

UN-GGIM: Europe – SDG Line of Work Webinar Monday 12th May 2025, 10:00 – 12:00 CEST

Concept Note



Agenda

Introduction

- Welcome and introduction of the set of webinars [Célia Ferreira, Statistics Portugal & Gwendolin Seidner, BKG, Co-chairs of the SDG Line of Work]
- Overview of the session and orchestration of the webinar [Mónica Miguel-Lago, EARSC, member LoW SDGs]
- Setting the scene: the work of the UN-GGIM Europe Line of Work on 'SDG' [Célia Ferreira, Statistics Portugal & Gwendolin Seidner, BKG, Co-chairs of the SDG Line of Work]

Theoretical Context [30 min approx. Short presentations (10 min) + Discussion]

- From Global Monitoring to National Action: UNEP's EO-Driven Approach to SDG 6.6.1 and the Freshwater Ecosystem Explorer [Stuart Crane, UNEP]
- Wetlands at the Heart of SDG 6.6.1: Ramsar's Role in Monitoring and Conserving Water-Related Ecosystems [RAMSAR (TBC)]
- Earth observation opportunities and challenges for mapping water-related ecosystems [Marc Paganini, ESA]

[Round table moderated by Steven Ramage, CEOS] *Q&A moderated:*

-This moderated roundtable will bring together key institutional voices from UNEP, the Ramsar Convention (TBC), and ESA to explore how global and regional policy frameworks, environmental protection standards, and Earth Observation capabilities intersect to support SDG Indicator 6.6.1. Building on the preceding presentations, the discussion will examine practical pathways for aligning international conventions and translating them into robust, data-informed national monitoring strategies.

-Some discussion topics may include: (i) Translating SDG 6.6.1 methodology into national implementation with EO support (ii) Leveraging EO tools and services to detect changes in water-related ecosystems (iii) Addressing data gaps, validation, and capacity needs for monitoring wetlands, lakes, rivers, and groundwater (iv) Enhancing synergies between global conventions, policy frameworks, and local environmental action (v) Coordinating EO providers, mapping agencies, and reporting authorities to promote coherent, multi-scale monitoring.

Use case contributions (Methodological Insights) [60 min approx.: Short presentations (10 min) + Discussion]

• Tracking Global Water Dynamics with Earth Observation: The JRC Global Surface Water Explorer- JRC-GSWE [Marco Clerici, JRC]

• Earth Observation in Action: Global Tools and Case Studies for Monitoring Water-Related Ecosystems under SDG 6.6.1 [Torsten Bondo, Christian Toettrup, DHI]

EO4WI (DHIGroup)

Global Wetland Watch (UNEP-DHI Centre on Water and Environment)

Freshwater Ecosystem Explorer (UNEP-DHI Centre on Water and Environment)

• Highlighting the integration of Copernicus services to support the computation of the change in the extent of water-related ecosystems over time (CLMS water-related products) [Joanna Przystawska, EEA]

• Integrating EO and In-Situ Data for Groundwater Monitoring: Insights from Finland's EOSDG Project [Meseret Menberu, Pekka Hurskainen, SYKE]



[Round table moderated by Steven Ramage, CEOS] *Q&A moderated:*

-This roundtable will bring together technical experts and institutional representatives to explore practical and methodological insights into the monitoring of water-related ecosystems using Earth Observation, in-situ measurements, and integrated modelling approaches. Building on the short presentations from JRC, DHI, EEA, and SYKE, the discussion will focus on how various data sources and tools are operationalised to support SDG Indicator 6.6.1 — Change in the extent of water-related ecosystems over time. Speakers will showcase real-world applications and systems used to monitor surface water, wetlands, and groundwater ecosystems at different spatial and temporal scales — from global platforms to national case studies.

-Some discussion topics may include: (i) Integrating EO, in-situ, and modelling approaches for effective SDG 6.6.1 monitoring (ii) Ensuring time-series continuity and spatial resolution across different ecosystem types (iii) Addressing data validation, harmonisation, and national applicability of global tools (iv) Enhancing accessibility and user uptake of platforms (v) Identifying key data gaps and opportunities for innovation in freshwater ecosystem monitoring

Wrap-up and closing

Wrap-up: EARSC + Moderators to summarize the key points from the sessions Closing Remarks [Célia Ferreira, INE & Gwendolin Seidner, BKG, Co-chairs of the SDG Line of Work]

Background

Water-related ecosystems—such as wetlands, rivers, lakes, and groundwater systems—are essential for maintaining biodiversity, supporting livelihoods, and providing critical ecosystem services like clean water, climate regulation, and flood mitigation. SDG Indicator 6.6.1, "Change in the extent of water-related ecosystems over time," serves as a key metric for assessing the health and sustainability of these ecosystems globally and nationally. In recent years, the methodology for monitoring SDG 6.6.1 has increasingly relied on Earth Observation (EO) as a core data source. EO technologies enable consistent, high-resolution, and time-series monitoring of surface water and freshwater ecosystems at multiple scales. This capability is particularly relevant in the European context, where monitoring efforts are supported by robust policy frameworks. This webinar, organised as part of the UN-GGIM: Europe Line of Work on Sustainable Development Goals (SDGs), aims to highlight the evolving role of EO in SDG 6.6.1 monitoring. It brings together representatives from UN agencies, European institutions, and national authorities to explore how EO data and services are used in practice, how they align with policy frameworks, and how collaborative efforts can improve national and regional monitoring systems. The session will provide both a theoretical and practical lens, examining global tools, Copernicus services, and in-country case studies. It also aims to foster dialogue across the community to address challenges related to data integration, validation, accessibility, and the operationalisation of SDG 6.6.1.

Goals

- Present up-to-date information on global and European developments related to SDG 6.6.1, and the use of EO for environmental monitoring.
- Highlight current methodologies, data products and country-level innovations.
- Promote collaboration among EO providers, policymakers, national authorities, and users to improve monitoring practices and build capacity.
- Generate practical insights and recommendations for enhancing data availability, accuracy, and integration across institutions and countries.

Institutions involved

By Alphabetical Order:

- BKG, Germany
- CEOS
- DHI Group
- EARSC
- EEA
- ESA
- JRC
- RAMSAR
- SKYE
- Statistics Portugal
- UNEP