

# ECSL

European Centre for Space Law

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## *A Word from the Chairman*

*ECSL's next biennial General Assembly will be held at ESA Headquarters on 20 June 2005.*

*The General Assembly has always played an important role in ECSL's history, providing as it does the opportunity to verify implementation of the measures previously agreed, and to determine whether what is planned is in accordance with the aims of the Charter and so on.*

*This time, as on previous occasions, a number of reports will be presented to the Assembly, which will also be required to elect Board members and take decisions on future actions. I would like to draw attention to a matter of some importance for the future of the ECSL, that is to say its enlargement to take into account interest from central and eastern European countries, and the accession of new ESA Member States (taking the number of Member States to seventeen). We have witnessed the interest shown by central and eastern European countries in ECSL activities through their participation in the Moot Court Competition and Summer Course. This enlargement, which must be carried forward without undue haste, can only enrich ECSL's potential and its responsibilities with respect to promoting knowledge of space law, and thereby strengthening Europe's position within the international community.*

*In addition, the Board will propose a slight amendment to the Charter so as to place emphasis on the first level of responsibilities, that borne by national communities, within the whole. Once this first level is in place, it will be easier to prepare the next level, namely National Points of Contact (NPOCs).*

*A two-year period now lies ahead which must be devoted to serving the aims of the Charter, namely to develop knowledge of space law among various groups including academics, scientists, practitioners and students. Greater representation and participation on the part of these various groups is desired (and indeed, their participation was greater in the past). Also, the closest possible links must be formed with similar mechanisms already in existence or yet to be set up in other regions of the world.*

*We must continue to add and improve the space law database (I invite everyone to visit the site and create forums for the exchange of ideas), to be present at the Manfred Lachs space Law Moot Court Competition, the Summer Course and the Practitioner's Forum. These efforts would require qualified 'human resources' and dedication.*

*I very much hope, therefore, that you will all be able to attend on 20 June to share your ideas for the coming two years.*

**Dr G. Lafferranderie**  
**(ECSL Chairman)**

# Project 2001 Plus Global and European Challenges for Air and Space Law at the Edge of the 21st Century

## Workshop on “Current Issues in the Registration of Space Objects”

Berlin, 20-21 January 2005

### I. Introduction

The Project 2001 Plus workshop on “Current Issues in the Registration of Space Objects” took place on 20-21 January 2005 in Berlin. It was the last in the series of dedicated events within the framework of “Project 2001 Plus - Global and European Challenges for Air and Space Law at the Edge of the 21st Century”. Overall scientific project management was in the hands of Prof Dr Stephan Hobe, LL.M. (McGill), Director of the Institute of Air and Space Law of the University of Cologne. The workshop was co-chaired by Dr Kai-Uwe Schrogl, German Aerospace Centre (DLR) and Gabriel Lafferranderie, European Space Agency (ESA). The workshop was attended by a selected group of experts in this field, comprising representatives from ministries, space agencies, universities and space industry.

### II. Objective and Structure of the Workshop

The workshop took place at a very crucial moment in time regarding the discussion of the registration of space objects. In April 2005 the Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) is expected to establish a three-year working group on the issue of “Practice of states and international organisations in registering space objects”. This working group will discuss, on an inter-governmental level, all relevant aspects of the registration practice. The Project 2001 Plus Workshop on “Current Issues in the Registration of Space Objects” thus had the objective to support the respective policy debate and to provide substantive scientific input by developing recommendations, steps and measures that could be taken to ensure compliance with, and enhancement of, the effectiveness of the Registration Convention (RegConv), and to strengthen national legislative norms relating to the registration of objects launched into outer space. In the course of the workshop it was envisaged to discuss not only abstract legal problems, but also practical examples relating to the registration of space objects.

The workshop was structured into four sessions dealing with various aspects related to the registration of space objects:

- Session I: Introduction
- Session II: Policy issues - different ways of interpreting the Registration Convention
- Session III: The application of the Registration Convention – specific problems
- Session IV: Other and future issues in the registration of space objects

Each session provided presentations by outstanding experts in the specific field and was followed by a discussion on the relevant issues.

### III. Summary of Achieved Results

The workshop was successful in fulfilling its objectives: an up-to-date reflection on all implications of the question of registration of space objects, as well as a set of recommendations to tackle identified problems and shortcomings. The following section contains a brief summary of findings and conclusions reached in the four sessions. The official results of the workshop as well as the papers presented will be published within the proceedings series of Project 2001 Plus.

#### Session 1: Introduction

- *UN Register* is the main source of information provided by governments and international organisations on all types of space objects
- all states involved in the launch or operation of space objects should become party to RegConv (accession of states to ESA and EU)
- online index provided by the OOSA through its website could be a useful reference tool for information provided to the UN under the RegConv and Res. 1721 B (XVI)
- *national registration* is equally necessary and important
- all data contained in the international register should appear in the national registry (e.g. Art. IV RegConv as “*minimum-standard*” to gather information necessary for international registration)

- designation of national focal points for national registries to facilitate exchange of information between those who maintain national registries and OOSA
- establishment of national registries on websites and the establishment of links between the UN Register and national registries

#### Session 2: Policy issues

- disparity exists in format and content of information provided between parties registering space objects
- examples of NL, UK show special ways of interpreting the RegConv
- interpretation of “*procurement*”, Art. I lit. a RegConv, with regard to space objects launched by private entities needs to be considered
- Member States should study their respective national practices to identify possible areas of improvement and harmonisation (e.g. use COSPAR international designator, use GMT/UTC)

#### Session 3: Specific issues

- *change of ownership* in space and state of registry is a relevant issue
- relevance of the concept of transfer in orbit for identification of the state responsible for registration
- little reliability of UN Register for industry needs (cross check with other sources e.g. ITU)
- role of “*inter-party agreements*” Art. II (2) RegConv: agreements necessary in case of two or more launching states to determine state of registry
- guidelines necessary to guarantee unified approach – framework agreement?
- different needs of information on registration of *launcher and payload*
- concept of “*launching state*” in particular of the term “*procurement*” has to be considered in this context
- the term *space object* needs clarification (e.g. functional/non-functional objects)
- practice of International Satellite Organisations needs further clarification; adherence of IGOs (expectation at least to follow UN Res. 1721 B)

#### Session 4: Other and future issues

- no relationship between the UN Register provided by OOSA and the catalogues provided by COSPAR and ITU
- different objectives, different registration requirements
- however, links might be established through the OOSA website to other international registers containing information on space objects, e.g. ITU.

- *space traffic management* will be needed in future with broadening space activities to guarantee safe interference-free access into outer space, operations in outer space and return from outer space to earth
- improvement of the RegConv in a substantial way needed for developing comprehensive system for space traffic management

- development of pre-launch notification system (e.g. building on the Hague Code of Conduct against Ballistic Missile Proliferation)

Stephen Mick  
Senior Research Associate  
Institute of Law of the University of Cologne  
Coordinator of Project 2001 Plus and  
Rapporteur of the Workshop

## Global Monitoring for Environment and Security – A New Way of European Cooperation

The Global Monitoring for Environment and Security (GMES) has, along with the European Galileo Satellite Positioning System (GSPS), been identified as a priority area for cooperation between ESA and the EU<sup>1</sup>. GMES, together with the Galileo project, will combine both space and terrestrial equipment in order to support a wide range of European civil policies and to meet specific and practical user needs.

The year 2008 has been set as a target date for the operational use of both GMES and Galileo services and technologies. In the near future, with the full implementation of both the navigation programme and the global monitoring system, Galileo and GMES will operate in synergy with complementary duties. After 30 years, during which space was seen as a special separate and exclusive activity, apart from other European activities, the time has come to perceive and use space systems as an instrument for political, scientific and economic leadership. The evolution is reflected in the increased institutional relationship between ESA and the EU. This new perception is well demonstrated in the GMES programme, which will be developed by ESA and the EU in close cooperation with Eumetsat and the European Environment Agency (EEA), as well as other governmental and non-governmental organisations in Europe interested in data and information available from the new space program. The GMES initiative, proposed in May 1998 at the first intergovernmental meeting in

the “Baveno Manifesto”, was adopted jointly by ESA and EU in 2001<sup>2</sup>. The common objective defined is to develop and bring into operational service a European independent capacity for global monitoring of environment and security.

GMES, focusing mainly on the use of Earth observation satellites, is not just a space programme. Its final aim is to integrate all available data and information (i.e. remote sensing sources, *in situ* measurement networks and socio-economic data sources) in order to support sustainable development policies from the global to local level, with particular regard to the protection of the environment, the management of natural resources and public security. At a global level, GMES will contribute to the verification and implementation of international environment treaties such as the United Nations Framework Convention on Climate Change<sup>3</sup> and its Kyoto Protocol<sup>4</sup>. It also represents an important contribution to the Global Earth Observation (GEO) launched by the US. At the European level, GMES will support European strategies in the fields of environment, transport, agriculture, development and foreign policy. Finally, at a local level, GMES will help national governments to understand major environmental problems, as well as to improve the management of catastrophic events (e.g. floods, earthquakes, forest fires).

GMES will deliver a continuous flow of real-time data about any part of the globe, in compliance with international law. The

first step to meet policy needs is the identification and the development of a wide range of services based on space and *in situ* data. Another important issue from the users’ perspective is data integration and information management, which are related to user access and the sharing of information.

By now the GMES programme has reached a rather advanced stage. The Fourth GMES Forum, again held in Baveno in November 2003, marked the end of the GMES Initial Period and the beginning of the implementation phase. This assembly, an annual event since 2001, represents the main platform of interactions where all parties, involved in producing and using information for environment and security, meet and discuss how to coordinate different European initiatives with due regard to user needs. Users can be public institutions, private enterprises, the scientific community and individuals.

The Forum published a Final Report<sup>5</sup>, based upon the progress and experiences gained during the Initial Period, which outlines a series of pilot requirements directed towards the implementation of the GMES structure, and indicates the way of fostering the partnership among all the relevant players. This report was drafted by a joint EC-ESA team and further reviewed by the EU and ESA. Member States in the ad hoc GMES Steering Committee<sup>6</sup>. According to the report, the Commission of the European Union adopted, in

<sup>1</sup> COM (2003)673, White Paper “Space: a New European Frontier for an Expanding Union. An Action Plan for Implementing the European Space Policy”, Brussels, 11 November 2003.

<sup>2</sup> ESA/C(2001)45, “The Implementation Proposal for GMES”, 12 June 2001; COM(2001)609 final, “Outline GMES EC Action Plan- Initial Period (2002-2003)” Luxembourg, 23 October 2001.

<sup>3</sup> Convention-Cadre des Nations Unies sur les Changements Climatiques, New York 1992.

<sup>4</sup> Protocole de Kyoto à la Convention Cadre sur le Changements Climatiques, 1997.

<sup>5</sup> “Final Report for the GMES Initial Period (2001-2003)”, 10 February 2004. web site <http://www.gmes.info>

<sup>6</sup> COM(2001)609 final, op.cit, p.13

February 2004, a communication establishing the GMES Action Plan for 2004-2008. This Action Plan addresses challenging institutional issues and funding strategies to implement future GMES capacity: defining a management structure similar to the Galileo joint undertaking to be put into place before the end of 2005, establishing a detailed data policy framework for 2005, designing space components and investigating feasibility of new technologies for 2006, and improving data integration

management for 2008. Until 2006, resources will be founded by the thematic priorities of the Sixth Framework Program and the GMES Services Element (GSE) which is part of the Earth Watch Programme.

Currently, all GSE activities are conducted by the European Space Research Institute (ESRIN). The role of ESRIN is particularly relevant for the establishment of a series of new *consortia* working for different selected priority areas such as the monitoring of

climate change and air quality, as well as the support given to civil protection for forecasting and management of natural and technological hazards. The urgent need of effective implementation has reached a new dimension by the tragic event of the catastrophe in South Asia (26/12/2004), which demonstrates the impellent necessity to improve adequate forms of future cooperation in regard to environment and security.

Marianna Morelli

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## Report on the 2005 ECSL Practitioners' Forum

The 2005 ECSL Practitioners' Forum was organised on 18 March at ESA Headquarters, by the ECSL (Mr A. Marchini), in cooperation with the two Chairs, Prof F. Lyall (University of Aberdeen) and Dr F.G. von der Dunk (International Institute of Air and Space Law, Leiden University). The theme was "New Developments in the Field of (Satellite) Telecommunications"; some 45 participants from various institutional, commercial and academic professions listened to the presentations and joined the discussions.

After some welcoming words on behalf of ECSL by Prof S. Marchisio (University of Rome "La Sapienza" and ECSL Vice Chair), Prof Lyall, as Chair of the morning session, introduced the theme. He referred to the fact that progress in telecommunications and information technology continues at a fast pace. Convergence of technology consequently poses problems of regulation, while commercialisation and market developments have added to the need for legal responses.

Then, the first speaker, Dr P. Mancini (Applications Strategy Manager, ESA, Paris), dealt with "Satellite communication applications in ESA". He discussed the general rapid progress in telecommunications from analogue to digital (1998) to multi-media (2000), leading to issues such as the breakdown of technical barriers

resulting in legal barriers being undercut. Integration also of navigation and telecoms (and even weather forecasts) is a further consequence of digitalisation. Whilst ESA is working in satcom applications, it should be noted that downstream most of the business is generated; thus, ESA's role would be to develop and secure capability in partnership with the user community. He then went into some detail as to the key service parameters involved (band-width, contention ratio, latency and asymmetry), service requirements (robustness, availability, ubiquitous coverage area (a clear-cut advantage of satellites!) and interoperability) and security issues involved in satcoms, with ESA effectively entering dual-use areas. Finally, he noted that ESA has developed data relay programmes like ARTEMIS, EGNOS and Galileo, and has managerial expertise in the area of major space infrastructure projects.

The second speaker was Dr S. Mosteshar (Mosteshar Mackenzie, San Diego/London), on "The WTO Telecommunications Services Protocol and satellite communications". He discussed the role of the WTO in the telecoms sector through the realisation of a series of market-opening arrangements (commitments), pointing out that telecoms was special within the WTO and GATS context: it is not only a generator of economic activity itself but also a facilitator

of other economic activities (e.g. financing). Then he discussed the legally difficult issue of definitions, where even "basic telecom services" was not defined in the GATS context! In practice the term used to comprise only voice telephony, but that interpretation has gradually shifted. Satcoms had been effectively included only by means of 1997 Chair's note on this issue, precisely since there was uncertainty and inconsistency in the commitments. Some states referred to satcoms explicitly, others deemed them included implicitly. As a consequence of such uncertainties, a lot of regulatory discretion was maintained at the national level. He gave the example of Brazil, which allows a foreign satellite service to be offered to a user in Brazil only if the *user* could show that that foreign service was better, technically, operationally and commercially speaking, than any Brazilian service available. Similar confusion arises in the area of broadcasting, specifically excluded by the GATS Annex, which caused e.g. the United States, where the legal borderline between broadcasting (DTH) and other telecom services is far less clear, to consider a reservation necessary to that part of the commitments. Finally, he remarked that too often the reservation allowed with regard to the opening up of national markets, making it subject to availability of spectrum, opened the door to abuses and circumventing the intention of the commitment system.

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<sup>7</sup> COM(2004) 65 final, "Establishing a GMES Capacity by 2008 – Action Plan (2004- 2008)", Brussels, February 2004.

<sup>8</sup> Public Information Note (EW-GSE-EOAD-INFO-02-0001), "ESA Earth Watch Program GMES Services Element", July 2002; Statement of Work (EOCP-GSE-EOADS-SW-02-0001), "Service Consolidation Actions of Earth Watch Gmes Services Element", September 2002. Web site [www.earth.esa.int/GMES](http://www.earth.esa.int/GMES).

The last speaker in the morning session was Prof P. Achilleas (University of Paris-Sud XI), on "The Digital Divide and the World Summit on the Information Society (WSIS)". He pointed out that there are actually two types of 'digital divide' concepts to be used and analysed: one applying between cities and rural areas, the other applying between industrialised and developing countries. In either case, the legal principles applied for efforts for bridging the digital divide concern the freedom of information and the universal service obligation (speaker referred to the 1996 WTO reference paper on basic telecoms and the 2002 EU Universal Services Directive for that purpose).

In the context of the World Summit on the Information Society (WSIS) the issue of the digital divide has been discussed twice: in Geneva in December 2003 and in Tunis in November 2004. This resulted in two documents. Firstly there was the Declaration of Principles: the ideal of a people-oriented and development-oriented information society was posited, the freedom of information reaffirmed, confidence building on the use of information and communications technologies was promoted, the promotion of cultural identity and diversity should be taken care of, as was the case with the promotion of the proper ethical dimensions, and finally the promotion of international and regional co-operation. Secondly there was a Plan of Action, with a timeframe running until 2015. Apart from the technical issue of access there is the social issue of what to do when you *do* have access – e.g. to Internet, when most people targeted in the developing countries are illiterate. Finally, he pointed out that the Universal Services Directive was focused on commercial market issues; it is not for the companies to provide access to universities, schools and suchlike, that would be a different matter, being dealt with by the relevant EU plan.

After the lunch, with Dr von der Dunk as Chair, the afternoon session on "The Business Perspective" was opened by Dr D.W. Sagar (London), speaking on "Supervision of privatised former telecommunication organisations". Dr Sagar pointed out that in the old International Satellite Organisations (ISO's) the concept of 'public service' was right there up front, and referred also to UN Resolution 1721 in this context. Thus, e.g. Inmarsat had been subject to five types of obligations under the old,

intergovernmental structure which could be qualified as 'public service': to provide the Global Maritime Distress and Safety System (GMDSS) established by the International Maritime Organisation (IMO); to provide all its services without discrimination in particular on the basis of nationality; to act exclusively for peaceful purposes; to seek to serve all areas where there is a need for mobile satellite communications; and to operate in conformity with the principles of fair competition.

With the privatisation of Inmarsat in the time-frame 1999-2001 and the ensuing creation of the private operator Inmarsat, great care was taken to ensure that these 'public service' type of obligations would be maintained. This was taken care of by means of clear-cut obligations resting upon the private operator as laid down in a Public Service Agreement, monitored and supervised by the International Mobile Satellite Organisation (IMSO), a transformed version of the old intergovernmental Inmarsat. Since 2003/4 however, the majority of shares in Inmarsat was no longer held by the 'old' (P)TO's, but by venture capitalists with little inherent sympathy for maintaining the public service obligations (with the exception of GMDSS); as a consequence, the system was coming under growing strains.

Similar to Inmarsat, in the case of Intelsat there had been two 'public service'-like obligations secured in the Agreements. This concerned the Lifeline Connectivity Obligation (LCO), i.e. the obligation to continue to provide services at an essentially unchanged levels to those dozens of states which depended exclusively upon Intelsat for their international telecom links – for a period of 12 years from the moment of privatisation onwards – and of global connectivity and coverage. Analysing recent developments, he concluded that the burden for public service obligations was now shifted away largely from the companies to the supervisory intergovernmental organisations.

As a second speaker, Mr C. Janvier (Legal Adviser with Eutelsat) provided an "Update on the evolution of Eutelsat S.A. in a post-privatisation context". He briefly introduced Eutelsat, as the current #3 of satcom operators worldwide, with 23 satellites in orbit and annual revenues at a level of 760 M €. Eutelsat services were strongly focused on TV and video, using a

distributor network for reselling satellite capacity to PayTV operators or TV channels. Mr Janvier then discussed the process of privatisation which had more or less been finalised as of July 2001, with a Convention amended as of May 1999 finally entering into force in November 2002, a Transfer Agreement, and an Arrangement for the relationship between the 'old' Eutelsat (which did not cease to exist directly) and the newly privatised Eutelsat. As of 31 December 2004, more than 85% of Eutelsat share capital was owned by financial investors, thus corroborating the evaluation by the previous speaker. Finally, he focused on the regulatory changes having come about since 2001 and some resulting problems for Eutelsat; such as a 1986 French law on the freedom of communications as to content; and the four basic principles to be guaranteed by EUTELSAT which could be considered 'public service' obligations: the provision of universal service for telephony and broadcasting; the provision of its services with a pan-European coverage; non-discriminatory treatment and compliance with applicable rules of fair competition.

The third afternoon speaker was Mr J. Purvis (Vice President Corporate and Legal Affairs, SES Global), on the question "Is European law preferring technologies alternative to satellite?". Mr Purvis started by pointing at the long and very beneficial track record of the European Commission in promoting space and satellite policies, running from the Green Paper in 1990 through the 1994 Satellite Directive to the current Space Strategy, Galileo, GMES and other initiatives. He specifically mentioned the 2003 White Paper on European Space Policy and the December 2004 speech by Commissioner Verheugen.

Discussing current developments in the market next, he turned to the issue of the 'digital switchover', i.e. the transition from analogue to digital television where multiple and sometimes competing technological solutions remained available. He pointed at the policy of technology neutrality which was key to EU policy and law in this respect, promoting and encouraging the establishment and development of trans-European networks, the interoperability of pan-European services and end-to-end connectivity. Moving from the legal theory to the practice of implementation, he dealt with two state aid cases currently under investigation in this respect. As of July

2004, in state aid cases NN 35/04 and NN 36/04 the Commission initiated formal investigation procedures against Germany and Sweden for not being technology-neutral and effectively favouring terrestrial operators over cable and satellite systems. In the German case this concerned the state-supported roll-out of DVB-T in the state of Berlin-Brandenburg, resulting in distortion of competition between the various providers of transmission services. In the case of Sweden, the state-owned company Teracom/Boxer is providing the relevant transmission service, whereas part of the network is financed by and the public broadcaster SVT. Further, similar cases in Austria and Italy were also mentioned.

The final speaker was Dr M.H. Pichler (Ortner Pösch Foramitti Law Offices, Vienna), who discussed the topic of "Running a satellite telecommunications legal service: opportunities and problems". She pointed, in particular, to the need of clarity of laws and policies, a key to any effort at enhancing the regulatory environment for satellite operators, which have increasingly become privatised and commercialised. Otherwise, sponsors and financiers of satellite projects would face such detrimental prospects as unforeseen delays for regulatory reasons, lack of adequate financing for lack of adequate securities for the financiers, and significant operational risks as a result. This concerns both international telecommunication regulations and national licenses and concessions.

The speaker further noted that telecom regulations were essentially of two kinds: technical and economic. Here, the International Telecommunication Union (ITU) was the main body at the international level regulating for technical purposes; whereas the World Trade Organisation (WTO) took the lead when it came to international economical

regulation. At the European level in addition there were a set of satcom-related directives, but even so, Member States still maintained their sovereign rights to license, and certain states even started to apply spectrum use tariffs (e.g. leading to auctioning of spectrum).

As to the financing issue, finally speaker dealt briefly with the UNIDROIT efforts to arrive at a space assets protocol, including an international register for securities in satellites – which had to deal in that context also with the issue of 'public services' and the risks posed to such services by operators going bankrupt and the relevant assets being taken over by the financiers.

Since the last speaker briefly touched upon the issue of auctioning telecom frequencies, the discussion largely focused upon that issue as well. Various potential risks respectively benefits of somehow pricing satellite frequencies were posited, as well as the legal complications in view of satellite frequencies being coordinated but not being given in 'ownership' at the international level by the ITU, and the ensuing 'downstream' duties of ITU member states to respect that international system in their national frequency policies.

As a result of these discussions, the debate then turned to a discussion of other possible ways to economically value frequency spectrum for the purpose of making commercial operators somehow pay for their entitlement to use of something generally considered to be a limited resource of great public value. For example, it was proposed to levy a charge depending upon how successful the spectrum/business performs, instead of applying auctioning up front. One main problem with auctioning which would thus be circumvented was the snapshot character of it, as a consequence of which

it was in reality not really technology-neutral and not a very efficient way of valuing scarce resources. Finally the Chairs offered some concluding remarks. Most fundamentally, in the context of the dichotomy of public/universal services versus commercial interests a shift from the 'left' side to the 'right' side was detected. Also, it had become clear that commercial services as such will *not* likely fulfil the aim of providing public services through the force of the market alone (with reference in particular to the US example). Perhaps then one would need to go back to the public financing of an infrastructure for digital divide purposes, like the old Intelsat and Inmarsat constructs, or like nowadays Galileo and GMES were at least partially envisaged (reference was had here also to the ESA applications programme).

As a consequence of privatisation and their becoming private, relevant operators now found themselves naturally running up against more 'classical' regulatory obstructions, which might not have much to do with convergence, digitalisation or public/universal services. The discussion on the regulatory issues Eutelsat is facing was a clear example of this phenomenon. Further to that, privatisation also meant that governments will (tend to) again individually assert their authority, e.g. in areas such as licensing – the example of service provision for Bulgaria requiring a French license to use Eutelsat capacity being a particularly prominent one, but also the competition law issues proper which e.g. SES was now facing. In sum: the future, revised – or should one say reinstated – role of regulatory authorities *vis-à-vis* private enterprise was becoming of crucial importance again; the 'auctioning issue' perhaps representing the most topical subject matter to be dealt with currently...

Dr Frans G. von der Dunk

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## Manfred Lachs Space Law Moot Court Competition - European Round Results

The ECSL organised the European Round of the Manfred Lachs Space Law Moot Court Competition at the Surrey Space Centre, University of Guildford, United Kingdom, 4-5 April 2005.

This year, nine teams had registered: Leiden University (the Netherlands); Warsaw University (Poland); Moscow State Institute of International Relations (MGIMO) University, Russia); University of Aberdeen

(United Kingdom); University of Bremen (Germany); University of Cambridge (United Kingdom); Catholic University of Lublin (Poland); University of Jaén (Spain); and Kyiv International University (Ukraine).



*The Judges, first row, from L: Dr Oliver Ribbelink (TMC Asser Institut, The Netherlands), Mr Hermann Ersfeld (EADS, Germany), Mr Walter Thiebaut (ESA), Prof. Elisabeth Back Impallomeni (Università di Padova, Italy), Mr André Farand (ESA), Prof. Philippe Achilleas (Université Paris XI, France).*

The teams pleaded as applicant (Deltastan) and as respondent (Gammaland) and knowledgeably defended their arguments in front of very demanding judges. The case (available in issue 28 of the ECSL Newsletter and on the official website of the competition, <http://www.spacemoot.org>) concerned the international liability, as well as many other aspects of space and international law.

The pleadings were of remarkable quality and students proved to have a good command of space law. The number of registered teams is also encouraging since it shows that there is a growing interest for this kind of events in Europe.

Indeed, the Manfred Lachs Competition represents a unique opportunity for students to gain moot experience at the international level, and to test and improve court skills. Moreover, it is worth

recalling that the competition has the distinction of having the world finals judged by the three judges of the International Court Of Justice (ICJ).

However, back to this year's results. The ECSL warmly congratulates the team from the University of Cambridge, UK (Coach: Prof James Crawford) which won this year's European Round of the Manfred Lachs Space Law Moot Court Competition.

The Team's Members are: Mr Chris Owen (Agent), Mr Alessandro Turati (Co-Agent), and Mr Daniel Bovensiepen (Back-up person).

The team will compete against the winners of the North America and Asia-Pacific Rounds during the world finals which will take place in October, during the IAF Congress (Fukuoka, Japan, 17-21 October 005).

The runner-up team was the University of Warsaw, Poland (Coach: Mr Jakub Ryzenko, Team Members: Mr Marcin Terlikowski (Agent), Mr Marcin Zawadzki (Co-Agent), Mr Maciek Zwirski (Back-up person).

The Warsaw University team also gained the award for the 'best written briefs'

The award for the best oralist went ex equo to Mr Chris Owen (University of Cambridge) and Ms Svetlana Chugunova (Moscow State Institute of International Relations, Russia).

The ECSL has great expectations for the winners of the European Round and hopes that they will be able to repeat the achievement of University of Leiden (The Netherlands), which won at the world finals in Vancouver, Canada, last year!

The ECSL would like to thank the Surrey Space Centre (SSC) and the University of Surrey, Guilford, UK for their hospitality and organisation (Sir Martin Sweeting, Ms Karen Collar, Mr Peter Hurley), and the judges of the European Round for their commitment during the two day competition: Prof Elisabeth Back Impallomeni (Università di Padova, Italy), Mr André Farand (ESA), Mr Walter Thiebaut (ESA), Prof Philippe Achilleas (Université Paris XI, France), Mr Hermann Ersfeld (EADS, Germany), Dr Oliver Ribbelink (TMC Asser Institut, The Netherlands).

The ECSL also would like to mention the excellent content of the conference on "Current Issues in Earth Observation" (6 April 2005) organised by the ECSL NPOC UK (Mr Tony Ballard, Ms Joanne Wheeler).

*Alberto Marchini*

## **ECSL UK National Point of Contract – Conference on Current Issues in Earth Observation**

The day after the European Rounds of the Manfred Lachs Space Moot Court Competition, the ECSL UK NPOC held a conference at Surrey University, UK, on "Current Issues in Earth Observation". The students who had competed in the moot competition and their judges could now relax and enjoy the presentations of the speakers. They were joined in the audience by several people from the Surrey Space Centre, based at the University, and also several members of the UK NPOC. Tony Ballard, Chair of the UK NPOC, chaired the conference and introduced the

various speakers after providing an introduction to the topics ahead.

Gordon Campbell (ESA/ESRIN) provided an excellent introduction to the topic illustrating some of the applications of Earth observation and the services that could be produced, concentrating on GMES. He showed some of the information-rich views of the Earth that could be supplied by ESA satellites, on a variety of different scales from local (even pinpointing subsidence causing structural damage to individual buildings, or even

parts of them) to global. At low cost, such satellites can supply continuously updated data across the whole planet, including terrain too difficult or inaccessible for ground-based monitoring.

Professor Ray Harris (University College, London) then discussed the challenges of access to Earth observation data to users and potential users. He examined issues of ownership, privacy, intellectual property rights, standards, distribution, pricing and archiving, leading to much discussion from the audience. He then presented some of

the key recommendations of an International Council for Science (ICSU) report on scientific data and information that examined policy for data access for all scientific data, and assessed how the policy for scientific data interacts with policies on remote sensing data.

Some of the benefits of Earth observation in practice were then presented by Joanne Wheeler, ESA and a wildlife filmmaker, Madelaine Westwood from Nutshell Productions and Co-President of Filmmakers For Conservation (FFC). They discussed the use of Earth observation data in wildlife conservation and in education activities, with particular examples from ESA and UNESCO's Build Environment for Gorilla (BEGo) project, and the work Madelaine has done with the Great Apes Film Initiative (GAFI), which had 11 films broadcast in the Congo and Cameroon and screenings at Limbe Wildlife Centre to educate local school children on the apes and their conservation.

Gordon Campbell continued his presentations by discussing how Earth observation

data could be used monitor compliance with environmental treaties. As the information provided by satellites is sound, systematic and rigorous it can be relied upon, once integrated with other data sources, to establish general consensus on the current state of the environment and as a basis for efficient environmental modelling systems that can aid decision-making processes.

He mentioned the Treaty Enforcement Services using Earth Observation (TESEO) initiative set up by ESA in 2001, which works with various treaty secretariats to develop satellite-based services for their operational requirements. International treaties that it addresses include the 1971 Ramsar Convention on Global Wetlands, the 1992 Kyoto Protocol to the United Nations Framework Convention on Climate Change and the 1996 United Nations Convention to Combat Desertification. David Sagar then presented a paper written by Ray Purdy (University College, London), who was unable to attend, on the use of Earth observation data as

evidence in courts, its admissibility and the possible breach of human rights legislation. This presentation also stimulated much discussion that, after closing remarks were presented by Andre Farand (ESA), was continued around the lunch table.

This was a thoroughly enjoyable conference, which provokes much discussion. Perhaps the most interesting achievement was simply bringing together lawyers, scientists, engineers, academics specialising in the area, students, insurance brokers and even filmmakers to discuss how each could bring their own talents and thoughts to the subject for the benefit of the global community.

If anyone based in the UK wishes to become a member of the UK NPOC for the ECSL, please feel free to contact Joanne Wheeler at [joanne.wheeler@esa.int](mailto:joanne.wheeler@esa.int).

*Joanne Wheeler, ESA  
Secretary for the UK NPOC*

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## IISL/ECSL Space Law Symposium 2005

### Recent developments in remote sensing and the desirability of reviewing the 1986 United Nations Principles Relating to Remote Sensing of the Earth from Outer Space

The annual IISL/ECSL Space Law Symposium was held on the occasion of the 44th Session of the Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space on Monday, 4 April 2005 in Vienna, Austria. Ambassador Peter Jankowitsch, Chair of the Supervisory Board of the Austrian Space Agency and Past Chair of COPUOS, had again agreed to chair the symposium. Sergei Negoda of the UN Office of Outer Space Affairs served as rapporteur, and IISL Secretary Tanja Masson-Zwaan had coordinated the programme.

An introduction, entitled "The International Legal Framework of Remote Sensing in the Year 2005: Changed Conditions and Changed Needs?" was given by Dr Mahulena Hofmann of the Max Planck Institute for Comparative Public Law and International Law in Heidelberg, Germany. Referring to the title of the symposium, she noted that it was clear that the conditions have changed, but that the question whether the needs have also changed was harder to answer.

As for changed conditions, Dr. Hofmann mentioned in particular:

- The number of states active as remote sensing actors has increased, so that data are no longer a rare product and former customers have now become providers, thus altering the market;
- National space legislation is emerging;
- Civil and military programmes are converging;
- The technical potential of remote sensing has greatly increased, as has its capacity to be applied as a national means of verification; and
- There is a strong tendency towards a development of global space-based systems for the monitoring of the earth, such as GEOSS and the International Charter on Space and Major Disasters.

Regarding changed needs, the speaker noted that:

- The interest of states to protect data concerning their own territory is decreasing; and
- There is a growing consensus on the need for a coordinated international

system of Earth data, active primarily in the area of disaster management and environment protection.

Then, Prof Joanne Gabrynowicz of the National Remote Sensing and Space Law Center of the University of Mississippi, USA, spoke about "The 1986 UN Principles and current state practice in North America". She gave a thorough overview of bills, statutes, regulations, policies and bilateral agreements in force or coming into force in the USA and Canada. For Canada, she focused on Bill C-25, an Act governing the operation of remote sensing space systems, currently in the process of becoming law. In summary, this Act would, when passed:

- Establish a licensing regime for remote sensing space systems;
- Provide restrictions on the distribution of data gathered by them; and
- Give special powers to the Government concerning priority access, and interruption of service.

For the USA, Prof Gabrynowicz distinguished between public, non-commercial systems on

the one hand, such as Landsat, and private, commercial systems on the other, such as DigitalGlobe. She focused on the so-called 'Interim Final Rule'. She explained that while entirely tax-funded programs would require full non-discriminatory access, completely privately-funded systems would only require access for sensed states, with a hybrid area in the middle of public/private systems where a case-by-case determination would be required.

Dr. Rajeev Lochan of the Indian Space Research Organisation, then gave a colourful presentation of "The 1986 UN Principles: on the necessity of a revisit". In a first part, he gave an extensive overview of the Indian space endeavour and its achievements in the past four decades, focusing also on the many applications for which remote sensing technology has proved useful.

Then turning to the 1986 UN Principles, Dr. Lochan recalled its objectives, and reminded participants that the Principles had taken more than a decade of intensive negotiations and fierce debate to be adopted unanimously, with the issues of national sovereignty, prior consent, prior consultation and the equal access policy proving to be the main stumbling blocks. He also recalled that the Principles are not a treaty and hence not strictly enforceable, but do have a certain legal status and 'cannot be wished away'. He demonstrated that today's world is characterised by increased cooperation and capacity-building.

In concluding, the speaker noted that there are several global initiatives towards the protection of the environment and the protection of humanity against disasters, and that many data are available at no cost for these applications, as well as in research areas. He also noted that remote sensing is not yet a matured and self-sustaining industry. As regards the Principles, he held the view that although they are not flawless, they do contain most of the novel features. In view of the fragile equilibrium in international space law, he warned against shattering that equilibrium by attempts to re-open the discussions, and advised that seeking enhanced compliance is a more pragmatic solution.

Lastly, Mr. Marco Ferrazzani of the European Space Agency, spoke about "The 1986 UN Principles and current state practice in Europe". As for the legal and

policy framework for remote sensing, one has to look at the 1986 UN Principles, but also at national data policies and at international state practice. Mr. Ferrazzani noted that the UN Principles only refer to the sensing of the Earth's surface, and this may be a shortcoming in view of current realities.

Regarding the policy evolution in Europe, Mr. Ferrazzani noted that Europe has developed experience in building and operating all types of satellites and information, and is now moving towards a policy of coherence and long-term strategy via GMES, a joint ESA/EU initiative to build a complete system by 2010. Regarding ESA's data policy, ESA uses the UN Principles as guidelines in programmes such as ERS and Envisat.

Lastly, he focused on other international state practice, such as the CEOS and the International Charter on Space and Major Disasters, which were also mentioned by other speakers. These examples provide useful models for international cooperation, because:

- They provide a flexible method of law creation;
- Their standards are strongly followed by their members; and
- "Soft law" is in his view the most suitable form of law.

In conclusion, the speaker raised the question of the conversion of the Principles into a legally binding agreement, and argued that with the current tendency toward commercialisation of space activities, it may become difficult for governments to guarantee non-discriminatory access for sensed states at reasonable cost. It is essential that national data policies converge as much as possible, even though this is not easy because each state has its own economic, commercial and military objectives. Nevertheless, an integrated international data policy framework for earth observation should be aimed at.

Prof Sergio Marchisio, Chair of the Legal Subcommittee, gave some concluding remarks. He observed that the practice of states and international organisations shows that the tenets of the UN Principles have maintained their importance, even in an emerging commercialised remote sensing system of services. The basic international regime of remote sensing is recognised and must be preserved,

promoting the broadest possible use of data. On the other hand, he argued, some of the most prominent issues connected to recent and ongoing developments in remote sensing are not fully regulated by the Principles. They do not provide clear and specific regulations for new issues, such as the focus on global systems, the access to data by the sensing states and the legal protection of data, which is increasingly necessary to justify costly investments required by remote sensing activities and the expansion of the market. Nor do they provide an adequate discipline as regards the production, use and treatment of sophisticated and detailed imagery, especially in relation to their potential implications for national security and individual privacy.

He saw two main reasons why the transposition of the Principles on remote sensing into a binding treaty has never materialised. First, the LSC is not in a law-making phase: that era of its activity ended at the beginning of the 1980s, and there currently is no political will to engage into new agreements. Rather the current goal is to broaden the acceptance of the treaties in force or to better define issues relating to them. Secondly, although the Principles were adopted by consensus, the agreement reached stemmed from several compromises, and not from a uniformity of views.

Another option would be to re-open a debate on a more limited issue, namely the desirability of reviewing the 1986 Principles. This option has the merit of not questioning the soft-law character of the Principles. In fact, this character is exactly what makes them a broad and flexible legal framework, and, as such, able to accommodate the ongoing evolution in the field of remote sensing technology and landscape.

A third option could be to analyse the current practices of sensing and sensed states in a more limited perspective, with a view to assess how the key statements contained in the 1986 UN Principles have been implemented and the obstacles that hamper their full application.

Ambassador Jankowitsch then closed the symposium, and invited all Delegates to a reception hosted by IISL and ECSL.

*Tanja Masson-Zwaan*  
*IISL Secretary /former ECSL Board Member*

## 44th Session of the UNCOPUOS Legal Subcommittee

The Legal Subcommittee held its 44th session from 4 - 15 April 2005 with Prof Sergio Marchisio (Italy) serving as Chair. Two agenda items should be highlighted:

- Agenda Item 8a. Considerations relating to the possibility of the United Nations serving as supervisory authority under the future protocol on matters specific to space assets to the UNIDROIT Convention on International Interests in Mobile Equipment; and
- Agenda Item 9: Practice of states and international organisations in registering space objects.

During the deliberations under AI 8a, the report of an ad-hoc working group on the question of the appropriateness of the United Nations serving as Supervisory Authority, submitted by The Netherlands as coordinator of the Working Group has been discussed. It was not possible to reach consensus on the political desirability of the UN assuming this function and the Subcommittee decided that the item should remain on the agenda of the Subcommittee at its next session. Concerning AI 9, the Secretariat had produced a very informative background paper and also a conference

room paper containing statistical information on the number of space objects launched and registered or unregistered from 1957 to 2004. These documents, as well as the statements by the State Members of the Legal Subcommittee, were analysed by a Working Group with Niklas Hedman (Sweden) as Chair. For 2006, the Subcommittee proposed the identification by the working group of common practices and drafting of recommendations for enhancing adherence to the Registration Convention.

*Dr Ulrike Bohlmann*

### The Natural Disasters and the Role of Remote Sensing – Economic and Legal Considerations

(Tunis, 26-28 April 2005)



The Centre Régional de Télédétection des Etats de l'Afrique du Nord (CRTEAN)\* and the European Centre of Space Law (ECSL) organised a conference entitled "Natural Disasters and the Role of the Satellite Remote Sensing : economic and legal considerations", held in Tunis on 26-28 April 2005.

The purpose of this meeting was to highlight and encourage global and regional cooperation and actions in remote sensing (access to data and uses) for natural disasters prevention and management. The event was also the occasion to analyse implementation policies and activities relevant to the CRTEAN Member States and to promote the knowledge of the space law, of provisions in the field of satellite remote sensing, and of the framework policies and objectives of various actors.

The conference ended with the recommendation of the text of the "**Tunis II Declaration**" (see following), which, after its approval by the CRTEAN Member States and by the CRTEAN Council of Administration, will be sent to other international bodies concerned with the prevention and management of natural disasters.

The proceedings of the event will be available in the coming months (for further information, contact Mr Alberto Marchini, [alberto.marchini@esa.int](mailto:alberto.marchini@esa.int)).

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\* The CRTEAN (or North African Centre for Remote Sensing) is an intergovernmental sub regional organisation. It was created on 6 October 1990 by the signature of the constitutive Act by five North African States: Algeria, Libya, Morocco, Mauritania and Tunisia. Egypt and Sudan signed their adhesion respectively on 12 November 2001 and 6 March 2002. There are also associated states. The CRTEAN has its headquarters in Tunis (Tunisia), and its main mission is to promote, coordinate, harmonise and ensure the Member States policies dealing with remote sensing and Geographic Information System, and ensure their compliance.

# **International Conference "Natural Disasters and the Role of Satellite Remote-Sensing: Economic and Legal Considerations"**

**Tunis, 26-27-28 April 2005**

(Translated from French)

## **"Tunis II" Declaration adopted on 28 April 2005**

**The Centre Régional de Télédétection des Etats de l'Afrique du Nord (CRTEAN), with the assistance of the European Centre for Space Law (ECSL), held a Conference in Tunis on 26-27-28 April 2005 on the subject of "Natural Disasters and the Role of Satellite Remote-Sensing: Economic and Legal Considerations". This followed on from the 27 September 2002 Conference and the resulting Declaration on promoting Earth observation to meet the needs of the North African countries, which was adopted by the CRTEAN Board and subsequently forwarded to the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS).**

The Delegations of the CRTEAN Member States participating in the Conference discussed the present Declaration on 27 and 28 April 2005 with a view to continued pursuit of the objectives set in the 27 September 2002 Declaration and recommended the following text to the CRTEAN Board for adoption:

"Recalling the base Declaration of 27 September 2002, its objectives and work plan;

Whereas that Declaration relates to the regional and sub-regional initiatives taken on the basis of the international strategy for the prevention of major disasters, as set out in the relevant Resolutions adopted by the United Nations General Assembly;

Stressing the efforts of the United Nations Office for Outer Space Affairs (OOSA) in developing skills in areas drawing on space activities;

Having regard to the various international Conventions of major interest to sustainable development and environmental protection;

Recalling the global summits on environmental protection and on sustainable development which have stressed the role of satellite observation combined with ground-based observation;

Noting the 2005-2014 action plan adopted at the Brussels Summit on 16 February 2005 on the implementation of a Global Earth Observation System of Systems (GEOSS);

Having regard to the results of the work completed in the context of Unispace III +5 and the Resolutions of the United Nations General Assembly (A/RES/59/2 of 20 October 2004 and A/RES/59/116 of 10 December 2004);

Pleased that Libya has become a COPUOS member, that the CRTEAN is monitoring COPUOS proceedings as a permanent observer and that Tunisia has attended Scientific and Technical Subcommittee proceedings as an observer;

Noting the report by the Director General of CRTEAN and the reports on activities presented by the Member States;

Recalling with distress that the CRTEAN Member States are exposed to natural disasters such as earthquakes, flooding, forest fires, desertification, drought and locust attacks and that such disasters are common to the region of North Africa;

Welcoming with interest the participation of Algeria in the Disaster Monitoring Constellation (DMC) via the Alsat 1 satellite;

Stressing that the added value of satellite data results from the content of the information generated by their integration with other types of data in the form and language adopted by the end-user;

Noting with interest the results achieved by activating the International Charter "Management of Major Disasters" and the contact between the DMC and that Charter;

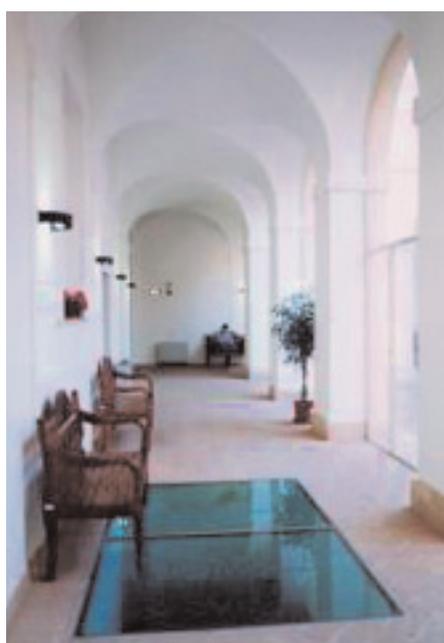
- 1) Encourages programmes evaluating the risk of major disasters (earthquakes, flooding, forest fires, countering desertification, drought and locust swarms), the national, regional and sub-regional planning which in conjunction with ground-based programmes is helping to reduce the economic impact of natural disasters, foster environmental protection and assist with raising the living standards of all citizens;
- 2) Recommends that these efforts continue, having regard to the initiatives and possibilities offered in concerted international planning; Welcomes the DMC's intention to make available free of charge a proportion of the DMC satellite data collected;
- 3) Recalls the importance attached in the 27 September 2002 Declaration to establishing a data pricing policy based on reproduction costs in the case of public applications; Notes that the tsunami of 26 December 2004 has prompted reflection on data pricing policy and a shift towards no charge, regarding which continuity would be desirable in the case of major disasters;
- 4) Notes with interest the data access and utilisation policy for Earth observation satellites such as ERS, Envisat, Spot and others; Expresses interest in the contribution of the International Charter "Space and Major Disasters" to managing major disasters as an example of application of the Principles Relating to Remote Sensing adopted by the United Nations on 3 December 1986; Recommends study of the advisability of the CRTEAN Member States acceding to that Charter and machinery for immediate implementation;
- 5) Encourages the CRTEAN Member States to provide access to non-classified information from their databases for the purposes of preventing and managing natural disasters and information networking; Invites the CRTEAN to study at the earliest possible juncture the contribution and deployment of a regional database in this connection, taking into account the multidisciplinary dimension of such data, and to determine standard exchange arrangements with a view to worthwhile exploitation of the data;
- 6) Notes the ongoing need for national expertise for the purposes of education, training and development; Recommends the introduction of space systems training programmes and calls for these to be expanded; in this context, Would Welcome those countries that have training facilities and the European Space Agency hosting trainees from the countries of North Africa, providing them with study bursaries by drawing on their own resources or on United Nations machinery, and also envisaging in situ training at global or regional level in Earth resources observation, telecommunications and satellite-aided navigation and positioning;
- 7) Supports activities designed to review and improve legislation relative to preventing natural disasters and managing the consequences; Recommends concerted legislative and regulatory action, having regard to the cross-frontier impact of such disasters;
- 8) Welcomes the interest shown by the states of North Africa in space law and the organisational support provided by the European Centre for Space Law for arranging conferences, seminars and forwarding documentation; Encourages the CRTEAN Member States and Associate States to persevere with their space programmes, become parties at the earliest possible juncture to the United Nations Outer Space Treaties and incorporate existing legal instruments into their national legislation so as to derive full benefit from them;
- 9) Recommends that the CRTEAN Member States set about intensifying their cooperation and their dialogue, conduct studies of common interest and keep each other informed through permanent contact of the results of their initiatives in order to fully benefit from them and exploit knowledge acquired in the region in terms of prevention, management and aid to victims where natural disasters occur; Recommends that the CRTEAN give special attention to the needs of Africa in the framework of south-south cooperation and dialogue;
- 10) Invites the CRTEAN Director General to forward the present Declaration, after adoption by its Board, to the United Nations Committee on the Peaceful Uses of Outer Space, to Unesco, to the FAO and to other bodies concerned with the prevention and management of natural disasters."

## Italy will Host the 14th ECSL European Summer Course on Space Law and Policy

Thanks to the commitment of the Italian ECSL NPOC (Prof S. Marchisio, ECSL Vice President), the next edition of the ECSL European Summer Course on Space Law and Policy will be held in Terni, where two courses of the Faculty of Political Science of the University of Perugia are hosted. The university courses of Terni are located in the former Monastery of San Valentino, a very pleasant and prestigious historical building contiguous with the homonymous basilica. The political science courses at Terni focus on development cooperation and the dialogue among cultures; two topics only seemingly distant from space law and its context. As the European initiative "Global Monitoring for Environment and Security" shows, space can provide essential tools to tackle critical social and political issues.

### Terni

Terni is a town rich in history: under Roman domination, it played a significant role at the times of the struggles between the Papacy and the Empire. During the late 19th century, it was among the Italian towns to be involved in the industrial revolution, with the foundation, in chronological order, of the large weapons factory, the steel-works and the calcium carbide plants. Later on, many other industrial facilities were built, exploiting the extraordinary water patrimony of the



area. Even nowadays, Terni is famous for the presence of a steel mill, which has historically represented a relevant resource of employment for its inhabitants or workers coming from other areas of Umbria.

Today, Terni presents a very modern aspect, while preserving, at the same time, some ancient buildings worthy of visiting, which make Terni a pleasant place to live in. Terni is one of the two provinces of Umbria, the splendid region known as the green heart of Italy. Therefore, it is a perfect starting place for a sightseeing tour of Umbria and its well-preserved medieval towns, such as Assisi - St. Francis' birthplace - Perugia, Spoleto, Gubbio and Todi.

### The University of Perugia: the Pole of Terni

#### Historical outline and general information

One of the oldest universities in Italy, the origins of the University of Perugia can be traced back to the late thirteenth century, when a Studium was established by the Perugia Town Council. The privilege of being a Studium Generale, given by Pope Clement V in 1308, marked the foundation of the university, which first established courses on Canon and Civil Law and on Medicine and Liberal Arts. With the unification of Italy in 1860, the University of Perugia was established under the jurisdiction of the Rector and the Town Council, who issued statutes subject to approval by the Government. Since 1944, the University of Perugia has achieved an outstanding reputation as one of the leading Universities in Italy, with roughly 33 000 students not only from Umbria and other parts of Italy, but also from foreign countries. Currently, the university consists of the following faculties: Law, Political Science, Economics, Humanities, Education, Mathematics, Physics and Natural Sciences, Pharmacy, Medicine, Agriculture, Veterinary Medicine and Engineering.

#### The Pole of Terni

The Scientific and Didactical Pole of Terni



Images: Views of the Region Umbria, of the City of Terni, of the Faculty of Political Science of Terni

is the structure which coordinates the numerous activities developed in Terni by the University of Perugia since the academic year 2001/2002. It promotes the harmonious development of didactic activities and contributes, along with the Regional University Agency for Students (Adisu), to programme services for students.

#### The Faculty of Political Sciences in Terni

The Faculty of Political Sciences in Terni has chosen to be constantly ready to face the professional needs of the labour market. It offers two three-years courses (International Cooperation for Development and Peace; Social Sciences of Intercultural Communication) and a





specialist two-years course (Cooperation Politics and multicultural society). The course on International Cooperation for Development and Peace aims at training experts for the elaboration and evaluation of projects in this field, with possibility of

career in international organisations, public administrations, ONGs, PVS undertakings and the European Union. The course on Social Sciences of Intercultural Communication is devoted to form experts in social dynamics related to multi-ethnic contexts with an emphasis on journalism, teaching and advice activity. The specialist course on Cooperation Politics and Multicultural Society trains autonomous and responsible experts in the development of programs aimed to overcome social and political strife originated by cultural diversity. The faculty in Terni also has well established international relations with several institutions. In particular, it is the site of the General Course of the Master in Euro-Mediterranean Affairs (MEMA), created and managed by a

network of Mediterranean universities and other academic institutions. A large number of universities and other academic institutions from the entire Mediterranean area take part in the network for MAEM/MEMA, in which they have been working together since 2001. The first edition of the Master will start in the summer 2006.

*Prof Fabio Raspadori*

For more information on the ECSL Summer Course, please visit the relevant section on the ECSL website ([www.esa.int/SPECIALS/ECSL/SEMLMNGHZ](http://www.esa.int/SPECIALS/ECSL/SEMLMNGHZ))



## Telders Organising Office

The Telders Competition was first organised in 1977 on the occasion of the 30th anniversary of the Telders International Law Students Debating Society, created in memory of Professor Telders. Due to its success, the competition has been held annually ever since at the Peace Palace in The Hague.

The 28th Competition took place on 21-23 April 2005 with 22 participating teams. Bulgaria, Denmark, England, Estonia, Finland, Georgia, Germany, Greece, France, Hungary, Ireland, Lithuania, The Netherlands (2 teams), Poland, Romania, Russia, Scotland, Sweden, Switzerland, Turkey and Ukraine. Six National Rounds

took place in England (5 universities): The Netherlands (3), Russia (3), Turkey (2), Ukraine (4), Germany (2). 44 Judges were present, half of whom came especially from abroad. And, additionally, there were eleven jury members.

The Telders is honoured to have had amongst its judges, IISL and ECSL Board members and members: Prof Back Impallomeni, Prof Kopal, Prof Lyall, Tanja Masson-Zwaan, Dr P. van Fenema, Prof P. Dempsey, Mr Steven Freeland, Dr Ribbelink, Dr Martha Mejia-Kaiser, Ms Joanne Wheeler and Mr Thaddée Sulocki.

The ECSL sponsored the event, along with a.o. Clifford Chance, Bird&Bird, the Board of Leiden University, the Grotius Centre for International Legal Studies, Leiden University/Campus The Hague, the Cities of The Hague and Leiden, the Embassy of Switzerland in The Hague, l'Institut Français des Pays-Bas/Antenne de La Haye, the Embassies of Bulgaria, Hungary and Ukraine.

Contact: Ms Axelle Cartier, LL.M., Director, Telders Organising Office, Lange Houtstraat 7, 2511 CV The Hague, the Netherlands, Tel: +31-70-302 1070, Fax: +31-70-302 1025, e-mail: [telders@campusdenhaag.nl](mailto:telders@campusdenhaag.nl), on the web at: [www.telders.org](http://www.telders.org)

## First Regular Space Law Lecture at the University of Graz!

### - Block Lecture NOV/DEC 2004

Not as obvious as the summer course, but nevertheless the important second highlight of 2004: the first regular space law lecture at the University of Graz, Faculty of Law.

Taught in English by Prof. Brünner and Mag. Soucek, the two-day seminar gave an extensive overview on the field of space law. The success exceeded all expectations:

20 law students signed up for this first space law seminar!

This not only reflects interest and curiosity, but also the enjoyable fact that the topic of space law has apparently gained ground over the past two years in Graz – thanks to the engagement of the NPOC and its members. The Karl Franzens University of

Graz added the seminar with 5 ECTS points (2 hours) in the official curriculum of the winter semester 2004/2005.

Part 1 (Brünner) gave an overview on the subject, new developments, the methods and practical aspects of space law making, and introduced space policy. Of great importance was the approach to familiarise

participants with the 'big picture' and to extract the significance of a special branch like space law in today's world.

Part 2 (Soucek) went into details of space law. The UN treaties and principles were elaborated on together with the students. Regulations and practical legal aspects of

various space applications formed the last extensive part of the lecture (among others responsibility and liability, environmental law, human space flight, Earth observation and telecommunication).

The NPOC hopes to be able to offer a successful followup of this seminar, which

was – in the light of the academic goals of the NPOC Austria – a crucial step forward.

*Univ.Prof.Dr. Christian Brünner, NPOC Austria  
Mag. Alexander Soucek*

## A Postgraduate Course at the Heart of the Professional World – The Master in Law of Space Activities and Telecommunications

University Paris Sud – 11  
Institute of space and telecommunications law (IDEST)



Students are also doing three to six months' internship in prestigious institutions in France or abroad.

### Research contracts

Students may participate in research contracts concluded between IDEST and its partners. This year students have participated to the following studies: Elaboration of the French space legislation (Contract concluded with CNES), Analysis of the American space legislation (Contract concluded with CNES), Analysis of the Russian space legislation (Contract concluded with CNES) and Legal issues of space tourism (Contract concluded with ISU). Students are, in particular, involved in the Student Space Exploration & Technology Initiative (SSETI) project developed by ESA. The main objective of this initiative is to create a network of students and educational institutions facilitating the distributed design, construction and launch of space objects. The headquarters of the SSETI association

### Meeting practitioners' needs

The Master in law of space activities and telecommunications has been created, with the support of the national and European space institutions, to satisfy the need of a fast-growing sector for young and highly qualified graduates. Every year, the educational and research content is determined considering professional needs, as determined by an Academic Committee composed of the heads of legal departments of institutions and businesses of the sectors, as well as representatives of law firms. This year emphasis is given to competition law and contract law.

### EADS Space sponsoring

Every year, a firm or an institution of the space and telecommunications sectors sponsors the program. The 2004-2005 class is sponsored by EADS Space. EADS Space is offering several activities

including visits to various EADS sites and specialised conferences. Furthermore, a book on international business law in space, written by the students in cooperation with EADS, will be published.

### Direct contact with professionals

Half of the classes are taking place in the master partner institutions facilities : ESA, CNES, EADS, Neuf Telecom, AFOM, ART... Classes are given by potential future employers. This year, students have especially been welcomed by the entire Eutelsat Legal Department for a one-day intensive workshop.



Images: Students and Teachers of the Master Class



are at the University Paris-11. The Institute is also accredited by the World Summit on the Information Society Conference. Students will participate in the second phase of WSIS in Tunis in November 2005 by working on legal issues dealing with digital divide.

### Professional visits

Every year, students are offered the great opportunity to be welcomed through professional visits into international organisations and conferences, and into industrial sites. As an example, students participated to the International Week on Space and Telecommunications Law held in

Geneva and organised by the Institute. During the week in Geneva, Students participated in conferences and workshops at various international institutions (the Conference on Disarmament, European Broadcasting Union, ITU, UN WIPO and WTO).

### Worldwide alumni network

Students can benefit from an alumni network established in more than 20 countries with representatives in most of the institutions and companies involved in space and telecommunications, such as ART, CNES, Bird and Bird, ESA, EADS Space, Euroconsult, European Commission, Hellasat, Marsh, Ministry of Defence and SES-Astra

Thank you to ECSL and ESA

The master class students want to thank all the practitioners supporting their activities in particular Mr Lafferranderie and ECSL (who allowed some of them to participate in the ECSL Summer course), the Education Department and all their professors at ESA especially Marco.

*The Master Class*

## Book Offer

ELEVEN International Publishing is delighted to offer the highly acclaimed publication *Space Law: Basic Legal Documents* at a special price of €295 to students of the ECSL Summer Course on Space Law and Policy.

This four-volume loose-leaf, first published in 1991, presents a comprehensive collection of basic legal documents on space law. It is an essential reference and research tool for all those involved in the formulation, implementation and operation of space law and policy. Its loose-leaf format ensures that the material is kept fully up-to-date.

If you would like to make use of the offer, please fill in the order form and send it, together with proof of your ECSL Summer Course registration, to the address listed on the order form. After clearance from ECSL and payment of the invoice, the publication will be sent to you.

For further information see the ELEVEN advertisement (next page) or visit the ELEVEN website [www.elevenpub.com](http://www.elevenpub.com).

## Interesting Reading and New Books

### International Encyclopaedia of Law: Intergovernmental Organisations: THE EUROPEAN SPACE AGENCY (ESA)

By Dr Gabriel Lafferranderie  
Former ESA Legal Adviser  
ECSL Chairman

This updated monograph on the European Space Agency follows the outline below:

1. Genesis and Historical Development:

- The Search for European Unity in the Field of Space
- 2. Institutional Framework
- 3. Activities and Programmes
- 4. Finances
- 5. Industrial Policy and Contracts
- 6. International Relations
- 7. The European Space Agency and the European Union
- 8. The Access to Space
- 9. Information and Data
- 10. Staff Policy

- 11. Concluding Remarks
- 12. Selected Bibliography
- 13. Appendix and Subject Index

Significant issues for the period 1996-2004 have included:

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- The review of the delegate's bodies' structure and of the Agency;
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##### Volume 4

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- other space faring and not space faring nations and with other international organisations (including COPUOS); and
- The relationship between ESA and the European Union and Commission (the EU and ESA councils Resolutions, the Framework Agreement).

IEL: International Organisations  
 First published in 1996 and updated bi-annually Looseleaf, 3 volumes (upto/incl. Sup. 18) ISBN: 90-411-0775-4  
 The book will be available May 2005.  
 Published by Kluwer Law International. To order this book, go to:  
[www.kluwerlaw.com](http://www.kluwerlaw.com), or contact the ECSL.

### Space Law Current Problems and Perspectives for Future Regulation

*Edited by Marietta Benkő and Kai Uwe Schrogl*

This work will be published by Eleven International Publishing in October / November 2005. A special pre-publication price will be made available to ECSL members and students, and will be announced on the Eleven website ([www.elevenpub.com](http://www.elevenpub.com)) in due course. The book has 16 sections written by distinguished scholars and experienced practitioners in the legal, technical as well as in the political field. The following subjects will be treated:

1. Basic Principles Governing the Use of Outer Space in Future Perspective (*Lafferranderie*)
2. Ex Facto Sequitur Lex: Some Facts which Merit Reflection in Space Law (Perek);
3. Transfer of Ownership in Orbit: Which State shall Register According to the Registration Convention (*Schmidt-Tedd and Gerhard*)
4. Liability and Arbitration in Space Matters (*Kerrest*)
5. Enforcing the Liability Convention: Ensuring the Binding Force of the Award of the Claims' Commission (*Hanappel*)
6. Legal Aspects of Space Tourism (*Cloppenburg*)
7. Diversification of the Law Governing Space Applications (*Schmidt-Tedd and Baumann*)
8. National Space Legislation Dealing with Private Space Activities (*Gerhard*)
9. Legal Aspects of the Growing Military Uses of Outer Space (*von Kries*)
10. Space Law from the Perspective of Peace Research: Expectations and

Criteria for a Sustainable and Peaceful Use of Outer Space (*Hagen/Scheffran*)

11. The Problem of Space Debris: Could it also be a Possible Chance Against the Use of Aggressive Military Systems in Outer Space? (*Benkő*)
12. Legal Aspects of the „Space Exploration“ Initiatives (*Bohlmann*)
13. Space Traffic Management (*Schrogl, Lala and Contant*)
14. Space Law and Private International Law – the Case of the UNIDROIT Protocol (*Marchisio*)
15. Regulation of Space Resources: Present and Future (*Ospina*)
16. Future Space Regulations and Co-operation Patterns (*Riess*)

### Space Law Teaching in Europe

An ECSL initiative dating from 1991 and revised in 1993, this booklet compiles a list of space law teaching institutions, universities and educational centres (at European level). The booklet also provides detailed information on teaching professors, credits, tuition fees and duration of the course. Moreover, it displays pictures of the listed universities.

The booklet will be a useful tool for students and academics; it will be a means to guide their studies and research works, and to facilitate relationships among all those centres involved in space law in order to allow them to share their respective experiences.

The third edition of the Space Law Teaching in Europe will be ready for distribution in May 2005 and will be sent **free of charge** to institutions and academics interested in the teaching of space law, as well as to students.

For further information, contact the ECSL.

### In Orbit Over the Space Law

With this new initiative, ECSL would like to address/answer the need expressed by law professors of having at their disposal a reference brochure listing space law texts, their history and comments, necessary in the preparation of their space law lectures. Basically, it will consist of a group of chapters dedicated to specific space law topics, beginning with a short introduction (general background) on the subject and

ending with a list of selected bibliography useful for the preparation of the lesson.

Finally, in the Annexes, readers will find references to space law journals, yearbooks, IISL-ECSL Colloquia, proceedings, and major web sites on space law all over the world.

The brochure should be ready for distribution by June 2005 and is intended to be a new tool for students attending the summer course.

For further information, contact the ECSL.

### Articles

An important article on space law written by the ECSL Chair, Gabriel Lafferranderie, entitled: *Jurisdiction and Control of Space Objects and the Case of an International Intergovernmental Organisation (ESA)* will appear in the second issue of the "Zeitschrift für Luft- und Weltraumrecht / ZLW" in June of this year and will be printed on pp. 228 – 242. The article will also be available electronically via internet from the website of the publisher ([http://www.heymanns.com/servlet/PB/menu/1127773\\_I2/index.html](http://www.heymanns.com/servlet/PB/menu/1127773_I2/index.html)).

Benkő, Marietta and Kai-Uwe Schrogl  
*The UN Committee on the Peaceful Uses of Outer Space: Adoption of a Resolution on Application of the Concept of the "Launching State" and Other Recent Developments*  
 ZLW 1/ 2005 (See website as quoted under sec. 2) , pp. 57 – 73.

Perek, Lubos  
*Rational Space Management*  
 ZLW 4/ 2004, pp. 573 – 582.

Abeyratne, Ruwantissa  
*Space Tourism – Paralell Synergies Between Air and Space Law?*  
 ZLW 4/2004, pp. 184 –202.

## Calendar of ECSL upcoming events and important deadlines (May-October 2005):

**20 May 2005: Deadline for ECSL NPOCs to submit their Activity Reports for the term 2003-2005**

**27 May 2005: Deadline to submit an application for the ECSL Summer Course**

**8-10 June 2005:** Institute of Air and Space Law of the University of Cologne and the German Aerospace Center (DLR) "Project 2001 Plus - Global and European Challenges for Air and Space Law at the Edge of the 21st Century"; Maternushaus Cologne, Germany, (contact, Mr S. Mick, e-mail: Stephan.mick@uni-koeln.de)

**8-17 June 2005:** UNCOPUOS Main Committee, Vienna, Austria

**10 June 2005: Deadline to submit votes for the ECSL Board elections**

**20 June 2005: ECSL Biennial General Assembly**

**21 June 2005:** ECSL Board Meeting (morning session only)

**26-29 June 2005:** "Bringing Space Benefits to the Asia Pacific Region", Bangalore, India. Conference organised by the Indian Space Research Organisation and the International Institute of Space Law (for more information, visit <http://www.iafastro-iisl.com/>)

**4-17 September 2005: 14th ECSL Summer Course on Space and Policy, hosted by the Faculty of Political Science of the University of Perugia, at the branch of Terni, Italy. (For further information, visit the ECSL website [http://www.esa.int/SPECIALS/ECSL/SEMLMNGHZTD\\_0.html](http://www.esa.int/SPECIALS/ECSL/SEMLMNGHZTD_0.html))**

**17-21 October 2005:** 56th International Astronautical Congress - Fukuoka, Japan; World Finals of the Manfred Lachs Space Law Moot Court Competition

**October/November 2005 (tbc):** UN Workshop on Space Law, Nigeria (for further information, visit <http://www.oosa.unvienna.org/SAP/sched/index.html>)

ECSL NPOCs are always welcomed to highlight to the ECSL their upcoming activities (projects and conferences) and other events of interest in the space sector. Such information will be published on the relevant section of the ECSL website.

### Errata Corrige

- In the special issue of the ECSL Newsletter "The role and place of the National Points of Contacts (NPOCs) within the ECSL Architecture" (N. 29, February 2005), the contact details of the ECSL NPOC United Kingdom were incorrect; the right ones are:

#### United Kingdom

Mr Tony Ballard  
Field Fisher Waterhouse, 35 Vine Street, London EC3N 2AA, UK  
Tel: + 44 (0)20 7861 4103  
Fax: + 44 (0)20 7488 0084  
E-mail: [tony.ballard@ffw.com](mailto:tony.ballard@ffw.com)

Ms Joanne Wheeler  
ESA, 8-10 rue Mario-Nikis  
F-75738 Paris Cedex 15, France  
Tele: + 33 (0)1 5369 7785  
Fax: +33 (0)1 5369 7671  
E-mail: [joanne.wheeler@esa.int](mailto:joanne.wheeler@esa.int)

- On the proceedings (printed version) of the 13th ECSL Summer Course on Space Law and Policy (University of Graz, Austria, 6-17 September 2004), some pages of the paper presented by Prof. Brünner are missing. The ECSL apologises for this inconvenience. The full-length presentation of Prof. Brunner is available on the electronic version of the proceedings (CD-ROM) and upon request to Mr Marchini

### ECSL news

ISSN 1013-9036

The ECSL newsletter is distributed free of charge to all ECSL Members. The current and previous issues are available online at the ECSL website:

[www.esa.int/SPECIALS/ECSL](http://www.esa.int/SPECIALS/ECSL)

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For further information, contact the ECSL Secretariat:

c/o ESA, 8-10 rue Mario-Nikis  
75738 Paris Cedex, France  
Tel.: +33-1-5369 7605  
Fax: +33-1-5369 7560