

55th IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7)

The International Legal Regulation of Outer Space within the Scope of Public International Law (3)

Author: Dr. Henry Hertzfeld

Space Policy Institute, George Washington University, United States, hrh@gwu.edu

A ROADMAP FOR A SUSTAINABLE SPACE LEGAL REGIME

Abstract

International space law contains remarkably few effective incentives for avoiding accidents in space and the resultant effects of human-made space debris. In particular, the Liability Convention contains important gaps that have the unintentional result of allowing satellite owners (and nations) to take risks without culpability. Since most experts agree that it would be very difficult to change any of the existing space treaties, other ways of encouraging a solution to this problem and to create more responsible use of outer space must be addressed. One problem is with the limiting definition of a space object; all space objects can become space debris, but not all space debris can be classified as a space object. If it is not a space object, it is not subject to the Liability Convention. Another is that the Liability Convention only applies to damage to another nation's space object and does not include damage to one's own nation's objects, even if that involves two satellites owned by different companies. Third, and perhaps most important, is the gap created by the lack of a definition of fault. There is no defined duty of care in the space treaties and without that, negligence and fault are very difficult to prove. The IADC Space Debris Mitigation Guidelines are a very important and necessary step, but are not sufficient to accomplish this. Technological changes in the way spacecraft are built and regulated have occurred and today few new satellites of high value are launched without the capability to maneuver. Because of on-board thrusters, valuable satellites have the potential ability to avoid collisions as well as meet the requirements that some nations have for end-of-life de-orbit or safe orbits. This creates an opportunity to define a duty of care, assuming there is a proper warning system. This paper will address these gaps in the Liability Convention with the suggestion that a new protocol should be considered to make space operations more sustainable without changing or contradicting any existing provisions of the Liability Convention or other space treaties. An approach of this type also has the advantage of retaining the present rules, which will remain applicable to some situations in space. And, of course, national laws will still be necessary to provide enforcement mechanisms for any space protocol or treaty.