L’ESA regarde vers l’Est

Il y a quelques années, un tel titre aurait suscité, à la rigueur, le sourire. L’Organisation européenne de Recherches spatiales (ESRO) avait, il est vrai, conclu un accord sous forme d’échange de lettres avec l’Académie des Sciences de l’URSS, entré en vigueur le 12 février 1971. Cet accord a servi de chapeau pour les quelques activités de coopération scientifique qui sont restées bien rares et sporadiques. La coopération avec les pays socialistes de l’Europe Centrale et Orientale était encore plus éphémère pour ne pas dire inexistante, ces pays étant entièrement orientés vers l’Union Soviétique.

De la Glasnost à l’apréS-Glasnost
Cette situation a commencé à changer vers 1986 quand ceux des États membres de l’ESA qui n’avaient pas souhaité une grande coopération spatiale avec l’URSS pendant l’âge de la guerre froide, assouplissaient leur position à la lumière de la Glasnost. La coopération triangulaire entre l’ESA, l’IKI (Institut de recherches spatiales de l’Académie des Sciences de l’URSS) et la NASA pour permettre au satellite Giotto de l’ESA de s’approcher à quelque 600 km du noyau de la comète de Halley en mars 1986 était le premier signe tangible de ce changement.


Le point culminant de cette évolution jusqu’à maintenant se trouve dans la Résolution sur le Plan spatial européen...
à long terme 1992-2005 et les programmes (ESA/C/M/XCVIII/Rés. 1 (final). Adoptée par le Conseil de l’ESA se tenant au niveau ministériel, le 20 novembre 1991, la Résolution "réaffirme la nécessité d’intensifier la coopération internationale, aussi bien entre les États membres qu’avec d’autres partenaires européens et non européens, en vue de réaliser pleinement les objectifs du Plan spatial européen à long terme avec le meilleur rapport possible entre les impératifs de coût et d’efficacité..."

Depuis l’adoption de ladite Résolution, l’ESA a déployé tous ses efforts pour mettre en œuvre la consigne des Ministres.

**Les bases d’une coopération ESA/Russie**

La coopération spatiale avec la Russie dont le Gouvernement a notifié l’ESA en avril 1992 qu’il reprenait les droits et obligations résultant de l’accord entre l’Agence et le Gouvernement de l’URSS (voir, pour texte, ECSR News No. 9), fait appel à la fois à la tradition des contacts entre scientifiques ainsi qu’au grand potentiel de l’industrie spatiale russe.

En application de la Résolution de Munich, l’ESA a décidé de rechercher intensivement le potentiel de cette industrie en finançant des contrats, conclus soit par l’Agence elle-même soit par des firmes de ses États membres, avec des entreprises et des instituts de recherche de la Russie dans des domaines de l’infrastructure spatiale (voir article de T. Beer).

Associé à cet effort, outre cinq groupes de travail déjà établis en décembre 1990 (pour la science spatiale, la biologie et la médecine spatiales, la recherche fondamentale en microgravité, l’observation de la terre et les systèmes de transport spatial habités), les Directeurs généraux de l’ESA et de l’Agence spatiale russe (RSA) ont créé en avril 1992 trois groupes de travail ad hoc. Ces groupes étudient respectivement :

- 3 voirs d’astronautes de l’ESA sur la station MIR ainsi que des expériences scientifiques à effectuer ;
- une station spatiale future intégrant des éléments développés par l’ESA et ceux développés en Russie ;
- les technologies nécessaires pour le transport spatial.


**Sans oublier l’Europe Centrale...**

La coopération spatiale avec les pays de l’Europe Centrale et Orientale peut se fonder sur une grande expérience des scientifiques, acquise lors de leur longue collaboration avec l’Union Soviétique. Les domaines d’intérêt mutuel sont la science spatiale et les sciences de la vie, ainsi que la télédétection et les télécommunications.


Cet élément de formation à l’aide de bourses est particulièrement apprécié par les partenaires de l’ESA. Si les moyens nécessaires à cette activité étaient plus importants, la formation devrait encore se développer.

**Et pour le long terme ?**

La fin de la guerre froide, l’omniprésence des restrictions budgétaires, un passé commun – même s’il a été souvent conflictuel –, la situation géographique et enfin la construction de l’Europe sont autant d’éléments qui militent tout naturellement en faveur d’une coopération spatiale plus complète et équilibrée dans notre grande Europe. Si nous mettons en commun nos efforts pour l’accomplissement de cet objectif, on ne peut douter que l’Europe aura les moyens de réaliser ce qui n’est aujourd’hui qu’un rêve...

K. Barbance
Space Activities of Russia and Member States of the Commonwealth of Independent States

Features of the post-Soviet Legal Regime

During over 35 years the Soviet Union built itself into a mighty space power. Its access to space resembled a freight service. MIR gave it an orbital base. But what of the legal system applicable to space then, and, more important, in the post-Soviet era? Academician Kamenetskaya of the Institute of State and Law, Moscow, provides her insights in this second ECST News briefing.

The global character of space activities and the universal interest of the international community regarding their consequences, prompted the rapid development of international law on the exploration and use of outer space. At the same time, several States thought it necessary to address national level issues connected with the implementation of their international obligations and the regulation of private sector space activities. This resulted in the appearance of a limited, though growing, amount of specific domestic legislation governing space activities in the US, Britain, Sweden and some other countries.

In the Soviet Union, despite a huge space programme, that country had no specific legislation on space activities — or at least no provisions of an open character. Space activities were regulated by a number of secret rules and decisions adopted by the Central Committee of the Communist Party, the Government and various ministries and agencies. These regulations were and are inaccessible to the public in the country and abroad.

For years Soviet lawyers felt this situation unfortunate and advocated the passage of a unified space act. Their efforts were consistently rewarded with a negative reaction on the part of those who governed the country and had legislative authority, at least until the closing months of the Gorbachev era.

What is the situation now — after the break-up of the USSR, the appearance of a number of sovereign States and the creation of the Commonwealth of Independent States? There are two main aspects — firstly, the legal regulation of cooperation among former Soviet Republics in the exploration and use of outer space and, secondly, the legal and organisational foundations of space activities in Russia.

First move of the CIS era

Taking into account the economic, scientific and technical legacy of the Soviet space programme there are important incentives to carry out space activities jointly among Member States of the Commonwealth of Independent States (CIS) on the basis of treaties of an international character between those Members that are interested. A first such treaty — the Agreement on Combined (Joint) Activities in the Exploration and Use of Outer Space — was concluded at the highest level among nine CIS Members on 30 December 1991 in Minsk (the Ukraine and Moldova did not sign this Agreement), practically simultaneously with the CIS' creation.

As will be seen from the Agreement's text following this article, the accord is in part a general statement. It notes the necessity to develop space activities, the significance of space science and technology for the development of the Commonwealth Member States and the need for combined efforts. The interests to be served are the economy, science, defence and the collective security of CIS Member States.

But the Agreement also sets out how the combined efforts should be undertaken. Joint activities are to be effected on the basis of interstate programmes of space research and exploration, the implementation of which is to be coordinated by a special organ — the Interstate Space Council. Interstate programmes for military or dual-use purposes (i.e. military and civilian applications) will rely on the Joint Strategic Armed Forces for their fulfilment.

The Joint Agreement (but in July 1992 Ukraine joined the Minsk Agreement) also provides principles on the continuing utilisation of space facilities, proportionate financing and associated functional questions. Much, however, was left to subsequent agreements.

From Minsk to Tashkent

Later, on 15 May 1992, a new Agreement was signed in Tashkent by all CIS Member States except Moldova. This treaty develops some provisions of the Minsk Agreement, particularly on rights over ground infrastructure for space programmes. One of its main provisions, Art. 1, stipulates that ground segment elements (e.g. the Baikonur and Plesetsk cosmodromes, the Cosmonauts Training Centre, technical, launch and landing complexes, adjacent rocket break-up zones, flight control centres) which are situated on the territories of Azerbaijan, Belarus, Kazakhstan, Russia, Turkmenistan, Uzbekistan and the Ukraine are to be considered the property of these States.

The right to use these elements is transferred to Strategic Forces of CIS or other parties concerned on the basis of special agreements. On May 25, 1992 two Member States of CIS — Russia and Kazakhstan — signed a bilateral Agreement on the problems connected with the utilisation of Baikonur Cosmodrome which is situated in Kazakhstan and is the property of this state. The Agreement not only governs access and use conditions to Baikonur, but also provides a basis for coordination of space programmes. The rest is devoted to financial procedures, and ecological and social matters.

Though the combination of the Minsk, Tashkent and Baikonur agreements have now regulated some of the most pressing problems connected with the transition from the Soviet programme to the new order, we still have before us the challenge of establishing a full-scale cooperative programme within CIS.

A new Russia in space

Against the overall post-Soviet situation, it is Russia of course which has the task of taking over the bulk of the
Central Europe Then and Now

The fundamental transformation in the lives of Central European countries is reflected in their space activities. From 1967 these had relied on Soviet rockets, satellites and tracking systems that were later made available under the Intercosmos cooperation (started by the Agreement on Cooperation in the Exploration and Use of Outer Space for Peaceful Purposes, Moscow, 13 July 1976).

Intercosmos lacked the common funding and other characteristics of a full-scale international organisation, but rather coordinated national space research bodies set up by each member government. Czechoslovakia’s took the shape of a Commission, chaired by the President of the Czechoslovak Academy of Sciences and composed of interested ministries and agencies. The Chairman represented the country in the Intercosmos meeting of Chairmen of national organs. Joint expert groups oversaw by discipline the various projects.

Intercosmos’ programme was originally oriented to basic research effects in scientific institutes (this explains the national bodies being linked to their academies of sciences). But this changed over the years and user-oriented applied research started to play a significant role. The programme came to cover space physics, meteorology, biology and medicine, communications and the environment. Its expansion led to a multidisciplinary network among institutes, universities, ministry research institutions and industrial laboratories. Still there, it now enables cooperation with any partners, inside or outside the Intercosmos framework.

Taking again the example of Czechoslovakia, it participated, mainly via Intercosmos up to 1991, in over 140 experiments in space physics, space biology and medicine, and remote sensing. They were accomplished on 57 space objects; 3 were built in Czechoslovakia (subsatellites of the ‘Majon’ series). In constructing most of the space instruments, their makers cooperated with partners from both East and West Europe.

While Intercosmos’ existence is now in question, individual projects already started continue, despite funding and other difficulties. At the same time, existing scientific and technical teams are forming closer ties to other space programmes, especially in Europe. An example was the signing in 1990 of a Czechoslovak-CNES agreement on Earth observation and other space research cooperation. The usefulness of SPOT data in different areas of the Czechoslovak economy is now under investigation. Also, on 11 February 1992 Eurnetsat and the Czech and Slovak Hydrometeorological Services concluded a 4-year agreement on the use free of charge of MeteorSat image and other data. The Czechoslovak Commission now intends to be active in the Hexagonal initiative’s space section. These, and joint experiments with West Europeans, will certainly proceed irrespective of the possibility of the dissolution of the Federation.

As to further steps, all Central European countries consider the development of cooperation with ESA to be particularly important. Hungary concluded a Cooperation Agreement with ESA in 1990, and similar agreements have been negotiated with Poland and Romania, though not yet signed. Czechoslovakia was engaged in similar negotiations in June 1992. The draft agreements foresee cooperation in space science, Earth observation research and applications, telecommunications, microgravity research and material processing. Other provisions deal with working-level consultations on joint projects, awards of fellowships, exchanges of experts, and joint symposia. The possibility of closer association with ESA is under study in these countries.

Internally, the new situation requires organisations comparable to space agencies in other countries (see also Kamenetskaya and Plaviczous articles). Hungary decided to establish a space research agency earlier this year, and Poland reportedly is also close to such a step. Subject to broader political developments, the Czech and Slovak space community believes the present Commission should give way to an agency as the conceptual, coordinating and advisory body of the government and its representative in international relations.

E. Kamenetskaya

V. Kopal
De l'URSS à la Russie : la situation juridique

La dislocation de l'Union soviétique a posé la question générale de la succession aux traités et, en matière spatiale, de savoir quel était le statut des nouveaux États vis-à-vis des Traités spatiaux multilatéraux et si les Accord internationaux conclus demeuraient valides et pouvaient servir de base, au moins temporairement, à la poursuite de la coopération. Le Conseil de l'Agence réuni au niveau ministériel de Munich de novembre 1991 avait mis l'accent sur le développement de la coopération internationale dans le but de réduire les coûts des programmes pour l'Europe spatiale. L'affirmation de liens avec la Russie prenait ainsi une autre signification, celle de contribuer à la stabilité de ce pays et au maintien de son potentiel et par là à la sécurité de l'Europe et de développer des liens de partenariat avec l'ESA établis par l'Accord de coopération ESA-URSS du 25 avril 1990.


C'est ce qui fut finalement réalisé par la note transmise par l'Ambassade de Russie en France du 28 avril 1992 qui affirme que "la Fédération de Russie continue d'exercer les droits et de respecter les obligations découlant de l'Accord" de 1990. Cette note légére en quelque sorte les contacts qui s'étaient poursuivis et donne une base à la conclusion d'arrangements négociés en attente de signature (Bior-10 et la mission Mars-94). Mais de nombreuses interrogations subsistent. Que se passe-t-il pour les autres Républiques qui faisaient partie de l'ex-URSS et des relations entre l'Agence et ces Républiques ? Comment assurer la protection des biens et des personnes de l'Agence, par exemple l'accès et l'utilisation de la base de lancement de Baïkonour dans le Kazakhstan ? Ou, tout simplement, les autres Républiques ont-elles donné leur accord à la reprise par la seule Russie du contenu de l'Accord conclu avec l'ex-URSS ?

Une série de questions est liée à la succession de l'URSS aux Traités spatiaux : comment régler le cas de lancement pour l'Agence ou en coopération d'objets spatiaux à partir des bases de lancement sur le territoire d'une République de l'ex-URSS ? (par exemple immatriculation, responsabilité internationale).

Un début de réponse à ces diverses questions a été donné par l'"Accord de Minsk", mais c'est insuffisant. La note diplomatique apporte une amélioration mais les carences ne pourront être surmontées que par une réflexion générale et la conclusion d'un nouvel accord avec la Russie et des accords appropriés avec certaines Républiques. Les projets d'accords entre l'Agence et la Russie sur des coopérations précises essaient, dans l'attente, de faire en sorte que la Russie agisse en tant que protecteur des intérêts de l'Agence.

G. Lafferrandière

Signing of the first cooperation agreement on space exploration by the Soviet Ambassador in Paris (left) and the Director General of ESA (Paris, 25 April 1990).

Space Law Notepad


This five-year agreement (renewable by exchange of notes) opens the way for US Shuttle/Mir astronaut missions by as soon as 1993. A docking could occur in 1994-95. Soyuz may be used as a crew return vehicle for the International Space Station.

The Agreement founds the cooperation, like others, on 'equality, reciprocity and mutual benefit' (Art. I). The forms it may take (Art. II) are broad, ranging from global monitoring to spaceflight safety, manned missions and — a clause arrived at by last-minute political intervention — examining the possibilities of working together in other areas, such as the exploration of Mars'. Yearly high-level consultations will be held (Art. IV), while NASA and the Russian Space Agency are the main implementing Agencies.

Technology transfer restrictions are maintained through making 'cooperative activities' subject to 'national laws and regulations' of each Party (Art. III).

Intellectual property rights (IPRs) are graced by a special Annex to ensure 'adequate and effective' protection, meaning:

- mutual notification and timely protection of inventions or copyrighted works arising under the Agreement;
- the limitation of IPRs over joint research to one's own system and by agreement to third systems; i.e. a Party's IPRs do not extend to the other Party's system. A Party loses its third-system rights if its laws do not provide for the particular type of IPR in question. (Publishable material, though, benefits from a mutual non-exclusive royalty-free licence);
- identified 'business-confidential information' must be protected by law, regulation and administrative practice.

K. M.
The ‘Minsk Agreement’

(official translation)

The States Parties to the present Agreement,

NOTING the great significance of space science and technology for the development of the Commonwealth Member States,

RECOGNISING the need to combine efforts for effective space research and exploitation in the interests of the economy and science, as well as for defence capabilities and the maintenance of the collective security of Commonwealth Member States,

CONFIRMING the need for the rigorous observation of international Agreements and obligations in the sphere of space research and exploitation that were earlier entered into by the Union of Soviet Socialist Republics,

CONSIDERING that the adoption of an Agreement on joint activities in space research and exploitation will serve the interests of signatory States

HAVE AGREED AS FOLLOWS:

ARTICLE 1

Joint activities in space research and exploitation shall be effected by States Parties to the present Agreement on the basis of inter-State programmes.

ARTICLE 2

The implementation of inter-State programmes of space research and exploitation shall be coordinated by an inter-State Space Council, whose Charter is to be drafted by appointed representatives of the States Parties to the present Agreement. The Council’s charter shall be approved by a decision of the heads of Government.

States Parties to the present Agreement may conduct independent programmes for space research and exploitation.

ARTICLE 3

The fulfilment of inter-State programmes of space research and exploitation in the area of military and dual purpose (military and civilian) space facilities shall be assured by the joint strategic armed forces.

ARTICLE 4

Inter-State programmes for space research and exploitation shall be financed by means of proportionate contributions by the States Parties to the present Agreement, and be implemented on the basis of existing space complexes and space infrastructure facilities and those in the course of being established (the Baikonur and Plesetsk cosmodromes, technical, launching and landing complexes, areas where separating fragments of rocket stages fall to the ground, space flight control centres, the cosmonaut training centre, coordinating and computing complexes, data reception and processing centres, arsenals and other facilities).

The use of the afore-mentioned infrastructure for conducting the independent programmes of the States Parties to the present Agreement shall be determined by separate Agreements among the interested States Parties.

ARTICLE 5

Expenditure on the exploitation of existing space systems and on the establishment of new space systems for economic, scientific and military purposes and on the maintenance of the single testing base, as well as the return to be gained from space projects and the launch of space equipment which are carried out on a commercial basis shall be allocated proportionately among the States Parties to the present Agreement.

The States Parties to the present Agreement shall bear responsibility for their activities in space research and exploitation in accordance with terms and modalities to be defined in a special Agreement.

ARTICLE 6

The States Parties to the present Agreement undertake to develop their activities in space research and exploitation in accordance with existing international norms, and to coordinate their activities aimed at settling international legal problems of space research and exploitation.

ARTICLE 7

The States Parties to the present Agreement agree to arrive at mutually agreed decisions determining the procedure for allocating the proportionate financing of inter-State programmes for space research and exploitation, for the provision of facilities, territory, material and energy resources, and for the compensation of damage associated with the use of space equipment, as well as regarding the procedure for the termination of the present Agreement by one or all of the States Parties.

ARTICLE 8

The States Parties to the present Agreement pledge to provide the persons and facilities associated with the execution of inter-State space research and exploitation programmes with the necessary material and technical resources, to make payments pursuant to legislation, to pay taxes and to deal with welfare matters.

Beginning in 1992, they also pledge to make provision for the allocation of the funds necessary for the implementation of inter-State programmes when developing State budgets.
L’Agence spatiale roumaine

Mettant en valeur les traditions et l’héritage technique de l’aéronautique et de la propulsion par réaction, illustrés grâce aux remarquables prédécesseurs comme Aurel Vlaicu, Traian Vuia, Elie Carafoli, Herman Oberth et Henri Coanda, les activités spatiales en Roumanie furent engagées à brève échéance dès le lancement des premiers satellites artificiels de la Terre.

Les premières années étaient consacrées aux observations conjuguées des satellites en orbite, des chercheurs et scientifiques roumains ont participé à l’interprétation et à l’utilisation des résultats en astronomie, géodésie, cartographie et télécommunications.

Par suite de la multiplication des modalités d’engagement des capacités roumaines dans l’effort spatial, on a créé en 1968 la Commission roumaine pour les Activités spatiales (CRAS) – un organe représentatif au niveau gouvernemental et actif dans le programme Intercosmos (voir article de V. Kopal). Dans ce cadre, la CRAS a monté à bord des satellites de dizaines d’équipements et d’appareils scientifiques et a fourni le cosmonaute Dumitru Prunariu pour le vol cosmique Soyuz-40 en mai 1981. En outre, la CRAS a entretenu des relations d’information et d’échange d’expérience avec les organismes similaires d’autres pays (Etats-Unis, Inde, RFA, Canada, Grande-Bretagne).

Dans le cadre de la participation aux programmes d’application, on a développé des directions prioritaires dans les domaines suivants : télécommunications, météorologie et télédétection par satellites, avec l’infrastructure technique nécessaire.


Les objectifs qui définissent les programmes à court et moyen terme de l’ASR sont structurés selon l’orientation des neuf divisions constituées : Télécommunications et Télédétection, Géophysique, Météorologie et Astronomie, Structures matérielles et Technologies; Opérations; Transports aérospatiaux; Biologie et Médecine spatiale; Sciences spatiales; Droit spatial; et Relations internationales et juridiques.

L’ASR manifeste un intérêt constant dans sa participation en qualité de membre titulaire aux activités spatiales de l’ONU. Au niveau de la coopération une délégation du Ministère des Affaires Etrangères et de l’ASR a négocié avec l’ESA le texte d’un accord de coopération entre les deux organismes.

En collaboration avec l’Académie des Sciences roumaine, les institutions et organismes de recherche scientifique et universitaire et les services économiques des ministères, l’ASR élabore à présent son programme d’activités pour 1993-94. Elle oeuvre en faveur d’un rapide regroupement du potentiel scientifique autour des domaines spécifiques en cherchant le soutien financier nécessaire.

I. Plaviciusou
ECRL ACTIVITIES

1st UK NPOC Workshop
Satellite Rights (and Wrongs)

This workshop (10 June 1992) attracted over 40 participants, overwhelmingly from the practitioners' sector. Hosted by Inmarsat (London) and chaired by NPOC Chairman Prof. Lyall, it mainly investigated private-law aspects of the satellite — what species of rights and interests can be possessed in satellites, which financing arrangements and remedies apply, and how liability is allocated among different entities involved in a commercial satellite operation. Attention too was paid to data rights and UK legislation. An Inmarsat legal officer and her external adviser provided a highly effective — staged dialogue running through the various issues they had encountered in a commercialisation activity. The Chairman closed the workshop with a reminder of the necessity for European lawyers not to fall behind the rapid pace of development of the law in the US. The Proceedings will be made available to ECRL members.

EC Commission-ECRL Workshop
on Satellite Data

This group (ESA HQ, 11 June 1992) heard and examined the first part of Prof. Gaudrat's study report on the protection of remote-sensing data. The problem dealt with was whether and how one could protect the most basic type of data, raw data. Copyright and other traditional means of protection, including contracts, were not always available. SPOT's position was the exception, not the rule. Despite keen debate among Gaudrat and other eminent experts such as Prof. Dryer (MPI, Munich), the report's conclusion — that a sui generis right needed to be created — was broadly accepted. If all goes well, an adaptation to an existing draft EC Directive on Databases (the conceptual equivalent of satellite data handling) may bring about a change in the law in the near future. (The second part of Prof. Gaudrat's study will deal with processed data.)

Publications


Just Published!

Proceedings of the European International Space Year (ISY) Conference (Munich, Spring 92): Space in the Service of the Changing Earth
Joint Organisers: Commission of the European Communities (CEC), European Space Agency (ESA) & German Space Agency (DARA).

ESA ISY-1 — Environment Observation and Climate Modelling through International Space Projects (3 volumes, 1500 pp, 270 Dfl. or 150 US$)

ESA ISY-2 — Space-based Systems for Navigation & Mobile Communications and Image Processing & Space-assisted Mapping (1 vol., 500 pp, 90 Dfl)

ESA ISY-3 — Space Sciences with particular emphasis on High-Energy Astrophysics (1 vol., 350 pp, 90 Dfl)

ESA ISY-4 — Utilisation of Earth-orbiting Laboratories — COSY-8 (1 vol., 500 pp, 90 Dfl)

ECRL Board Meeting, 26 June 1992

One year after the 1991 General Meeting, the Board mainly performed a mid-term review, but made two significant decisions:

- Approval of FF10 000 support from the ECRL Fund (i.e. members' donations) to the ECRL Summer Course;
- Confirmation of Practitioners Forum (see ECRL News No. 9) date as 18 November 1992, at ESA HQ.

The Steering Group for the Forum will consist of Prof. Böckstiegel (who will chair the Forum meeting), Dr. Kröner, Dr. Pichler and Dr. Madders. Reports will be provided on:

- case law
- national legislation
- EC and ESA developments
- international developments.

A Rapporteur is to be approached. Further details from ECRL Secretary.

ESALEX

Cooperation is foreseen with the Heidelberg Max-Planck Institute for International Law, which has the largest European catalogue of space law articles and is now putting them into electronic form. These inputs will enter the 'National Databases' section of ESALEX. Members will soon be receiving a revised ESALEX manual.

New address for ECRL Coordinator:
Please send Enquiries, Inputs, Book Titles, Comments to:
K. Madders
ESA Brussels Office
Rue de la Loi L223, Bte 4
1040 Brussels, Belgium
Tel: 32 2 230 90 39; Fax: 32 2 230 90 81

ECRL News (ISSN 1013-9036)
The European Centre for Space Law's magazine is published twice a year by the European Space Agency's Publications Division and is distributed free of charge to all readers interested in legal aspects of space activities in general and of ESA's programmes in particular.

Coordinator:
K. Madders
55, rue Marie Nikaer, B-2578 Seneffe
Phone: 32 14 42 53 75

Editor: N. Longdon & I.D. Gruyter

For further information on ECRL and on ECRL News, please contact the ECRL Secretary at ESA/ESTEC in the Netherlands.