## Statement by Thailand on Agenda item 13. Space and global health The 61<sup>st</sup> Session of Scientific and Technical Subcommittee of COPUOS 29 January – 9 February 2024

## Chair, Distinguished Delegates,

Health is a critical foundation of a country and a fundamental service people deserve. With uniqueness of information from satellites, space is a pivotal tool for activities supporting health and wellness issue like never before. The government of Thailand prioritizes health and wellness sector, no matter in continuing enhancement of national security system, tackling the pandemic, particularly an urgent problem that Thailand and countries in the region are facing, air pollution.

More than past 5-year, Thailand has been confronting the challenge regarding ambient air pollutants, which caused around 32,000 premature deaths, many diseases related to cardiovascular, respiratory, skin, and eyes to an innumerable population. Given that satellites are able to observe pollution across a large area, and plausible to detect potential sources or origins of the pollution, using space technology combining with ground sensors play a vital role in management of the pollution problem.

With recognizing information from satellite imagery could fulfill the gap in air quality data with limited monitoring ground stations, Thai universities and research institutes, for instances, Mahidol University and Kasetsart University, have been conducting an air pollution epidemiologic study using satellite remote sensing data with various analysis models to accurately estimate ground-level concentration of air pollutants throughout the country. The study explored associations between air pollution and human health consequences and also contributes the representativeness in health effects of air pollution in Thailand that could fostering policy development in public and environmental health.

In operation level, Pollution Control Department and Geo-Informatics and Space Technology Development Agency or GISTDA developed PM2.5 monitoring system project, namely "Check Fuun", focused on integrating data from satellite and fixed-site air quality monitoring stations for the specific purpose of PM2.5 monitoring. People can access to platform to be informed the air quality in their area.

Warning people who are affected is important, Department of health and GISTDA collaboratively develop a user-friendly platform for living healthy, "Life Dee." General users can acquire the information of current weather and pollution situation nearby. The information was derived from satellites and "Check Fuun" monitoring system. The information air pollution has been visualized and displayed in spatiotemporal variation under microclimate conditions in an area. On the top of that, Life dee platform contains useful features for search and navigation to nearby medical facilities, providing people with a convenient way to access medical assistance promptly and ensuring that they can receive appropriate care and treatment when needed. Chonburi Province, a prioritized area located in the eastern part of Thailand where industrial, transportation and economic activities are rapidly accelerated, has been selected to be a sandbox area to implement the Life Dee platform. In addition, the platform will be enlarged to provide Knowledge sharing on air pollution and health, the platform to cover over the country and able to inform other conditions affected to health and contagious diseases.

One of the main sources of haze and air pollution are biomass burning from agriculture and forest fire, especially in rural areas where difficult to be spotted. Identifying the originality is also Thailand's intention. Satellites have been used to detect and monitor

heat clusters from Earth orbit, allowing extinguishing forest fire and burning points in remote areas timely and effectively. Space technology essentially contributes prediction of direction of the pollution, including mitigate severity of the problem.

## Chair, Distinguished delegates,

Thailand started to utilize information from satellites for solving pollution challenge. In the coming years, we will expand the capability to monitor many more health issues, such as dengue, fever, and heat stroke. They all are local deceases that caused morbidity and have taken many lives in our country. Thailand recognizes significance of leveraging space technology for global health and will supports the agenda for wellbeing of people.

## Thank you for your kind attention

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