

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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U.S. POLICIES AND APPROACHES TO ENHANCE SPACE SITUATIONAL AWARENESS

Abstract

Space situational awareness (SSA) is broadly understood as the knowledge and characterization of the space environment. Traditionally, SSA includes tracking and detecting space objects and forecasting near-Earth objects and space weather events. The U.S. Federal Government has issued several policies, including most recently Space Policy Directive-3 (SPD-3): The National Space Traffic Management Policy, to enhance its SSA capabilities. SPD-3 calls for greater Federal civil agency involvement in SSA and calls for more coordination across communities – civil, defense, and commercial – to better manage and mitigate operational risks in space. This paper will outline U.S. approaches to SSA, discuss Federal Government policies to improve SSA, and identify what opportunities exist to improve Federal coordination to enhance SSA capabilities. In addition, we will compare and contrast the space surveillance and tracking issues with space weather and near-Earth objects challenges. Each domain has an operational mission, but the civil, commercial and military implications vary.