Committee on the Peaceful Uses of Outer Space Scientific and Technical Subcommittee 58th Session April 19-30, 2021



Agenda Item 10- "Recent developments in global navigation satellite systems"

Madam Chair and Distinguished Delegates,

On behalf of the Japanese delegation, I am pleased to present recent developments in Japan regarding Global Navigation Satellite Systems (GNSS).

Madam Chair,

Japan has constructed the Quasi-Zenith Satellite System (QZSS), MICHIBIKI, which is composed of three IGSO and one GEO satellite. QZSS became fully operational on November 1, 2018.

The four-satellite constellation currently provides three types of services. The first is a GPS complementary service, transmitting ranging signals from satellites. QZSS ranging signals have the highest interoperability with GPS signals. Secondly, GNSS augmentation services can provide error corrections via QZSS. Thirdly, QZSS service supports disaster mitigation and relief operations through a messaging function.

With a future expansion in mind, Japan began the procurement process for three additional satellites. We expect the completion of a constellation of seven satellites to enable sustainable Position, Navigation and Timing (PNT) around 2023. Japan has also started the development of a High Accuracy Augmentation Service known as "MADOCA-PPP" which will start its service around 2023, and an Early Warning Service to the Asia Oceania region which will start its service around 2024.

Madam Chair,

Japan continues to support international outreach activities on GNSS through QZSS. As a GNSS provider participating in the International Committee on GNSS (ICG), we promote interoperability and compatibility among global and regional systems.

Japan has supported the Multi-GNSS Asia (MGA) conference since 2010 as an ICG-related activity in the Asia/Oceania region. As part of its activity, MGA has been organizing the Rapid Prototype Development (RPD) Challenge, a hands-on Hackathon where participating teams come up with creative ideas utilizing GNSS and build a prototype by the end of the course. In 2020, MGA together with the Geo-Informatics and Space Technology Development Agency (GISTDA) in Thailand co-organized a special online version of the RPD Challenge under the theme of "Solutions for Disaster Management: Tsunami/Flooding". The final demonstration is scheduled for May 2021 in Thailand and is planned to go into the next phase towards actual implementation.

Madam Chair,

I would like to conclude this statement by reiterating our commitment to contributing to the benefit of society by promoting GNSS and their applications.

Thank you for your attention.