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”TRANSITIONING AGENCY OVERSIGHT: CHALLENGES AND OPPORTUNITIES FOR
CISLUNAR SPACE DOMAIN AWARENESS”

Abstract

Since the first years of the Space Race, the United States Department of Defense (DoD) has had space situational awareness (SSA) and space traffic management (STM) capabilities. Starting in the 1960s, the DoD began issuing orbital data to NASA, other U.S. entities and the space agencies of allied countries. Various developments were made to the United States’ SSA capabilities in the following decades, including a more stringent control by the U.S. military due to national security reasons. In 2004, the U.S. Congress issued the Defense Authorization Act, which required the DoD to provide commercial and foreign space partners with SSA data. Following the Iridium-Cosmos collision in 2009, the United States military’s Joint Space Operations Center (JSpOC) expanded its surveillance coverage to account for nearly every satellite in Earth orbit. In the present, the DoD completes its SSA tasks through the Space Surveillance Network, which is comprised of more than thirty ground-based radars and telescopes, and six satellites. Under the Obama Administration, calls began to emerge to move the United States’ SSA capabilities from the DoD to a civil agency. In Space Policy Directive-3 (SPD-3) of 2018, the Trump Administration advocated for the Department of Commerce to be the agency to “responsible for the publicly releasable portion of the DoD catalog and for administering an open architecture data repository” and “ensure safe coordination of space traffic in this future operating environment... [and] be the focal point for this collision avoidance support service”. These conversations have continued into the present.

This paper will explore the variety of stances on the question of why the transition from the DoD to a civil agency were done, and what rationales support them. The stances are categorized into four groupings: 1) Mission Alignment, 2) Future International Coordination and Cooperation, 3) Transparency and Openness, and 4) Resources. Three pieces of legislation are also discussed in a similar light. Once this fully analyzed, these arguments will be considered in a discussion of cislunar space domain awareness, as it is a domain of growing importance. Cislunar space is void of a policy environment in terms of agency oversight, so it necessary to produce a series of insights/recommendations for the construction of a cislunar SDA program.