



GEO and UNISPACE+50

High level Panel 2

Giovanni Rum GEO Secretariat

High Level Forum: Space as a Driver for Socio-Economic Sustainable Development 20-24 November 2016 Dubai, UAE







GEO Vision

To realize a future wherein decisions and actions,

for the benefit of humankind, are informed by

coordinated, comprehensive and sustained

Earth observations and information





103 Members







106 Participating Organizations

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Mexico City Ministerial Declaration (2015)

 <u>Endorses</u> the new "GEO Strategic Plan 2016-2025: Implementing GEOSS"

<u>Resolves</u> to



- strengthen & facilitate active participation of developing countries, including through Regional Initiatives
- pursue implementation of Data Sharing Principles (DSPs) & Data Management Principles (DMPs)

Calls on GEO to :

- strengthen engagement with Users & Stakeholders, with a focus on UN Institutions, Multilateral Environmental Agreements (MEAs), Development Banks, Private Sector
- to launch an Initiative to leverage EO in support of 2030 Agenda





The GEO Strategic Plan 2016-2025

for the benefit of humankind are informed via coordinated,

GEO Vision High level Strategic Objectives

Core

Functions

to scope GEO

activities

Advocate the importance of Earth observations as key resources that must be protected and rendered fully & openly accessible . Engage with stakeholders to increase the understanding and use of Earth observations and address global and regional challenges.

"The vision for GEO is to realize a future wherein decisions and actions"

comprehensive and sustained Earth Observations and information".

Deliver data, information and knowledge enabling stakeholders to improve policy- and decision-making processes

- 1. Identifying user needs and addressing gaps in the information chain
- 2. Sustaining foundational observations and data
- 3. Fostering partnerships and mobilize resources
- 4. Advancing the Global Earth Observation System of Systems (GEOSS) and best practices in data management and sharing
- 5. Implementing sustained global and regional services
- 6. Cultivating awareness, building capacity and promoting innovation





GEOSS the Global Earth Observation System of Systems



A set of coordinated, independent Earth observation, information and processing systems that interact and provide access to diverse information for a broad range of users in both public and private sectors.



UNISPACE+50 Challenges and Opportunities

- 1. Space exploration and innovation as essential drivers for opening up new domains in space science and technology, triggering new partnerships and developing capabilities through space exploration that create new opportunities for addressing global challenges;
- 2. The effective use of space tools for meeting sustainable development goals and targets, building resilient societies, and monitoring and mitigating climate change;
- 3. Ensuring long-term sustainability of outer space activities, including strengthening the existing registration regime by looking closely into enhanced information exchange and notification procedures on space objects and events; space debris; space security and transparency and confidence-building measures and space traffic management;
- 4. Strengthening interoperability and coordinated response to a possible near-Earth object threat; and strengthening the ability to depend on space systems and to respond to the impact of events such as adverse space weather;
- 5. Improving the use of space technologies and space-based information and systems in the global health domain; and
- 6. Forging partnerships to strengthen and deliver capacity-building in the use and applications of space science and technology, fit for the 21st century.



The four pillars to frame UNISPACE+50 deliverables – GEO contributions

- 1. Development of economy under "Space Economy"
- GF
 - Free and open Landsat Data
 Engagement of Commercial Sector
 - 2. Evolution of society and societal benefits stemming from spacerelated activities under "Space Society"
 - Systematic approach through Societal Benefit Areas (SBA)
 - Specific initiatives to develop global/regional products/



- services providing socio-economic benefits (GEOBON, GEOGLAM, GFOI, GOS4M, SDGs....),
- Integration of EO data with socio-economic data
- Evaluation of socio-economic benefits





The Landsat case

Landsat Scenes Downloaded from USGS EROS

Center (Cumulative)







8 Societal Benefit Areas







The four pillars to frame UNISPACE+50 deliverables – GEO contributions

- 3. Strengthening of national space infrastructures and capacity-building under "Space Accessibility"
 - The GEOSS Portal, a main entry point to access Earth Observation Data, Information and Knowledge.
 - Implementation of the GEOSS Data Sharing and Data Management Principles



- A dedicated GEO Strategy for Capacity Building based on the three I's: Individual, Infrastructural, Institutional
 - Regional coordination to improve data infrastructure (observation, archiving, processing dissemination)
 - Advocacy for continuity and sustainability of Earth Observations





The four pillars to frame UNISPACE+50 deliverables – GEO contributions

- 4. Building partnerships and strengthening international cooperation in space activities under "Space Diplomacy"
 - GEO as a platform for cooperation
- User needs and gap analysis process
 - Linking providers, users, scientific and technical actors
 - A clear link with UN Organizations and Programmes
 - Fostering national coordination as the essential building block for a more effective international cooperation







- 1. Consistent with its mandate, GEO is prepared to address the challenges and exploit the opportunities connected to UNISPACE+50 and beyond
- 2. GEO on going and planned activities provide direct contributions to the four pillars that frame the UNISPACE+50 action.
- 3. GEO processes, such as user needs and gap analysis and engagement of commercial sector, can provide direct inputs and support to the Space 2030 roadmap
- 4. GEO is ready and willing to cooperate with UNOOSA and other Organizations.



Thank you !

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GEOSS Portal

https://www.geoportal.org/

GEO Website

http://www.earthobservations.org/index.php