Thailand's statement On Agenda Item 16: Space and Global Health by Ms. Raksina Lekthanoo, Chief of International Relations Division, 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 9 February 2022

Mr. Chairman

Distinguished Delegates,

For more than 2 years that the whole world, including Thailand has been suffering from the covid-19 pandemic. Not only the pandemic but Thailand also suffered from haze and smoke which is a part of air pollution for more than decades. These issues have severely threatened and affected our health and living. These are challenges for leveraging space technology applications, and integration of geospatial information into local and national institutions. We have seen that regional cooperation is an imperative. These issues call for borderless solidarity. Regional cooperation is a key tool to strengthen our capacity and to overcome unexpected challenges and find useful solutions.

The EO data and geospatial information applications have been adopted through utilization and integration of data, processes, and cooperation. A lot of space-based Earth observation data have been used for mapping and monitoring the situations. Night light images and Nitrogen Dioxide emission derived from satellite data , NPP Suomi, for example, were used for monitoring "the Lock Down Measure" in COVID-19 administration. With combining and integrating space-based data with geospatial information technology and other medical and related data, "iMap" platform has been developed to monitor and track COVID-19 pandemic in Thailand. The platform enable us to analysis for risk map on pandemic situation, vulnerabilities, increase of infection, vaccinations, medical capacity and supplies, preventive and precautionary measures, and good consumer etc. The platform has tremendously supported policymakers/ government agencies to make the appropriate decisions against the covid-19 pandemic.

On the other aspect of applications, air pollution including smoke, haze, PM2.5/PM10, and other air pollutions, which also severely affect health and livings of people in Thailand, satellite-based data have been recognized and used. Extracting hotspots and burnt scars, dissemination of information on the websites for scientists, forest fire squads, natural resources officers have been in operation since 2013. These are our seasonal routine operation. Recently, number of hotspots was adopted as a crucial KPI for province governors to limit and reduce this number each year. This operation has started providing the PM2.5/PM10 maps extracted from satellite data and available for downloading

since 2017. More and more websites and mobile applications for public have been being developed and provided.

Lastly, it seems that more people realize and recognize that satellite data along with aspects of applications can support public health. More and more useful space-based data and information will be coming. However, we need improvement in terms of frequency, accuracy, and friendly use style. Adding to that, ground sensors needed to be considered, more collaboration needed to be made, and modeling is needed to be crested for forecast and useful for daily life. Most of all, we believe that engaging all stakeholders ranging from policy makers, operation agencies, local parties and public is the key for sustainable use of space-based Earth observation data and its applications.

Thank you very much.
