

61st IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7)

The relationship between space law and cyberlaw, and other recent developments in space law (5)

Author: Prof. Stephan Hobe
University of Cologne, Germany, stephan.hobe@uni-koeln.de

Ms. Rada Popova
Institute of Air and Space Law, University of Cologne, Germany, rada.popova@gmail.com

CYBER LAW AND OUTER SPACE (ACTIVITIES): LEGAL AND REGULATORY CHALLENGES

Abstract

Cyber law is a domain which opens a new dimension in the discussion of human activities which take place arguably in a common space. It has been defined as “The sense of a social setting that exists purely within a space of representation and communication . . . It exists entirely within a computer space, distributed across increasingly complex and fluid networks”. The part of cyber law which is of interest for this paper is the law related to cyber activities in outer space.

This paper will first describe the technical nature of cyberspace in order to address the question of what the cyberspace encompasses before certain activities which may touch upon outer space are discussed in terms of their legality and legal consequences.

Space activities are not immune from malicious cyber activities as any transmission signal is vulnerable to cyber access. The range of threats is very wide and can include the loss of signals and interference (e.g. through satellite jamming, spoofing and hacking), the disruption of services and the stealing of information. Furthermore, control over satellites could be gained through cyber space. While it is clear that cyber attacks constitute a threat for space operations, the legal rules applicable to cyber operations have still to be determined.

Questions of the applicability of space law to cyber activities and a possible cyber legal regime as well as measures to address the consequences of cyber threats to the space infrastructure will be analysed in this paper.

Summarizing, the attempt will be made to arrive at a systematic overview on cyber activities in outer space, the legal framework for such activities and the key actors who can contribute to the development of an adequate legal regime and its implementation. With this, the question of the existence and character of a new ‘cyber law’ and the applicable law to cyber operations in space shall be answered.