

## *APSCO, Item 3*

### **Statement of APSCO**

#### **The 60<sup>th</sup> Session of the Scientific-Technical Sub-Committee of the UN Committee on the Peaceful Uses of Outer Space**

#### **(COPUOS)**

**Mr. Chair, Distinguished Delegates,**

On behalf of the Asia-Pacific Space Cooperation Organization (APSCO), I appreciate the opportunity to report an update on the Organization's activities in the past year in support of the aims of the Scientific and Technical Subcommittee.

**Mr. Chair,**

APSCO is currently implementing the Organization's 2<sup>nd</sup> 10-Year Strategic Plan - the Development Plan for Cooperative Activities of APSCO (2021-2030), where projects and activities focus on enhancing capability of our Members in peaceful uses of outer space, in the domains of space science, space technology and space applications. Our key strategy is on taking advantage of the wide coverage area of the Asia-Pacific to multiply benefits for our Members in the region. Pooling up and sharing of resources and knowledge, as well as networking of facilities and infrastructures for Space Science, Technology and Applications, Space Education, Training and Capacity Building are at the heart of the Strategic Plan.

Under the APSCO 5-Year Project Implementation Plan (2021-2025) that supplements realization of the 10-Year Plan, there are 34 projects included. In 2022, feasibility studies of 3 new projects in space science, space technology and space application domains, respectively, have been completed, namely,

- Remote Sensing Techniques for Monitoring and Emergency Response to the Earthquake-Related Hazards in APSCO Member States Project
- APSCO Aerosol Monitoring CubeSat Project, and
- Spatial Downscaling of Retrieved Soil Moisture Using Synergistic Multi-satellite Remote Sensing Project

**Mr. Chair,**

As a basic facility for sharing space-derived data, and promoting application of satellite remote sensing, the APSCO Data Sharing Service Platform (DSSP) has been actively utilized through 35 Certified Users in all APSCO Member States. The upgraded version of the Platform can provide Earth-observation data in more extensive and responsive manner. The 1<sup>st</sup> Batch of the DSSP Application Projects, kicked off in 2021, are now being actively implemented by our Member States, based on one-country-one-project principle. They cover the topics on Satellite Imagery Search Engine, Flood Monitoring and Warning System, Forest Cover for the Evaluation of Amazonian Ecosystem, Mangrove Watch, Air Pollution Assessment, Wildfire Monitoring, and Crop Acreages Assessment. In the 2022, the 2<sup>nd</sup> Batch of DSSP application projects, focusing on climate change and agriculture, has been approved.

For disaster monitoring and management, APSCO has established a Charter-like emergency response mechanism among our Members. Knowledge, experiences and best practices have been shared through supporting projects, such as the ‘Framework for Researches on Application of Space Technology for Disaster Monitoring in the APSCO Member States Project’, in which 14 Joint Research Projects focusing on Flood, Landslide/Avalanches, Drought and Multi-Hazard, are currently under implementation.

**Mr. Chair,**

In the Domain of Space Science, a number of networks with measurement nodes distributed in Asia-Pacific are now in operations, such as,

- APSCO GNSS Monitoring and Assessment Service Network
- APSCO Network for Ionosphere Modeling through Study of Radio Wave Propagation
- APSCO Seismo-Ionospheric Observation and Application Platform (SOAP) for Integrating Satellite and Ground Observations for Earthquake Signatures and Precursors Monitoring, and
- Asia-Pacific Space Science Observatories (APSSO)

In deep space exploration, a CubeSat Project from APSCO Members State, Pakistan, has been selected as a scientific payload to be deployed from Change'E-6, a lunar sample return mission planned to be launched in 2024. Meantime, the cooperative activities on International Lunar Research Station (ILRS) have been approved by APSCO Council in 2022, and ready for kickoff early this year. In last November, in collaboration with Arab Union for Astronomy & Space Sciences (AUASS), APSCO successfully organized an international symposium on “Space Exploration - Moon and Beyond” for knowledge exchange among APSCO Members and other world-leading experts in the field.

**Mr. Chair,**

APSCO has continued its capacity-building endeavor in Space Education and Training, and has adopted diverse online platforms to offer training courses and to provide opportunities for exchange of knowledge. In the year 2022, 6 training activities, including 2 distant trainings, 4 short trainings, including 1 project-related training, and APSCO-UNSPIDER onsite training in Bangkok, Thailand have been successfully conducted.

Under APSCO's Degree Education Program, the process for enrollment of degree education program with leading universities in China, namely, Beihang University, Northwestern Polytechnical University, and Harbin Institute of Technology, has been well coordinated. In 2022, there are totally 9 Master and 8 PhD students recruited with full scholarship provided. Furthermore, cooperation with Zhejiang University and Wuhan University have already been approved and the recruitment of students will begin in 2023.

For hands-on training, after successful launch of two satellites under the Student Small Satellite (SSS) Project in 2021, the development of 3<sup>rd</sup> satellite has been in great progress this year. The SSS-2B is planned to be launched in 2<sup>nd</sup> quarter of 2023. This program marks an outstanding achievement for university cooperation and capacity-building under the multi-lateral cooperation of APSCO. To follow up on this legacy, APSCO Cubesat Competition for students has been formulated and the first phase of the competition will be implemented in 2023.

**Mr. Chair, Distinguished Delegates,**

APSCO and its Members are strongly committed to support the work of COPUOS. We are also open for cooperation with all nations in keeping outer space available for peaceful activities, and improve capabilities to use space for socio-economic development, especially to those developing countries.

**Thank You.**