

## Austrian Space Law Newsletter

RÜCKBLICK EINBLICK AUSBLICK REVIEW INSIGHT PROSPECT RÜCKBLICK EINBLICK AUSBLICK

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## EDITORIAL

Irmgard Marboe



Unter den Rubriken "Rückblick-Einblick-Ausblick" bietet dieser Newsletter wieder einen Überblick über Ereignisse im Bereich des Weltraumrechts in Österreich. Einer der Höhepunkte der letzten Monate war die Konferenz zum Thema "Soft Law in Outer Space. The Function of Non-Binding Norms in International Space Law" am 2. April 2011. Obwohl der Begriff „Soft Law“ manchmal als *contradictio in terminis* kritisiert wird, ist er im Völkerrecht immer noch weit verbreitet. Im Rahmen des Weltraumrechts werden damit vor allem UN Generalversammlungsresolutionen, Guidelines, Charters oder Verhaltenskodizes bezeichnet, die keine rechtlich bindende Wirkung haben, aber dennoch darauf ausgerichtet sind, das Verhalten von Staaten und privaten Akteuren im Weltraum zu beeinflussen und dies auch tatsächlich tun. Die Konferenz fand an der Rechtswissenschaftlichen Fakultät der Universität Wien statt und kam beim international zusammengesetzten Publikum, das auch aus zahlreichen Teilnehmern des Rechtsunterausschusses des UN-Komitees für die friedliche Nutzung des Weltraums (UNCOPUOS), der vom 28. März bis 7. April seine 50. Tagung in Wien abhielt, sehr gut an (siehe Seite 26). Ende dieses Jahres soll ein Buch über die Ergebnisse der Konferenz erscheinen.

Eine andere interessante Entwicklung, die bereits letztes Jahr begann, war die zunehmende Zusammenarbeit mit dem Academic Council of the United Nations System (ACUNS). Die

Annual Conference von ACUNS fand unter dem Generalthema „New Security Challenges“ zwischen 3. und 5. Juni 2010 in Wien statt. Der NPOC Austria wirkte dabei mit, das Panel zum Thema „Security in Outer Space“ zu organisieren (siehe Seite 10). Weiters wurde der NPOC Austria eingeladen, an der Konferenz „Connecting Academics and UN Practitioners“ vom 28. Februar bis zum 1. März 2011 in den Räumlichkeiten der Vereinten Nationen teilzunehmen. Bei dieser Gelegenheit wurde die Arbeit des UNCOPUOS und das UN Office for Outer Space Affairs einem interessierten jungen Publikum vorgestellt (siehe Seite 15).

In den letzten Monaten wurde auch die Arbeit am „Entwurf für ein Bundesgesetz über die Genehmigung von Weltraumaktivitäten und die Einrichtung eines Weltraumregisters“ fortgeführt. Das österreichische Bundesministerium für Verkehr, Innovation und Technologie (BMVIT) organisierte zahlreiche interministerielle Sitzungen und Expertengespräche. Der vorläufige Status des Gesetzes stellte einen der thematischen Schwerpunkte des Österreichischer Völkerrechtstages in Freistadt, Oberösterreich, dar (siehe Seite 6). In der Zwischenzeit wurden die Tagungsbeiträge bereits in einem Buch mit dem Titel „Von Lissabon zum Raumfahrzeug. Aktuelle Herausforderungen im Völkerrecht“ (2011) publiziert.

Dieser Newsletter enthält darüber hinaus Berichte über den International Astronautical Congress in Prag (siehe Seite 22) wo auch das Finale des Manfred Lachs Space Law Moot Court stattfand (siehe Seite 20), eine von ESPI organisierte Konferenz über Rechtsfragen der Erdbeobachtung (siehe Seite 4), den ESCL Summer Course on Space Law and Policy (siehe Seite 24) und den UN/Thailand Space Law Workshop in Bangkok (siehe Seite 18).

Einmal mehr habe ich Frau MMag. Karin Traunmüller für ihren unermüdlichen Einsatz beim Zusammenstellen der Beiträge und Frau Mag. Anna-Maria Kanduth für das Layout besonders zu danken. Ich hoffe, dass dieser Newsletter Ihre Erwartungen erfüllt und Ihnen einen interessanten Einblick in das faszinierende Feld der Raumfahrt und des dazugehörigen rechtlichen Rahmens bietet.

## Preface

Under the rubrics "Reviews-Insights-Prospects", this Newsletter will again provide an overview over events in the area of space law in Austria. One of the highlights of the past months was the conference on "Soft Law in Outer Space. The Function of Non-Binding Norms in International Space Law" on 2 April 2011. Even if the term "soft law" is sometimes criticized as a *contradictio in terminis*, it is still widely used in the area of international law. In the context of space law, it refers to documents like UN General Assembly Resolutions, Guidelines, Charters, or Codes of Conduct which have no legally binding force but are nonetheless meant to influence and in fact do influence the behaviour of States and private actors in outer space. The conference took place at the Faculty of Law of the University of Vienna and was well received by an international audience including many participants of the UN Committee for the Peaceful Uses of Outer Space's (UNCOPUOS) Legal Subcommittee which held its 50th session between 28 March and 7 April in Vienna (see page 26). A book will be published as an outcome of this conference by the end of this year.

Another interesting development which started last year was the emerging co-operation of the NPOC Austria with the Academic Council of the United Nations System (ACUNS). The Annual Conference of ACUNS under the overall title "New Security Challenges" took place between 3 and 5 June 2010 in Vienna. The NPOC Austria helped in organizing a panel on "Security in Outer Space" (see page 10). In addition, from 28 February to 1 March 2011, the NPOC Austria was invited to participate in the "Conference on Connecting Academics and UN Practitioners" at the premises of the United Nations. At this occasion, the work of the UNCOPUOS and the UN Office for Outer Space Affairs was presented to a young and interested audience (see page 15).

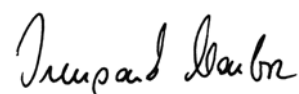
During the last months, the work on the draft Austrian space law, the "Entwurf für ein Bundesgesetz über die Genehmigung von Weltraumaktivitäten und die Einrichtung eines Weltraumregisters", has continued. The Austrian Ministry of Transport, Innovation and Technology has organized numerous inter-ministerial meetings and expert consultations. The preliminary status of the law represented one of the main thematic focuses of the Austrian national conference on public international law (Österreichischer Völkerrechtstag) in Freistadt,

Upper Austria (see page 6). In the meantime, the proceedings of the conference were published in a book entitled "Von Lissabon zum Raumfahrzeug. Aktuelle Herausforderungen im Völkerrecht" (2011).

This Newsletter furthermore contains reports on the International Astronautical Congress in Prague (see page 22) where also the finals of the Manfred Lachs Space Law Moot Court took place (see page 20), a conference on legal aspects of remote sensing organized by ESPI (see page 4), the ESCL Summer Course on Space Law and Policy (see page 24) and the UN/Thailand Space Law Workshop in Bangkok (see page 18).

Once again, I have to thank in particular MMag. Karin Traunmüller for her tireless effort in bringing the articles of this Newsletter together, and Mag. Anna-Maria Kanduth for the layout. I hope that this Newsletter meets your expectations and provides an interesting insight into the fascinating area of space flight and the corresponding legal framework.

Yours,



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## RÜCKBLICK *review*

# ISPRS/ESPI/IAA/IISL Conference “Current legal issues for satellite Earth observation” 8 - 9 April 2010

Karin Traunmüller

In April 2010 the European Space Policy Institute (ESPI), together with ISPRS, IAA and IISL, organized a two-day conference on „Current legal issues for satellite Earth observation“. Nine presentations and a closing roundtable, the focus of which was put on treaty monitoring and privacy conflicts, gave a substantial overview of the legal problems arising in the context of remote sensing.

As **Ray Purdy** pointed out in his introductory presentation “Overview on legal issues” satellite earth observation has undergone essential changes during the past years. Nowadays, many States resort to the use of remote sensing satellites for monitoring purposes. Examples of key legal application are to be found in relation to fisheries (United States, European Union), immigration (Australia), water abstraction mitigation (Spain), forestry controls (India, Greece, Portugal), maritime oil spills (United Kingdom), the detection of agricultural subsidy fraud (United States, European Union) et al. The development of greater monitoring opportunities through the increase in number of satellites, ‘Fit-for-purpose’ satellites, the appearance of new unmanned aerial vehicles (UAVs), as well as the better access to and decreasing costs of archived data, public awareness to satellite data, for instance through Google Earth, and improved resolution of the satellite pictures are calling for a revision of the regulatory framework for Earth observation.

Without being fully aware of it, the use of satellite pictures forms part of our everyday lives, and can redound to people’s advantage, as was shown by **Ed Parsons**, demonstrating Google’s Earth Observation interests: the localisation of a car being looked for desperately by their forgetful driver doesn’t seem to be a problem anymore with satellite pictures.

**Jana Jentsch**, who emphasized the relevance of Earth observation in the context of Disarmament and Arms Control Treaties, Environmental Treaties, International Conflicts and Peace Agreements and Human Rights Treaties, pointed out that despite the fact that satellite-based monitoring technologies are widely accepted and applied even in relation to treaties, which formally don’t foresee satellite imagery as a tool for verification (like it is the case with the NPT 1968), Intergovernmental organizations and its member states still remain reluctant to formally establish satellite monitoring as a verification technique (ITM). However, as the success of international law depends on implementation and enforcement rules, the further development of binding legal instruments which provide for organized monitoring techniques is highly desirable.

**Jean-François Mayence** started his presentation raising the crucial question in connection with the use of satellites data for law enforcement: the weighing of interests between the right of the individual to security and the right of the individual to privacy. In addition to the presentation of the utilization of satellites for law enforcement in Non-Judicial Procedures through surveillance and prevention, monitoring of activities, and global Management, J.-F. Mayence addressed the use of satellite data in judicial procedures and underlined that in order to add value to their application for law enforcement purposes, it is absolutely essential to delimit privacy, ensure confidence in and reliability of the data.

**Frans von der Dunk** discussed the two different European approaches as to privacy as relevant to high resolution imaging, analysed the relevant regulations and decided cases. He showed that while the European Convention on Human Rights addressed this topic from a human rights perspective,

the dealing with the given issue within the EU, where the trans-border flow of personal, including satellite data as part of the intense economic and commercial activities increases the risk of interference with privacy, the economic perspective prevails.

**George Cho** stressed the privacy aspect as well, demonstrating it by examples of US-Hollywood Stars, who have suited Newspapers and Magazines for publishing satellite pictures of their houses. He pointed out the need to find a balance between the rights of individuals against those of the general public.

**Catherine Doldirina** gave an overview of privacy's history and differing privacy perceptions from over the world. She pointed out that they are subject to changes over time and differ not only from culture to culture, but also among different social groups within one society.

**Gunter Schreier** presented the European initiative for the establishment of a European capacity for Earth Observation "Global Monitoring of Environment and Security" (GMES). He described past and ongoing projects like "Global Monitoring for Security and Stability" (GMOSS), "Land and Sea Integrated Monitoring for European Security" (LIMES), "GMES Services for Management of Operations, Situation Awareness and Intelligence for regional Crises" (G-MOSAIC) and "European Maritime Security Services" (MARISS). Within the EU Policies Framework remote sensing satellites are used in various domains like the Civilian Crisis Management, Common Foreign and Security

Policy, EU-Africa Joint Strategy, Euro-Mediterranean Partnership, or the Middle East Peace Process. Giving as examples the support of the Kimberley Process by GMOSS and Nuclear Treaty Monitoring by GMOSS and LIMES, Mr. Schreier illustrated various possibilities of Earth Observation implementation.

**Atsuyo Ito** focused on Earth Observation as regards to the International Charter on Space and Major Disaster in the context of the recent Haiti earthquake. After describing the problems which had to be dealt with in this specific case, like the fact that aid workers themselves were victims of the disaster, the lack of coordination and confusion as to who was in charge, she recommended the Charter partners to prepare for disasters that strike the capital, to reach prior arrangements between the states and Charter partners, and to develop a system that would enable them to coordinate and give direction of aid in urgent disaster situations.

The recommendations emanating from the discussions and the concluding roundtable encompass capacity building on the use of satellite data in the context of law enforcement and disaster management, the incorporation of satellite data in international legal instruments and the development of common principles on privacy applicable to remote sensing activities. Due to the practical relevance of Near Earth Observation and its point of contact with human rights, it is a topic within Space Law, to which particular attention has to be paid in the coming years.



## 35. Österreichischer Völkerrechtstag in Freistadt 27. - 29. Mai 2010 - Fokus Weltraum

Karin Traunmüller

**FOKUS WELTRAUM**  
Chair: Univ. -Prof. Dr. Manfred Rotter, Universität Linz  
**TUGSAT, BRITE AT und ein österreichisches Weltraumgesetz**

ao. Univ. - Prof. Dr. Irmgard Marboe, Universität Wien  
Mag. Boris Levtchev, Wiss. Mitarbeiter Universität Salzburg  
ao. Univ. - Prof. Dr. Sigmar Stadlmeier, LL.M. (London), Universität Linz



**Weltraumrecht war neben dem Vertrag von Lissabon und Fragen der Rechtsinformatik ein Themenschwerpunkt des 35. Österreichischen Völkerrechtstages, der Ende Mai 2010 im oberösterreichischen Freistadt stattfand.**

Die drei Vorträge von Prof. Irmgard Marboe (Universität Wien), Prof. Sigmar Stadlmeier (Universität Linz) und Mag. Boris Levtchev (Universität Salzburg) behandelten die künftige Weltraumtätigkeit Österreichs und die damit verbundenen notwendigen rechtlichen Regelungen.

Zum Einstieg präsentierte Mag. Boris Levtchev den anwesenden, zum Großteil technisch eher weniger versierten Völkerrechtsexperten die beiden Satelliten TUGSAT-1 und UniBrite, die 2011 von einer indischen Trägerrakete in eine erdnahe polare Umlaufbahn in der Höhe von 800 km befördert, und Österreich zu einer, wenn auch kleinen, Raumfahrt-nation machen werden. Die beiden würfelförmigen Satelliten,



die eine Kantenlänge von jeweils 20 cm aufweisen, sollen die Helligkeitsschwankungen massiver, sehr heller Sterne mit Hilfe differentieller Photometrie mit höchster Präzision messen, um Theorien über die Physik der Sterne sowie die Entstehung des Universums zu verbessern.



Mit Prof. Marboe verließen die Anwesenden die technischen Dimensionen und wandten sich rechtlichen Fragestellungen zu. Der Vortrag gab einen Überblick über die sich aus der Ratifikation der fünf Weltraumverträge durch Österreich ergebenden Pflichten, wobei das Hauptaugenmerk auf Fragen der Registrierung und Haftung gelegt wurde. Es wurde gezeigt, welche Staaten bereits mit gutem Beispiel vorangegangen sind und die völkerrechtlichen Verpflichtungen in eigenen Weltraumgesetzen umgesetzt haben. Hervorzuheben ist hierbei, dass es sich bei diesen keinesfalls bloß um klassische Weltraumnationen wie die Russische Föderation und die USA handelt. Eigene Weltraumgesetze wurden bereits von Norwegen



(1968), Schweden (1982), Südafrika (1993), Australien (1998), der Republik Korea (2005), Belgien (2005) sowie den Niederlanden (2007) ausgearbeitet, in Deutschland, Italien und der Tschechischen Republik ist eine entsprechende Gesetzgebung in Planung bzw. in Erarbeitung. Prof. Marboe stellte darüber hinaus die Arbeit der von ihr geleiteten Arbeitsgruppe zur nationalen Weltraumgesetzgebung im Rechtsunterausschuss von UNCOPUOS vor, durch welche ein koordiniertes Vorgehen auf internationaler Ebene angestrebt wird. Zuletzt ging sie noch auf die Änderungen auf EU-Ebene durch den Vertrag von Lissabon ein, der in seinem Art 4 (3) eine neue geteilte Kompetenz für Raumfahrt vorsieht (vgl. Art 4 (3) und Art 189 AEUV).

Abschließend wandte sich Prof. Sigmar Stadlmeier den verfassungsrechtlichen Kompetenzgrundlagen für das österreichische Weltraumgesetz zu, die an der Schnittstelle der äußere-

ren Angelegenheiten, des Zivil- und Immaterialgüterrechts, des Verkehrs- sowie Post- und Fernmeldewesens liegen. Weiters wies er auf die zwischen vier Ministerien geteilte Vollzugsorganisation im Bereich der Raumfahrt hin, ehe er schließlich einen von ihm und Prof. Marboe erarbeiteten Entwurf für ein österreichisches Weltraumgesetz präsentierte, der derzeit in den betroffenen Ministerien diskutiert wird. Der Schwerpunkt lag auch in seiner Darstellung der Fragen betreffend Genehmigung, Registrierung und Haftung, wobei er auch bestehende Parallelen zum Luftfahrtrecht aufzeigte. Besonderes Augenmerk legte Prof. Stadlmeier auf die im Gesetzesentwurf enthaltene Verordnungsermächtigung, die die im Gesetz enthaltenen Grundsätze der Genehmigungsvoraussetzungen näher ausführen soll.



## Space Law Courses - Universität Wien und KFU Graz

Karin Traunmüller

Auch im Sommersemester 2010 wurde wieder Weltraumrecht an der Universität Wien unterrichtet. Ein Themenblock des von Prof. Marboe abgehaltenen Seminars war neben anderen Schwerpunkten erstmals auch diesem Rechtsbereich gewidmet.

Die Studenten wählten die Themen für ihr Referat und die zu verfassende Diplomandenseminararbeit selbständig aus und präsentierten sie vor ihren Kollegen. Sehr erfreulich war, dass sich von 37 Teilnehmerinnen und Teilnehmern neun, also fast ein Drittel, aktuellen Fragen des Weltraumrechts zuwandten.

Das Referat zum Thema „Das geistige Eigentum im Weltraumrecht“ von Alexander Schultmeyer, das gleichzeitig auch ein



Dissertationsprojekt darstellt, behandelte die sich im Zusammenhang mit Erfindungen im Weltraum stehenden rechtlichen Fragen. Insbesondere wurde darauf hingewiesen, dass die Erforschung und Nutzung sowie das Aneignungsverbot als zentrale Grundsätze des Weltraumrechts im Spannungsfeld zum Territorialitätsprinzip, nach dem sich die gewerblichen Schutzrechte richten, steht. Fraglich ist in diesem Kontext auch, welches Recht im Falle einer Erfindung im Weltraum anwendbar sein soll: Während sich die Lage mit der Anwendung nationalen Rechts (meist des Rechts des Registerstaates) bei Erfindungen auf Flugelementen wie Raumstationen oder Space Shuttles als nicht strittig darstellt, besteht in Bezug auf den „offenen Weltraum“ ein rechtliches Vakuum, das genauerer Untersuchung und einer Harmonisierung bedarf.

Ein äußerst aktuelles Thema behandelte Denitza Petrounova in ihrem Referat über „Space Tourism“, in dem sie neben der informativen Darstellung der derzeitigen Situation und dem Entwicklungsstand auf sämtliche Problemfelder in diesem Bereich hinwies. Angefangen mit der Frage, ab wann überhaupt von Weltraumtourismus die Rede sein sollte, über die Unterscheidung von „Suborbital“ und „Orbital Flights“ bis zu den fehlenden Definitionen zentraler Begriffe wie „spaceflight“, „space object“, „spaceflight participant“ ua., gaben einen detaillierten Überblick über die sich mit zunehmender Verbreitung des Tourismus in den Weltraum in Zukunft stellenden Fragestellungen. Handlungsbedarf bestünde insbesondere bei der Regelung von Haftungsfragen und der Festsetzung von Streitbeilegungsmechanismen zwischen Passagieren und





Träger. Die derzeit bestehenden Normen sind unzureichend und bedürfen einen – sich wohl als schwierig erweisenden – Regelung auf internationaler Ebene.

Die Präsentation zu dem ebenso aktuellen Thema „Law Enforcement and treaty monitoring through satellite Earth Observation“ von Magdalena Dobrowolska behandelte die immer öfter eingesetzte Erdbeobachtung zur Durchsetzung und Einhaltung völkerrechtlicher Verträge (siehe näher zu diesem Thema den Beitrag zu „Remote Sensing“ oben).

Aufgegriffen wurden weiters auch das Problem des Weltraummülls, welchen man heute überwiegend über nicht verbindliche Normen des sog. „soft laws“ zu bekämpfen versucht, sowie die Frage des „Space Traffic Management“ (Popova Rada). Beide Bereiche bedürfen angesichts der zunehmenden Nutzung des Weltraums dringend eines rechtlichen Rahmens.

Weitere Präsentationen widmeten sich dem Mondvertrag (Moik-Suppan Renate), der Legaldefinition des „launching state“ (Fritz Gernot), sowie der transatlantischen Kooperation im Bereich des Weltraums (Hendrich Armin).

Aus den den Referaten folgenden Diskussionen und der dabei entwickelten Neugier ist zu schließen, dass der Weltraumrechtsschwerpunkt des Seminars für alle Teilnehmer eine Bereicherung war und möglicherweise das Interesse des einen oder anderen Studenten an diesem Rechtsgebiet erweckt hat. Im WS 2010/11 wurden wieder die Kurse „General Legal Framework of the Use of Outer Space Technologies“ und „Special Issues of the Use of Outer Space Technologies“ angeboten. Die Teilnehmerzahlen von 42 bzw 51 zeigten, dass der Be-

reich Weltraumrecht an der Universität Wien auf steigenden Ansturm stößt.

Im Sommersemester 2011 fand erneut ein Seminar mit welt-raumrechtlichem Schwerpunkt statt.

Auch an der Universität Graz wurde im SS 2010 ein vierstündiges Seminar zum Weltraumrecht abgehalten, welches folgende Themen umfasste: Nutzung des Weltraumes, Funktion und Quellen des Weltraumrechts, mit Weltraumrecht befasste Institutionen, aktuellen Kooperationen und Projekten ua. Auch dieses Seminar wurde im SS 2011 erneut angeboten.

Weitere Informationen:

[http://www.uni-graz.at/opvwww/opvwww\\_courses.htm](http://www.uni-graz.at/opvwww/opvwww_courses.htm)

<http://intl.wu.wu.ac.at/npoc-space-law/>



## ACUNS annual meeting - New Security Challenges 3 - 5 June 2010

Irmgard Marboe

### Workshop Panel - Space Security

**CHAIR: Peter Jankowitsch, Austrian Foreign Ministry (ret'd)**

#### PANELISTS:

Militarization of Outer Space: Present and Future Challenges from the International Legal Perspective

**Irmgard Marboe, University of Vienna**

Transparency and Confidence-Building Measures for Space Security

**Jana Robinson, European Space Policy Institute**

The Role of OOSA in Promoting Security in Outer Space

**Niklas Hedman, Chief of the Committee Services and Research Section**

Asteroid Threats: A Call for Global Responses

**Walther Lichem, Austrian Foreign Ministry (ret'd)**



The Academic Council of the United Nations System (ACUNS) held its 2010 Annual Meeting in Vienna. The Opening Ceremony took place at the University of Vienna on 3 June under the presence of Rector Georg Winckler. The keynote speaker, Danilo Türk, President of Slovenia, addressed the main theme of the conference, "New Security Challenges". The plenaries and workshop panels of the following days were organized at the Austrian Parliament, the Vienna International Centre and the Vienna Faculty of Law.

On Saturday, 5 June, in the afternoon, a workshop panel entitled "Space Security" was organized with participation of Irmgard Marboe (NPOC Space Law, University of Vienna), Jana Robinson (European Space Policy Institute), Niklas Hedman

(United Nations Office for Outer Space Affairs) and Walther Lichem (former Ambassador of Austria). The former Austrian Foreign Minister, Peter Jankowitsch, chaired the panel.

One of the focuses of the panel was the militarization of outer space and its present and future challenges from the international legal perspective. The militarization of outer space has been a concern of the United Nations since the launching of the first satellite, Sputnik I, by the Soviet Union in 1957. Almost immediately after that, the UN established the UN Committee for the Peaceful Uses of Outer Space (UNCOPUOS). It elaborated – amongst others - the "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies" (Outer Space Treaty) in 1967 which emphasizes the common interest of

mankind in the exploration and use of outer space for peaceful purposes.

On the other hand, outer space has always been used for military purposes. Thus, the difference between “peaceful” and “military” plays an important role in the legal framework of the use of outer space. So far, the military use of outer space has been limited to Earth observation and other support activities by satellites, such as navigation, communication and meteorology, thus passive, non-destructive uses. However, there is a growing concern among States, that outer space could also be used for military applications of an active, destructive capacity. Such a use would represent an actual and physical threat to objects on Earth and in space. The so-called “space weapons” include weapons to be used from Earth to space, from space

to Earth and from space to space. The military use of outer space by passive, non-destructive means was already generally known at the time of the conclusion of the Outer Space Treaty. Only a few States have protested against them and asked for a general prohibition of all military uses of outer space including “dual use applications” of satellites. This included for some years also the Soviet Union which considered the use of reconnaissance satellites as espionage and in contradiction with general law. However, in the framework of arms limitation and arms reductions treaties, such as the ABM or the START treaties – including the latest START Treaty of 8 April 2010 –, such uses have been even explicitly recognized and protected as “national technical means of verification”. Today, one can say that the use of satellites for military purposes is generally accepted by the international community. It is estimated that today approximately 70% of satellite launches are dedicated to such uses. In the 1970ies, this portion amounted to only 60%.



The distinction between passive and active military uses of outer space was also maintained at the UNISPACE II conference in Vienna in 1982 which identified three categories of military uses of outer space. The first category, support systems, i.e. satellites for communication, meteorology and navigation which can also be used for civil purposes, was regarded as unproblematic. The second category, comprising military surveillance systems, like high resolution cameras, electronic intelligence systems, radars, early warning systems and nuclear test detectors, was more controversial. Some countries wanted to include it in a general ban of military activities in outer space, but others emphasized the stabilising effect for verification of arms control treaties. With regard to the third category, namely space based weapons, in particular ASAT weapons, laser and particle beams weapons, the conference recommended to the General Assembly, in particular to its Disarmament Committee, to undertake the necessary steps

to urgently negotiate a multilateral treaty on arms prohibition and control for outer space.

This differentiation between passive and active military uses is quite original. In particular, it is not in line with International Humanitarian Law, where support activities – such as observation and communication – may clearly be regarded as “military”. The marking of such military devices plays an important role. By contrast, in outer space, “spy satellites” have never been particularly marked. If they have been registered with the UN register of space objects, they just contain identifications like “Earth observation” or “research” under the rubric “general function of the object”. The reason why one would nevertheless assume that they are military satellites is that the “Ministry of Defense” would appear as the “appropriate designator” in the registry.

The statute of the International Atomic Energy Agency (IAEA) also uses the terms “peaceful purposes” and “military purposes” in a different manner. The Agency shall support the peaceful

use of outer space for peaceful purposes.

use of atomic energy and ensure that it is not used to further "any military purpose". In this context, the explosion of nuclear devices has been developed as the decisive factor. A device which involves the same technology and characteristics as a weapon can not be regarded as peaceful. This kind of definition came with the Non-Proliferation Treaty of 1968 which prohibits the transfer of "nuclear weapons or other nuclear explosive devices". With this exception, all States retain the right to develop research, production and use of nuclear energy for "peaceful purposes" (Art. IV).

What does the Outer Space Treaty (OST) say about "peaceful purposes"? The most important principles in this respect are contained in the Preamble, in Art. I and in Art. III. The Preamble of the treaty recognizes the "common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes". According to Art. I OST, the exploration and use of outer space shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind. Art. III stipulates that States Parties to the Treaty shall carry on activities in the exploration and use of outer space in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and promoting international co-operation and understanding. According to this last specification, apparently two options remain: the use of military force on the basis of a mandate of the UN Security Council according to Art. 42 of the UN Charter and in the exercise of the right to self-defence in accordance with Art. 51.

However, is it true that all military activities in outer space meant to be used under a UN mandate or for defence-purposes only are in accordance with international space law? Is the protection of passive military support systems by military means in conformity with international space law? The increasing use of passive military devices for support activities makes the

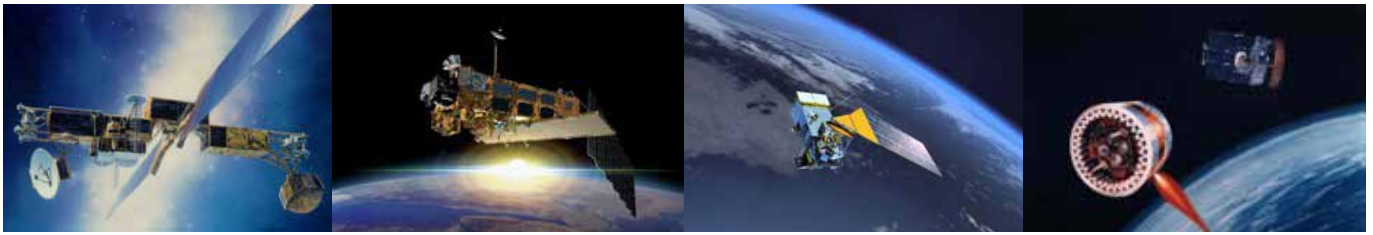
respective States more vulnerable. This leads to an increasing need to safeguard those devices and protect them also by military means. The US Space Policy of 2006 was a clear example of this. It emphasized that the US considered space capabilities – including the ground and space segments and supporting links – vital to its national interests. Therefore, it was determined to preserve its rights, capabilities, and freedom of actions in space, to dissuade or deter others from either impeding those rights or developing capabilities intended to do so. The US pointed out that it would respond to interference and to deny, if necessary, adversaries the use of space capabilities to US national interests.



The international framework with regard to the deployment and use of weapons in outer space is not yet adequately equipped to address such announcements. Art. IV of the Outer Space Treaty only prohibits to place in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, to install such weapons on celestial bodies, or station such weapons in outer space in any other manner. This provision is generally regarded only as a "partial" demilitarisation of outer space.

Therefore, in 1981, Italy, on behalf of the Western European and Other States group introduced a draft resolution to the





United Nations entitled "Prevention of an Arms Race in Outer Space". Against the background of the development of ASAT-Tests of the US and the USSR, the resolution called on the Committee on Disarmament (today the Conference on Disarmament, or CD) to "consider as a matter of priority the question of negotiating effective and verifiable agreements aimed at preventing an arms race in outer space." It demanded, in particular, to negotiate an agreement "to prohibit anti-satellite systems." The Resolution urged all States "to prevent an arms race in outer space ... and to prevent outer space from becoming an area of military confrontation" and held that such use would be "contrary to the spirit of the [Outer Space Treaty]."

This was the beginning of a process called "PAROS". It includes annual resolutions of the GA which reiterate the need for a comprehensive agreement to prevent weaponization of outer space. In 1985, the CD created an Ad hoc Committee on PAROS. The definition of the mandate, however, turned out to be difficult. Most of the States wanted to start concrete negotiations about a prohibition of space weapons. The US objected such a mandate. It was of the opinion that the UN Charter, existing multilateral treaties on outer space, bilateral and multilateral arms control regimes together with customary international law already provided an equitable, practical and extensive legal system for ensuring the use of outer space for peaceful purposes.

In 1995, the negotiations came to a complete standstill, primarily because of the linkage with other disarmament issues (eg China and Pakistan were against a Fissile Material Cut-Off Treaty without including also existing stocks, and with "Transparency in Armaments"). Since then, China and Russia have been trying to advance negotiations on a treaty preventing the weaponization of outer space by a number of proposals.

One comprehensive draft was submitted in 2002, the most recent draft is of February 2008, namely the "Draft Treaty on Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects". This treaty aims not only at banning space weapons but also at prohibiting the threat or use of force against space objects which would ban ASAT and ABM weapons, either ground based or mounted on aircraft. So far, however, no consensus in the CD about this issue is foreseeable. The US position is that it is willing to discuss the issue at the CD, but not to negotiate a treaty on it. However, there is a significant interest among scholars and practitioners who consider such a prohibition beneficial for all States, including the US, enhancing their national security situation.

In the meantime States have explored other ways. In recent years, they have increasingly fostered non-binding international instruments. They have developed a number of "Codes of Conduct" have been developed in order to increase transparency, consultation and cooperation. States seem to prefer such instruments to which they subscribe on a voluntary basis. Their commitment to follow the rules contained therein, however, seems to be dictated very much by self interest. As one US scientist, Laura Grego, has recently put it: "Even from a strictly military utility point of view, there is very little to be gained and much to be lost from introducing weapons into space."

## UNCOPUOS , 1 - 10 June 2011

Chiara Redini

Das 54. Meeting des Komitees der Vereinten Nationen zur friedlichen Nutzung des Weltraums (UN COPUOS) fand vom 1. bis 10. Juni 2011 bei den Vereinten Nationen in Wien statt. Zwei besondere Jubiläen wurde dieses Jahr gefeiert: das 50-jährige Jubiläum des ersten bemannten Raumfluges durch den sowjetischen Kosmonauten Juri Gagarin sowie der Aufnahme der Tätigkeit des UN-Weltraumkomitees.

Aus diesem Anlass wurde das 54. Meeting des Komitees mit einer besonderen Veranstaltung eröffnet. Durch eine Videobotschaft würdigte UN-Generalsekretär Ban Ki Moon die Arbeit der UN COPUOS und seine Rolle bei der Unterstützung und Erleichterung der Überwindung neuer technologischer Grenzen, der globalen Gemeinnutzung der Vorteile sowie der friedlichen Nutzung des Weltraums unterstrichen. Außerdem sprachen ehemalige Astronauten, darunter auch Alexey Leonov, über ihre Eindrücke vom All vor den Delegierten.

Nach einer Live-Schaltung zu den sechs Astronauten der Internationalen Raumstation ISS, wurde die „Draft Declaration on the Fiftieth Anniversary of Human Space Flight and the Fiftieth Anniversary of the Committee on the Peaceful Uses of Outer Space“ angenommen, die wesentliche Grundsätze des Weltraumrechts wiederholte und die Notwendigkeit der internationalen Zusammenarbeit unterstrich.

Am ersten Tag der Sitzung wurde auch die Ausstellung „50 Jahre bemannte Raumfahrt“ eröffnet, die bis zum 30. Juni 2011 für die Öffentlichkeit zugänglich war. Unter anderem wurden Modelle amerikanischer, chinesischer und russischer



Raketen und Raumfahrzeuge sowie Modelle der International Space Station gezeigt.

In Zusammenarbeit mit der Stadt Wien wurde in den Tagen des COPUOS Meetings eine Konferenz mit Astronauten und Kosmonauten über die Zukunft der Menschen im Weltraum organisiert, an der die Astronauten Leland Melvin (USA), Chiaki Mukai (Japan), Claude Nicollier (Schweiz), Thomas Reiter (European Space Agency), Sheikh Muszaphar Shukor (Malaysia), Liwei Yang (Volksrepublik China) und So-yeon Yi (Republik Korea) teilnahmen.

Im Laufe der Sitzungen waren vor allem folgende Tagesordnungspunkte von besonderer Bedeutung: Mittel und Wege der Benutzung des Weltraums für friedliche Zwecke, die Umsetzung der Empfehlungen der Dritten Konferenz der Vereinten Nationen über die Erforschung und friedliche Nutzung des Weltraums (UNISPACE III), Umweltmanagementsystems, sowie Climate Change.

Zahlreiche technische Präsentationen wurden im Laufe der Sitzung vorgestellt, darunter etwa zu den Themen „Wirksamkeit von Satellitendaten für Katastrophen - das Große East Japan Erdbeben“ von der Japanischen Delegation, oder „Operational Services auf Weltraum-Daten zur Unterstützung der seismischen Grundlage des Risikomanagements“ von der italienische Delegation.



## ACUNS Conference in Vienna: Connecting Academics and UN Practitioners, 28 February - 1 March 2011

Karin Traunmüller and Irmgard Marboe

From 28 February to 1 March 2011, the Academic Council of the United Nations System (ACUNS) organized a "Conference on Connecting Academics and UN Practitioners" at the premises of the United Nations in Vienna.

More than 300 participants from 24 countries attended the conference. One panel was dedicated to the work of the United Nations in relation to the use and exploration of outer space. The former Austrian ambassador Walther Lichem moderated and opened the session. He provided a brief historical overview over the work of the United Nations since the beginning of the space age and highlighted some important developments and changes in the outer space agenda. He emphasized, that in outer space the significant role of international institutions in the global governance process should be appropriately appreciated.

**Sergei Chernikov** (OOSA) gave an overview of the history, mission, structure, work and achievements of the United Nations Office for Outer Space Affairs (OOSA) as well as of the UN Committee for the Peaceful Uses of Outer Space (UNCOPUOS) and its Technical and Scientific Subcommittee.



**Irmgard Marboe** (University of Vienna) highlighted the political and legal dimensions of outer space activities and presented some of the most important legal texts on outer space elaborated in the framework of UNCOPUOS. As chairman of the working group on "National Space Legislation" she also gave an insight into recent developments in the work of the Legal Subcommittee of UNCOPUOS.

Both presentations were published in the Favorita Papers 01/2011 "Academics Meet UN Practitioners: An Encounter in Vienna", edited by the Diplomatic Academy of Vienna.



For further information see <http://www.unstudies.org/content/conference-material>.

## ESPI-Review of Spanish EU Council Presidency, 23 June 2010

Karin Traunmüller

On 23 June 2010 the European Space Policy Institute (ESPI) hosted an event dedicated to the review of the Spanish EU Council Presidency with regard to outer space.

Ambassador **José Luis Roselló** inaugurated the evening emphasizing that the Treaty of Lisbon changes the situation of space matters on the European level: for the first time, the European Union will have an explicit competence in space matters. This raises numerous new questions. Space programs on the European level have reached a critical point by now, as not all ESA-members as well as not all EU-members see the need to move on in space policy. This phenomenon requires a sensible approach to questions in the given area, as space policy will be an important factor in future. As Ambassador Roselló stressed, the Spanish presidency has been very active and productive during the six month presidency. In particular, he pointed out that neither the ESA, nor the European Commission, but the Council Presidency is the driver in the area of space policy in Europe.

The first speaker of the evening was **Tamara Zabala Utrillas** from the Spanish permanent mission to the UN. She gave an overview of the development of Space matters in Europe since the foundation of the European Communities in 1957, when space policy played no significant role in view of the need of food, energy and reconstruction in post-war Europe. An important step was the establishment of the European Space Agency in 1975 with the aim to combine national space research activities at a European level and guarantee Europe's independent access to space.

However, space activities have changed in the last decades due to improvements in technology, increasing access to space, public awareness and increased growing importance of the commercial space industry and demand other approaches and solutions. The European Union has responded to this challenge by strengthening its relationship and cooperation with ESA as well as by the elaboration of a European Space Policy. In 2000, a Joint ESA/EU Resolution on European Space Strategy was adopted as a framework for cooperation

The Permanent Mission of Spain in Vienna and the European Space Policy Institute (ESPI) are pleased to invite you to the event

**Policy challenges for a single European space**  
Results and perspectives from the Spanish EU Council Presidency for European space policy and programmes

**23 June 2010, 19:00h**  
European Space Policy Institute  
Schwarzenbergplatz 6 (entrance Zaunergasse 1-3)  
1030 Vienna

**Programme**

Welcome:	D. José Luis Roselló Ambassador Permanent Representative of Spain to the United Nations and Vienna based Organisations Kai-Uwe Schrogl Director, ESPI
Presentations:	
The role of Europe in space: Facts and perspectives	Tamara Zabala Utrillas Counsellor, Permanent Representation of Spain to the United Nations and Vienna based Organisations
The Spanish Presidency of the EU Council: Highlights in space matters	Roberto Trigo Responsible for the Applications Area Spanish Centre for the Development of Industrial Technology (CDTI)
The competence of the EU in space: More than an article	Matxalen Sánchez Aranzamendi Resident Fellow, ESPI
Panel discussion:	with Tamara Zabala Utrillas, Roberto Trigo and Matxalen Sánchez Aranzamendi as well as Harald Posch, Head of the Austrian Agency for Aeronautics and Space ALR/FFG Moderator: Kai-Uwe Schrogl, Director, ESPI
Followed by a reception	

between the two institutions. In 2004, an ESA-EU Framework Agreement was signed, followed by the European Space Policy adopted in 2007, which for the first time covers all space domains.

EU-MS will be involved in the European Space Policy Process through the Presidency, which will convene and prepare Space Council meetings together with the Presidency of ESA. Furthermore, the Space Council itself, which will endorse resolutions, and a High-Level Space Policy Group, which will discuss the draft resolutions or orientations, will also be important actors. Ms. Zabala Utrillas also pointed out that for the European Union, outer space is important for ensuring the citizen's wellbeing and supporting public policies as well as for its strategic capabilities. The Treaty of Lisbon is a basis for further development of the institutional framework for space activities in Europe and can promote unity in space affairs, so that Europe finally will speak with one voice in this area.



The presentation of **Roberto Trigo** of the Spanish Centre for the Development of Industrial Technology (CDTI), concentrated on the highlights of the Spanish presidency of the EU Council. As in other members and in the European Union itself, space has been getting more and more attention in the past 10 years. Spain is intensively participating in ESA programmes since 2005. It runs two consolidated telecom operators (Hispasat/Hisdesat) and has launched 5 satellites in the past 5 years, thus had consolidated its position as the fifth space faring nation in Europe. Two of the most important topics for the presidency were the role of the European Union after the Lisbon Treaty as well as the increasing importance of space exploration and security. Two conferences were organized during the Spanish presidency: the Space and Security Conference and the Conference on Governance of European Space Programmes. The conclusions of the former included: the acknowledgement of the contribution of space to security and defence-related EU policies, the importance of GMES as a tool in response to security related services and to increase synergies between civil and military space activities, as well as the recognition of the significance of SSA as the first Eu-



ropean Space initiative to consider dual use dimension. The latter conference's aim was to review the impact of on-going programmes, identify key topics to be addressed as well as to promote a debate on current issues in the light of the Unions' space competence contained in the Lisbon Treaty. According to Roberto Trigo, the EC/ESA-Framework Agreement is a good beginning but will need further evolvement in future. In his conclusion, he stressed that the objectives of the Spanish presidency have been reasonably achieved. Regardless of the budgetary crisis, discussions on the main issues will continue during the Belgian presidency in the second half of 2010.

In view of the European Union's new exclusive competence in space, **Matxalen Sánchez Aranzamendi** (ESPI) drew attention to the fact that under Art 189 TFEU, which for the first time regulates the exclusive competence of the European Union in space affairs, the competence in outer space consists of three elements: its aim is to serve competitiveness and other policies, like transport, energy, environment, foreign and security policy; its instrument is space policy, whereas the raw material is exploration and exploitation. Space policy must not be seen as an isolated element, but in the context of the core aims of the European Union, for the achievement of which it is a tool. Ms. Sánchez Aranzamendi pointed out that the space competence primarily is founded in the internal market and other European Union policies. Above all, the internal markets principles are applicable and essential to the development of space services and applications, which consequently cannot be conceptualized without the demand from other sectors. Furthermore, it has to be taken into account that regulations in other areas can also have an impact on activities in outer space. Only the whole of those regulations forms the European legal framework of space activities.

The presentations were followed by a panel discussion under the moderation of Kai-Uwe Schrogl, the director of ESPI. Apart from the three speakers the head of the Austrian Agency for Aeronautics and Space and Chairman of ESA's Industrial Policy Committee, Harald Posch, participated in the discussion.

## United Nations / Thailand Workshop on Space Law Bangkok, November 2010

Irmgard Marboe

**“Activities of States in outer space in the Light of New Developments: Meeting International Responsibilities and Establishing National Legal and Policy Frameworks.”**



The UN Office of Outer Space Affairs organizes “Workshops on Space Law” in different regions of the world as one of its activities in capacity building in space law. In November 2010, the Workshop on Space Law was organized in Bangkok (Thailand) in cooperation with the government of Thailand and the Geo-Informatics and Space Technology Development Agency (GISTDA), with the support of the European Space Agency (ESA) and the Asia-Pacific Space Cooperation Organization (APSCO).

The workshop was attended by approximately 130 legislators, government officials, practitioners and educators working in government departments and representatives of space agencies, international organizations, national universities, research institutions and the private sector, as well as university students. The workshop provided an overview of the legal regime governing the peaceful uses of outer space, examined and compared various aspects of existing national space legisla-

tion, considered the current state of university-level studies and programmes in space law, as well as ways of enhancing the availability and development of such studies and programmes.

The first session of the workshop focused on the international legal framework governing space activities. Participants were provided with a comprehensive overview of the United Nations treaties and principles on outer space and other legal frameworks. They discussed and identified the benefits of States becoming parties to the treaties and conducting their space activities in accordance with the United Nations principles on outer space.

The second session was dedicated to national legal and policy frameworks. The presentations showed how national space laws and policies had been developed in different countries. The examples of national regulatory and policy frameworks included China, India, Japan, Republic of Korea, Thailand and United States. In addition, a presentation on the national space-related legislation of ESA member States was given, which included information on the draft code of conduct for outer space activities being developed by the Council of the European Union. The presentations also discussed aspects related to the relationship between international space law and



national space legislation. The work of the Legal Subcommittee of the UN Committee for the Peaceful Uses of Outer Space and its Working Group on national space legislation was particularly taken note of in this context.

The third session provided an insight into mechanisms for international and regional cooperation in the exploration and use of outer space. Several international organisations and cooperation mechanisms of the Asia-Pacific region were presented (e.g. APSCO, the Asia-Pacific Regional Space Agency Forum and the Space organization for the Association of Southeast Asian Nations, ASEAN).

The fourth session focused on specific considerations and needs for capacity-building and education in space law. Participants examined the experience of educators in promoting education and developing courses in space law, considered mechanisms for overcoming regional challenges and discussed the core elements to be included in curricula on space law. Presentations were made on: (a) current opportunities for education in space law in the region; and (b) programme on capacity-building in space law of the Office for Outer Space Affairs.

The speakers were renowned experts in their respective fields and shared their experiences and thoughts with a very receptive audience. Presentations were given by Vladimir Kopal (Czech Republic), Ulrike Bohlmann (ESA), Martin Stanford (Unidroit), Joanne Gabrynowicz (United States), Sergio Marchisio (Italy), Armel Kerrest (France), Xu Yu (China), Setsuko Aoki (Japan), Doo Hwan Kim (Republic of Korea), Stephan Hobe (Germany), Niklas Hedman (UNOOSA), Ahmad Talebzadeh (Iran), Irmgard Marboe (Austria) and others. The report of the Workshop was made publicly available as a UN document (A/AC.105/989). The proceedings of the Workshop are made available on a CD by the UN Office of Outer Space Affairs which has also been distributed to the participants of the Legal Subcommittee of the UN Committee for the Peaceful Uses of Outer Space at its 50th session in 2011.



## EINBLICK *insight*

# Final of 19th Manfred Lachs Mootcourt Competition 2010

Karin Traunmüller

In September 2010, the Final of the 19th Manfred Lachs Moot Court Competition took place in Pilsen, Czech Republic. The Manfred Lachs Moot Court Competition is organized by the International Institute of Space Law (IISL) on an annual basis since 1992. It focuses on a hypothetical space law dispute before the International Court of Justice, written by a Member of IISL.

The panel consisted of their Excellencies Mr. Abdul Koroma, Mr. Peter Tomka and Mr. Leonid Skotnikov, judges at the International Court of Justice in The Hague. This particularity makes the Manfred Lachs Moot Court one of the most prestigious competition in the world.

The Case, treated by last year's participants, was entitled "Case concerning Suborbital Tourism, Definition of Outer Space and Liability" and concerned a dispute between the two fictitious neighbouring countries Aspirantia and Republica, both economically powerful and well developed. Whereas the rich and islanded Republic of Aspirantia had no significant history or technical expertise in space exploration, the continental Kingdom of Republica could resort to considerable capabilities in space activities. Due to favourable tax climate and absence of national space legislation, the company Startours Inc had been incorporated in Aspirantia. The company developed an experimental passenger spacecraft Starflight-1 and offered suborbital flights to an altitude of 112 km. The company Stationride Corporation, licensed under Republica's Space Activities Act of 2000, uses the Stationferry to carry scientists and supplies to the Republican space station, offers unique rides to private individuals and has contracted with Ashes Corporation, a funeral services company that provides the placement of lipstick-sized capsules filled with 5 grams of human ashes

into low earth orbit. On the maiden flight of Starflight-1, such a capsule struck the passenger spacecraft, causing the death of two passengers and the co-pilot. Later, a return flight of Stationferry suffered from a malfunction and landed on an air force base in Aspirantia. This led to the emergence of significant costs for the latter. The Stationferry's captain and a passenger were arrested by Aspirantian authorities upon the landing.



Over 40 participating teams from North America, Europe and the Asia-Pacific region had to deal with a number of claims raised by the two States covering in particular questions of liability and damage, as well as the definition and rescue of astronauts. In the end, the team representing the George Washington University (USA) was successful with its convincing presentation and won against the National University of Singapore's team.

Further information including a video:  
<http://www.iislweb.org/html/2010moot.html>

## Diplomarbeit: “Compliance of ESA Activities with the International Obligations Regarding IP Rights”

Wolfgang Mildner, graduated at University of Innsbruck

Starting point for what turned out to be a kind of an odyssey were the following facts:

As the output of a research process correlates not only with its fertility but also with the appropriability of research results, the right choice of IP policy is of considerable importance to secure the desired output of any Research & Development based project.

For the realisation of the Galileo Project – which is nothing less than the European Union’s flagship scientific and technical project – the European Space Agency made a sudden change of its policy regarding intellectual property rights (IPR). Whereas in prior projects the contractor has been entitled to exploit the IP produced, for the Galileo Project this was no longer true. In reaction on a Price Waterhouse Coopers study, all the IPR have been vested in the Agency. Not only unusual at the time and no strong incentive for the contractors to put much effort in Research & Development, comparable policies have often led to legal problems and would likely do so if a private entity was acting this way.

This lead to the following hypothesis:

The IPR policy set up for the Galileo project could be infringing to European Union law, international law or may be in contradiction to the provisions of the ESA Convention.

To enable the reader to judge if the changing of the IPR policy has been in accordance with the legal obligations imposed on the European Space Agency, the work had to be designed to give an overview of the former and new IP policy, of the European Space Agency, of the Galileo Project, the basic institutional framework and the basic legal framework in respect of IPR.



One single contract has been taken as an example in addition to the general provisions. This was necessary because numerous legal provisions require additional information such as the competitive relationship between the parties involved.

After several years of working on this topic, it was concluded that there was in fact some potential for optimization in the ESA IP Policy regarding the Galileo Project because it has not been fitted without frictions into the framework of the EC Law of Competition. Nevertheless, it has to be noticed, that for the purpose of the diploma thesis, many presumptions had to be made. Although the reasoning leads to the result of an infringement of Article 81 EC, it was not possible to come to a conclusion which could exclude any doubt and be sufficiently convincing to declare the hypothesis verified in this point.

Furthermore, in the opinion of the writer, the IP Policy under scrutiny was found to be in contradiction with certain aspects of the ESA Industrial Policy and thus, with Article 7b of the ESA Convention.

Taking into account that the R&D output of the Galileo Project could have been better, this might be an incentive to revise the IP policy for the next project.

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## 61<sup>st</sup> International Astronautical Congress, Prague 27 September - 1 October 2010

Irmgard Marboe

Every year the International Astronautical Federation organizes the International Astronautical Congress, an event which brings together several thousand participants from the space industry, researchers, technicians and academics for an exchange on the most recent developments in space technology and science. One part of the programme is the annual Colloquium on the Law of Outer Space.

One of the focuses of the 53rd Colloquium, organized by the International Institute of Space Law, was "The Current Status of the Rule of Law with Regard to Space Activities." Under the chair of Stephan Hobe (University of Cologne, Germany) and Peter Jankowitsch (Austrian Aeronautics and Space Agency, Austria) a number of renowned speakers addressed the issue of the importance of the rule of law in outer space.

The topic was chosen because since the adoption of the Moon Agreement in 1979, no other international treaties have been adopted on the United Nations. Rather, a number of United Nations General Assembly Resolutions dealing with direct broadcasting satellites, remote sensing, nuclear power sources have been adopted. Thereafter, other United Nations General Assembly Resolutions addressed certain aspects of international space legislation, such as Article I paragraph 1 of the Outer Space Treaty with the Space Benefits Declaration, or the notion of the Launching State in the Liability Convention and the Registration Convention, etc. Against this background, in light of the most recent developments of the UN Space Debris Mitigation Guidelines, speakers were invited to discuss the current status of the rule of law with regard to outer space activities. The "rule of law" in the present context meant generally that the law must be prospective, well-known, and have the characteristics of generality, equality, and certainty.

The papers covered a wide range of normative instruments related to recent developments in outer space activities.

**Prof. José Monserrat Filho** (Brazil) raised some fundamen-

tal issues regarding the remarkable lack of "hard law" in the area of space law in the last decades. While recognizing the usefulness of "soft law", he expressed his concern about the apparent unwillingness of States to agree on new binding norms for the regulation of outer space affairs. According to him, there were urgent topics which would require new binding international instruments, such as the security and safety of space activities, including the military uses of outer space, the placing of new weapons in Earth orbit, the rapid growth of space debris numbers, as well as a more comprehensive regulation of remote sensing activities and the increasing necessity for a global system of space traffic management.

**Prof. Setsuko Aoki's** presentation "In Search of the Current Legal Status of the Registration of Space Objects" initiated a lively discussion on the registration practice of States. Prof. Armel Kerrest (France) supported Prof. Aoki's observation that jurisdiction and control of a space object was not always exercised by the registering State and that, on the other hand, States exercised jurisdiction and control of a space object without registering it. He underlined the problem that – according to the definition of the "launching State" in the Registration and in the Liability Conventions – there can be up to four launching States but only one – the one which has registered – can exercise jurisdiction and control according to Article VIII of the Outer Space Treaty. The other launching States continue to be jointly and severally liable according to Article V, para 1, of the Liability Convention but cannot control it. Prof. Kerrest pointed out that a solution to this important problem can be found by using the agreements referred to in Article V, para 2, of the Liability Convention according to which the participants of a joint launching may apportion among themselves the financial obligations in respect of which they are jointly and severally liable.

**Prof. Frans von der Dunk** (US/Netherlands) expressed his reservations with regard to the practice of the Netherlands to establish two sub-registries in its national registry, distinguish-

ishing between space objects of which the Netherlands is a launching State and space objects on which it has jurisdiction and control. According to him, a State would be either a launching State or not. If it exercised jurisdiction and control over a space object it could not deny liability. Mario Hucteau (CNES, France) explained the French practice to inform the Secretary General about the nationality of customers of launches from French territory. The nationality – according to French legislation – was determined by the place of a company’s headquarter. He noted, however, that it was unclear if this notification had any legal effect.

**Prof. Mark Sundahl** (United States) shared his thoughts about “The Expansion of Private Activity in Space and its Impact on the Development of the International Law of Outer Space” with the audience and provoked a discussion of the role of private actors in the formation of customary international law. There was, however, general consensus that not the practice of private actors was decisive in this regard but the reaction of the States to that practice.

**Mr. José Humberto Castro Villalobos** (Guyana) discussed the important difference between binding norms and non-binding norms and their corresponding effects.

**Prof. Toshio Kosuge** (Japan) emphasized in particular the urgent need for binding instruments for the regulation of space debris. The discussion which followed focused on the important role of space agencies in this respect and the necessity of further coordination and cooperation between the space agencies and the States. Both would benefit from an enhanced sharing of experience and competence.

Further Information: <http://www.iafastro.com/?title=IAC2010>



## 19th ECSL Summer Course on Space Law and Policy 30 August - 10 September, Jaén, Spain

Alexander Schultmeyer

Eine der erfolgreichsten Aktivitäten des European Center for Space Law (ECSL), welches 1989 durch die Initiative der European Space Agency (ESA) gegründet wurde, ist der jährlich stattfindende „ECSL Summer Course on Space Law and Policy“. Dieser wird von ESA mit Unterstützung der jeweiligen Gastgeberuniversität organisiert. Ziel des zweiwöchigen Sommerkurses ist es insbesondere, Studierende für die Thematik Weltraumrecht und -politik zu begeistern und ihnen die Möglichkeit zu bieten, sich näher und umfassender mit dieser Materie auseinanderzusetzen.

Der diesjährige Sommerkurs fand in der kleinen andalusischen Stadt Jaén (Südspanien) statt und wurde von der Universidad de Jaén veranstaltet. Wir wurden im spartanisch ausgestatteten, aber zentral gelegenen Studentenheim am Campus untergebracht und konnten daher die Unterrichtsgebäude bequem zu Fuß erreichen. Die internationale Studentengruppe bestand aus 38 Studierenden und JungabsolventInnen aus 16 Nationen, darunter vornehmlich TeilnehmerInnen aus Europa (2 österreichische Studenten) aber auch aus Thailand, Kanada, den USA und Russland, was die positive Gruppendynamik noch beflügelte.

Der spanischen Lebensweise zum Trotz blieb uns leider nur wenig Zeit, das mitunter charmante Städtchen Jaén zu besichtigen. Die intensiven Unterrichtseinheiten begannen morgens um 9.30h und dauerten, mit etwas zu knapp bemessenen Pausen, bis 18.00h. Die Kurse wurden von renommierten ProfessorInnen sowie PraktikerInnen in Englisch gehalten und zumeist durch Powerpoint-Präsentationen unterstützt. Die Vorträge deckten fast das gesamte Spektrum des Weltraumrechts ab und boten eine Fülle an detaillierten Informationen, die Impulse für spannende Diskussionen lieferten. Allgemein war das Niveau der Vortragenden wie auch der Studierenden sehr hoch. Es wurde mehr als nur Basiswissen geboten.

Zusätzlich sollten wir im Anschluss an die Kurseinheiten, unterteilt in internationale Teams, ein Abschlussprojekt zum The-



ma „Satellite applications for the benefit of the Euro-Mediterranean cooperation“ erarbeiten. Hierbei war vorgesehen, dass eine neuartige und durchführbare Satellitenanwendung zum Nutzen der EUROMED-Zone gefunden wird und im Rahmen einer Präsentation einer Jury vorgestellt wird. Trotz der Unterstützung der Tutoren arbeiteten die Gruppen oft täglich (teils auch am Wochenende) bis in die Nacht hinein, um die Projektvorgabe umzusetzen.

Der negative Aspekt des Sommerkurses ist neben dem spärlichen Rahmenprogramm eindeutig der überaus vollgepackte





und dichtgedrängte Stundenplan, der für Gruppenaktivitäten und Entspannung abseits des Wochenendes kaum Zeit ließ und die sonst angenehm positive Atmosphäre ein wenig trübte. Der „ECSL Summer Course on Space Law and Policy“ ist daher sicherlich nicht als Urlaubsveranstaltung zu verstehen, bietet aber eine ideale Gelegenheit, sich ausführlicher und tiefer gehend mit dem Weltraumrecht zu befassen. Als großes Plus zu werten ist allen voran die Internationalität der Vortragenden sowie der Studierenden.

Ich persönlich nahm viele wertvolle Erfahrungen und Erkenntnisse sowie viele neugewonnene Freundschaften samt einprägsamer Erinnerungen aus Jaén mit. Ich kann Interessierte daher nur ermutigen, sich um die Teilnahme für den

### English Summary

The 19th ECSL Summer Course on Space Law and Policy took place in Jaén, Spain, and was hosted by the Universidad de Jaén. 38 students from 16 different nations (e.g. Europe, Russia, Canada, USA and Thailand) spent two weeks together and had lectures on topics related to space law and policy both by academics and practitioners. The high level classes often led both to intense and fruitful discussions and to the exchange



Sommerkurs zu bewerben, da ich vom Weltraumrecht faszinierter bin denn je.

of views and knowledge among students. Apart from the daily lectures, the students, grouped into international teams, had to elaborate a final project on the topic of „Satellite applications for the benefit of the Euro-Mediterranean cooperation“. The projects were submitted in paper form and then presented orally.



## “ ‘Soft Law’ in Outer Space - The Function of Non-binding Norms in International Space Law”, Conference, 2 April 2011

Karin Traunmüller

On April 2, 2011 the NPOC Space Law organized the conference “ ‘Soft Law’ in Outer Space“. The Function of Non-binding Norms in International Space Law” at the Faculty of Law of the University of Vienna. About 70 participants, among them experts in the area of space law, delegates of UNCOPUOS to the Legal Subcommittee that took place at that very period, as well as other interested legal experts and students attended the venue.

Non-binding norms have become popular in many areas of international law. The difficulty of formulating and enacting binding multilateral treaties, the diversity of States’ interests and the increasing importance of private actors on the international level have contributed to this phenomenon.

The term “soft law” is sometimes criticized as contradictive and inappropriate, but it is nevertheless still widely used. In the present context, it served as a term of reference to denote various texts and documents, such as “declarations”, “principles”, “guidelines”, “codes of conducts”, or “frameworks”, which have no legally binding force but which are nonetheless meant to influence the behavior of States and private actors.

Non-binding instruments are common in international environmental law, in the context of social governance and the protection of indigenous people, as well as in international



economic law. As regards outer space, non-binding norms have played an important role from the very beginning of space activities. The Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space of 1963 is a good example of how a non-binding instrument, such as a UN General Assembly resolution, may develop into a binding instrument, namely into the Outer Space Treaty of 1967. Furthermore, after the conclusion of the five UN treaties on outer space, UN General Assembly resolutions have been widely used to interpret the treaties and to further develop guiding principles for States carrying out space activities. With the emergence of new space faring nations and the privatization and commercialization of space activities other instruments followed.

The conference’s aim was to clarify and discuss the role of soft law in outer space. It consisted of two main parts: the first part dealt with “General Considerations” on the role of soft law in international law and in international space law. The function of soft law in the international legal system in general and for the development of international space law in particular was analyzed. Issues like the role of soft law in the making of international customary law and international treaty law as well as compliance, verification and monitoring were addressed, as well as the role of non-state actors in the creation and



application of soft law. Another focus was the interaction of soft law and national law. Furthermore, the speakers discussed the role of soft law for standard-setting and its consequences for liability.

The second part was dedicated to "Special Issues" in relation to specific non-binding international instruments concerning space activities. Several instruments were analyzed in view of their regulative effect on the conduct of States and private actors. These instruments include UN General Assembly resolutions (Direct Broadcasting, Remote Sensing, Benefits Declaration, Concept of the Launching State, Registration Practice), Guidelines (Space Debris Mitigation Guidelines), Codes of Conducts (e.g., Hague Code of Conduct against Ballistic Missile Proliferation, European Code of Conduct) and Frameworks (e.g., Safety Framework for Nuclear Power Sources). The analysis of the specific instruments took up and reflected the general aspects addressed in the first part.

The conference was opened by two presentations concerning the general question of the Role of 'Soft Law' in Public International Law, and, more specially, in International Space Law. In his presentation "The Role of 'Soft Law' in Public International Law", Steven Freeland (Australia) analyzed the general function of soft law instruments, examining their different legal status and effect. The speaker pointed out the increasing use of soft law in the development of international law. However, he warned that given instruments should not be regarded as legally binding, as they are not. The most effective legal means still remain multilateral treaties.

**Setsuko Aoki's** (Japan) presentation "The Function of 'Soft Law' in the Development of International Space Law" con-



dered various functions of soft law rules: the substitution of a treaty, the avoidance of the time-consuming treaty-making for highly-technical agreements which need to be adopted or updated as promptly as possible, and, finally, the avoidance of a North-South confrontation. The speaker then evaluated if soft law was sufficient for the maintenance of the order of space activity, and came to the conclusion, that although treaties still matter, it would be possible that a new source of international law, similar to 'international regime', based on some of the soft law rules could emerge.

**Marco Ferrazzani** (Italy) discussed "Soft Law in Space Activities" and characterized the international institutional environment for various activities. He pointed out that most of the space institutions elaborate "soft-law-documents", with which the international community, in general, complies. As new, non-state actors that lacked the capacity to conclude and sign treaties emerged in space law, soft-law instruments became more important. After pointing out some examples, the speaker concluded that although there is no enforcement of non-compliance with soft-law norms, they work well and are, in general, followed by the States, because important economic incentives exist to comply with the standards.

After this general introduction, the speakers turned to more specified problems and questions. Carsten Wiedemann (Germany) gave a predominantly technical presentation on space debris and the peril emerging from it. At the outset, he showed graphics about the number of existing space debris in outer space: in 2005, 44 000 objects larger than 5cm, 600 000 objects larger than 1 cm, 150 million objects larger than

1 mm, and 6000 billion objects exceeding 0,1 mm were orbiting around in outer space. An especially high risk for collisions exists in the sun-synchronous orbits (SSO), where the number of space debris and the collision velocity is very high. It is this combination of factors that lead to an increased probability of catastrophic collisions. It is in this SSO, where the so-called "collisional cascading" (Kessler Syndrom) will start. It may therefore be necessary to start removing existing objects actively. Wiedemann pointed out some of the existing scientific, technical and legal parameters and the question of responsibility for collisions.

**Irmgard Marboe** (Austria) turned to the consequences of the violation of soft law norms in her presentation "The Importance of Guidelines and Codes of Conduct for Liability of States and Private Actors". As some soft law norms contain guidelines and standards to prevent harm from third persons and property, the causation of damage due to non-compliance with those standards could be an indicator for a negligent behaviour. Thus, the violation of soft law norms could be taken as evidence of fault in order to establish liability. She then analysed the concept of 'fault' in various jurisdictions (Common Law, French Law, German Law) and explored if this could be useful for interpreting the term in the area of space law.



**Fabio Tronchetti's** (Italy/China) presentation "A Soft Law Approach to Prevent the Weaponization of Outer Space" dealt with the risks emerging from the weaponization and the advantages and problems related to the hard law approach, that the speaker demonstrated using the example of the Draft

Treaty on the Prevention of the Placement of Weapons in Outer Space and of the Threat or Use of Force against Outer Space Objects (PPWT) of 2008. Finally he concluded that hard law and soft law efforts should be complementary. The prevention of an arms race in space should be the primary goal of the international community, which could be achieved through transparency and confidence building measures (TCBM).

The presentation "The European Union's Initiative for a Code of Conduct on Space Activities: A Model of Soft Law for Outer Space?" by **Jean-François Mayence** (Belgium) raised the question to what extent the current European Union's initiative for an International Code of Conduct on Space Activities could constitute a model. As some of the biggest space-faring nations have stated that they did not intend to conclude binding instruments of international law in the field of space activities, soft law could offer a fair substitute.

**Joanne Gabrynowicz** (USA) focused on "The UN Principles Relating to Remote Sensing of the Earth from Outer Space". After giving an overview over the development of the Principles, she pointed out that parts of them have been adopted in some national laws and policies and are applied by some of the remote sensing nations to their own activities. The speaker further discussed the probability of the UN Principles as a "Way Station" to a treaty or custom. She concluded that as remote sensing law relates to environmental matters, and the recognition of soft law in this branch of law is prevalent, it was likely that soft components would be recognised. The soft law discussion signals changes towards globalization as well as changes occurring in the modern Nation-state system.

**Franz Koppensteiner** (Austria) dealt with the "1982 UN Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting". After an historical overview of regulations concerning satellite broadcasting, an analysis of the content and legal nature of GA Res 37/92, and a critical review of the Principles contained, he concluded that the concept of free flow of information was underestimated. This, in the opinion of the speaker, seemed to be the most important reason, why Resolution 37/92 had remained "soft law". The existing principles would therefore need a reformulation in the future, preferably in the direction of favouring the freedom of broadcasting to better meet the requirements of today's globalized world, on the one hand,



and a specification of the limitations, on the other hand.

**Kai-Uwe Schrogl's** (Germany) critically analyzed the work of the Legal Subcommittee in his presentation "Launching State and Registration Resolutions as 'Kick Off' for a New Phase in Space (Soft) Law Development", pointing out that no legally binding document has been adopted there since 1996. According to him, the adoption of Resolution 59/115 of 10 December 2004 "Application of the concept of the 'launching State'" and Resolution 62/101 of 17 December 2007 "Recommendations on enhancing the practice of States and international intergovernmental organizations in registering space objects" "rescued" the Legal Subcommittee from complete inactivity and led to the formal agreement amongst states that specific issues in this area need to be resolved. Schrogl underlined the urgent need of changes in the working method of the committee and proposed rather integrated working groups dealing with specific issues from technical as well as legal perspectives in order to approach urgent topics in the future instead.



**Ulrike Bohlmann** (Germany, ESA) and **Leopold Summerer** (Austria, ESA) turned to the STSC/IAEA Safety Framework for Space Nuclear Power Source Applications that aim to protect people and the environment in Earth's biosphere from potential hazards associated with relevant launch, operation and end-of-service phases of space nuclear power source applications. After providing a general introduction to the subject of the use of nuclear power sources in outer space activities, the speaker provided an overview and analysis of the STSC/IAEA Safety Framework for Space Nuclear Power Source Applications and its potential impact on the practice of space-faring nations.

As last speaker, **Ben Baseley-Walker** turned to the international reactions to both the concept of non-binding norms in general, and to current soft law space security initiatives in particular in his presentation "Analyzing International Reactions to Soft Law Initiatives on Space Security". Mr. Baseley-Walker elaborated several questions that had to be addressed as soft law can play a critical role for predictability, stability and security in outer space. Beside the need of a clear definition of the purpose of soft law initiatives for space security, it has to be clarified where soft law mechanisms can be discussed and promulgated. New approaches are needed in order to fashion international agreement and to work towards best to safeguard the continued utility of space for all actors in the long-term.

The outcomes of the conferences will be published in a book that will come up in autumn 2011.

## AUSBLICK *prospect*

11 July - 9 September 2011	ISU Space Studies Program 2011 (TU Graz)
19 - 28 July 2011	Summer School Alpbach „Star Formation across the Universe“, Alpbach (Tyrol), Austria
8 - 11 August 2011	AIAA/USU Small Satellite Conference, Logan, UT, United States
29 August - 9 September 2011	20th ECSL Summer Course on Space Law and Policy, Rijeka, Croatia
8 - 9 September 2011	Leuven Centre of Global Governance Studies , University of Leuven, Leuven, Belgium. Workshop on “Militaryization of Space: International Legal Perspectives”, September 2011
13 - 16 September 2011	United Nations/Austria/ESA Symposium on the Use of Small Satellites for Sustainable Development “Implementing Small Satellite Programmes: Managerial, Regulatory and Legal Issues”.
14 - 15 September 2011	5th ESPI Autumn Conference. ESPI, Vienna, Austria
21 - 23 September 2011	1st International Conference on Space Access, Paris, France
3 - 7 October 2011	62nd International Astronautical Congress (Cape Town – South Africa)
4 - 6 October 2011	20th World Finals of the Manfred Lachs Space Law Moot Court Competition , Cape Town – South Africa
17 - 19 October 2011	5th IAASS Conference „A Safer Space for a Safer World“. Versailles, Paris, France



The image shows the cover of a brochure for the Austrian Space Applications Programme (ASAP) 2010. The top half has a light blue background with the logo of the Federal Ministry for Transport, Innovation and Technology (bmvit) in the upper right. The title 'Austrian Space Applications Programme' is centered, followed by the ASAP logo '>asap>' and the text 'Projects - 5<sup>th</sup> and 6<sup>th</sup> Call for Proposals'. A large, faint '2010' watermark is visible in the background. The bottom half features a satellite in orbit over a mountainous landscape, with several lines representing satellite signals. The website 'www.bmvit.gv.at' is at the bottom left, and the FFG logo is at the bottom right. A vertical label on the right edge reads '> EDITION 1 > 2010 >'. Three small white circles are positioned at the bottom center.

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**Austrian Space  
Applications Programme**

**>asap>**

**Projects - 5<sup>th</sup> and 6<sup>th</sup> Call for Proposals**

2010

Photo: ESA, Image by ACS/Merlot/CCO, tracked by GPS satellite

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[www.bmvit.gv.at](http://www.bmvit.gv.at)

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