

IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7)

Space Traffic Management: From Space Situational Awareness and Space Surveillance and Tracking to developing Rules of the Road (4)

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RESEARCH ON BASIC PROBLEMS OF SPACE TRAFFIC MANAGEMENT

Abstract

With the increasing frequency of space launch, the increasing types of space activities, the increasing number of space debris and the vigorous development of commercial space, seemingly infinite space will soon become a crowded hot spot. In order to ensure the safety, standardization and sustainability of space activities, it has been put on the agenda to establish an international space traffic management organization or a feasible space traffic management mechanism. In view of the unbalanced development of space power in various countries, there are great differences in the understanding and demand of space supervision. The technical and legal means of space traffic management are still in the primary stage. At present, there are still some basic problems to be solved urgently. Firstly, the concept and scope of space traffic management; secondly, the management responsibilities and coordination mechanism at the national and international levels; thirdly, the technical means of space surveillance, information sharing and collaborative space activity control; fourthly, the identification and punishment of violations; fifthly, the operational rules of space traffic management agencies; and sixth, the relationship between space traffic management and free use of space. This paper will focus on the above issues and provide support for space traffic management.