

**Commission on Science and Technology for Development (CSTD)
Twenty-seventh Annual Session**

Side event:

**“Panel on Data-Driven Services for Countries:
Advancing Development Through Earth Intelligence”**

Tuesday, 16th April 2024

Side event from 13:30 to 14:30 CEST, preceded by lunch service from 13:00 to 13:30 CEST

Room XXII, Building E, Palais des Nations, Geneva, Switzerland

Concept note

Background

The advancement of scientific research hinges significantly on the progress made in data and Artificial Intelligence (AI), marking it as a pivotal contribution to driving transformative change. The emergence of data-driven innovations has the potential to revitalise scientific progress, paving the way for groundbreaking discoveries across critical fields. When applied to Earth observations, AI is a powerful tool for extracting valuable insights from vast amounts of data. AI algorithms can process satellite imagery to detect changes in land use and the environment, and predict natural disasters with greater accuracy. This integration of AI with Earth observations not only enhances the speed and accuracy of data analysis but also opens up new avenues for understanding our planet's complex systems.

The Group on Earth Observations (GEO) is an intergovernmental partnership committed to co-producing user-driven Earth intelligence solutions. With a mission to inform decisions and accelerate action on global, societal, and environmental challenges, GEO draws from over 20 years of experience in developing and delivering services based on Earth observation data. Recognising the transformative potential of Earth intelligence, GEO has identified pathways to create programmes that provide trusted solutions, integrate frontier technologies, partner with industry, increase youth participation, and raise awareness and resources.

Objective

The side event will discuss and explore ongoing national and international efforts and initiatives and the underlying dynamics and imperatives of strengthening country-level action. The side event aims to provide insights and good practices to inspire countries to consider ideas and solutions to leverage Earth intelligence in tackling key developmental and environmental challenges faced by them.

Target audience

The event is aimed at country representatives and experts who wish to explore innovative technologies and Earth data solutions for sustainable development.

Guiding questions for discussion

These questions will help steer the panel discussion towards practical examples and insights from different country experiences, providing a comprehensive overview of the potential of Earth intelligence solutions in addressing various challenges:

- Could you share examples of successful initiatives in your country that have utilized Earth intelligence solutions to foster sustainable development, particularly in key sectors such as agriculture, climate resilience, and environmental management??
- How has your country effectively utilized science and Earth observation data to address pressing challenges related to sustainable development, and what lessons can other nations learn from these initiatives?

- How can Earth intelligence solutions contribute to enhancing food security and addressing challenges related to agricultural land use?
- What are the key considerations for leveraging Earth observation data in building resilience to extreme heat events and other climate-related hazards?
- How can Earth observation technologies be applied effectively to monitor and manage mountain environments, considering their ecological significance and vulnerability to environmental changes?

Format of the side event

Prior to the side event, there will be a brief lunch service from 13:00 to 13:30.

The event will begin at 13:30 with welcome remarks from the GEO Secretariat Director. This will be followed by a moderated panel discussion illustrating concrete examples of Earth intelligence solutions being applied at the national level, and ending with an interactive discussion among panellists and participants.

Agenda at a glance

1. Welcome remarks (10 min)
2. Moderated panel discussion (35 min)
3. Interactive Q/A (15 min)

Moderator:

- Ms. Sara Venturini, Chief of Member Services, GEO Secretariat

Speakers:

- Ms. Yana Gevorgyan, Director, GEO Secretariat
- Mr. Mmboneni Muofhe, Deputy Director-General: Socio-Economic Innovation Partnerships, Department of Science and Innovation, South Africa
- Mr. Martyn Clark, Urban Resilience Coordinator, Global Heat Resilience Service, GEO Secretariat
- Ms. Esther Makabe, Capacity Development Coordinator, GEO Global Agricultural Monitoring
- Mr. James Thornton, Coordinator, GEO Mountains