

U.S.-Japan Space Forum Meeting XII

Key Takeaways

- The war in Ukraine has proved that satellites are an indispensable tool of wartime strategy making through their role in enabling communications, imaging, and other services necessary for an effective understanding of the battlefield. All nations must act now to incorporate and strengthen their domestic contingency planning and defense strategies to ensure continuity of use for space assets in wartime.
- The U.S. and Japan should be each other's preeminent security partners in space – bar none. However, we must overcome major challenges to make this ideal into a reality. Among these, a lack of standardized criteria for data, personnel, and facility security is a key concern that both partners must address. Many private companies in Japan have already developed proprietary information security procedures, but there is not yet a universal certification backed by the Government of Japan that they can use to prove their compliance to international partners.
- Large satellite constellations are particularly transformative for maritime domain awareness, though it has major impacts across all areas of security. Getting high resolution, frequent images of activities in the maritime domain enables nations of all sizes to strategically deploy their limited resources to maximum effect.
 - The emergent need for more effective space traffic management and space situational awareness is well-documented by other organizations, but this Forum felt it was worth emphasizing again given the major implications that large satellites have on the operating environment in low earth orbit (LEO).
- Private leadership in space is here, and private companies strongly desire regulatory clarity and consistency in the United States and around the world so they can innovate more quickly and collaboratively. They accept the crucial role of government oversight in protecting critical information from bad actors, and strongly urge the United State and all spacefaring nations to centralize and streamline their regulatory mechanisms, especially as related to spacecraft launches. Spreading regulatory responsibility across disjointed agencies and actors forces nascent space companies to duplicate effort without a corresponding increase in safety or security.
 - Supply chains and export controls further complicate the operating environment for space industries. Much work has been done in the United States to improve supply chain reliability, and Japan also shares a growing awareness of supply chains as an important element of its national economic well-being. However, the regulations around export controls and Technology Security Agreements (TSAs) could be clarified further to give companies a better understanding of what actions they must take to both operate internationally and to partner with international organizations.

Policy Recommendations

- The U.S. Government must work with the Japanese government and others to harmonize processes for ensuring that all partners in sharing arrangements are satisfied that information, technologies, and other areas of concern are adequately protected. These processes should include certification, training, and compliance reviews through which specific access control limits can be set to best serve international security objectives while respecting each country's national security concerns.

- The underlying principle should be “high fences around small plots.” Critical technologies must be protected, but we also cannot work in a complete vacuum from one another if we are to nurture successful space industries.
- Emerging spacefaring nations, such as the Philippines, Vietnam, and Australia, must be considered and directly involved in the conversation about creating standardized licensing and certification to ensure that any U.S.-Japan framework will be built to accommodate new partners rather than exclude them. In an era of growing geopolitical competition, a focus on what can be achieved for the common good will be welcomed by these partner nations.
- There is a growing awareness that sustainability applies to the space domain as much as Earth, and the safe future use of LEO depends on our ability to enact new regulation for clear end-of-life plans for all satellites. This is especially true as more large constellations enter this orbit. The U.S. and Japan must work together to devise better systems for registering, tracking, servicing, and decommissioning space assets to ensure attribution and verify that relevant laws regard end-of-life plans have been duly observed.
 - There are exceptions that must be made for assets critical to national security, but for this concern we refer back to the “high fences around small plots” concept mentioned earlier.
- The U.S. and Japan should work with regional partners to invest in and support the growth of maritime domain awareness as a common good for all nations, including the ones which do not possess or possess limited space capabilities. This can be done by expanding existing fora such as the U.S.-Japan Comprehensive Dialogue on Space to include observers from nations such as the Philippines, Vietnam, and Australia with a mechanism in place to eventually form a full-fledged dialogue between the Indo-Pacific spacefaring nations.
 - Both the U.S. Government and the Government of Japan should continue the trend of increasing investment in their respective military space branches, namely the Space Force and the Space Operations Squadron, so that these services can expand their ability to pursue international capacity building exercises, provide public goods, and promote space sustainability.
- The Artemis Accords facilitate government-to-government cooperation in space, and private actors should form a private version of the Accords to enable better industry coordination. Existing global fora such as the Lunar Industry Business Council or the International Astronautical Congress could be used as the launching points to discuss specific proposals for a business-to-business version of the Artemis Accords.