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EXAMINING THE ROLE OF LIABILITY IN SSA SERVICES UNDER INTERNATIONAL SPACE  
LAW

**Abstract**

The commercialization of outer space in the recent past has made it a congested and contested domain. Space Situational Awareness (SSA) solves for this problem by detecting, identifying, and tracking space objects to prevent collisions and tackle the Kessler Syndrome. However, a regulatory environment with a clear liability framework is necessary to promote SSA activities. In the context of SSA, liability has two facets. One, a spacecraft operator using SSA will reduce its potential liability in a satellite collision, especially when other spacecraft operator(s) involved failed to use such services. Two, SSA entities have liability concerns when spacecraft operators who use their SSA data fail to prevent a collision due to such data. The premise of this paper uses both scenarios for exploring liability from the lens of spacecraft operators, SSA entities, and launching State(s). Through national space legislations and policies of spacefaring countries, the author analyzes how liability issues in relation to SSA information sharing can be resolved whilst being aligned with international space law. The *lex specialis* of the Liability Convention provides fault-based liability for damage caused in space, involving space objects of different launching States. In the first section, the author examines the manner in which "fault" should be interpreted for SSA activities. Deviations from internationally agreed parameters for conjunction assessment and best practices for sharing SSA information may indicate faulty behavior. Since SSA information is linked to avoiding a potential collision between spacecraft, guidelines for SSA data must not only depend on use cases but also on other parameters including maneuverability, accuracy, and the nature of data which, in turn, must have varying thresholds of liability for SSA entities and launching States. In the second section, the author suggests that States must, as a part of their obligation to continually supervise national space activities under Article VI of the Outer Space Treaty, establish specific rules of liability for use of SSA information. For instance, if launch licenses mandate the use of SSA services for missions, the corresponding extent of liability arising from reliance on such data must also be stated. This must be complemented with incentives such as governments purchasing data from commercial SSA entities and giving them immunity from liability arising from the use of such data. Lastly, the author concludes this paper by evaluating the viability of contractual mechanisms to address liability, such as indemnity, limitation of liability, and cross-waivers under specific circumstances.