITAR regulations. In order to obtain defence contracts in the US it might be a good option for a foreign company to create a US subsidiary – even though the communication between a company within the US and another outside the US, e.g. the non-US mother company of that subsidiary, might be restricted.

**Second topic: The effects of Sarbanes Oxley (US Patriot Act 2002) on international investment impacting the space industry: who has been affected by it, clients, customers? If so how?**

The panel then discussed briefly the effects of another United States federal law, the Sarbanes–Oxley Act of 2002 (Public Company Accounting Reform and Investor Protection Act of 2002) that was passed in response to a number of major corporate and accounting scandals. The Sarbanes Oxley Act requires companies to comply with extensive reporting obligations.

The panel pointed out that the effects on small companies are 16 times more burdensome than on publicly traded companies. The reporting duties are also strongly felt by the major shareholder of a company. Furthermore, the obligatory responsibility and liability of the senior management of a company has increased significantly.

According to John Purvis companies are encountering major compliance difficulties. To de-register companies from the stock exchange to avoid these reporting duties is however also made difficult.

Art Dula indicated that these rules divert energy from senior management since they are disproportionately concerned with the liability implications of their decisions. There is a move to create non-US companies in order to avoid the implications of the Sarbanes Oxley Act.

**Third topic: There is talk of revisiting the Liability Convention. Would this be a good thing to do or better to leave it well enough alone?**

Frans van der Dunk expressed his preference for revisiting but not revising the regime established by the 1972 Liability Convention (Convention on international liability for damages caused by space objects). This Convention establishes the principle of state liability regardless of the nationality of the (private) space operator. In his view it is important today to keep this principle of state liability at the same time as differentiating more as regards the application of the Convention' rules, above all concerning the definition of "launching state".

Clay Mowry reported that the US administration, above all the Federal Aviation Authority (FAA), wishes to remove the principle of state liability in favour of the liability of the private

space operator. The industry is against such a move which would also affect negatively the young industry of personal space flight operators.

Art Dula disagreed with Clay Mowry as regards the benefits of the Convention. In his view, the obsolescence of the Convention is demonstrated by the fact that no claim was ever brought under the Liability Convention. He declared that the market offered inexpensive third party liability insurance which would solve the liability problem. He proposed to treat the aircraft and spacecraft industries alike rather than differentiating between them. Therefore the US should implement corresponding legislation to override the rules of the Liability Convention.

Frans van der Dunk pointed out that national law could not supersede international law and that the airlines could not be compared to space flight operators. The FAA should adopt an "hands off" approach to stimulate the industry.

John Purvis recalled that launching satellites is an intensely international activity involving many different states (state of the launching company, of the launching territory, of the operator of the satellite, etc.) requiring international rules.

Art Dula insisted that federal national law might override treaty obligations and proposed to adapt the principles of the Warsaw Convention, limiting liability of air carriers toward passengers, to space flight operations. Such a new "Warsaw-like" convention should replace the Liability Convention.

Frans van der Dunk was against this option: the Warsaw Convention regulates the liability flowing from contracts between contractors and carriers towards private passengers. The Liability Convention on the other side deals with third party liability. Both type of conventions could thus exist alongside each other but could not

replace each other. The air law convention corresponding to the Liability Convention would be the Rome Convention that deals with damages caused by an air crash to third parties. Unfortunately it has not been ratified by many States and would thus not be such a good example to follow.

Professor Joanne Gubrynowicz from the University of Mississippi School of Law pointed out the success of the Liability Convention: in her view it is functioning precisely because there has never been brought a claim. Therefore it should not be revised.

A member from the audience, John Crane, a retired US Navy Captain, inquired about an agency to establish traffic management for space. The panel agreed that an international regime, established by the rules of the International Telecommunications Union (ITU), is already in place. The ITU allots orbital slots for satellites and has agreed on rules for frequency coordination to protect users against mutual interference.

#### **Fourth topic: New issues in space law – space debris, space property rights**

The panel discussed the problem of space debris, i.e. the objects in orbit around Earth created by humans that no longer serve any useful purpose. Space debris has become a growing concern in recent years, since collisions at orbital velocities can be highly damaging to functioning satellites and can also produce even more space debris in the process.

The US, for example, has national rules in place to deal with this problem, the US Government Orbital Debris Mitigation Standard Practices. The declared US policy seeks to minimize the creation of orbital debris by government and non-government operations in space in order to preserve the space environment for future generations.

The panel pointed out that the commercial industry goes to great length to avoid space debris whereas not all governments are keen to comply with the international aim to avoid space debris.

Rachel Gates, a Dutch attorney in the audience, inquired about the emerging challenges for the space industries.

According to John Purvis, every country has its own challenges. Whereas in the US it is only possible to operate satellite services with an up-front licence, the legal situation outside the US is quite different. In Europe, for example, operators are quite free to emit satellite signals without the need for "landing rights" per se, once the ITU frequency co-ordination procedure has taken place. In Africa, on the other hand, satellite signals may only be emitted with "landing rights" and it is necessary to involve domestic operators. Satellite services in third countries may be subject to strict conditions.

Christian Sallaberger: there is a growing interest of private investors to develop space resource industry projects (e.g. mining of minerals on the moon). There exist however legal doubts about the ownership of such resources that have been mined with the financial help of private companies. To ensure the financial interest of investors these doubts have to be cleared to be able to develop such mining projects.

John Purvis pointed out that the Draft UNIDROIT Space Assets Protocol to the Unidroit Convention on International Interests in Mobile Equipment, adopted in November, 2001 in Cape Town, which intends to deal with the issue of securitisation of space investments has encountered serious problems and might never be agreed upon.

Frans van der Dunk stated the need for a regime that it is clear on this issue. He pointed out however that the 1984

Moon Treaty (the Agreement governing the activities of states on the Moon and other celestial bodies) dealing with the activities of states on the moon and other bodies, is very explicit on the principle of non-appropriation of the territory of the Moon by any State.

This principle of non-appropriation is also enshrined in the 1967 Outer Space Treaty (Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies) which governs the activities of states in space exploration.

Art Dula indicated that the Isle of Man has already a Space Resource Act in place. The ownership of minerals once exploited should be separated from the ownership of the territory from where it is exploited.

Frans Von Der Dunk talked on the suitability of the fishing analogy to the use of resources in Outer Space.

As the time for the event was up, Chris Stott closed the session.

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