

ECSL News

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

Editorial

It is perhaps a sign of the growing importance of space in so many fields that one should see and support the need for a European Centre for Space Law. This was confirmed in my mind when in October last year I attended the initial meeting of the European Centre for Space Law at ESA Head Office.

We are now in an era of space exploration and exploitation in which matters of law have a significance to policy makers, investors, industrialists and space agencies alike. There is, therefore, a need for exchange of information, education for those not versed in legal affairs, and a dialogue. It is my hope that ECSL News will play its role in meeting some of these needs.

It is appropriate that as European Space celebrates its silver jubilee, we should see progress in establishing the permanent nature of the Centre. I am grateful to ESA staff and to the national bodies which have given it their fullest support: if their enthusiasm and dedication are hallmarks for the future, then its success is already assured.

One of the main information sources which will be fostered by the Centre is a refinement of an electronic database (ESALEX), and an interactive information system accessible to ECSL users. ESA will use its considerable experience of modern information techniques to provide a cheap, user-friendly system designed for a non-technical community such as the legal profession.

My thanks go to those who worked so hard in the ECSL Preparatory Group to turn good ideas into a plausible reality. As with so much of the European Space venture, ECSL brings together different cultures, different concepts, and will I know produce better understanding.

I look forward, first to the inauguration of the Centre in May and secondly to its success and influence in the coming years.

Reimar Lüst
Director General ESA

The European Centre for Space Law initiative

Gabriel Lafferranderie, ESA Legal Adviser

What is the European Centre for Space Law, and what is it meant to achieve?

The idea of founding such a Centre was proposed by the ESA Executive early last year to ESA's International Relations Advisory Committee (IRAC). IRAC supported the idea, and so, with the help of IRAC national delegations, the Executive contacted the people needed for the initiative to succeed: legal academics, industrial lawyers and practitioners in private practice, government service and international organisations. Sufficient people responded positively for ESA to call a start-up meeting on 28 October 1988 at ESA HQ in Paris, which I had the pleasure to chair and the outcome of which I will come to shortly.

But, first of all, I would like to describe the motivations for setting up the Centre. And here a couple of caveats are necessary at the outset. For one thing, the intention is not to establish a formal structure, a learned society. Nor is the idea to compete with the work already done by various space-law institutes at national level. Rather, what we aim at is:

- to strengthen and promote the utilisation of the resources that are already available, and
- to fill the large gaps that presently exist, both in terms of
 - coordinating analysis and formulation of concrete propositions on space law in Europe and
 - providing a supportive environment for the conduct of good, practically-oriented, research.

Concentrating on the 'gaps' for a moment, it is at present difficult for the space investor and user – and their advisers – to appraise the regulatory situation across national borders in Europe when it comes to providing an operational space service. This is due to the lack of reduced, analysed legal data, and applies whether one is speaking of satellite use of the radio spectrum or the handling of spacecraft-generated data. A similar situation exists with respect to the impacts of non-European legislation on space technology R&D and exploitation within Europe. There are, further, a great many lessons to be learned from the contracts practices that have grown up

Nucleus of the ECSL team: G. Lafferranderie (centre) with staff of ESA Legal Affairs Department.



at European and national level over the past thirty years in the space field. Again, though, this valuable experience – which may be very helpful in improving the competitive profile of other sectors of European industry – has hardly been explored, largely because the mechanism has not existed to focus attention on the phenomenon.

One could easily go on, particularly when one thinks of the multitude of specific legal issues that accompany Europe's entry into an era of permanently manned facilities in space. But the conclusion of the Agency and of those attending the 28 October meeting is simply this: that insufficient organised effort has been directed at space law in Europe according to any standard usually applied for determining priorities among fields of legal study.

Moreover, in a Europe already integrated in space matters, and elsewhere pointed towards 1992, remedying the situation is a task that can only reasonably be undertaken on a European scale – hence the Agency's leading role in this project, which mirrors the role it has adopted in stimulating European space-science research since 1960.

Is, though, the European space law community adequately equipped now to take up this challenge? There is certainly no shortage of space-law material nor of persons active in the field. What is lacking, by contrast, is the means to bring the two together effectively. And this is not achieved only by the organisation of colloquia and workshops and the setting of common research priorities and programmes, although all these tasks, as well as the exchange of students and faculty, will be indispensable parts of the ECSL's collective effort. Instead, one also needs to be equipped with a sufficient infrastructure when thinking on a continent-wide scale in a field as fast-moving and international as space law. Today, this need above all translates into having available an electronic database system, upon which researchers can rely, and through which they can have access to up-to-date information remotely and instantaneously. This is why ESALEX (see separate article) is so essential an ingredient of the ECSL project. Equally, though, institutional support (office space, meetings support and machinery for maintaining contact with ECSL members) is necessary. In this infrastructural respect also, ESA is prepared, in promoting the Centre, to provide its assistance, as well as the services of one person full-time who will be assigned to secretariat duties.

Another way in which ESA is helping to establish the Centre is through the production and distribution of *ECSL News*. This newsletter will, it is hoped, act as another bridge between members, informing them, and enabling them to speak to other members of their community.

But I must add that, even if ESA can act, by these means, as something of the 'backbone' of the Centre as it gets started, ESA's role must be complemented by the efforts of members themselves. Otherwise, the initiative will surely fail. ESA cannot, for instance, undertake the collecting of national database material, even though it will load them in ESALEX. Help at national level is required, and in this regard I would like to give particular thanks to the Cologne, Leiden, Utrecht and Max Planck (Heidelberg) institutes for their promises of support. Further contributions are, however, vital in establishing a useful all-European database. Likewise, a network of national correspondents needs to be created for the supply of news items and features to *ECSL News*. And of course the Centre needs to build a committed team that will help prepare and conduct transnational and multidisciplinary research projects.

It was therefore gratifying, in respect to meeting all these needs, that the 28 October meeting approved the principles of a draft ECSL Charter, which, at the same time as providing for a simple organisational structure, emphasised the partnership that has to develop between national members and ESA Executive. National members' commitment has indeed already been demonstrated in the excellent contribution made by the participants who kindly agreed to serve in the ECSL Preparatory Group and who have helped to define the orientation of *ECSL News* and to address other practical modalities involved in forming the Centre.

The product of these preparations (which should be completed in March), and of the ESA Executive's efforts in establishing ESALEX and other ECSL implementation items, will be presented at an inaugural General Meeting of the ECSL at ESA HQ in Paris on 12 May 1989. That meeting will mark the commencement of the partnership just spoken of, and a process of change that will surely enhance the life of the European space law community.

I thus very much hope that you, the space law scholar, practitioner, student or interested layman, can attend this meeting, as well as a demonstration of the ESALEX database, on 11 May 1989. The trip to Paris will be worth it – and not just because Paris in Springtime is a little special anyway!

ESALEX and

Kevin Madders, ES
(ECSL News Coordinator)

What a database is for

As research workers in law in one way or another, one experience the readers of this newsletter will have in common is spending hours in dusty libraries and archives, searching for that single scrap of information that somehow manages to keep a step ahead of every catalogue we open. Hours passed that way are a genuine waste, because they detract from performance of the jurist's vocation – analysis of the texts, once they are at hand.

What an electronic database aims to achieve, by contrast, is this: to cut out the process of manually searching through layers of directive to reach relevant material, and to give clues to something else – a computer – to do the job for you. The computer thus performs the task of picking out relevant information, and does so by referring to the sets of catalogues that have been stored in its own memory, this 'memory' being known as a 'database'.

The ESALEX database as an ESA database

Over twenty years ago, as Europe began to meet the challenges of space by developing high-technology spacecraft (which therefore rely upon processing vast amounts of experimental and other stored data), this same realisation of the essential role databases perform impelled Europe's space organisations to establish what is today the ESA Information Retrieval Service (ESA-IRS) system, located at ESRIN (Frascati, Italy) – the largest database in Europe and one of the largest in the world. During IRS's lifetime, it has passed through many stages of evolution in order to make access to data both easy and productive for widely different kinds of user communities, from space engineers to medical doctors and financial advisers. As a result, it is a system intended to be 'friendly' to the non-expert. ESA experts at ESRIN have, furthermore, gained experience with legal and policy bibliographical data, having already included a number of items in the ordinary IRS database.

Although being a specialist database, ESALEX will draw upon the experience built up by ESRIN and will use the basic network service established by ESA-IRS. This network connects users into a single system that extends across Europe. Using it, any user in an ESA Member State will be able to dial up and enter

the ECSL user

Dept. of Legal Affairs
ESALEX System Manager)

ESALEX for the cost of a regional telephone call within that user's country.

ESALEX features

User friendliness

ESALEX was originally developed by the ESA Legal Affairs Department with the support of ESRIN's Information Services Division (ISD) to serve the internal needs of the ESA Executive where basic ESA legal documentation was concerned. ESA staff have access to personnel and training resources which allowed this internal database to be set up quickly and with little modification to existing database standards used elsewhere within the Agency. But such a system does require some computer skills to use; it is not really suitable for untrained external users.

The ECSL version of ESALEX is, by contrast, as user-friendly as possible. That is, a user should be able to follow simple directions on the screen without needing either a training session or a detailed manual to tell him or her what to do. An average standard of literacy should, in other words, suffice!

A wide set of data, arranged in clear categories

Another major change to the original ESALEX database is its expansion to include a very complete collection of ESA law, as well as the leading texts of international space law. These classes of law are separated into what are sub-databases, files containing:

- ® *ESA's Basic Texts* (a collection of several hundred documents, including the ESA Convention and related rules and regulations, ESA's international Agreements, programme-related legal texts, and international space law Agreements);
- ® *the ESA Contract & Finance Regulations*; and
- ® *the General Clauses & Conditions for ESA Contracts*.

Entirely new sub-databases have, though, been created for the materials connected with the ECSL, starting with the inventory of space-law materials available at ESA. This and subsequent issues of *ECSL News* will, for example, be included. But the most important item here is the assemblage of bibliographical data from the various national databases held at university libraries, institutes and other sources. By combining the data of each, all will be equipped with a remark-



ably powerful (and most likely unique) tool for research in the space law field.

Even though the greatest bulk of data will be that contained in the bibliographical part of the database, a further major item of content will be a collection of non-ESA legal materials. These will span not only national law and regulation relating to space activities, but also case law and – sources too often neglected in European legal research – reports, official correspondence (e.g. published State papers), and legal opinions. Acts and proceedings of (mainly European) international organisations would also be included, where they have a space-law bearing.

Easy search and full-text facilities

So far, I've only described ESALEX conceptually. But what will you, the user, actually see once you're in the system? Your use of ESALEX will typically be something like this. After log-on, you will choose the sub-database you wish to look at and, in it, select which way you would like the computer to search the material. If, perhaps, you need to find out, in the *ESA Basic Texts*, which agreements Spain has been party to, you specify 'agreements' and 'Spain', and the computer will list those agreements. If you wish to study an agreement, you next specify a 'browse' option and its list-number; an alternative method would be to use another option to select the document you want from the *Basic Texts'* Tables of Contents. In either case, the text of the document will then appear on the screen. After this, you can print the document out, if you wish to keep a hard copy for your file.

This use of 'search' and 'full-text' facilities would apply also to stored pieces of national legislation, reports, case-law, etc. And, remember, this research can be done from any point within an ESA territory – in minutes, and without touching a dusty bookshelf!

An electronic mail facility

Last but not least, ESA wishes to encourage the maximum interchange between ECSL members. If, for instance, you work in Palermo and want to try out an idea on a colleague in Copenhagen, you will, as an ESALEX user, be able to send him a message via the ESA-IRS network, and he or she will be able to reply in the same way. Very important too, you will be able to send your inputs to me for inclusion in the ESALEX database or in *ECSL News*.

ESALEX's availability and costs

Access to ESALEX will be open to all ECSL members operating from within any ESA territory. No charge will be made, at least initially, for using the database itself (although the user will be liable for the regional telephone link-up mentioned earlier and the costs of a modem; a small charge may be applied for electronic mailing). ESA will issue ECSL users with a password and, for individuals and institutes not already connected to an IRS-compatible communications link, the communications software your terminal requires (at a reduced price).

Progress made in ESALEX

In setting up as powerful a database as the ECSL version of ESALEX, under conditions of maximum user-friendliness, one has to be prepared for a relatively long-lead time, in order that planning and execution proceeds at an even pace. Nevertheless, ESALEX's basic framework is now operational and good progress has been made in adapting the *Basic Texts* for ECSL purposes. A prototype database with all main ESALEX sub-databases on-line will be demonstrated at a meeting devoted to ESALEX and IRS on 11 May 1989 at ESA HQ, beginning at 14.00 hours. A trial period will then ensue with a selected number of users. This trial will allow ESA to assess which changes need to be made to the system before making it operational. It is our intention to have the system at operational status during the Autumn of this year, including, if possible, the electronic mail facility.

Conclusion

I hope in this feature I have been able to open up the ESALEX system, especially to the ECSL member who perhaps knows only a little about informatics. ESALEX itself has been conceived with this user's needs and problems in mind, since – as the questionnaire reveals – he or she is in the majority. And without him or her joining in a common system for research activities, keeping up-to-date, and communicating information, we know that ECSL will not be what it can be – Europe's powerhouse of ideas on space law.

About ECSL News

(ISSN 1013-9036)

This magazine aims to:

- inform the readers on ECSL & national activities and plans
- focus on current issues of space law affecting Europe
- establish a calendar of space-law-related events in Europe
- update the reader on ESALEX and other space-law databases
- include inputs from leading European space figures
- give details of recent space-law publications of interest
- provide a means for ECSL members to air their views
- supply news on national and international space regulation

Outcome of the ECSL questionnaire

At the 28 October 1988 meeting called to discuss the ECSL initiative at ESA HQ, one of the main conclusions was that some market research should be done to assess the needs of the European space law community, and its existing potential. ECSL activities should then be oriented in such a way to take the results of this survey into account.

The ESA Legal Affairs Department therefore produced and circulated detailed questionnaires throughout the academic and practitioner communities. Based on a current response from 40 participants, three main ideas emerged from the survey:

- All felt the need for an easily accessible system permitting use of ESA and other space law documentation, especially through an electronic database service.
- Equally, all wanted to enlarge cooperation in facilitating the exchange of information and views through the organisation of meetings, joint projects and other means of contact within the framework of the ECSL.
- Many wished to have advice on setting up their own informatics systems, particularly for receiving, storing and retrieving legal data.

Many thanks to those who responded to the questionnaire. The information gained is currently being used in preparing for the implementation of the ECSL initiative.

Meetings & Courses 1989

30 June – 31 August, Strasbourg, F
European Summer Meeting of the International Space University: to be held at Université Louis Pasteur.
Contact ESA Public Relations Dept., Paris
Tel. (33-1) 4273.7155

7-13 October, Beijing, China
Intl. Coll. on the law of outer space (IAF)
Organiser: International Institute of Space Law (IISL), 3-5 rue Mario Nikis, 75 Paris

7-8 November, Paris, France
Intl. Symp. on Space Law: 'Orbital Stations – Man at Work in Space'
Organisers: Univ. de Paris I, CNRS, ESA
Languages: English and French

Legal texts and publications

International Agreements on the Development and Use of the International Space Station

- Agreement among the Governments of USA, Member States of the ESA, Japan and Canada on cooperation in the detailed design, development, operation and utilisation of the permanently manned civil Space Station.
(Washington, 29 September 1988)

- Arrangement among the Governments of USA, Member States of ESA and Canada concerning application of the Space Station Intergovernmental Agreement pending its entry into force.
(Washington, 29 September 1988)

- Memorandum of Understanding between ESA and NASA on cooperation in detailed design, development, operation and utilisation of the permanently manned civil Space Station.
(Washington, 29 September 1988)

- Memorandum of Understanding between the Ministry of State for Science & Technology of Canada and NASA on cooperation in the detailed design, development, operation and utilisation of the permanently Manned civil Space Station.
(Washington, 29 September 1988)

Recent Agreements between Member States of ESA and the USSR in the Space Field

- Agreement between the Governments of the UK and the USSR concerning cooperation in the field of study, exploration and use of outer space for peaceful purposes.
(Moscow, 31 March 1987)

- Cooperation Agreement between the Governments of Italy and the USSR concerning the exploration and use of outer space for peaceful purposes.
(Moscow, 14 October 1988)

- Agreement between F R Germany and USSR on Space Cooperation. Signed in October 1988 (not yet in force).

- Treaty between Austria and USSR on astronaut flights. Signed on 6 October 1988 (not yet in force).

- Contract between Austria and Glavkormos. Signed on 25 October 1988.

Journals

'La coopération spatiale européenne'
S. Courteix & A. Manin
Problèmes politiques et sociaux n° 583-4
La Documentation Française, Paris 1988.

European Space Agency (several authors)
Interdiscipl. Science Rev., Vol. 13, N° 2,
June 1988
J W Arrowsmith Limited, Bristol, UK

'L'Agence Spatiale Européenne: aujourd'hui, demain' and 'La Station spatiale internationale: La portée des Accords de Washington'
G. Lafferranderie, Le Trimestre du Monde, N° 1, 1989

Reports

'The European Community and Space: A Coherent Approach'
CEC, Brussels, July 1988

Report on Space Debris:

An ESA study on space debris problem, undertaken in collaboration with national experts, including a section on legal aspects. (Copies available from ESA Public Relations Department).

Student Initiatives

EGEE (Etats Généraux des Etudiants d'Europe) is organising Space Weekends (the first took place in Toulouse in 1986, the second in Munich in 1987, and the third in Toulouse in November 1988). The point of contact is M. Faurens 75 rue d'Amsterdam, 75008 Paris.

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