

ECSL News

Bulletin of the European Centre for Space Law – Published under the auspices of the European Space Agency

Le mot du Président

Il est particulièrement réconfortant de voir combien l'intérêt pour le droit de l'espace se développe en Europe; de nouveaux enseignements s'ouvrent, une coordination interuniversitaire se met en place. L'Europe est riche de talents. Aussi nous a-t-il paru intéressant de dresser un premier tableau. Une brochure en cours d'édition répondra à ce premier souci.

Au-delà de ce tableau, de ces potentialités, on ne peut négliger de réfléchir à un certain nombre d'événements qui devraient influencer les méthodes et les orientations de l'enseignement du droit de l'espace.

Qui dit droit de l'espace, dit aussi droit des activités spatiales. Le satellite ignore les frontières terrestres; l'enseignement du droit de l'espace devrait lui aussi s'affranchir de frontières et s'ouvrir à une approche multidisciplinaire, associer les disciplines de droit public et celles de droit privé, l'étude des lois nationales et celles des conventions internationales.

Au moment où l'on assiste à une accélération de l'unification européenne, par la mise en place de réseaux d'universités et de programmes d'échanges d'étudiants, le droit de l'espace doit faire en sorte d'être présent et d'apporter sa pierre. D'autant que par ses caractéristiques, il peut être l'exemple même d'un enseignement coordonné, pluridisciplinaire et transfrontière, d'une matière européenne. La presse s'est faite l'écho de la création récente à Bruxelles d'un réseau des universités des capitales européennes. L'enseignement du droit de l'espace peut constituer un thème porteur, moteur, dans cette approche. D'autres formes d'enseignement apparaissent. Je songe au 'week-end spatial' annuel organisé par les Etats généraux des Etudiants d'Europe qui mobilise avec enthousiasme des étudiants venus de divers pays pour écouter des exposés scientifiques, techniques et juridiques. L'Université internationale de l'Espace (ISU) est un autre exemple qui donne à réfléchir, quels que soient les sentiments mélangés qu'on peut avoir à son sujet.

(suite page 2)

Exemples d'enseignement de droit spatial



Utrecht University Faculty of Law (The Netherlands)

My university has had a course on air and space law for some years now as an optional subject in its law curriculum. However, in 1988 we started a postgraduate course specifically on space law, as an experiment. With around 15 students a year opting for it, we are pleased with the experiment and feel it has added to the University's research potential in this area.

A typical student on the space law course (and the course is also open to postgraduate law students from other Dutch universities and abroad) will pursue a six-week course of lectures based on a textbook prepared by the University. In the first part, the student is taken systematically through the UN space treaties in the wider context of international law-making. Then, in the second part, the student learns of the practice of space law – which organisations have been created to deal with space activities (e.g. ESA and Intelsat), which applications of space law there have been (such as the Cosmos-954 incident), and how space law joins with other areas of law such as arms control. The student is also made aware of the problem areas where law-making is still at an early, and often controversial, stage, from satellite broadcasting to remote-sensing, to pollution of the space/earth environment. When possible, we try to use films and the experience of guest lecturers to add depth and an understanding of technical detail.

For other types of student, the exam at the end of the curriculum just described is not the end but the beginning of their real involvement with space law. That's when, over a further six weeks, the student can undertake supervised work on a research topic, coordinated through seminars. The resulting paper will be about 70 pages in length and can draw on experience gained outside the university. For example, ESA recently hosted an advanced student, Miss Van der Doe, as stagiaire in its Legal Affairs Department, while two students attended the ISU'89 summer session. Examples of the topics covered are satellite broadcasting and European media policy, and the delimitation of outer space and the use of the geostationary orbit.

Reflecting on the way this still-young course is developing, I feel we took the right decision to separate space from air law. I look forward now to deepening the course's interdisciplinary content, with a view to making its graduates better equipped to deal – as a number of especially the advanced students will – with the problems of practice, problems that initially are of a technical nature. ECSL's work will be a big help in making this improvement.

Dr Bess Reijnen

(cont'd page 2)



Cologne University (Germany)

The Institute of Air & Space Law of Cologne University is the only specialised institution in Germany for teaching and research in space law. Since the early 1960's space law has been taught by lectures at undergraduate level and seminars at postgraduate level. Teaching is integrated with the extensive research programme of the Institute and many seminar papers and doctoral dissertations by students and practitioners have resulted in publications in the *German Journal of Air & Space Law*, in the series *Studies of Air & Space Law*, or in contributions to international colloquia organised by the Institute. The long list of topics treated in this teaching and research programme ranges from basic principles to specialised issues of space law and from scientific research to commercial space activities. Further details are available in the recent publication by Bittlinger, *History of the Institute of Air & Space Law*, 1989, or may be obtained direct from the Institute (fax: 49-221-4705151).

Prof. Dr. Karl-Heinz Böckstiegel

Leiden University (The Netherlands)

Leiden University has a special Professorial Chair for Air & Space Law, occupied since 1977 by Prof. Wassenbergh. In addition, an International Institute of Air & Space Law was inaugurated in 1985. Space law can be studied in several ways. It can form part of the general course on air and space law, with 2-hour lectures given every fortnight during the whole academic year (from September to June). The period from January to June is dedicated to space law and since 1989 the classes are given in English and are attended by some 10 foreign students in addition to 70 Dutch students. All main issues of international space law are addressed. Several excursions (Fokker, ESTEC) are included in the programme, and the course is concluded with an oral exam. Secondly, a short course on liability and responsibility in air and space law is given each year in May-June. Here,

students give oral presentations and write a paper on a special subject of air and space law. Finally, students may write their LL.M. or PhD. thesis in Leiden, although foreign students in this case have to comply with the usual admission requirements. For further information, please contact the International Institute of Air & Space Law, Leiden University, PO Box 9520, 2300 RA Leiden.

Tanja Zwaan

Université de Toulouse (France)

Un cours semestriel de 37 heures de 'Droit des Activités spatiales' est enseigné en maîtrise depuis 1988 par MM. Martin et Peyrefitte. Ce cours constitue une option. M. Martin assure par ailleurs en DEA de Droit économique international et communautaire, un séminaire de 20 heures obligatoire de 'Droit économique des activités spatiales'.

Le mot du Président (suite)

Alors pourquoi ne pas pousser plus loin, pourquoi ne pas songer dans le cadre de cette nécessaire coordination pluridisciplinaire et transfrontière, à un enseignement unique de haut niveau ('postgraduate level') réservé aux étudiants ayant déjà acquis les éléments de base du droit de l'espace, dispensé par les professeurs/chercheurs/praticiens les plus réputés, sanctionné par un diplôme reconnu en Europe? L'ESA pourrait s'associer à la réalisation d'un tel projet dans lequel les Communautés Européennes auraient un rôle important à jouer (projet Erasmus, etc). La recherche y trouverait son compte et peut-être ceci permettrait-il de s'attaquer à d'autres lacunes comme celles d'un soutien à la recherche et à la publication des travaux. Je ne peux que souhaiter que le présent numéro provoque un débat et permette d'ouvrir des voies vers des solutions.

G. Lafferranderie

Président du Bureau ECSL

A bold education

The International Space University (ISU), the summer session of which (July-August 1989) was hosted by the Université Louis Pasteur at Strasbourg, under the deanship of Dr Gerhard Haerendel (FRG), began as the dream of three students, two American (T. Hawley & P. Diamandis) and one Canadian (R. Richards). They saw significant space activity as having an inherently international dimension and as being only intelligible in multidisciplinary terms. That required a university that would teach students from all parts of the world about space from architecture of systems to microgravity research, making decent stops at economics, policy and law on the way. It should also do this in a practical way, which would not only act as near on-the-job training for the students but would also shake the space 'Establishment' into considering ambitious but realistic new projects.

The dream itself, of course, was hardly a practical one, as many people were quick to point out. But avuncular advice was not enough to dissuade the three young men who managed to secure just enough funding to bring their dream to life with ISU's first summer course in 1988 at MIT, Boston. The present authors attended, on different sides of the academic table, the 1989 course. ESA and other European organisations provided a substantial proportion of both the Faculty and students for this year's session. This (postgraduate) course, which cost US\$ 10 000 to attend (scholarships do, however, exist) had three main elements:

- a multidisciplinary 'core' where all students attend all lectures;
- a series of advanced lectures where students attend their chosen school/department's lectures (physical sciences, resources & manufacturing, life sciences, satellite applications, space engineering, space architecture, business & management, and policy & law);
- a design project.

As a lecturer soon discovers, the secret of ISU is that the first two elements serve the third. All students must participate in a project. In 1988 it was a lunar base, this year either a variable gravity research facility ('Newton') — of high utility in preparing for long-duration space-flight, e.g. to Mars — or a lunar-polar orbiter ('Artemis') for remote-sensing the Moon's resources prior to exploration. Thus, although general information is of interest to gain a feel for the space do-

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al idea in action

main, what is uppermost in each student's mind is how a particular subject matter will help in tackling the problems posed in that student's project. This helps all to keep to the practical essentials and to use limited time well.

Among the questions that had to be probed and resolved were the institutional character and shape of the entity that should conduct the international project; in 'Newton', how to allocate jurisdiction and control and especially IPRs in an East-West cooperation; and, in 'Artemis', how to accommodate a private entity (for investment, management and data sales) in a venture that would also require government-level cooperation and to protect the commercial value of data coming from the Artemis orbiter.

Daunting problems for any space lawyer or planner, they encouraged original research and imaginative possible solutions that form part of the bulky reports that were organised and produced by the student groups at the end of the course – printed and bound on time. The Newton project, which draws somewhat on the International Space Station arrangements, but with several innovations, was subsequently presented to the October IAF meeting at Malaga.

As lawyers, we found ISU a challenging intellectual experience and a source of valuable training. This arose from being confronted with the demands of engineers and others on legal expertise that occur in real life in ESA, NASA, or other space agencies and industry. Another benefit came from working closely with space professionals from the USSR, USA, Europe and elsewhere to find solutions to project problems and then translate them into acceptable text. There is much to recommend this kind of practical approach as a component of the European space law course the ECSL Chairman proposes for debate in his 'Mot du Président', above.

K. Madders ('89 Faculty Member)
& S. Hobe ('89 Alumnus)

N. B. The next ISU sessions are at Toronto-1990, Moscow-1991, Japan-1992. It is hoped to establish a permanent campus for ISU after 1992, possibly in Strasbourg, with specialised schools being distributed worldwide and, one day, with a spaceborne operational centre. Readers in Europe seeking further ISU information should contact : Mme Véronique Percheron, ESA 8-10 rue Mario Nikis, 73858 Paris.

ECSL Activities

Board meeting

The ECSL Board held its 2nd meeting in Paris on 12 February 1990.

ECSL had registered 168 members on this date with an increase of members coming especially from British law practitioners.

NPOC

Members who are also 'national points of contact' reported on their activities. Next, guidelines for NPOCs were discussed on setting up points of contact, coordinating their work with that of ECSL Secretariat, and enabling them to consult one another.

The principles approved are:

- Each national community with members belonging to the Centre is invited to designate a point of contact, according to procedures of its own choice.
- The NPOC may be a natural or legal person, whose role is that of an organiser, setting up meetings of the national community and gathering and forwarding to the Centre relevant information on the adoption of national regulations bearing on space activities, training courses, research topics, theses, publications, etc.
- The NPOC should reflect the interests of members from all backgrounds (academics and practitioners).

ECSL Workshop

A workshop on 'Legal Protection of Data received from Satellites' will take place before the end of 1990. The objective is to provide a detailed analysis of the situation and draft recommendations to improve legal protection of satellite data.

General Meeting

A first yearly activity report of the Centre will be issued by early summer and sent to each ECSL member. Under the Charter, the election of the Board must take place in a general meeting. Considering that the Centre's work is still so young, the members will be asked if they indeed wish the ECSL's first General Meeting to be held this year rather than next.

Centre italien pour le droit de l'espace

Suite aux initiatives entamées en 1989, une assemblée constitutive s'est réunie auprès du Ministère des Universités, de la Recherche scientifique & technologique à Rome le 6 février 1990. En présence de participants venus de l'université et de l'industrie, l'Assemblée a procédé à la constitution du Centre et à l'adoption de son statut, ainsi qu'à l'élection des

membres du conseil de direction composé des professeurs Capotorti (Université La Sapienza de Rome), Durante (La Sapienza), Leanza (Univ. Tor Vergata de Rome), Pocar (Univ. de Milan), Sico (Univ. de Naples), et Zanghi (Ecole Nationale d'Administration, Rome).

Des travaux de recherches universitaires relatifs au droit spatial sont en cours.

Une recherche interuniversitaire, réunissant les universités de Sienne, Milan, Pise, Rome et Trieste autour du thème du régime international de l'espace extra-atmosphérique, est coordonnée par le professeur Francioni (Sienne) au niveau interuniversitaire et par les professeurs Conetti (Trieste), Pocar (Milan), Ronzitti (Pise) et Conforti (Rome) au niveau local. Un séminaire consacré à ce sujet a eu lieu à Trieste fin janvier 1990.

Une recherche coordonnée par le professeur Leanza (Univ. Tor Vergata, Rome) sera publiée dans le courant de l'année, en anglais, sous le titre 'The Legal Regime of Geostationary Orbit and Communication Satellite'.

Mlle Spada, chercheur à l'Université La Sapienza a une étude en cours sur les 'institutions nationales et internationales pour la recherche dans l'espace'.

Une thèse de doctorat portant sur la télévision directe par satellite est en cours à l'Université de Bologne.

ESALEX moves from the pilot into the trial phase . . .

After major refinements had been made to the database, ESALEX's pilot phase started early in January and will have already been concluded by the time this issue of ECSL News is published. Its primary object was to test the user interface – to see whether the system is really easy to use. The 25 pilot-phase users were drawn mainly from various sections of the ESA Executive at Headquarters, ESTEC and ESOC, together with five ECSL members; some had had computer/database experience, but the majority had not.

Responses from users were almost uniformly favourable and no one seemed to have any difficulty with the method of finding material in ESALEX – our main concern. Where there was criticism, it mainly concerned the quality of the users' manual (an improved edition will now be produced that will be revised again during the trial phase) and the insufficiency of recent ESA programme material (a

bulk of more recent data is currently being loaded). Other criticisms identified faults in the data, and noted problems with response time that relate mainly to internal ESA users.

Taking the criticisms that were made into account, it has been decided to move to the trial phase and contracts have been sent out to ECSL members that will shortly give them access to the system and to its Questmail electronic-mail facility. Apart from link-up, use of the system is free of charge during the trial phase (no date has yet been fixed for its termination), though limited charges may have to be introduced later on.

As to the state of the trial phase data, loading of all currently-published ESA Basic Texts volumes should have been completed at the time of this phase's commencement, and we hope also speedily to load other space-law material (including UN treaties and General Assembly Resolutions of significance). Technical problems have meant that the consolidated collection of national-database bibliographical references will not be available at the beginning of the phase, but we intend this to be ready by the end of the year.

Kevin Madders
ESALEX Manager

... As National Databases Advance

Prof. Böckstiegel, ECSL Board member and Director of Cologne University's Institute of Air & Space Law, initiated the elaboration of a space-law database for his institute in 1987. Because it is the aim of the Institute's library – the contents of which will be reflected in bibliographical form in the database – eventually to collect all relevant published material on space law, the user will obtain information on a major segment of the literature via this tool.

Stored items are arranged in the form of bibliographic lists that include the language and the library code of each publication, as well as keywords. The system of keywords used is based on a philosophy of precise retrieval; that is, some 350 different keywords have already been developed, which would permit specific (and thus speedy) searches, depending on a user's knowledge of the subject, and potential keywords.

So far about 4800 documents have been stored in the database, which is still in development. Keywords have been allocated to half of them. The Institute hopes to provide visitors with access to the database early in 1990.

Knut Focke
Cologne Institute

Colloques récents

Comme exposé plus haut, les Universités de Milan, Trieste, Pise, Sienne et Naples, qui conduisent depuis un an une recherche sur 'Le droit de l'espace et la sécurité nationale', ont organisé un séminaire les 19-20 janvier 1990 à Trieste sur 'le régime international de l'espace extra-atmosphérique'. Les principaux sujets traités ont porté sur la coopération internationale et le transfert de technologie, les principes généraux en matière de responsabilité pour dommages, le règlement de différends, les assurances des activités spatiales et le rôle de l'Agence spatiale européenne ... Les actes du séminaire seront publiés.

'Space Insurance', London, 6 March '90. The Biennial Space Conference organised by the Insurance & Reinsurance Research Group, London.

The *First International Space Law Seminar* was held by CSP Japan, Inc. in March 1990. The theme was 'Space Business and Law: Commercialisation and Law in each country (Japan, USA and Europe)'. Three speakers were invited: Dr. Bess C.M. Reijnen (NL), Dr. Arthur M. Dula (USA), Dr. Kunihiro Tatsuzawa (Japan). The chairman was Prof. Toshio Kosuge (Japan).

'Towards a European Agency of Satellite Verification', colloquium sponsored by the Assembly of the Western European Union, Rome, 27-28 March, 1990.

Topics: the feasibility of creating an independent European satellite capability to monitor arms reduction treaty compliance; the role of European satellites in verification of conventional arms control agreements and the sharing of risks, roles and responsibilities.

Manifestations à venir

Conférence sur le Droit de l'espace, Propriété intellectuelle et Responsabilité, Paris, 6-7 décembre 1990. Inst. du droit et des pratiques des affaires internationales de la Chambre de Commerce internationale et IBA, avec le concours de l'ESA.

Colloque sur l'avion spatial, Paris, 14-15 mai 1991. Organisé par la Société française de Droit aérien & spatial, avec le concours de l'ESA et du CNES.

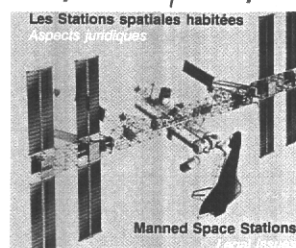
Publications

'Space Law – Basic Legal Documents', K.H. Böckstiegel & M. Benkô (Eds.), Martinus Nijhoff Publ., (2 vol. foreseen).

'International Administration. Law & Management. Practices in International Organisations', Ch. de Cooker (Ed.), UNITAR, Martinus Nijhoff, 1990.

'Environmental Aspects of Activities in Outer Space', K.-H. Böckstiegel (Ed.), Studies in Air & Space law, Vol. IX, Carl Heymanns Verlag 1990, 319 p.

Vient de paraître/Just published



Actes de colloque : **Les Stations spatiales habitées – Aspects juridiques/ Manned Space Stations – Legal Issues.** (ESA SP-305, janvier 1990, 232 p., fl. 40).

Ce document, qui vient d'être édité par les soins de l'Agence spatiale européenne, rassemble une vingtaine de communications présentées lors d'un colloque international organisé à Paris les 7-8 novembre 1989 par le Groupe de travail sur le Droit de l'Espace (Institut de Droit comparé de l'Université de Paris II et CNRS), avec le concours de l'ESA et du CNES. Les textes (présentés pour moitié en français et moitié en anglais) par des spécialistes de renom, traitent de quatre thèmes : (1) Aspects généraux & programmes; (2) Programmes nationaux & internationaux; (3) L'homme au travail dans l'espace & Statut juridique de l'astronaute; (4) Fabrications dans l'espace : Protection & Valorisation des innovations. Les sessions sont suivies de débats dont la synthèse est publiée dans ces Actes. En annexes figurent également les textes juridiques fondamentaux relatifs à la 'coopération en matière de conception détaillée, de développement, d'exploitation et d'utilisation de la Station spatiale civile habitée en permanence', à savoir : (i) *L'Echange de lettres sur les problèmes de sécurité nationale entre les équipes de négociation américaine et européenne*; (ii) *L'Accord entre les gouvernements participants (IGA)*; et (iii) *le Memorandum d'accord (MOU) entre l'ESA et la NASA*.

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