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IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7) Application of space law to cyber activities (4)

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WHEN CYBER ACTIVITIES ARE SPACE ACTIVITIES: DEFINITIONS ARE KEY

Abstract

Cyber space is not Outer Space and cyber activities are different to space activities. But where are the dividing lines? Space law applies to cyber activities when they are space activities. This leads to the question how we define space activities in the meaning of the Outer Space Treaty. With increasingly refined space applications, including satellite communications, remote sensing and navigation and networked environments that span from the Earth into space, space activities need to be defined more precisely. The other term that needs to be defined are cyber activities. They depend on network connectivity and this is the possible connecting point with space activities. However, in a computer networked environment, not every signal that traverses through outer space becomes a space activity. Based on the definition of both, space and cyber activities, this article attempts to delineate their intersection for a practicable understanding about when a cyber activity is a space activity. Following this approach, additional terms and concepts in connection with unauthorized cyber activities need to be more precisely distinguished, including interference, attack, jamming and spoofing. More precise definitions are key to the understanding of the concepts and the linkage between cyber and space activities.