

7th Prague Space Security Conference

PANEL 5: ALLIED INDUSTRY STRATEGIC SPACE COMPETITIVENESS

18th, June 2024

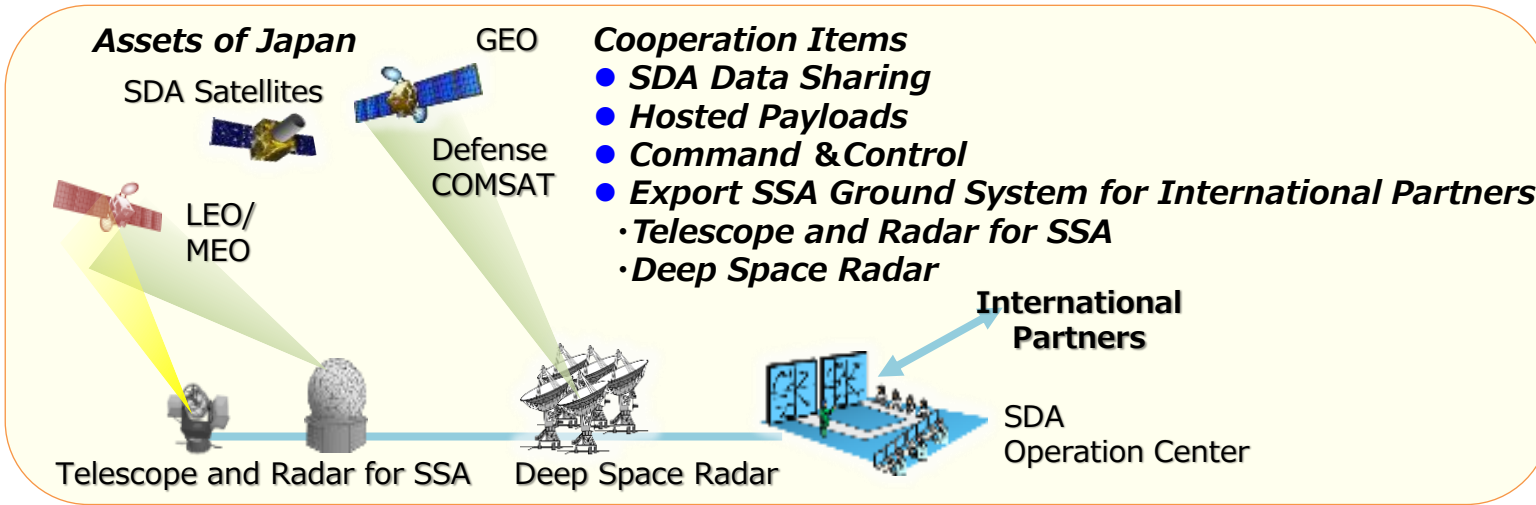
Mitsubishi Electric Corporation
Defense & Space Systems Group

Fellow Hiroshi Koyama

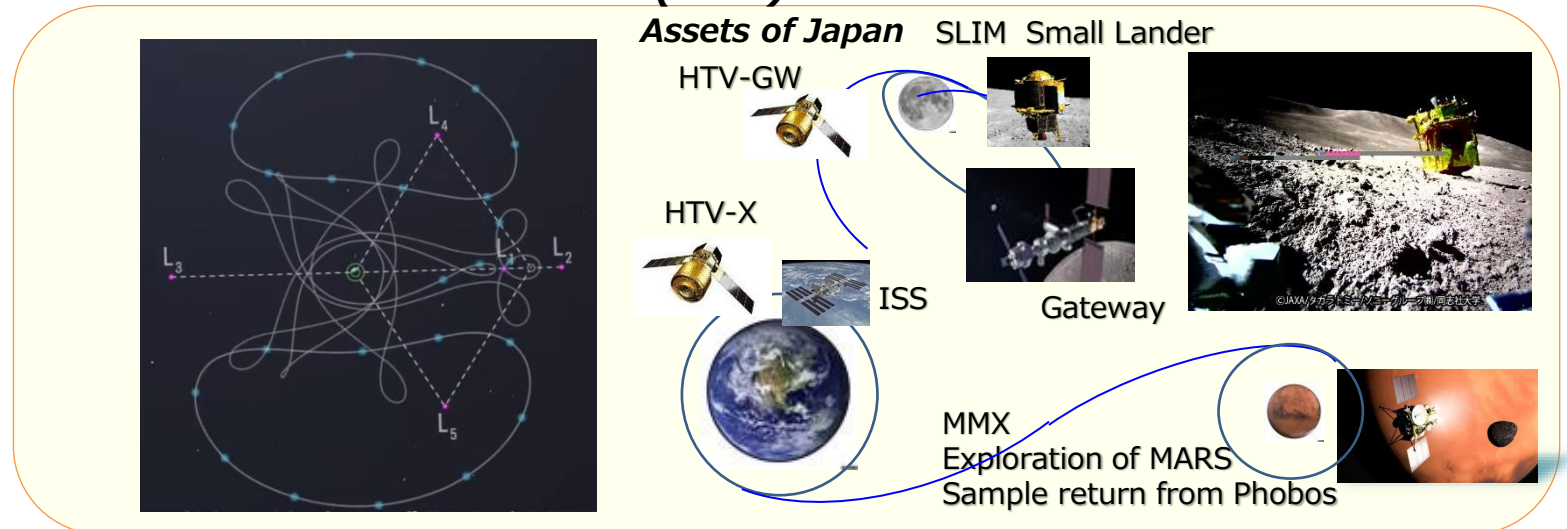
Strategic Cooperation Fields

- Candidates for strategic cooperation with high priority

SSA(SDA)/STM



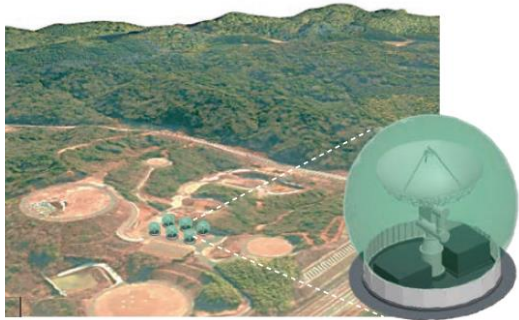
SSA(SDA) in Cislunar



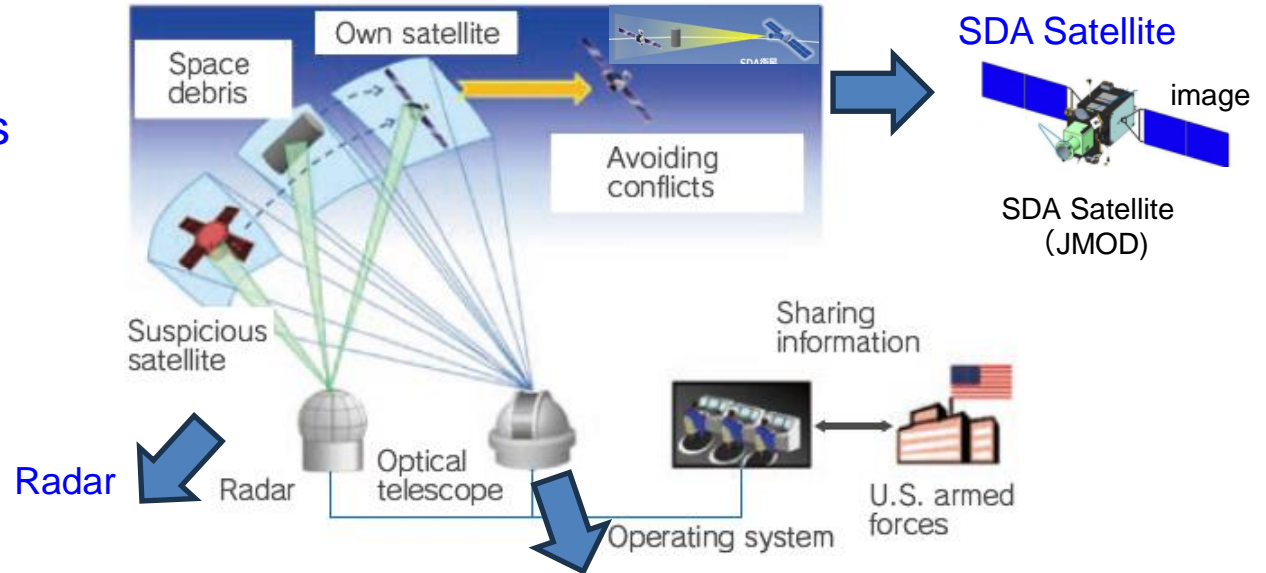
MELCO SSA/SDA Activities

- MELCO will contribute to security in outer space using radars to monitor suspicious satellites and space debris that might pose a threat to Japan's satellites.

MELCO SSA/SDA Products



Deep Space Radar Radar (JMOD)



Space Guard Center Radar (JAXA)



MU Radar (Kyoto Univ.)



J-FPS-5 (JMOD)



Space Guard Center Optical (JAXA)
Φ1m/50cm/25cm

Optical Telescope



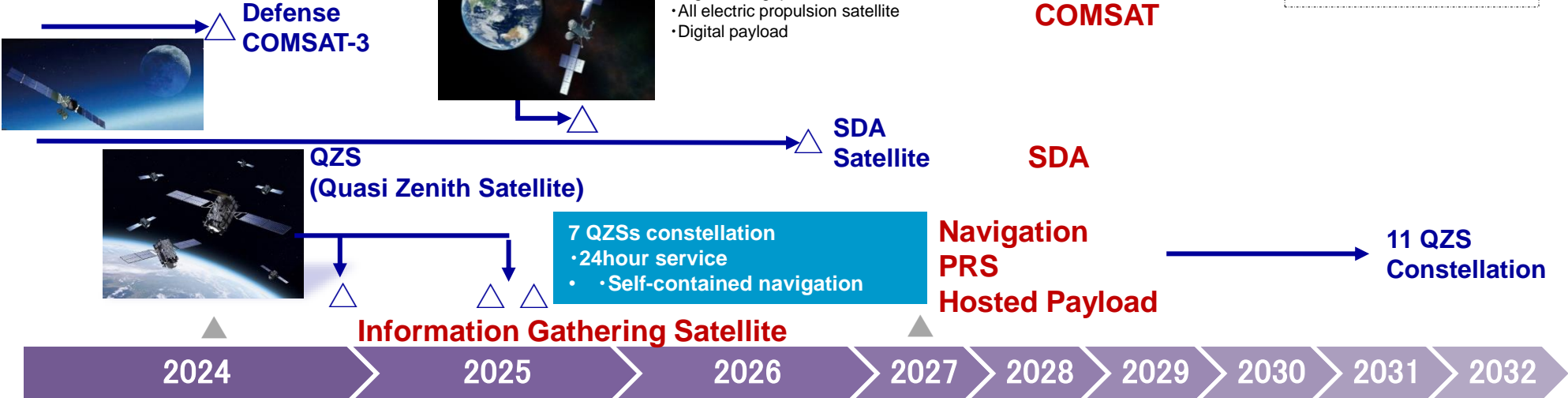
Subaru Telescope Optical (NAOJ)
Φ8.2m



Nishi-Harima Observatory Optical Φ2m

MELCO Space Activities

Defense & Space



▲ : launched
△ : to be launched

Exploration



Earth Observation





Mitsubishi Electric and Astroscale to Develop and Produce Satellite Buses

Tokyo, Japan, Feb. 27, 2023 –

Mitsubishi Electric Corporation, a leading defense and space company, and Astroscale Holdings Inc., the market leader in satellite servicing and long-term sustainability across all orbits, announced today that Mitsubishi Electric has invested U.S. \$25 million in Astroscale's Series G funding round.

[Separate from the investment, the companies have agreed to collaborate in the joint development and manufacturing of sustainably designed satellite buses for Japanese national security constellations.](#)

The satellite buses will be equipped with an Astroscale docking plate, similar to a car "tow hook," with a standardized interface. This allows other spacecraft to dock with and move or remove satellites if they are unable to deorbit themselves at the end of their operational lives.

Preparing satellites in this sustainable manner minimizes costs and maximizes safety for future on-orbit servicing. "The world depends on satellites more than ever before, so if the orbital environment is disrupted or becomes unusable, our lives will be irrevocably changed," said Nobu Okada, Founder and CEO of Astroscale. "Space is a special domain shared by the equally important commercial, civil, and defense sectors. We are proud to partner with Mitsubishi Electric to [assure that our orbital environment remains safe, secure, and sustainable, and that more objects operating in space are designed for future servicing and removal.](#)" END

Space Architecture for National Security

