Thailand's statement On Agenda Item 7: Matters relating to remote sensing of the Earth by satellite, including applications for developing countries and monitoring of the Earth's environment by Mr. Pakorn Petchprayoon, Director of Office Geo-Informatics Product Innovation, Geo-Informatics and Space Technology Development Agency at the 59th session of the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space 15 February 2022

Mr. Chair, Distinguished Delegates,

This is my privilege to appear before you today in celebration of the collaboration by all Member States to utilize space technology for sustainable socioeconomic development and share some of Thailand activities. There is tremendous value to understand our changing planet and to predict the future outlook of our earth. Observation from space inspires and serves humankind in ways that are truly unique. Remote Sensing is a critical tool to ensure that we, as a society, not only survive but thrive.

Thailand utilized observation from space to study the Earth as a complex system with diverse interacting components: biosphere, hydrosphere, atmosphere, and lithosphere. By measuring and monitoring the interactions of these various components, we are able to develop a comprehensive near real-time applications to support many national needs. GISTDA, the space agency of Thailand, partners with key national agencies to develop monitoring and decision support systems that improved national capabilities for agriculture, water resources, and natural hazards; the management of resources; and development of environmental policy.

Within agriculture sector, Thailand uses of the satellite imagery for crop monitoring and crop health assessment to support the government and local agricultural organizations. The remote sensing platforms provide data at different spatial, spectral, and temporal resolutions for agricultural management. Our in-house platform, GISAgro, allows the monitoring of crop growth from planting to harvesting and detects any abnormalities as the season progresses. The practical benefit of this platform is not only recognized by Thailand, but its potential is also acknowledged abroad. We have begun our collaboration with UNESCAP to expand similar systematic crop monitoring platform to Cambodia, Lao PDR, and Myanmar.

To support air quality monitoring, we monitor hourly PM2.5 level using geostationary satellite data. This platform uniquely provides complete coverage of the country. As part of this development, we also currently research the possibility of identifying the sources of PM2.5 which we believe to support more spatially explicit policy for Thailand. In the future, we hope to further extend this collaboration with neighboring countries to cover regional cross-border PM2.5 issue. This, we hope, will ensure holistic resolution that address root causes of PM2.5 issues in the region.

Mr. Chair,

Thailand also plans to utilize remote sensing technology to enhance our understanding of climate change impacts and to monitor the country's progress toward our commitment to reduce the country greenhouse gas emission. Climate change has increasingly stressed the world's ecosystem and undeniably became a pressing issue for all nations. In many countries including Thailand, climate change has caused more frequent natural hazards and worsen the damages from disasters. Earth observation from space offers additional observation of the Earth's climate system to complement the traditional point-based measurements from weather stations. We will work with various stakeholders and experts to ensure practical usage of space technology to design Thailand climate change adaptation and mitigation strategies.

We believed that remote sensing is an essential part of the national efforts to understand the global environment, to enhance scientific knowledge, to better support government management and to improve life quality of our citizens.

Lastly, Thailand would like to thank all the Member States and look forward for our collaborations. Our country is committed to working with all stakeholders to extend the application of space technology and deliver values from space.

Thank you, Mr. Chair.