



# *Recent developments in the UN GGIM Subcommittee on Geodesy and UN Global Geodetic Reference Frame*

**Zuheir ALTAMIMI**

**Chair, Geodetic Infrastructure Working Group  
President, International Association of Geodesy**

**IPGP-IGN France**

**[Zuheir.altamimi@ign.fr](mailto:Zuheir.altamimi@ign.fr)**

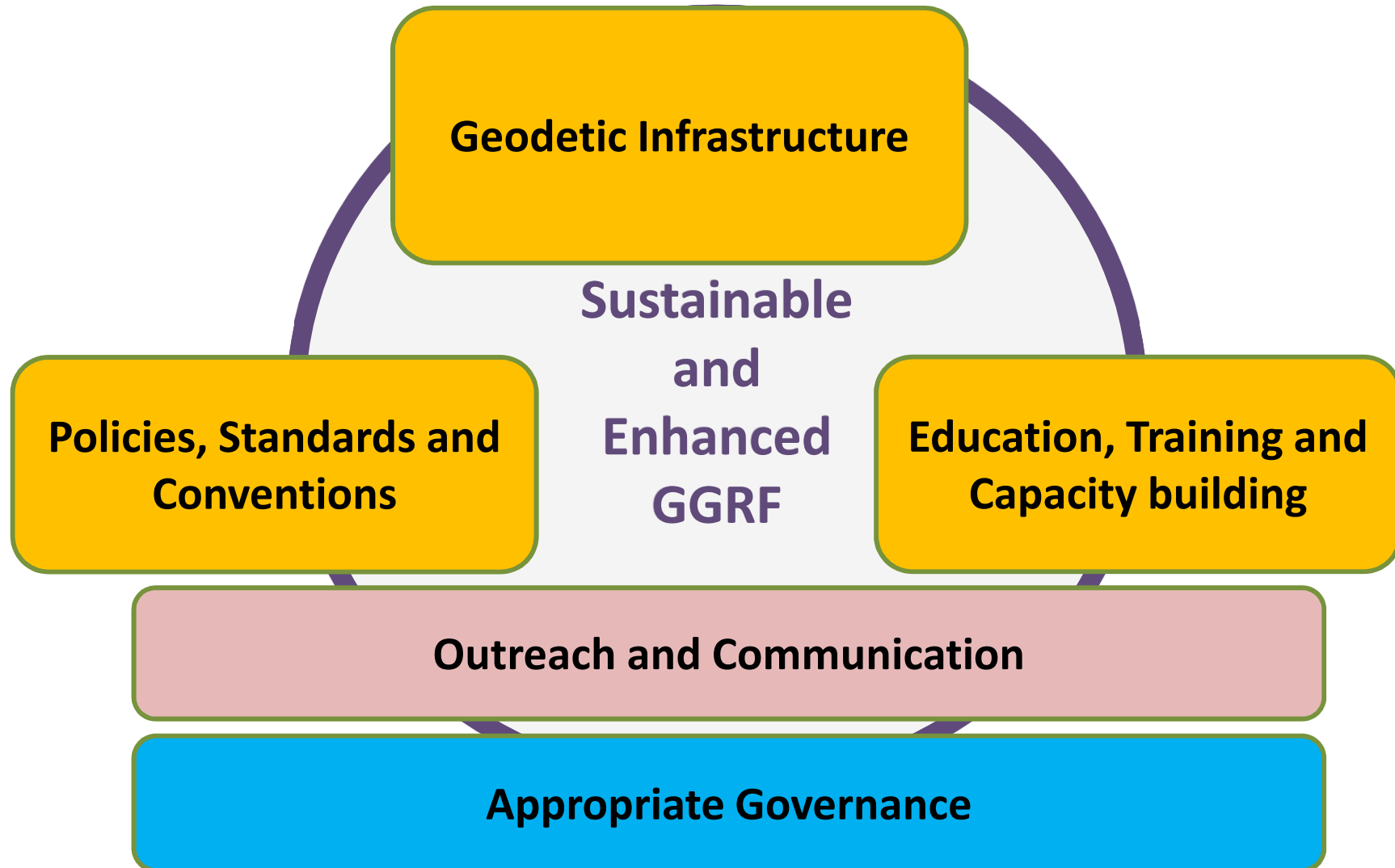


# UN-GGIM and Geodesy

- Creation of a **Working Group** on the Global Geodetic Reference Frame (GGRF) in 2013, tasked to formulate:
  - A draft text of a UN GA resolution on the importance of the GGRF for sustainable development :
  - **Resolution tabled by Fiji Ambassador, and adopted in 2015**
  - A global geodetic **roadmap** that describes the current situation & provides recommendations for the long-term GGRF enhancement & sustainability: **Roadmap finalized in 2016**
- Creation of UN-GGIM **Subcommittee on Geodesy** in 2016:
  - Develop an implementation plan for the long-term: translate the recommendations of the roadmap into actions
  - Investigate a governance mechanism for global cooperation

# SCoG VISION

An accurate, sustainable and accessible Global Geodetic Reference Frame to support science and society



# SCoG : GGRF Priorities?

## Two identified Priorities:

1. Ensure the long-term Sustainability and accuracy of the GGRF to meet science and societal requirements, by sustaining its geodetic infrastructure.
2. Ensure accurate access to the GGRF by all Member States. This includes Capacity Building, Data Sharing, Standards and Conventions, but also regional and national geodetic infrastructure to allow accurate access to the GGRF, mainly **using GNSS technology.**

# Towards a governance mechanism: Why ?

1. The GGRF Infrastructure is in danger of degradation
  2. No long-term contractual commitments exist for continued operation and maintenance
  3. It becomes difficult for the infrastructure owners to raise funds to develop and sustain it
  4. Global Geodesy is fundamental for science and society:
    1. Earth Science applications including sea level rise and natural hazard
    2. Satellite positioning
    3. Operational geodesy applications: national geodetic reference frame, surveying, cadaster...
  5. Global Geodesy is the business of every country
  6. Global cooperation & coordination is needed
- ==> Governance mechanism is needed, but also an operational Center to act toward the realization of the two priorities**

# Addressing the issues

**UN-GGIM Committee of Experts 11<sup>th</sup> Session in August 2021 adopted TWO reference documents, prepared by the SCoG after large consultation:**

- **Position Paper on Sustaining the Global Geodetic Reference Frame**
  - Long term plan which aims to address deficiencies in:
    - Geodetic Infrastructure; Governance; Communications and Outreach; Education, Training and Capacity Building; and Policies, Standards and Conventions
  - <http://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/DRAFT-Position-Paper-on-Sustaining-the-GGRF-20200806.pdf>
- **Concept Paper on Establishing a Global Geodetic Centre of Excellence:**
  - Functions of the GGCE
  - Part of the long-term plan
  - Mechanism for Member States to contribute
  - <http://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/DRAFT-Concept-Paper-on-GGCE-20200806.pdf>

# GGCE : Germany's Offer

- **Germany announced its plans to host the Global Geodetic Centre of Excellence in Bonn, with funding for an initial five year period.**
- **The UN-GGIM Secretariat are currently working with Germany on the MoU and Host Country Agreement**
- **The Global Geodetic Centre of Excellence is planned to start operating in 2021 or 2022**
- **There are on-going opportunities for other Member States to contribute to the Centre**

**<http://ggim.un.org/meetings/GGIM-committee/10th-Session/documents/GGCE%20Offer%20Germany%2027July2020.pdf>**

# Global Geodetic Centre of Excellence

- A **Federated Centre** is the preferred option - with multiple contributors, partners, sources of funding, and locations.
- Norway have offered a person to the Centre to assist with Communications
- The Centre will have:
  - **Steering Committee (governance of the Centre),**
  - **Advisory Committee (to provide scientific and operational guidance)**



# Global Geodesy Virtual Forum

## THE POWER OF WHERE

**The value of geodesy to society**

**Earth Day – April 22, 2021**



UN-GGIM

United Nations Committee of Experts on  
Global Geospatial Information Management

Subcommittee on  
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