

## Space Law Teaching and Education: General Introduction and Overview

### 1. The emergence of space law

While space law does indeed exist (a fact many people are unaware of), whatever its shortcomings, it is by no means easy to come up with a definition of it that is satisfactory to all. It is worth calling to mind the deliberations that took place early on in the Twentieth Century on the issue of the freedoms and sovereignty to be enjoyed by States in respect of the space over their territory (Professors Fauchille and Westlake), worth recalling too the Paris Convention (1919) and the Chicago Convention (1944) and also some early legal studies and theses<sup>1</sup>, etc. For the purposes of the present paper, we shall simply highlight the launch of the first artificial satellite from Earth, Sputnik 1 (14 October 1957) and go on to observe that space law originally came into being within the forum of the United Nations, for political reasons. It was the Ad Hoc Committee on the Peaceful Uses of Outer Space that generated the first Resolutions of the General Assembly and the first reports (document A/4141) of 14 July 1959. I do not intend to dwell on the historical background to all this; nor shall I be addressing the issues of the definition of space law, its sources or various functional and space-oriented approaches. Let us simply note as a general introduction to our overview of space law teaching and education that space law is a branch of public international law having its origins in the United Nations.<sup>2</sup>

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<sup>1</sup> See the published work of S. Doyle on the origins of the IISL.

<sup>2</sup> The five UN Space Treaties are:

- The [Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies](#) (the "Outer Space Treaty", adopted by the General Assembly as [Resolution 2222 \(XXI\)](#)), opened for signature on 27 January 1967, entered into force on 10 October 1967; 98 ratifications, 27 signatures (as at 1 January 2006).
- The [Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space](#) (the "Rescue Agreement", adopted by the General Assembly as [Resolution 2345 \(XXII\)](#)), opened for signature on 22 April 1968, entered into force on 3 December 1968; 88 ratifications, 25 signatures, 1 acceptance of rights/obligations (as at 1 January 2006).
- The [Convention on International Liability for Damage Caused by Space Objects](#) (the "Liability Convention", adopted by the General Assembly as [Resolution 2777 \(XXVI\)](#)), opened for signature on 29 March 1972, entered into force on 1 September 1972; 83 ratifications, 25 signatures, 3 acceptances of rights/ obligations (as at 1 January 2006).
- The [Convention on Registration of Objects Launched into Outer Space](#) (the "Registration Convention", adopted by the General Assembly as [Resolution 3235 \(XXIX\)](#)), opened for signature on 14 January 1975, entered into force on 15 September 1976; 46 ratifications, 4 signatures, 2 acceptances of rights/ obligations (as at 1 January 2006).
- The [Agreement Governing the Activities of States on the Moon and Other Celestial Bodies](#) (the "Moon Agreement", adopted by the General Assembly in [Resolution 34/68](#)), opened for signature on 18 December 1979, entered into force on 11 July 1984; 12 ratifications, 4 signatures (as at 1 January 2006).

The five UN texts of Declarations and Principles are as follows:

- The [Declaration of Legal Principles Governing the Activities of States in the Exploration and Uses of Outer Space](#) (General Assembly Resolution 1962 (XVIII) of 13 December 1963).
- The [Principles Governing the Use by States of Artificial Earth Satellites for International Direct Television Broadcasting](#) (Resolution 37/92 of 10 December 1982).
- The [Principles Relating to Remote Sensing of the Earth from Outer Space](#) (Resolution 41/65 of 3 December 1986).
- The [Principles Relevant to the Use of Nuclear Power Sources in Outer Space](#) (Resolution 47/68 of 14 December 1992).
- The [Declaration on International Cooperation in the Exploration and Use of Outer Space for the Benefit and in the Interest of All States, Taking into Particular Account the Needs of Developing Countries](#) (Resolution 51/122 of 13 December 1996).

This approach admittedly omits from consideration instruments such as bilateral and multilateral inter-governmental agreements as well as memoranda of understanding between public bodies and international organisations. But this omission becomes acceptable when we bear in mind that the UN Space Treaties are, and remain, the basis, the bedrock, of the overall space law edifice.

## **2. The IISL's investigative role**

For space law teaching to take place at all, there first had to be activities carried out by human beings in space, in the broadest sense of the term. According to the report of the COPUOS Ad Hoc Committee (document A/4141) published in 1959, the definition of this covered such activities and issues as telecommunications, meteorology, liability for damage, the uses of outer space for peaceful purposes, barring national appropriation of outer space and celestial bodies. It is worth emphasising that the deliberations with a view to regulating space activities internationally started in the forum of the United Nations a relatively short time after the launch of Sputnik 1. For it was that defining moment in modern history which prompted awareness of the need to introduce just such an international legal framework. Among the basic legal texts drawn up at the outset, mention should certainly be made of the Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space adopted in 1963.

And it was in that same year that the United Nations invited the International Institute of Space Law, headed by Professor Eugène Pepin, to conduct a survey of the existing space law teaching provision. That survey was completed in 1965. What was the overall picture that emerged? A sample panel of three hundred had been questioned, enthusiasm for the new emerging discipline of space law, numerous high-quality course textbooks and the obvious tie-in with the teaching of air law. Analysis of the findings was to generate a substantial amount of feedback at meetings of the IISL held in Athens, Buenos Aires, Brussels and Baku. Space law was being taught as part of the public international law course syllabus, as an adjunct of the air law syllabus or as a separate branch of international law altogether. Some specialised university institutes expanded their existing air law faculties to include space law, notably: the Institute of Air and Space Law at the University of Cologne/Germany headed by Professor A. Meyer, succeeded by Professor K.H. Böckstiegel and currently Professor S. Hobe; and Canada's McGill University Institute of Air and Space Law championed by Professor N. Mateesco-Matte. The surge in student interest in this emerging branch of international law was a further finding to emerge. Classes were being given at The Hague Academy of International Law. Leading international law academics had drafted course textbooks: Professors W. Jenks, Manfred Lachs, Bin Cheng, A. Haley, and many more.

The COPUOS Legal Subcommittee drafted the basic texts for the regulation of space activities under international law: the Outer Space Treaty of 1967, the Agreement on the Rescue and Return of Astronauts (1968), the Convention on Liability for Damage (1972) and the Convention on Registration of Space Objects (1976). Finalising the Moon Agreement (1984) would ultimately take a good deal of time. The complex legal issues arising in every area had to be scrutinised in considerable detail. This meant that the drafting of certain provisions proved to be a very protracted process indeed (notably when it came to the Liability Convention).

But this flurry of activity in the early days eventually started to die down, even though in the early 1980s the American academic Professor Stephen Gorove (University of Mississippi) did publish the results of a fresh survey of space law teaching worldwide. Parallel to the ongoing deliberations taking place in the UN Legal Subcommittee, similar reflection was taking place at national level. Thus, in France, a space law study group was set up in the mid-1960s which collected inputs from a variety of sources: international law academics; experts from organisations such as the *Centre National de Recherche Scientifique* (CNRS), the national telecommunication research centre (CNET), the French national space agency (CNES); lawyers practicing at international organisations (such as the European Space Agency precursor bodies ESRO and ELDO); and Foreign Affairs Ministry lawyers involved in international negotiations and contributing to COPUOS. The group produced a joint document on satellite communications.

Nowadays, such round-ups of space law teaching provision come in the form of the *Directory of Education Opportunities in Space Law*, published by the United Nations Office for Outer Space Affairs (OOSA), and *Space Law Teaching in Europe*, a guide published by the European Centre for Space Law. Europe (essentially Germany, France, the Netherlands and Italy), the United States and Canada have become key centres for space law teaching and education, along with countries of the former Soviet Union, Argentina and some other Latin American countries.

### 3. Initiatives

A number of initiatives on a global or regional scale were subsequently to generate renewed interest in the teaching of space law.

- One such initiative was the Manfred Lachs Space Law Moot Court Competition, set up by the International Institute of Space Law. Nevertheless, an international contest of this kind, requiring would-be entrants to come forward from various countries around the world, presupposes the existence of faculties where space law is actually taught (basically the United States, plus Europe, with Australia and the countries of Asia currently accounting for the largest number of participants, 40). For more on this subject, I would refer you to the presentation being given at this symposium.
- Here in Europe, one specific example of an initiative that had space-law teaching and education firmly in its sights was the setting-up of the European Centre for Space Law. The ECSL is characterised by the flexible approach adopted to its activities and to its *modus operandi* (as we shall shortly see). The need for concerted European-level reflection on space law issues became apparent to the Member States of the European Space Agency in the context of the negotiations that took place in the mid-1980s on the Inter-Governmental Agreement on the International Space Station programme. Whereupon the idea of establishing such a centre was duly taken up and translated into a founding Charter. Adopted in the spring of 1989, this established the European Centre for Space Law and defined the organisational arrangements. The Charter sets as prime objectives the promoting of knowledge of space law and the development of that field. The organisational set-up is as follows: a biennial General Meeting of members; a Steering Committee; and, importantly, National Points of Contact providing a focal point for all the various individual members from a given country. Incidentally, not having an NPOC is no bar to networking with all the other members of the Centre. ECSL activities are

increasingly being focused on the promotion of space law. Particularly worthy of mention are the following three fixtures in the ECSL calendar:

- a two-week student summer session programme that reviews, in depth, selected issues of the moment, both general and specific, culminating with some form of special exercise (either a moot-type contest or a project such as drafting a multipartite agreement/contract clauses);
- a Practitioners Forum concentrating on a matter of special interest to various types of legal practitioner (company lawyers, legal advisers, European Community);
- the holding of the European regional round semi-finals of the Manfred Lachs Moot Court Competition we have already mentioned.

As we have already noted, the ECSL publishes a booklet on *Space Law Teaching in Europe*. This provides an update on the various higher education institutions at which space law is taught. The Centre has set up a space law database. It issues a Newsletter. It also arranges conferences in collaboration with organisations in non-ESA countries as well as with intergovernmental organisations (UNESCO, CRTEAN<sup>3</sup>) and with representatives of various international bodies.

Building on this initiative and its experience, the ECSL has been able to learn a number of useful lessons regarding how to run a smooth and effective operation. Clearly, these lessons are dictated by various factors, among them the following.

- Firstly, the territorial dimension, with the involvement of the European Space Agency, which provides political support and resources (financial and personnel) up to a limit (€100k to €120k budget).
- Secondly, a very simple and straightforward administrative set-up, with the Centre having no legal status as such. It has a broad measure of financial autonomy nonetheless and benefits from the neutrality enjoyed by the Agency. The ECSL is neither a law faculty nor a business. The main impetus for its activities comes from its Board, whose ten Members plus Chairman meet a maximum of four times a year, the latter drawing on the support of one or two assistants.
- Lastly, decentralisation. The deployment of National Points of Contact (currently numbering 10) enables it to draw on a network that can distribute far and wide information coming from the Committee or initiated by the National Points of Contact themselves.

Networking by individuals thus plays a major part. This flexible and fluid set-up has made it possible for contact to be established between academics belonging to law faculties in one and the same country or in different countries, and also between academics and experts from the different worlds of industry and finance (banks, insurance companies, operators, launch service providers). Thanks to such contacts and networking, all concerned are able to become familiar with the extent of the knowledge at our disposal, with the key issues facing the international space community and with the needs of an ever-growing body of space law. A body of law that is firmly rooted in the concrete needs of the society in which we live, at all levels - national, regional and international.

#### **4. Needs**

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<sup>3</sup> Centre Régional de Télédétection des Etats d'Afrique du Nord.

Academic teaching, although indispensable, is no panacea. We should not overlook those areas where there is still much work to be done, the subsisting difficulties which may crop up in different places at different times. We have been able to identify a number of emerging needs:

- the need for high-calibre teaching staff, having a solid grounding in public international law plus knowledge of other areas such as air and maritime law;
- the need for an economic and industrial environment that can lend its assistance (telecommunications, intellectual property, banks, insurance, etc), one that is both able and willing to take on law students as trainees;
- the need to encourage the spread of networks and links between all the various players on the scene (at national and regional level in particular), not forgetting links with specialised international organisations (COPUOS, UNESCO, ITU, ICAO).

The distinct cultural, economic and industrial features of different regions call for a region-specific solution: a formal regional structure, sustained by allocated resources, or integration within an existing set-up, would be the right response. Will such provision be confined to academic teaching or educational resources? Clearly it is not possible to provide one catch-all response; no one solution can be valid in all cases. The solution involves exploiting the range of different resources at our disposal.

Before concluding with a final recommendation, I should like to underline one factor that seems to my mind to be essential, perhaps the most important issue today for teachers, students and experts alike. The issue of *documentation*. The volume of the documentation has become enormous, correspondingly hard to access and costly for all concerned. We need to give thought to how we can arrange things so that students in a given region or sub-region, and of course the teachers too, can gain access to the hundreds of works (textbooks), periodicals, conference proceedings and other such material which they justifiably require for their research studies or in order to practice their profession. We also need to think about how we can arrange things so that teachers and experts around the globe are able to link up with like minds in the same field, both on their own continent and overseas. However, the kind of survey that individuals such as Professors Pepin and Cocca were able to carry out in the 1960s would be impossible to repeat in the rapidly-changing world of today. The literature is simply too voluminous and too dispersed far and wide. A solution does exist, nevertheless: dedicated databases and, over and above that, interconnecting databases. This solution is clearly much less expensive than ones that would involve copying or purchasing the literature available. We need to press forward with setting up dedicated space law databases and also web-type electronic resources for researchers everywhere.

Having thus underlined the important need to come up with electronic solutions in order to be able to access the growing mountain of documentation, I am minded to put forward some further suggestions in the same vein. To begin with, we need to invest in creating 'virtual' university faculties of space law. Such distance-learning facilities would be accessible to lecturers and students who would consequently no longer need to travel in order to give or attend such classes. Next, we should consider extending the use made of multi-lingual CD-ROMs, since this educational resource is a relatively low-cost option. These could be distributed around the world, for example throughout the regional centres of the United Nations, and stored as data sets in libraries. We could also envisage creating model-format courses and other educational resources for distribution via the internet among the various law faculties. We also need to build on some of the

(already excellent) existing practices, such as the Moot Court contest, so as to widen student access to such opportunities.

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In conclusion, in the light of all of the above, I would like to recommend that the UN COPUOS Legal Subcommittee table a review of the status of space law teaching and education as a permanent item on its agenda to be addressed every five years.

Thank you very much for your attention.

## Annexes

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