

Agenda Item 8: Space and Sustainable Development`

Republic of Korea

Sixty-Sixth Session of the Committee on the Peaceful Uses of Outer Space

June 5, 2023

Thank you, Chair.

The Republic of Korea recognizes the critical importance of space technologies and space-related applications in responding to global challenges including climate change and disasters. Korea firmly believes that Earth Observations data offer valuable opportunities and tools for both itself and the global community to achieve the Sustainable Development Goals.

Our National Institute of Environmental Research developed the Geostationary Environment Monitoring Spectrometer (GEMS) to enhance capability in monitoring and predicting air quality and climate change over East Asia and Southeast Asia.

Launched in 2020, GEMS enables the world's first geostationary air quality mission, as mentioned by several delegations during the Committee. Korea is producing and sharing the hourly monitoring data with almost 20 countries in Asia.

While GEMS measures atmospheric composition and climate forcers including ozone which are Short-Lived Climate Pollutants, Korea is preparing satellites to monitor long-lived emissions such as carbon dioxide and methane to complement GEMS data. Data produced by these future satellites will be a critical contribution to global efforts against climate change.

Our National Geographic Information Institute has also been developing and operating medium-sized satellites based on the 500 kg standard platform which provide high-resolution satellite images needed for land use and monitoring, resource management, disaster response and national spatial information. We will launch Compact Advanced Satellite 500-2 with the enhanced monitoring capacity at the end of this year.

In addition to the previously mentioned satellites, Korea is developing a dedicated satellite for water resources monitoring to effectively respond to water disasters and manage water resources.

Growing participation and engagement of the private sector in space development will enable spin-off benefits of space technology and foster innovation, which will result in cost reductions in the satellite development process.

With these satellites in operation and development, the Republic of Korea will continue its efforts to contribute to the global community through data sharing. Since joining the International Charter in 2011, Korea has provided approximately 5,000 satellite images to contribute to the immediate response to disaster areas around the world. In 2022, 720 satellite images were provided for 50 disasters, including the Tonga volcanic eruption, flooding in the Philippines, and flooding in Nigeria.

The Korea Aerospace Research Institute served as the lead agency of the International Charter Space and Major Disasters until last April. And our National Geographic Information Institute will provide satellite images to the International Charter as a data contributor.

Before closing, the Republic of Korea reiterates its commitment to ensuring a sustainable future based on science and technology.

Thank you, Chair.

/END/