

Japan, Agenda Item 6 – “Space technology for sustainable socioeconomic development”

Mr. Chair, Distinguished Delegates,

The unprecedented crisis caused by the COVID-19 pandemic has given the space community an opportunity to rethink the sustainability of our space activities, and reconsider how space technology could contribute to existing social issues. In June 2020, the Japanese government updated the Basic Plan on Space Policy to include measures to contribute to the SDGs by leveraging space technology. Today, I would like to introduce these measures, including utilization of satellite data, debris mitigation, and education for young generations.

Mr. Chair,

Japan promotes the utilization of satellite data to address global challenges such as disaster risk reduction, climate change, and deforestation, all of which are expected to contribute to wide range of SDGs.

By leveraging the knowledge gained by utilizing L-band radar and optical Earth observation satellite data, Japan published the annual global mangrove map, called “Global Mangrove Watch” for free. In 2020, this map was designated by UNEP as the official mangrove dataset for SDG 6.6.1 reporting. We hope that these data can be used to support decision making for the sustainable conservation of mangroves.

Another example is an international cooperative project for disaster monitoring in the Asia-Pacific region, known as “Sentinel Asia.” This is a collaborative project among countries in the region to reduce the damage caused by natural disasters by sharing disaster-related information acquired from satellite images and other data with 94 organizations from 28 countries and regions and 17 international organizations.

Japan is also proud to promote research and development for a range of earth observation satellites that contribute to forest monitoring, estimation of sink and sources of CO₂ and other greenhouse gases, and prevention of health hazards caused by air pollution through the release of aerosol data. Japan will develop and promote the use of satellites especially for contributing to the fight against

climate change.

Mr. Chair,

In recent years, space debris has become a major social concern given the increasing diversity of space activities and continuous and recent congestion of the space environment. As mentioned earlier, satellites have become essential tools for contributing to the SDGs, therefore it is important to protect these satellites from the risks of collision with space debris. In this regard, JAXA has developed the “Risk Avoidance Support Tool Based on Debris Approach Collision Probability” (RABBIT) to facilitate debris avoidance operations by satellite operators.

Last year, this tool was nationally recognized as an effective tool that contributes to SDGs as well as the potential to contribute to the sustainable use of the space environment.

Japan also continues to promote the utilization of “Kibo” to maximize its outcomes. To date, various experiments have been conducted aboard “Kibo,” including areas in material/physical science, medical science, life science, and capacity building. One of these activities is the KiboCUBE programme, operated by JAXA and UNOOSA. This programme provides developing countries with deployment opportunity of CubeSats from “Kibo” of the ISS along with educational programs on CubeSat development through the “KiboCUBE Academy”.

Mr. Chair,

Japan firmly believes that space technology has a high potential to support sustainable socioeconomic development and will continue to contribute to this important issue.

Thank you for your attention.