

Japan Item 14 – “Space Exploration and Innovation”

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Chair, Distinguished delegates,

Space exploration represents a major challenge to humanity in our quest to explore new frontiers, gain knowledge and expand human presence deeper into space. Japan has been participating in this challenge in cooperation with our international partners.

Chair,

In October 2020, Japan signed the Artemis Accords as a political commitment to establish an internationally shared framework on various principles for civil space exploration activities and the use of outer space by national space agencies.

In the field of lunar exploration, Japan is participating in the lunar “Gateway” as part of the Artemis Program by leveraging the knowledge and technology gained from the ISS program and space science missions. In November 2022, Japan signed an implementing arrangement in cooperation with NASA on the moon-orbiting space station, “Gateway”. On the same day, Japan also announced that it would participate in extending the operation of the ISS until 2030 in order to demonstrate and acquire technologies, including those needed for the Artemis Program.

In Japanese fiscal year 2023, JAXA plans to launch the Smart Lander for Investigating the Moon (SLIM), which will demonstrate the ability to land on the lunar surface. JAXA is also developing the Lunar Polar Exploration mission (LUPEX) in collaboration with ISRO, which aims to investigate the presence of water and the possibility of resource utilization in the lunar polar region.

Chair,

In the field of planetary science, the asteroid probe Hayabusa2 arrived at the C-type asteroid Ryugu in 2018 and conducted surface exploration and two touchdowns. In December 2020, Hayabusa2 successfully returned samples from Ryugu to the Earth, and sample analysis has begun. The results of the initial analysis have been published in the US Journal “Science” and

the UK Journal “Nature Astronomy.” Hayabusa2 is currently on the way to explore another asteroid, 1998 KY26.

Moreover, JAXA is currently developing the Martian Moons eXploration (MMX), which will technologically succeed Hayabusa2, with a target launch in JFY 2024. With this mission, JAXA plans to explore the two Martian moons and collect samples from one of the moons called Phobos to bring back to Earth.

As for the Astrophysics, JAXA’s X-Ray Imaging and Spectroscopy Mission (XRISM) is scheduled for launch in JFY 2023 on the same launch vehicle as SLIM. XRISM will perform high-resolution X-ray spectroscopic observations of the hot gas plasma and aims to reveal the composition and evolution of celestial objects.

Chair,

Over the years, we have recognized the importance of working with Japanese industry on space exploration.

As an example of promoting this collaboration, JAXA’s Space Exploration Innovation Hub Center has been working with companies, universities, and research institutes on research and the development of technologies that will contribute to future space exploration, such as automatic and autonomous exploration technology, In-Situ Resource Utilization (ISRU) technology, and common technology adopted for both space and non-space sectors.

Chair,

Space exploration is in the common interest of all humankind and the ultimate challenge to explore new frontiers. Moreover, we believe that these space exploration endeavors are a great opportunity to benefit humanity by contributing to the development of science and technology on Earth as well as promoting social awareness among young people and advancing economic development. Together with our international partners, Japan would like to participate in this spectacular challenge by offering our technical expertise for the benefit of humanity.

Thank you for your kind attention.