Japan, Agenda Item 9– "Space-system-based Disaster Management Support"

Mr. Chair, Distinguished Delegates,

On behalf of the Japanese delegation, I am pleased to present some of Japan's recent initiatives and international cooperation activities related to this agenda item.

Mr. Chair,

Recognizing the importance of space technology and international cooperation in disaster management, Japan has been leading a regional disaster management project called "Sentinel Asia". The Asian region is often affected by a range of natural disasters, such as floods, volcanic eruptions, earthquakes and typhoons. Sentinel Asia contributes to preventing, mitigating, and reducing damage from these kinds of disasters by co-sharing satellite data in the region. Over 100 organizations in the Asia-Pacific region participate in this framework and more than 350 emergency observations have been conducted in total since its launch in 2006.

One of Sentinel Asia's remarkable characteristics is that it is composed of space agencies, disaster management organizations and international organizations. Recently Sentinel Asia has been working to build a stronger link with the disaster management community and the Sendai Framework for Disaster Risk Reduction.

Last year, the Standard Operating Procedures (SOPs) for making an Emergency Observation Request (EOR) to Sentinel Asia were established in Myanmar, Thailand, and Viet Nam. Thanks to these SOPs, in case of a natural disaster, the stakeholders of each country have strengthened their capacity to make immediate emergency observation requests to Sentinel Asia and utilize the information provided by Sentinel Asia for better response and recovery interactively. This is a good example of Sentinel Asia at work, which is mandated to address the entire disaster management cycle. We are convinced that it is a significant contribution to the Sendai Framework Priority 4.

Concerning our contributions to the Sendai Framework, we are pleased to inform you that in light of the partnership between UNDRR and Sentinel Asia as well as the achievements and enhanced recognition of Sentinel Asia in the global disaster management community, Sentinel Asia has been invited by the UNDRR to submit its commitments to the Sendai Framework Voluntary Commitments

(SFVC). Sentinel Asia's voluntary commitments have now been published on the SFVC online platform, which covers the Emergency Observation Request (EOR).

Sentinel Asia is committed to making its best effort to offer disaster assessment and response planning support, and to activate supporting agencies as required. Sentinel Asia will further update and upgrade the SFVC in the future and will continue to be committed to implementing the Sendai Framework through cooperation among Sentinel Asia member organizations.

Mr. Chair,

JAXA has been a member of the International Charter "Space and Major Disasters" since 2005 and has been actively supporting its activities in cooperation with 16 other Charter members. From November 2020 to mid-April 2021, JAXA took over as its Lead Agency for the third time with great pleasure and honor. During this leadership period, JAXA facilitated discussions among the Charter members and strengthened partnerships with external organizations to expand the benefit of the Charter.

Precipitation data is important for weather forecast as well as for water related disaster management, such as floods, typhoons, and landslides. Because of observation difficulties from utilizing rain gauges and weather radars on the ground, satellite observation plays a vital role in monitoring precipitation distribution both locally and globally.

To address water related disasters utilizing satellite data, JAXA has developed a precipitation data system known as GSMaP. GSMaP offers multi-satellite global precipitation map under the Global Precipitation Measurement (GPM) Mission, by using Dual-frequency Precipitation Radar (DPR) onboard GPM core satellites, other GPM constellation satellites, and geostationary satellites. This system provides hourly global precipitation information and thereby contributes to a wide range of disaster management. It also enhances flood forecasting and management capacity of the Typhoon Committee, an intergovernmental organization established under the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the World Meteorological Organization.

JAXA is cooperating with international partners for the improvement of accuracy in GSMaP data. For example, JAXA and the Indian Space Research Organization (ISRO) are cooperating on the joint validation, improvement, and

application of rainfall products of both agencies by using both satellite and ground data. JAXA and ISRO also aim to contribute to the enhancement of satellite data applications especially in the Asia-Pacific region where there is heavy annual rainfall.

Mr. Chair,

Before closing I would like to reiterate that space technology plays a great role in managing natural disasters. Japan will continue to strengthen its international cooperation in this field.

Thank you for your attention.