



APSCO's Initiatives in Space Exploration- Moon and Beyond

Agenda Item 14 66th Session of the UNCOPUOS

**Presented by: Ms. Yu Qi
Secretary-General
Asia-Pacific Space Cooperation Organization (APSCO)**

yuqi@apsco.int



About APSCO

- A non-profit, International, Inter-governmental organization, established in 2008
- Purpose is to promoting multilateral cooperation in space science, technology and applications
- China is the Host Country
- Headquarters is located in Beijing China
- Diplomatic Status in China
- 12 Members
 - Full Members:** Bangladesh, China, Iran, Mongolia, Pakistan, Peru, Thailand, Türkiye
 - Signatory:** Indonesia (ratification in process)
 - Associate Member:** Egypt (ratification in process)
 - Observer:** Mexico, Inter - Islamic Network on Space Sciences and Technology (ISNET)
- Cooperative Partnership with IAF, ESA, Argentina, Russia



APSCO's Vision in Space Science & Exploration



Background



Deep space exploration, lunar and mars exploration are listed as the key areas of cooperation in the new Development Plan on Cooperative Activities of APSCO (2021-2030), as approved by the 14th Council Meeting of APSCO in 2020.

Reference from Development Plan on Cooperative Activities of APSCO (2021-2030)

IV. ACTION AREAS TO DEFINE THE SCOPE OF IMPLEMENTATION

Space Science & Exploration

21.2) Study on Astronomy and Deep Space Exploration

“APSCO shall carry out basic research and advanced research on development of science and technical means for deep space exploration, and develop experimental study on it. In conjunction with the Moon, Mars and other international planetary exploration programs, APSCO shall also carry out research on origin of celestial bodies and search for extraterrestrial life, and investigating and surveying for comets, asteroids and near-Earth objects (NEO’s). APSCO should also develop equipment and infrastructure for studies in astronomy, astrophysics, astrochemistry, astrobiology and cosmology to extend knowledge about the universe, the origins of life, the effects of stellar activities and interstellar medium on the solar system and our planet.”

Initiatives in Space Exploration



Actions towards the Cooperation on Lunar Exploration

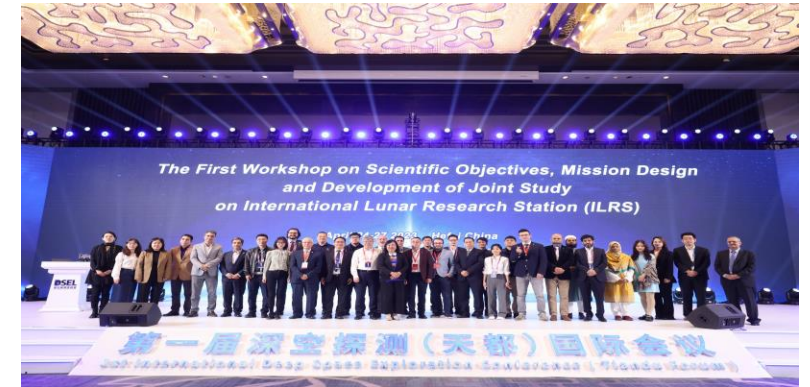


- 2021.Jan APSCO Shared information with MS on Joint Research on Lunar Sample
- 2021.Apr APSCO is invited by CNSA for “Cooperation in the Creation of the International Lunar Research Station (ILRS)”
- 2021. Jul APSCO Conducted Short Training Course on “Lunar Data Analysis”
- 2021. Dec APSCO is officially invited to join ILRS by CNSA and ROSCOSMOS, and made positive reply
- 2022. Jan China Lunar Exploration Office to explore cooperation opportunities, Chang’E 6 Payload opportunities for APSCO MS
- 2023. April APSCO established a working group on ILRS

APSCO 1st Workshop on Scientific Objectives, Mission Design and Development of Joint Study on ILRS



- China Space Day 2023 in Hefei, Anhui, 24-27 April 2023
- The 1st Workshop on Scientific Objectives, Mission Design, and Development of Joint Study on ILRS 26 April 2023
- More than 50 participants from 8 Member States and Arab Union
- Participants attended the International Conference of Deep Space Science
 - Sub-Forum 1: Engineering & Technology of Deep Space Exploration
 - Sub-Forum 2 : Deep Space Science & ILRS International Seminar
 - Belt and Road Space Dialogue: Universe Exploration, Propulsion Initiating





Sending Payload on Moon Mission-Chang E 6 Opportunity

Background

- The success of Chang'e-5 lunar sample return mission symbolized the end of CLEP's three-phase strategy.
- CNSA plans to utilize Chang'E-6 mission, a lunar sample return mission, to explore more modes and projects of international cooperation
- **Chang'E-6 is planned to be launched in April-June 2024.**
- **CNSA opens this opportunity for APSCO Member States to send a payload on ChangeE-6 mission.**



Sending Payload on Moon Mission-Chang E 6 Opportunity



Call for Interest Announced by APSCO Secretariat



Call for Interest Among APSCO and its Member States

Announcement of Opportunities for Scientific Payloads/CubeSat on board Chang'E-6 Mission

By

**China National Space Administration &
Asia-Pacific Space Cooperation Organization**

21 January 2022



Sending Payload on Moon Mission-Chang E 6 Opportunity

COOPERATION OPPORTUNITIES

The orbiter provides onboard opportunities. The payloads/CubeSat either work independently or require support from the orbiter.

SUPPORT TO APSCO MEMBER STATE

- Free piggyback launch of the payloads/CubeSat with Chang'E-6
- Free Testing services of the whole spacecrafts after the payloads/CubeSat integrated into the Orbiter module
- Free TT&C services for the payloads/CubeSat
- Technical Training and Sharing of Knowledge

Proposal from Pakistan have been selected

APSCO STAFF'S TRAINING

Deep Space Exploration Lab (DSEL) of China



- Discussion on possible cooperation
- Knowledge Sharing
- Training of APSCO Staff
- The DSEL aims to promote the long-term development of deep-space exploration regarding the moon, planets, asteroids and the edge of the solar system





*integrating
developing
countries into
space
exploration
initiatives*

*Support Thematic
priority 1: Global
partnership in space
exploration and
innovation*

*foster the development
of human capital in the
areas of space
exploration and
innovation*

*open and
inclusive
opportunities
at regional
and global
level*



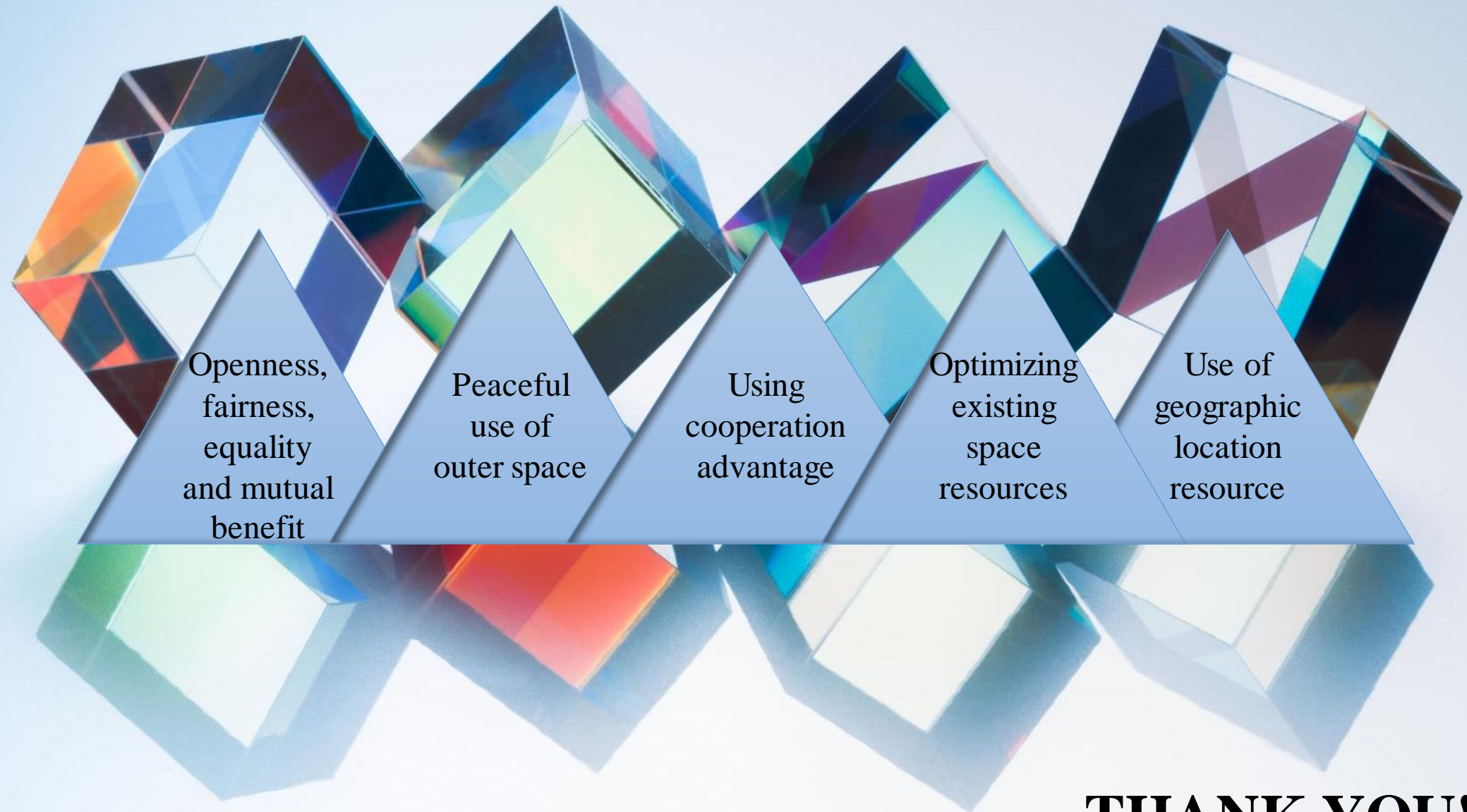
*inspire and
encourage
young people*

*Raising awareness of
space exploration and
innovation*



Conclusion

- ❑ A CubeSat Project from APSCO Members State, Pakistan, has been selected as a scientific payload to be deployed from Change'E-6.
- ❑ APSCO's Host Country, China, also offers a unique opportunity on piggyback and scientific payload onboard Change'E-7, the Moon's Polar-landing mission. The proposals from APSCO Members are currently under evaluation process.
- ❑ APSCO and CNSA have signed Joint Declaration Concerning Cooperation on the ILRS.
- ❑ APSCO Working Group for Joint Study on ILRS has been established, in which more than 50 experts and scholars from APSCO Member States have joined the team.



THANK YOU!