



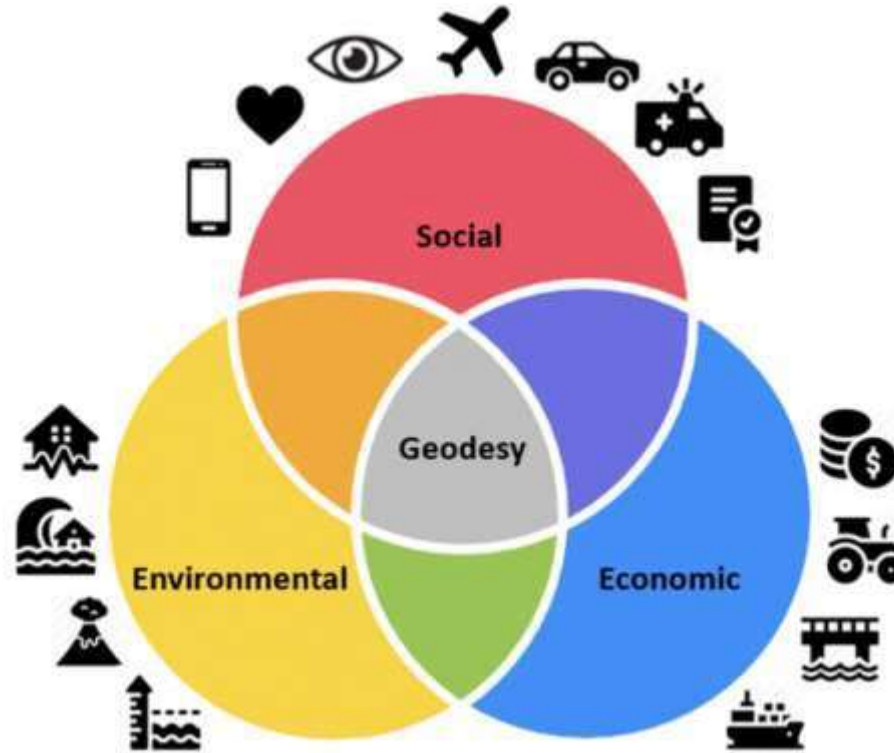
FIG Capacity Development Network

Dr. Daniel R. Roman

Chair FIG Commission 5



Importance of Geodesy



Courtesy: Geoscience Australia

<https://www.geospatialworld.net/prime/prime-opinion/the-power-of-where-it-begins-with-geodesy/>

- Geodesy underpins the three pillars of sustainable development:
 1. providing data and services to support societal benefits
 1. economic prosperity
 2. environmental monitoring
- Global players, amongst others:
- Member States
 - Build and maintain the geodetic infrastructure
- International Association of Geodesy: IAG
 - Operational services and product delivery
 - **Education, training and capacity**
- International Federation of Surveyors: FIG
 - **development**
- United Nations (Statistics Division)
 - **works with and supports Member States**



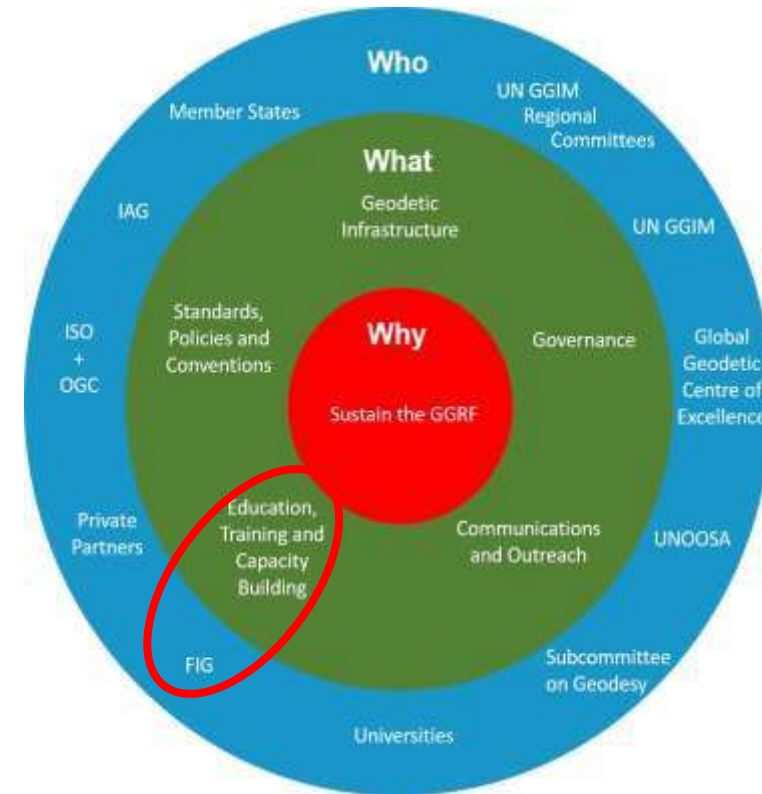
GGRF Roadmap Key Issues Categories

“A Global Geodetic Reference Frame for Sustainable Development”

- UN General Assembly adopted in 2015
- First resolution recognizing the importance of a globally-coordinated approach to geodesy.
- Uplifted WG GGRF to UN SCoG

Five WG’s are based on these categories:

1. Geodetic Infrastructure
2. Policies, Standards and Conventions
3. Education, Training & Capacity Building
4. Governance
5. Outreach and Communication





Coordination of Capacity Development

- Global training support and planning
 - FIG Commissions 2 & 5, YSN, FIG Foundation, CDN's
 - UN-GGIM, UN SCoG, GGCE, UN-OOSA, UN Academic Network
 - IAG/IGS/IGFS
- Regional coordination/implementation
 - UN-GGIM-Americas – WG GRFA (SIRGAS DC)
 - OAS/PAIGH/AmeriGEO/SIRGAS, ANA
 - Joint Action Plan
 - FIG CDN-Americas



UN-GGIM-Americas



Integration of Statistical and Geospatial Information

The Working Group on Integration of Statistical and Geospatial Information is currently managed by t...

[More](#)



Disasters

The current Working Group for Disasters is coordinated by Sint Maarten through the Ministry of Publi ...

[More](#)



Geodesy

The current Working Group of the Geodetic Reference Framework for the Americas (GRFA) is coordinated ...

[More](#)



Geospatial Data Infrastructure

The current Working Group on Geospatial Data Infrastructures is led by Chile through SNIT-SDI of the ...

[More](#)

WG Geodetic Reference Frames for the Americas ↔ SIRGAS Directing Council

FIG/IGM-Chile Technical Seminar

Reference Frames in Practice

Joint Action Plan (2021 - 2024):

Outcomes of the Aguascalientes Declaration





Joint Action Plan Elements => ETCB

Regional organizations in the Americas should work together to define further joint work strategies and programs to mutually advance regional integration to build a Spatial Data Infrastructure (SDI) composed of diverse information resources, such as Earth Observations (EO), geographic, statistical and other thematic information (hereafter referred to as geospatial data).

Three founded working groups:

1. **Capacity Development (CD),**
2. **Communication, Cooperation, and Coordination (CCC),**
3. **Data, Information, and Knowledge Sharing (DIKS)**

Americas CDN



FIG Regional Capacity Development Network



Welcome to FIG Regional Capacity Development Network

In 2015 the FIG Council established this Network. The purpose of the Regional Capacity Development Network is to **"Ensuring the Rapid Response to Change Ensuring the Surveyors of Tomorrow"** by a global network operationalised on a Regional basis.

A focus on surveyors working in the reference frame
Un enfoque en los agrimensuras y topógrafos que trabajan en el marco de referencia



Aspects of Americas CDN

- Support from other Commissions, the corporate sector, academic networks, and sister organizations
- Provide specialist advice on developing geodetic/geospatial capacity
- Must work regionally with SIRGAS and others
 - Coordination group at regional (Americas) to subregional (e.g., Caribbean)
 - OAS/PAIGH/SIRGAS/AmeriGEO/ANA have national contacts
- Must work towards Joint Action Plan tasks
 - Already in place – CDN does not operate by itself
 - This must also support global efforts at GGCE/UN-SCoG
 - Work through UN-GGIM-Americas
 - National ↔ Regional ↔ Global



Potential Activities

- Independent advocacy role to the geospatial and geodetic community
- The provision of technical, administrative and professional support and information
- Organizing, facilitating and actively participating in
 - Discussion forums
 - Meetings
 - Seminars / Workshops
 - Technical Sessions
- Encouraging co-operation and collaboration between countries, agencies and related professions.
- Connecting and engaging professional networks from traditional and non-traditional industry sectors



Benefits of FIG CDN

- The concept has been readily adopted by Land professional's groupings around the world at regional and subregional levels
- It becomes an identifiable entity in the minds of public and civic institutions and can more clearly be engaged and provide synergy
- It continues to increase the presence and involvement of the Young Surveyors, drawing upon the Young Surveyors Network as key partners
- It better ensures that professional surveyors everywhere have access to a common baseline of knowledge and skills
- It provides awareness of opportunities for further education and training



Americas CDN and Surveyors

- In the end, surveyors have to do all of this: standards, infrastructure, revised datums, new tools, new laws, etc.
- Hence, there is a need for a group to coordinate ETCB opportunities and needs to *build capacity*
- Many training opportunities exist
 - IAG/IGS
 - NASA/JPL
 - National training centers
- Ensure those who work in surveying and affiliated field are appropriately trained





Questions?

- Dr. Daniel Roman
- dan.roman@noaa.gov