

JOINT IISL/IAF SESSION

LEGAL FRAMEWORK FOR COOPERATIVE SPACE ENDEAVOURS

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Mechanisms for the Development of International Agreements Regarding Space Activities

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Abstract

The Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Space Assets was adopted at the diplomatic conference in Berlin under the auspices of UNIDROIT in 2012. This protocol constitutes the first binding space related international treaty since more than 30 years, additionally for the first time ever in private law. The aim of this protocol is to make asset-based financing more accessible to an industry that is currently searching for innovative ways to obtain start-up capital for space-based services.

However the focus of this paper will be on the nature of this so-called Berlin protocol. In this regard the Protocol has to be analyzed to see if it could be considered as a point of departure for further new mechanisms for the development of international agreements regarding space activities. The potential of this Protocol has to be explored in view of future other new tools for making international space law. In this context the ways of creating binding rules in other international areas (CTBTO, IAEO, OPCW) should have to be investigated in order to understand their mechanisms for setting law especially their systems for creating subsidiary legal norms which could possibly serve as other models for the space sector.

Introduction

The Cape Town Convention on International Interest in Mobile Equipment¹ was adopted and opened for signature in Cape Town on 16 November 2001.² The idea to create such a convention was to draft an internationally binding text regulating secured transactions concerning high-value mobile equipment. The Convention on International Interest in Mobile Equipment stipulates the

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¹ Convention on International Interests in Mobile Equipment, signed on 16 November 2001. UNIDROIT. 22 Jan. 2014 <http://www.UNIDROIT.org/english/conventions/mobile-equipment/mobile-equipment.pdf>.

² Currently 59 contracting states. 29 Jan 2014 <<http://www.UNIDROIT.org/english/implemented/i-2001-convention.pdf>>.

basic legal framework for registration of ownership and security interest and provides legal remedies for default in order to facilitate investment. Under the umbrella of the Convention the elaboration of three equipment-specific protocols followed. The first Protocol to the Cape Town Convention was elaborated with respect to aircraft, the Protocol on Matters Specific to Aircraft Equipment, the second on Matters specific to Railway Rolling Stock and lastly the Protocol on International Interests in Mobile Equipment on Matters Specific to Space Assets (the “Space Assets Protocol”)³ which will be the focus of the following analysis. Together with the Cape Town Convention they form a unique mechanism, the so-called umbrella mechanism, which may be useful for further space law creation initiatives. An ongoing ESPI study intends to explore how the potential of the Cape Town Convention mechanism may serve in a broader sense as a new tool for making international (space) law.

I. Cape Town Convention Mechanism

The Cape Town Convention structure is unique in terms of the use of supplementary protocols. Therefore it is interesting to investigate the potential effect that this technique for structuring treaties may have for the future of international law in a greater sense and on the future of legal regimes addressing space activities in particular. Generally the Cape Town Convention and its norms serve as an umbrella regulation. For this reason its elaboration and drafting was realized in a quite short time. Contrarily its Protocols define and concretize the Cape Town Convention provisions in detail for specific types of equipment. This two steps approach is the advantage of the Cape Town process: in a first step the general regulatory framework is elaborated and stipulated. So different commercial sectors get a kind of uniformity through the general dispositions of this umbrella system. Thanks to this regulatory framework its general norms may be easier adopted by states. Once this first step found a consensus on the basic rules, the second step of the protocols is initiated. This means protocol provisions may be more detailed and precise. This process allows states to agree step by step on norms that might become more and more specific and more and more sensitive.

³ Protocol to the Convention on International Interest in Mobile Equipment on Matters Specific to Space Assets, signed on 9 March 2012. UNIDROIT 22 Jan 2014 <<http://www.UNIDROIT.org/english/conventions/mobile-equipment/spaceassets-protocol-e.pdf>>. At the invitation of the Government of the Federal Republic of Germany, the Diplomatic Conference to adopt the Protocol to the Convention on International Interests in Mobile Equipment on Matters specific to Space Assets was held, under the auspices of UNIDROIT, in Berlin, from 27 February to 9 March 2012. At this Diplomatic Conference 40 States and 10 International Organisations participated. 25 States signed the Final Act and three states (Burkina Faso, Saudi Arabia and Zimbabwe) signed the Space Protocol at the closing ceremony of the diplomatic conference.

Cape Town Convention and the Space Protocol

The new international Protocol to the Convention on International Interest in Mobile Equipment on Matters specific to Space Assets aims to facilitate asset-based financing of high value space related mobile equipment like satellites or other mobile space property. One feature is the creation of an international registry. However, during negotiations the question emerged if there was a real need for a registry and how this need was perceived by the concerned target audience.

Creation of an international registry

The main reason for the creation of an international registry is to secure the rights of creditors who finance mobile space assets. Due to uniform rules and this international registry priority and enforcement of security interests should be ensured. Therefore creditors can trust recorded rights of the international registry. For any other inscriptions on this asset, the rule of temporal priority must be respected and inscriptions done accordingly. However concerning space assets the particularity consists in the fact that enforcing the right of physical possession to an asset in space is impossible (contrary to aircraft which have to land from time to time). Consequently the UNIDROIT Space Assets Protocol stipulates additional rules to ensure creditors' rights. Creditors' rights are 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" (art. I.1.a). This enlarges the possibilities for enforcing a right for the creditor to a considerable degree.

The international registry is intended to enable newcomers in the space sector to gain the market access as it will be easier for them to find the necessary financial support. However, in the negotiations the approach was found debatable as it can be seen as being incompatible with current market principles. Indeed it was brought forward that the UNIDROIT protocol would not provide advantages to financiers who wants to assist startup companies or emerging countries in their space activities. To the contrary, as already mentioned, space assets differ from aircraft as they are not reachable in the same manner. Space assets are subject to national registration and jurisdiction in accordance with Article 8 of the Outer Space Treaty ("A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body.") Therefore any new UNIDROIT regulations could be considered as interfering, overlapping or eventually counteracting with existing national dispositions under Article 8.⁴

The above mentioned aspect reveals already the possible different approaches and the points of discussions leading to a different perception of the need of

⁴ Hughes, Nick. Briefings, UNIDROIT Draft space Assets Protocol. HFW 31 Jan 2014 <<http://www.hfw.com/UNIDROIT-Draft-Space-Assets-Protocol>>.

this Protocol on Space Assets, especially between the large satellite operators and academia.

In sum the new supra-national layer is considered by a wide part of the worldwide space industry as making the whole financing process more laborious, uncertain and cost-intensive leading to the difficulty to find financing. A group of opponents pronounced its serious concerns which were considered as not been reflected adequately in the draft Protocol.⁵ The criticism was rejected by the authors of the protocol text. First of all they noted that a lot of concerns from industry operators were taken into account during the drafting process of the final version. Moreover the supporters of the protocol noted that the criticism came from the big established space operators/companies who do not need a new international rule for financing their space assets. The need may be more for the newcomers to facilitate their entrance into the market by getting financial support thanks to private financing possibilities.⁶ Because to the mechanism the cost of financing would be lower (contrary to what was predicted by the space operators) as a consequence of more transparency and predictability. Therefore financing would be also available for startup companies.

II. Cape Town mechanism: a new way for making international law?

The further development, acceptance and concrete implementation of the space protocol is still uncertain. Only three states signed the Protocol at the Diplomatic Conference in Berlin with Germany signing on 21 November 2012. But to enter into force, ten ratifications are required.⁷ However, the Protocol can only reap its harmonizing benefits if a large number of states ratify the treaty. Moreover even after entry into force, its benefits apply only to states party of this treaty, of course. Although the protocol was and is still criticized by parts of the space sector, nevertheless it has to be stated that it constitutes adopted international space rules.

International Space Law Creation

In order to see if the Cape Town mechanism could be useful for making new space regulations, a short look has to be taken at how international space law was created in the past decades. Indeed the first attempts emerged immediately with the first successful space operations during the cold war. At this time the UN treaties, like the Outer Space Treaties setting up the main principles, were drafted and adopted. This stage was marked by the adoption of binding rules quasi like a wish of humanity that this new area is “controlled” under reliable parameters which can be claimed for compliance by any state from any other

⁵ ESOA, Satellite operators oppose new protocol on Satellite Financing, FAQs about the Draft Space Assets Protocol. 13 May 2014 <<http://www.esoa.net/news-info-23.htm>>.

⁶ Sundahl, Mark. The Space Assets Protocol One Year Later: An Update and Reassessment, *The Air & Space Lawyer*, Vol. 26, nr. 1, 2013.

⁷ Until now no country ratified the Protocol, <<http://www.unidroit.org/status-2012-space>>.

state. However, with the development and maturation of space activities, the norms for space activities are getting more and more non-binding (resolutions, guidelines etc.). Generally speaking two tendencies in space law making can be identified, firstly from binding to non-binding space rules and secondly from general fundamental principles to specific aspects. Currently a period of voluntary non-binding initiatives is ongoing with for example the Space Debris Mitigation Guidelines or “Transparency and Confidence-Building Measures”. Therefore the adoption of the UNIDROIT Cape Town Convention and its space protocol has to be highlighted and analyzed. Indeed it constitutes the first binding space related norm (international treaty) since more than 30 years, additionally for the first time ever in private law. But does this mean that the Cape Town mechanism may serve as model for further law creation? Does the international law making arena need new mechanism? For answering this question, reference has to be made to the law setting systems of other international organizations.

Subsidiary Law Making Process in International Organizations

In the ESPI study diverse international organizations are analyzed like the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), the International Atomic Energy Agency (IAEA), the Organization for the Prohibition of Chemical Weapons (OPCW) and the ITU (International Telecommunication Union) with regard to their subsidiary law making processes. Indeed the rules of the CTBTO provide the creation of manuals as a system for creating subsidiary legal norm. The same is true for the IAEA. The adoption of template additional protocols may be seen as a mechanism for setting secondary law. The template was introduced in 1995 to increase the efficiency of the safeguard system. For this purpose a special committee of the Board was established to elaborate new legal authorities, the so-called “Additional Protocol”⁸. The Board adopted a Model Additional Protocol in May 1997.⁹ Moreover an additional protocol is expected “to be adopted by each NPT¹⁰ member to supplement its existing IAEA safeguards agreement.”¹¹ “NPT states-parties are not required to adopt an additional protocol, although the IAEA is urging all to do so”.^{12/13} The Model Additional Protocol which was

⁸ Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards, INFCIRC/540 (Corr.), 1998.

⁹ Board on 15 May 1997.

¹⁰ Nuclear Non-Proliferation Treaty.

¹¹ Arms Control Association. The 1997 IAEA Additional Protocol at a Glance, Arms Control Association. Arms Control Association 14 May 2014 <<http://www.armscontrol.org/print/2576>>.

¹² Arms Control Association. The 1997 IAEA Additional Protocol at a Glance, Arms Control Association. Arms Control Association 14 May 2014 <<http://www.armscontrol.org/print/2576>>.

¹³ “The United States, along with the IAEA and the Security Council, has called on Iran to resume voluntary implementation of and ratify its additional protocol, which it signed in

adopted by the Board (and not by the General Assembly) has to be accepted by each state concerned. Individual adaptation is possible with the general parameters of the Model. This is way the Additional Protocols may differ from one country to another, but generally speaking “Additional Protocols concluded with non-nuclear-weapon States parties to the NPT are (...) highly standardized”^{14,15} This demonstrates the high normative nature of this Additional Protocols. From a normative perspective the importance of the creation of subsidiary norm via this Model Additional protocol depends of the room to negotiate. If there is a little room to negotiate, there is a higher normative effect than if there is much room to negotiate. Generally a large majority of member states accept the Model Additional Protocol with no further important changes. Only some countries due to special political reasons asked for amendments. Therefore the Model Additional Protocol generally has a strong normative effect. The Additional Protocols give a mandate to the IAEA and its inspectors which goes by far over the rights foreseen originally in the Non-Proliferation Treaty. But the practice has shown that in order to fill the task and aim of the IAEA stronger measures were needed.

Conclusion

In general the Space Protocol has the aim to secure financial interests, meaning if a state does not adopt the registration system, which is internationally applied, its citizens and companies will be disadvantaged. This is an important aspect. Therefore the question arises if the Cape Town umbrella mechanism could serve as model system for further space topics. Can the Cape Town Convention be made to serve as a model for further hard law in space? To answer this first it has to be analyzed if there is a need for more hard law? Currently the tendency is in favor of soft law, recommendations, best practice etc. Indeed during the cold war, the UN treaties (hard law) were possible and requested by the worldwide community and across different political blocks facing an uncertain environment, marked by distrust and suspicion. Therefore every side insisted on hard law to be sure or to have a kind of warranty that the other side is respecting rights and obligations. But times have changed! Countries even from different (former)

December 2033, after Tehran stopped adhering to the measure in February 2006. Iran stopped applying the measure days after the IAEA referred it to the UN Security Council. Iranian officials have stated that Tehran will consider renewing implementation of its additional protocol if its nuclear file is referred back to the IAEA from the UN Security Council. Iran argues that the IAEA is the ‘sole competent authority’ responsible for verifying nuclear safeguards, The 1997 IAEA Additional Protocol at a Glance, Arms Control Association, <<http://www.armscontrol.org/print/2576>> and has asserted that the Security Council interferes with the IAEA’s work by politicizing the nuclear issue.”

¹⁴ Rockwood, Laura. in: Making Treaties Work. Ed. Geir Ulfstein, 2008: 308.

¹⁵ Moreover some countries have signed the individual elaborated Additional protocol but have not ratified it. This is the case for approx. 20 countries, among them Belarus, India, Iran, Malaysia, Myanmar or Thailand.

political systems cooperate now on space projects. Therefore confidence building measures are undertaken and guidelines on best practices are agreed. This is also the case for the space debris matter. Even if all actors are conscious of the danger which space debris have on the unique resource which outer space constitutes, hard law in this matter is hardly conceivable. First of all space faring countries have realized the danger and organized themselves on different levels for defining standards to mitigate space debris. The debris mitigation guidelines are generally transposed in national law so that their national space operators have to take them into account and construct space missions accordingly. Otherwise the national supervising authority does not authorize the venture. Moreover, technical standards are permanently evolving. Standards which were efficient at one point might have become obsolete (which may be the case quite quickly in such an evolving domain like the space technology sector). If standards are fixed in hard law it might be difficult to take account of this evolving element. A long process would then again be needed to find consensus among the whole state community to draft and agree on new norms which during the deliberation and adoption process may become once again obsolete. This is why the implementation by national authority of international guidelines can be more appropriate. Secondly, hard law turns out to be inefficient if its transgression cannot be sanctioned. Indeed what will be the sanction for a country which is not respecting hard law space debris treaties provisions? So why even create hard law? Therefore the current approach favors dialogue and confidence building measures.

Concerning space debris, generally every country is ready to respect the best practice which reflects the current status of technical possibilities, meaning that technically more is currently not possible (therefore it makes no sense that hard law provisions require more rigid requirements).

Another aspect can be detected concerning the creation of hard law: there may be a tendency among states to be more in favor of the creation and adoption of hard law when the topic concerns the life and security of humans. This is for example the case of the ISS agreements. By sending humans far from Earth, their lives depend on the work and accomplishment of all contracting states. Therefore states want to ensure as much as possible that the other contracting states are fulfilling their obligations to ensure the life of their astronauts. Additionally on the ISS there is a high interdependency. Important technical systems for the survival of the station only work in close cooperation with each partner which is essential for the survival of all humans on the station.

Third aspect is the degree of technology which is concerned. The Outer Space Treaty and the other three main space treaties stipulate general rules of "behavior" without going in detail concerning the needed or concerned technology. Therefore these Treaties could be adopted rather easily by the state community. Due to their general character they have also kept their importance and significance during the past decades and for the future. However with the Moon treaty, this approach was interrupted as the Moon treaty implies a

certain approach and fixes binding rules unacceptable currently for the majority of space faring nations. Indeed nobody knows which technology will be state of the art if the Moon treaty should some time become effective.

Nevertheless, hard law has a role to play, but in space more for “political” impregnated topics. The Cape Town mechanism may be conceivable for environmental issues, for instance. An umbrella convention may serve as a kind of fixing of standard rules to respect and protect the environment, and then diverse protocols may comprise details or technical standards for dedicated areas. In general the Cape Town mechanism has the advantage due to its “general” umbrella to unify certain norms but for this it is necessary that the regulated areas can be regulated in a unified way without presenting too many particularities related to their own sector.