

Scientific-Legal Liaison Committee of the International Academy of Astronautics and the International Institute of Space Law

15th Scientific-Legal Roundtable: Scientific and Legal Aspects of Space Debris

Introductory Note*

The Scientific-Legal Liaison Committee, a joint body of the International Academy of Astronautics (IAA) and the International Institute of Space Law (IISL), organizes during the IAF Congresses roundtables on selected topics that are of common concern to experts in space sciences, space technology, and space law. In this series, the first roundtable on the subject of Space Debris was held in 1990 as a part of the 41st International Astronautical Congress in Dresden, Germany. The papers presented at that meeting were published in the *Proceedings of the Thirty-Third Colloquium on the Law of Outer Space* (AIAA, Washington, DC, 1991, pp. 399–428).

Since the discussion on this topic was far from being exhausted, the Scientific-Legal Liaison Committee decided to convene another roundtable on "Scientific and Legal Aspects of Space Debris" at a later stage, believing that a new meeting could benefit from a number of specialized studies and meetings planned for the period between the two roundtables. In particular, the IAA Position Paper was compiled during this period by an Ad Hoc Expert Group of the IAA Committee on Safety, Rescue, and Quality in 1992, and published in its final version in *Acta Astronautica*, Vol. 31, October 1993, pp. 168–191. The first European Conference on Space Debris organized by the European Space Agency (ESA) was held in Darmstadt, Germany, April 5–7, 1993, and its organizers succeeded in publishing its materials in a big volume of Proceedings shortly after this conference. Moreover, national activities in this field have been developed by the leading space-faring nations, such as the United States, Russia, and Japan, and by State members of the ESA. Finally, the United Nations has been requested to pay more attention to all aspects related to the protection and preservation of the outer space environment, especially those potentially affecting the Earth's environment, as recommended by the General Assembly in its resolution 47/67 of December 14, 1992. The UN General Assembly determined that it was essential that Member States should pay more attention to the problem of collisions of space objects with space debris and other aspects related to space debris. On this basis, the UN Committee on the Peaceful Uses of Outer Space (COPUOS) agreed at its 36th session held in June 1993 that it should take up the subject "Space Debris" and recommended that this new item be added to the agenda of the Scientific and Technical Subcommittee, beginning with its 1994 session.

Therefore, the 15th Scientific-Legal Roundtable, which was convened on Wednesday, October 20, 1993, at 2:00 p.m. at Room M of the Grazer Congress, Graz, Austria, was able to rely on a widely elaborated background and contribute by its assessment of the scientific and legal aspects of the problems involved to the world-wide discussion on the subject. As the subject matter of the roundtable was defined by the Scientific-Legal Liaison Committee, "on the basis of the latest evaluations of the risks arising from the generation of space debris, the roundtable should discuss scientific and legal aspects of this phenomenon and possible actions to be taken in international cooperation to get space debris under control." The session was coordinated by Dr. Vladimír Kopal of the Czech Republic and chaired by Dr. Isabella H. Ph. Diederiks-Verschuur of the Netherlands. Dr. Miguel Orrico Alarcón, of Mexico, served as session

*This introductory note was prepared by Dr. Vladimír Kopal.

rapporteur. After a brief introduction, the following papers were presented by their respective authors:

"Space Debris—A Status Report. Summary of the First European Conference on Space Debris."

W. Flury, ESA/ESOC, Darmstadt, Germany

"Summary of the IAA Position Paper on Orbital Debris. Recent Events and Observations."

D. McKnight, Kaman Science Corporation, Alexandria, Virginia, USA

"Scientific and Legal Aspects of Space Debris."

C. Q. Christol, Pacific Palisades, California, USA

"Liability Issues on Space Debris. The Opinion of a Teacher in International Law."

P. M. Martin, Toulouse, France

"Summary of Replies to the Questionnaire Which Included Issues Concerning Space Debris."

V. Kopal, Charles University, Prague, Czech Republic

"Controlling Orbital Debris: The Role of the U.S. Congress."

R. Obermann, Space Subcommittee, U.S. House of Representatives, Washington, DC, USA, and Ray A. Williamson, Office of Technology Assessment, U.S. Congress, Washington, DC, USA

After the presentation of the papers, a number of questions were raised and comments were made from the audience in which some of the issues were further clarified. The texts of all papers presented and a summary of the discussion are included herein.

The IAA/IISL Scientific-Legal Liaison Committee also held its regular meeting on October 17, 1993, prior to the opening of the Congress in Graz. After a discussion which was guided by Professor Vladimír Kopal of the Czech Republic, the Committee decided, in accordance with its policy to hold the Scientific-Legal Roundtables as a rule on a biennial basis, to organize the next roundtable in 1995, during the 46th IAF Congress in Oslo, Norway. The 16th Roundtable in 1995 should be devoted, according to a definition suggested by Dr. S. Doyle of the United States, to "the continually increasing demand for radiofrequency allocations for expanding space services and the scientific, technical, legal, and policy implications of the international practices and machinery for managing the use of the radiofrequency spectrum."