Committee on the Peaceful Uses of Outer Space Scientific and Technical Subcommittee 61st Session January 29-Feburuary 9, 2024



Japan Item 8– "Recent developments in global navigation satellite systems"

Chair, Distinguished Delegates,

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

Chair,

Japan has built the Quasi-Zenith Satellite System (QZSS), MICHIBIKI, which consists of four satellites (three IGSOs and one GEO) and has been fully operational since November 2018.

The current four-satellite constellation 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 offer High Accuracy Service by providing error corrections via QZSS. Thirdly, QZSS service supports disaster mitigation and relief operations through a messaging function.

In accordance with Japan's Basic Plan on Space Policy 2023, Japan is planning to establish a constellation of seven satellites to maintain and improve capabilities for sustained positioning and plans to launch satellites sequentially from this year. In addition, Japan is preparing to develop a constellation of eleven satellites.

Japan has also been operating the trial service of High Accuracy Augmentation Service, known as "MADOCA-PPP," since 2022 and developing an Early Warning Satellite Service (EWSS) for the Asia Pacific region. MADOCA-PPP and EWSS are expected to begin offering operational services this year and next year, respectively. In preparation for the launch of those services for overseas users, we are developing necessary systems and conducting demonstrations in the Asia Pacific region.

Chair,

Japan is committed to supporting international activities on GNSS through QZSS. As a GNSS provider and a member state in the International Committee

on GNSS (ICG), Japan will contribute to the discussion to promote interoperability and compatibility among global and regional systems.

Japan has also been supporting the Multi-GNSS Asia (MGA) conference since 2010 as an ICG-related activity in the Asia/Oceania region. MGA has been organizing the Rapid Prototype Development (RPD) Challenge, a handson Ideathon and Hackathon where participating teams generate creative ideas utilizing GNSS and build a prototype by the end of the course. In Japanese Fiscal Year 2023, Japan's Cabinet Office, MGA and the Geo-Informatics and Space Technology Development Agency (GISTDA) in Thailand has been organizing "RPD challenge 2023." The lectures and demonstrations are to be conducted in early February 2024 in conjunction with the annual MGA conference in Chiang Rai, Thailand.

Chair,

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

Thank you for your attention.