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JAPAN'S SSA/SDA POLICY AND INTERNATIONAL COOPERATION IN THE NEW NATIONAL
SECURITY ENVIRONMENT

Abstract

It is commonly believed that space situational awareness (SSA) is the foundation of all space operations. In recent years, Japan has invested considerably in its national security space capabilities, and the center of the effort was to build and upgrade SSA systems, including a newly developed ground-based radar by the Ministry of Defense (MOD).

In the meantime, Tokyo's latest National Security Strategy (NSS), released in December 2022, has made significant policy changes to respond to the increasingly severe national security environment surrounding Japan. In June 2023, the Japanese government also unveiled the Space Security Initiative (SSI) to identify its objectives and approaches to ensure space security. While the NSS and SSI called for enhancing national security space capability, including space domain awareness (SDA), it is unknown what their actual requirements are and whether the current and planned Japan's SSA/SDA systems could meet the requirements of the new national security policy since those systems were developed incrementally in the past.

Therefore, this paper examines (1) the policy requirements for Japan's SSA/SDA capability drawn from the latest NSS and SSI, (2) the gaps between current and required SSA/SDA capabilities, and (3) the implications of developing robust SSA/SDA capability for Japan's international cooperation with other nations and how Tokyo could contribute to the stable use of outer space.

At first, the authors argue that Tokyo's new national security policy set the new space security requirements, whose priority shifted from observing space debris toward understanding threats posed by adversaries. The new NSS made it clear that Japan would defeat invasion "much earlier and at a further distance," which demands more effective and resilient space operations as well as SDA capability to support it. Secondly, while the MOD plans to launch a space-based SDA satellite in 2026, they still need to integrate more coherent intelligence, including adversaries' intent of space operations, to develop the full SDA capability. Finally, the paper proposes that the Japanese government disseminate SSA data

more openly with the international community, while keeping SDA data sharing with its close allies and partners due to their highly classified nature.

While Japan's SSA and SDA development plan has been updated every year, it is time for Tokyo to fundamentally review it to meet the latest national security policy requirement, which will also enable the Japanese government to cooperate with the international community and close partners more effectively.