ESCAP, *Item 12*

Use of Space Technology in the United Nations System

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Thank you, Chair.

The Economic and Social Commission for Asia and the Pacific (ESCAP) is the most inclusive intergovernmental platform in the Asia-Pacific region. The ESCAP secretariat supports inclusive, resilient and sustainable development in the region by generating action-oriented knowledge, and by providing technical assistance and capacity-building services, including the peaceful use of space technology and geospatial information, in support of national development objectives, regional agreements and the implementation of the 2030 Agenda for Sustainable Development.

In October 2018, ESCAP Member States endorsed the Asia-Pacific Plan of Action on Space Applications for Sustainable Development (2018–2030), an inclusive and country-needs-driven blueprint for harnessing space and geospatial applications and support countries, in particular those with special needs, in implementing the 2030 Agenda for Sustainable Development. It comprises 188 actions in the following thematic areas: (a) disaster risk reduction and resilience; (b) management of natural resources; (c) connectivity; (d) social development; (e) energy; and (f) climate change. All 188 actions are designed to contribute significantly to 37 targets of 14 of the Sustainable Development Goals and contribute to the Space2030 Agenda.

Countries have reported 600 activities that contributed 156 actions of the total 188 actions of the regional space Plan of Action. Most of the activities were implemented in the area of disaster risk reduction. The capacity-building and knowledge-sharing are still the priority requested by our countries. The secretariat has developed the database for collecting the data and information on the implementation, and a dashboard is also developed for showcasing the good practices made by countries in six thematic areas through three implementation modalities.

Dear Colleagues,

The Jakarta Ministerial Declaration on Space Applications for Sustainable Development in Asia and the Pacific, adopted at the Fourth Ministerial Conference on Space Applications for Sustainable Development in Asia and the Pacific, held in October 2022, with the theme of "SPACE+ for our Earth and Future", called for the acceleration of implementing the Plan of Action in its phase II, and encourages countries to better integrate digital technologies and innovations with traditional space applications and further geospatial information applications. The early efforts of the secretariat in this regard are to develop flood hotspots and risk maps using open-

sourced and easy-to-use models that use digital technologies such as machine learning, big Earth data, and cloud computing. These models map the inundated areas for significant floods from 1984 till the present using satellite-derived data and the flood severity and damage assessment. In early 2023, these models had been calibrated for a few countries that expressed interest in validating the models to augment their early warning systems for floods and wildfires.

The secretariat also developed the Asia-Pacific Risk and Resilience Portal, serving as a one-stop digital platform to assist policymakers in understanding the regional, subregional and national landscapes of hazards and climate risks and adaption measures. Using a variety of methodologies, it converts a vast array of publicly available geospatial, statistical and remote sensing information on hazards and climate change, and socioeconomic data into usable and interoperable data analytics for risk-informed decision-making. It provides targeted adaptation solutions for countries based on the risk profile.

Last October, ESCAP published the Geospatial Practices for Sustainable Development in South-East Asia 2022: A Compendium, a biennial publication series produced under the regional space Plan of Action. Just like the first edition in 2020 for the Asia-Pacific region, this 2022 edition is built from the ground up – it is a publication that showcases "what is" rather than "what ought to be." It demonstrates the diverse use of geospatial information and applications and the vital role they will continue to play in the future and highlights the importance of making geospatial data, tools and innovations accessible, available and affordable to maximize benefits for all.

The collaboration with the partners in the UN system has been enhanced.

In 2022, the secretariat facilitated the provision of approximately 100 gigabytes of satellite imagery and products to member States for early warning, response and damage assessment related to a variety of climate hazards through the network of the Regional Space Applications Programme for Sustainable Development, and in collaboration with the United Nations Satellite Centre, United Nations Platform for Space-based Information, International Charter: Space and Major Disasters, Sentinel Asia and other regional and global partners.

In addition, ESCAP and UN University Institute for Water, Environment and Health jointly developed online geospatial tools and capacity building for developing countries in Asia and the Pacific on space-derived information applications for mapping and monitoring water-related disasters. Over 1,800 participants have registered in two online training courses: Active and Passive Satellite Data Analysis Using Cloud Computing for Surface Water/Flood Mapping; and Spatiotemporal Drought Assessment by Leveraging Google Earth Engine Platform.

Thank you, Chair.