

A hand is shown holding a glowing blue wireframe globe. The globe is composed of many small, interconnected triangles, creating a mesh-like structure. The hand is positioned over a laptop screen, which is partially visible in the background. The overall scene is set against a dark, blurred background, suggesting a professional or technological environment.

OPEN DATA & OPEN KNOWLEDGE Workshop



Xingfa Gu

The Initiator and Co-chair of Asia-Oceania Group on Earth Observations (AOGEO)

**Professor,
Aerospace Information Research
Institute, Chinese Academy of
Sciences (AIRCAS)**

- **An expert of GEO Decade (2016-2025) development plan. He is a Member of GEO Programme Board.**
- **Co-Chair of CODATA Task Group of Preservation of and Open Access to S&T Data in Developing Countries (PASTD) (2008-2014), Deputy Secretary General of Asian Remote Sensing Association (AARS) (since 2009).**
- **Vice Chair of Executive Committee of Global Alliance for Open Access to and Application of Scientific Data in Developing Countries (e-SDDC), Global Alliance for ICT and Development, the United Nations (UN GAID) (2007-2010).**
- **A Member of the National Committee of the Chinese People's Political Consultative Conference (CPPCC), Academician of the International Academy of Astronautics (IAA).**
- **An Academician of the International Academy for Europe and Asia (IAEA), a Member of the Society of Photo-Optical Instrumentation Engineers (SPIE), and Principle Investigator of Applications Systems of Chinese High-Resolution Earth Observation Systems (CHEOS).**

AOGEO Accelerates Open Data & Open Knowledge in Asia-Oceania region

Open Data and Open Knowledge
Workshop: 15-16 June, 2023
Geneva, Switzerland

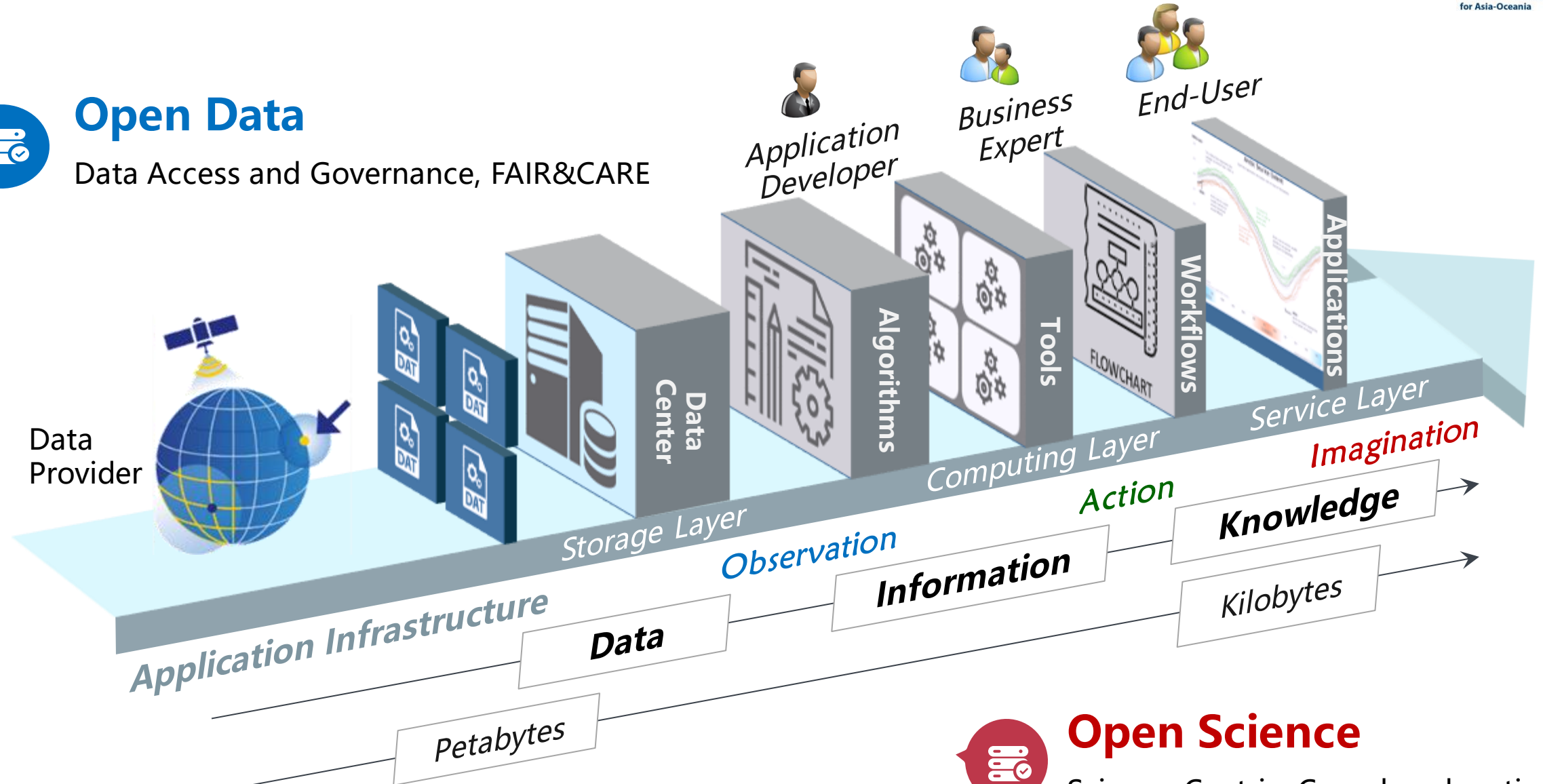
AOGEO
Xingfa Gu

Understanding of EO Knowledge



Open Data

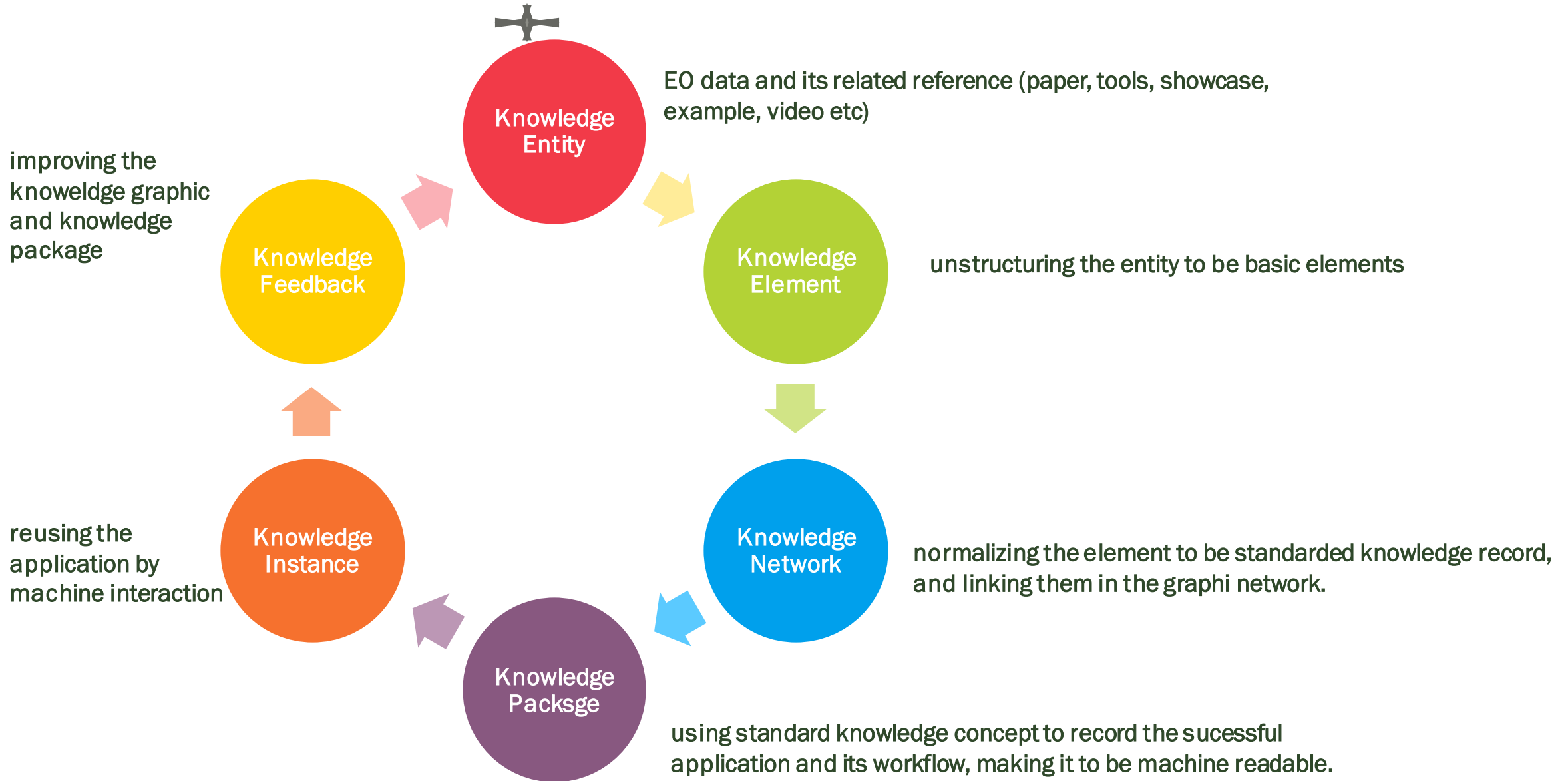
Data Access and Governance, FAIR&CARE



Open Science

Science-Centric, Causal explanations

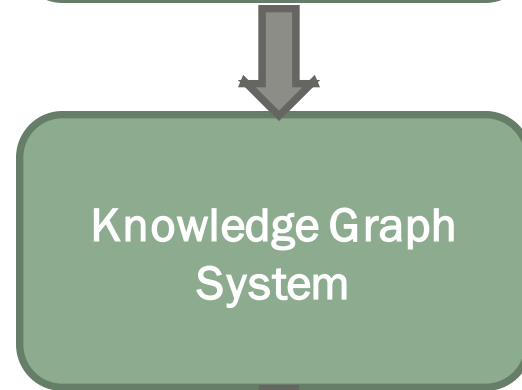
LifeCycle of EO Knowledge Object



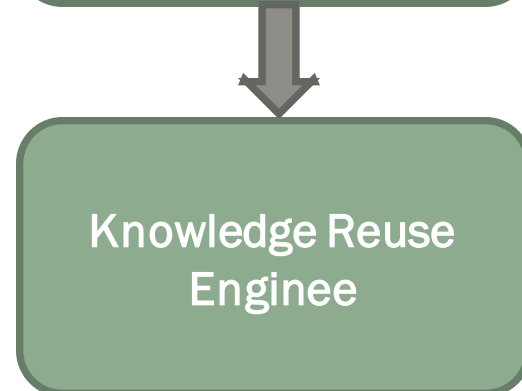
LifeCycle of EO Knowledge Curation



to record the knowledge object, element, normalized record and knowledge packages, to make them findable and accessible



to link the knowledge element as a network, to recognize and generate the new knowledge from the relationship of element of knowledge



to instantiate knowledge package of experience to solve the real problem by none professional users



Outlook of AOGEO

- **AOGEO takes great responsibility** in coordinating different stakeholders and activities that focus on regional needs and promoting GEO engagement priorities in Asia-Oceania region.
- **AOGEO has developed into a regional GEO** with:
 - 22 member countries
 - 12 participation organizations



GEO Member Map in Asia-Oceania region

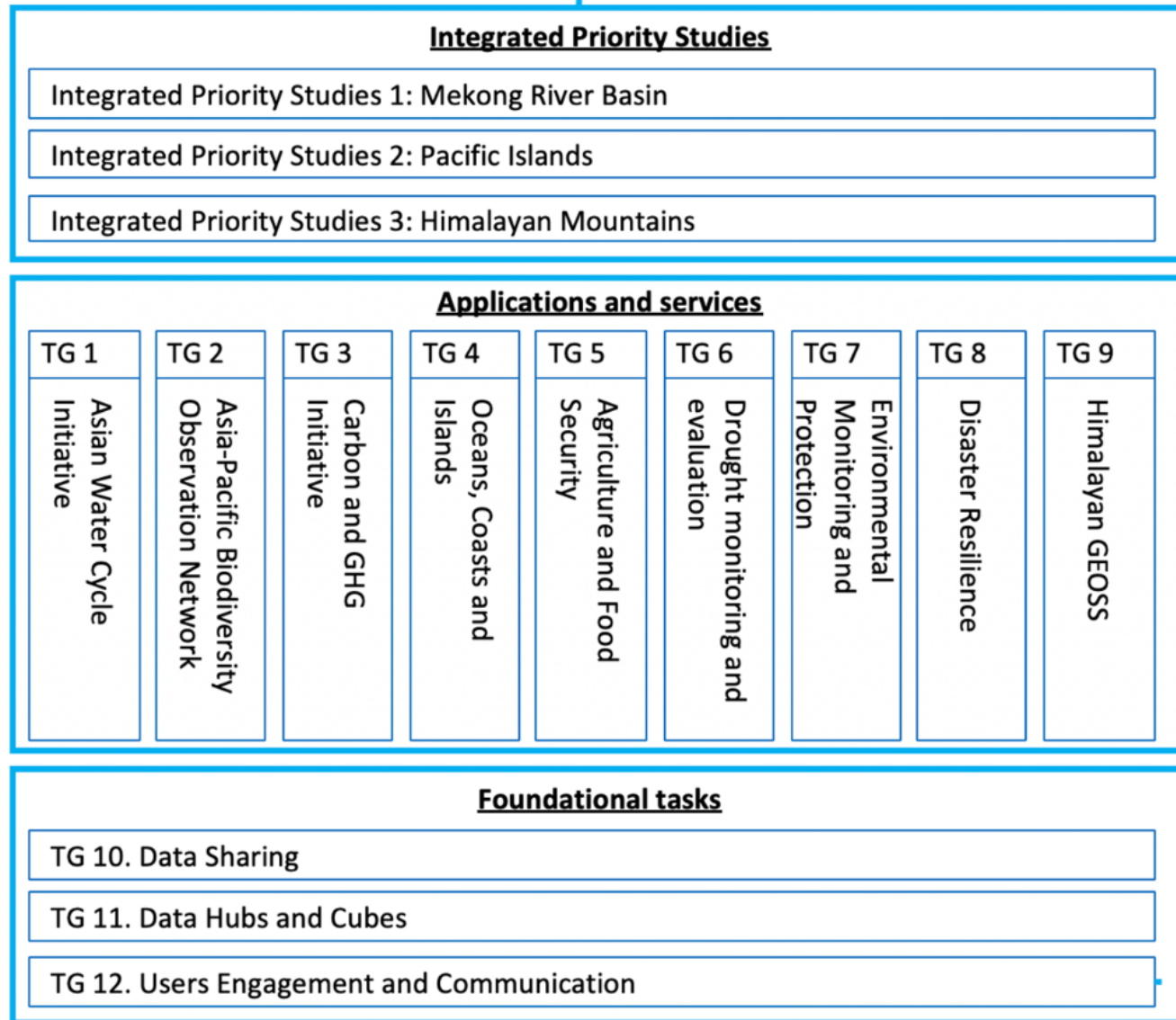
Members	Member List
Member Countries	Australia, Bahrain, Bangladesh, Cambodia, China, India, Indonesia, Iran, Israel, Japan, Republic of Korea, Laos, Malaysia, Mongolia, Nepal, New Zealand, Sultanate of Oman, Pakistan, Thailand, Tonga, United Arab Emirates, Vietnam
Participation Organizations	APSCO, CEOS, GRSS, ICIMOD, ICSU, ISDE, ISPRS, POGO, UNEP, UNESCAP, UNESCO, WMO

BACKGROUND

-  Biodiversity and Ecosystem Sustainability
-  Disaster Resilience
-  Energy and Mineral Resource Management
-  Food Security and Sustainable Agriculture
-  Public Health Surveillance
-  Infrastructure and Transport Management
-  Sustainable Urban Development
-  Water Resources Management

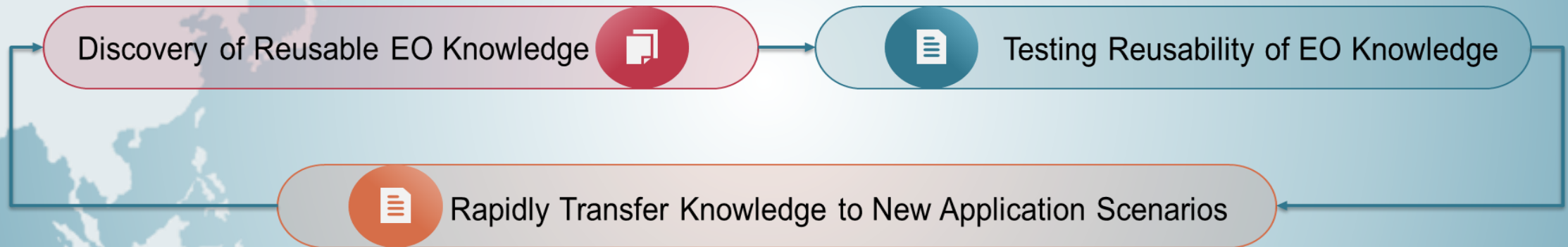
AOGEO Contributing to GEO Missions

AOGEO



Internal Missions in AOGEO

- **GEO has the ability to pool resources to develop specific solutions to major global challenges (Flagship GWPs ...)**
- **Regional EOs lack sufficient resources to provide specific solutions for the large number of fragmented needs**
- **Reusing the knowledge is an economic approach.**



- Manage and share EO data & knowledge for non-professionals users
- Create a common environment for the re-use of scientific output, ultimately **reduce the costs and barriers to application.**

during 6th AOGEO workshop (5.29-31,2023, Macau, China)



Thematic Session 4: Earth Observation Satellite Data Sharing and Knowledge Hub

Thematic Session 4: Earth Observation Satellite Data Sharing and Knowledge Hub
Moderator(s): Jinnian WANG(Guangzhou University) • Junliang QIU(University of Padova)

10:30 - 12:00

- A Knowledge-Driven Service Framework for China High-resolution Earth Observation System (CHEOS)
Prof. Limin ZHAO, Aerospace Information Research Institute, Chinese Academy of Sciences
- Construction Progress of New China GEOSS Components
Prof. Jian WANG, Aerospace Information Research Institute, Chinese Academy of Sciences
- Flood Dynamics Monitoring in China's Rural Areas Using GEE Online Computing Platform
Dr. Junliang QIU, Department of Land, Environment, Agriculture and Forestry, University of Padova
- The Construction of Data Sharing Center and The Development of Representative Online Data Processing Toolboxes for Key Regional Applications
Prof. Xiankun YANG, School of Geography and Remote Sensing, Guangzhou University
- Development, Sharing and Applications of JLS-5M Datasets from CGSTL's Medium-high-resolution Multispectral Satellites
Dr. Xing ZHONG, Chang Guang Satellite Technology Co.



Outcomes

- Highlighted the latest earth observation data sharing techniques, cloud computing, online processing techniques for big satellite data.
- The development of representative practical toolboxes and their case applications were shared.
- Future development and related applications require further solid and practical collaborations across AOGEO member countries.

CONTACT DETAILS



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