



United Nations
Global Geodetic
Centre of Excellence

Geodesy Capacity Development Workshop for Europe on Transitioning to a Modern Geospatial Reference System

17-21 February 2025
UN Campus, Bonn, Germany

United Nations Global Geodetic Centre of Excellence
Statistics Division, Department of Economic and Social Affairs

Concept Note

Introduction

The United Nations Global Geodetic Centre of Excellence (UN-GGCE) invites surveying and geodetic professionals working for, or with, Member State government agencies in Europe to participate in its Geodesy Capacity Development Workshop, in Bonn, Germany. This workshop will assist participants understand how to collaborate with colleagues in government to transition to a modern Geospatial Reference System (GRS)¹.

Background

The UN-GGCE envisions the future where all countries have a strong support for geodesy, enabling them – together – to implement the General Assembly Resolution 69/266 and to accelerate the achievements of the Sustainable Development Goals to derive social, environmental and economic benefits. Key to achieving these benefits is the establishment of a modern GRS on which geospatial data can be aligned and combined for improved decision making.

This workshop is part of the Geodesy Capacity Development Workshop series, which serves as a platform to strengthen global geodetic capabilities, ensuring that all Member States are equipped to support sustainable development through accurate and reliable geospatial information. The workshops will be provided across the five regions: Africa, Americas, Arab States, Asia-Pacific and Europe. Each workshop will run for five days (Monday to Friday) and will take place in person either at the UN-GGCE facility in Bonn, Germany, or within the respective region. Please note that there will be no online or remote participation available, however, the proceedings of the workshops will be open access.

¹ A modern Geospatial Reference System (GRS) is the collection of: datums, used to define latitude, longitude and height; infrastructure, including a network of Global Navigation Satellite System Continuously Operating Reference Stations and survey marks to provide an authoritative and accurate network in support of positioning applications; models, describing dynamic, geophysical processes that affect spatial measurements; and standards, to ensure positioning information is Findable, Accessible, Interoperable and Reusable.

Workshop Objectives

The primary objectives of the workshops are to:

- Communicate the importance of geodesy by equipping participants with the necessary tools and strategies to effectively communicate the value of geodesy to decision-makers, supporting the aim for increased investment in geodetic infrastructure and capacity.
- Provide guidance on modern Geospatial Reference Systems and describe the steps to create, access, use and sustain a modern GRS. This includes technical guidance with hands-on sessions to demonstrate important geodetic processes including geodetic adjustments and developing transformation parameters.
- Assist with the development of international geodetic standards, particularly for the ISO Geodetic Register and EPSG Register.
- Provide guidance on establishing the necessary governance structures within governmental frameworks to oversee and manage the modernization of a country's GRS.
- Assist in the development of a Communications and Stakeholder Engagement Plan.

Workshop Highlights

- **Interactive Sessions:** Hands-on training with the latest geodetic technologies and various geodetic methodologies.
- **Expert Discussions:** Engage with leading experts through dynamic panel discussions and other interactive sessions. Exchange of experience with professionals from different Member States and institutions.
- **Technical Assistance:** Receive guidance on developing practical technical manuals and communication strategies tailored to the national context.
- **Networking Events:** Build connections with professionals from your region and beyond, facilitating the exchange of best practices and innovative ideas.

Provisional Agenda

The agenda is structured in building blocks that systematically address the WHY, HOW, WHO, WHAT, and WHERE of modernizing the geospatial reference system.

	Monday	Tuesday	Wednesday	Thursday	Friday
Session 1	Opening, Overview and Introduction	HOW - Profiling Current Status of National Geodetic Reference	HOW - Transformation Parameters, Plate Motion Models and Deformation models	WHERE - Making Geodesy understandable and visible	WHY - Forward Strategies
Session 2	WHY - The Importance of Geospatial Reference System (GRS)	HOW - Geodetic Adjustment	HOW - National Geoid Model and Height Datum	WHERE - Crafting Effective Communication Strategies	WHY? HOW? WHAT? WHERE? - Roadmap and Implementation Planning
Session 3	HOW - Identifying the Current National GRS Status	HOW - Creating a New National Datum	HOW - Tailoring Technical Assistance and Support Requests	WHAT - Developing Business Cases for Increased Investment in Geodesy	Roadmap Sharing with Participants
Session 4	HOW - Aligning National Geodetic Datums with the ITRF	HOW - Data Sharing, Standards and Registers	WHAT - Capacity Development Needs in the region	WHO - Governance Structures for Overseeing National GRS Modernisation	Reflection and Feedback
Session 5	WHO - Regional Geodetic Collaboration and Challenges	HOW - Data Sharing, Standards and Registers	WHAT - Capacity Development Programs	WHO - Developing Governance Structures and Stakeholder Engagement	Summary and Next Steps
Session 6	WHO - Mapping Regional Geodetic Networks and Identifying Gaps	HOW - ISO Geodetic Register and EPSG Register	UN-GGCE Stronger. Together.		

A detailed agenda and further details will be shared with the selected participants at a later date.

Target Audience

The workshop is intended for:

- **Surveying or geodetic professionals and practitioners:** Individuals actively involved in geodetic work at a national or international level.
- **Government officials:** Representatives actively involved in technical geodetic processes and implementation.
- **Academics and Researchers:** Members of the academic community engaged in geodesy and related fields.
- **Representatives from geodetic organizations:** Individuals affiliated with professional bodies and organizations in the field of geodesy.

Benefits of Participation

By attending, participants will:

- Develop tailored roadmaps for modernizing their national geospatial reference system.
- Gain practical experience with geodetic technologies and methods.
- Network with international geodesy professionals and share best practices.
- Learn to effectively communicate the importance of geodesy to decision-makers.

Application Process

Interested applicants should complete the online form at https://docs.google.com/forms/d/e/1FAIpQLSeqktb-nZkLw7dXWTXvebpT89EGIM_Y5poBqabA0TIIFJkWIQ/viewform?usp=sharing and submit the requested reference letter to un-ggce@un.org.

Workshop attendees will be selected based on (but not limited to) the following criteria:

- Professional background and expertise
- Academic qualification
- Demonstrated practical technical skills
- Motivation for attending the workshop
- Affiliation with professional institutions / organizations / Member States
- Reference letter

Participants will be selected through a process that prioritizes diversity, equality, and inclusion, ensuring a broad representation of individuals from diverse backgrounds, perspectives, and experiences, with special attention to applicants from Least Developed Countries (LDCs)² and Small Island Developing States (SIDS)³. This approach will foster an inclusive environment that enriches the workshop experience for all participants.

Deadline for the application is: 1 November 2024 at 18.00 CET

Participation

The workshop is an in-person meeting for Member States.

The selected participants will have their travel arranged and paid for by the UN-GGCE. Selected participants will be contacted directly regarding travel arrangements. Selected participants will receive a per diem / Daily Subsistence Allowance (DSA), which is intended to cover accommodation, meals, and incidental expenses.

Please note that while the DSA is provided to cover accommodation and other daily expenses, participants are responsible for making their own accommodation bookings and managing local logistics (e.g., transport to/from the meeting venue).

All participants are responsible for their own travel visas to get into Germany including travel insurance as applicable.

² <https://unctad.org/topic/least-developed-countries/list>

³ <https://www.un.org/ohrlls/content/list-sids>

Logistics

Region:	Europe
Dates:	17. - 21. February 2025
Location:	UN Campus Bonn, Germany
Address	Platz d. Vereinten Nationen 1, 53113 Bonn

The Workshop for Europe will run for five days (Monday to Friday) and will take place in person at the UN Campus in Bonn, Germany. Please note that there will be no online or remote participation available. The Workshop will be conducted in English, and the Workshop materials will be in English only.

Further Information and Contact Details

For administrative matters and workshop arrangements, please contact

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For substantive matters, please contact:

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