



Australian Government
Geoscience Australia



UN-GGIM Integrated Geospatial Information Framework

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So many acronyms



UN GGIM Subcommittee on Geodesy (UN-GGIM SCoG)



General Assembly

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Agenda item 9

Resolution adopted by the General Assembly on 26 February 2015

[without reference to a Main Committee (A/69/L.53 and Add.1)]

69/266. A global geodetic reference frame for sustainable development

- Initiative of UN - led by United Nations Member States
- Aims to address global challenges regarding the use of geospatial information
- Recognising the growing demand for more precise positioning services, UN-GGIM created a UN GGIM Subcommittee on Geodesy (SCoG; formerly Working Group for a Global Geodetic Reference Frame).
- Formulated and facilitated the Resolution for a Global Geodetic Reference Frame for Sustainable Development (UNGGRF).

UN-GGIM Integrated Geospatial Information Framework



What is UN GGIM IGIF?

- Guide for developing, integrating and strengthening geospatial information management.
 - Some countries don't have management tools to for geospatial data
 - Some countries do, but they could be better
- Developed in collaboration between the United Nations and the World Bank.

UN-GGIM Integrated Geospatial Information Framework



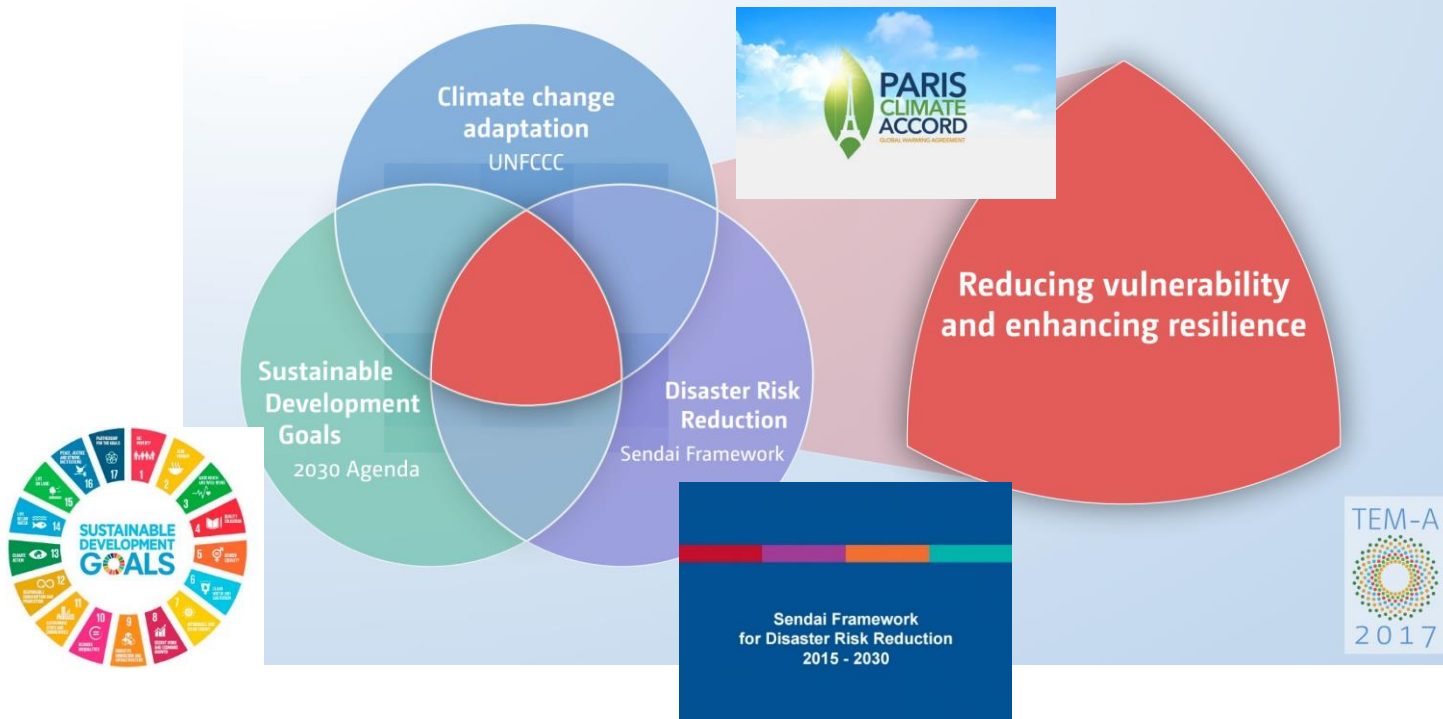
Why do we need this Framework?

“Everything happens somewhere”

- Increasing recognition that spatial information is fundamental to good decision making.
- To maximise the use of our spatial data, there is a need to:
 1. standardise how we talk about spatial data;
 2. identify gaps and develop ‘fit for purpose’ plans; and
 3. improve the quality, accuracy, interoperability and accessibility of spatial data.
- The Integrated Geospatial Information Framework aims to help achieve these goals.

1. Standardise our description of spatial data

Integrating climate change adaptation with the Sustainable Development Goals
and the Sendai Framework on Disaster Risk Reduction



UN-GGIM Integrated Geospatial Information Framework



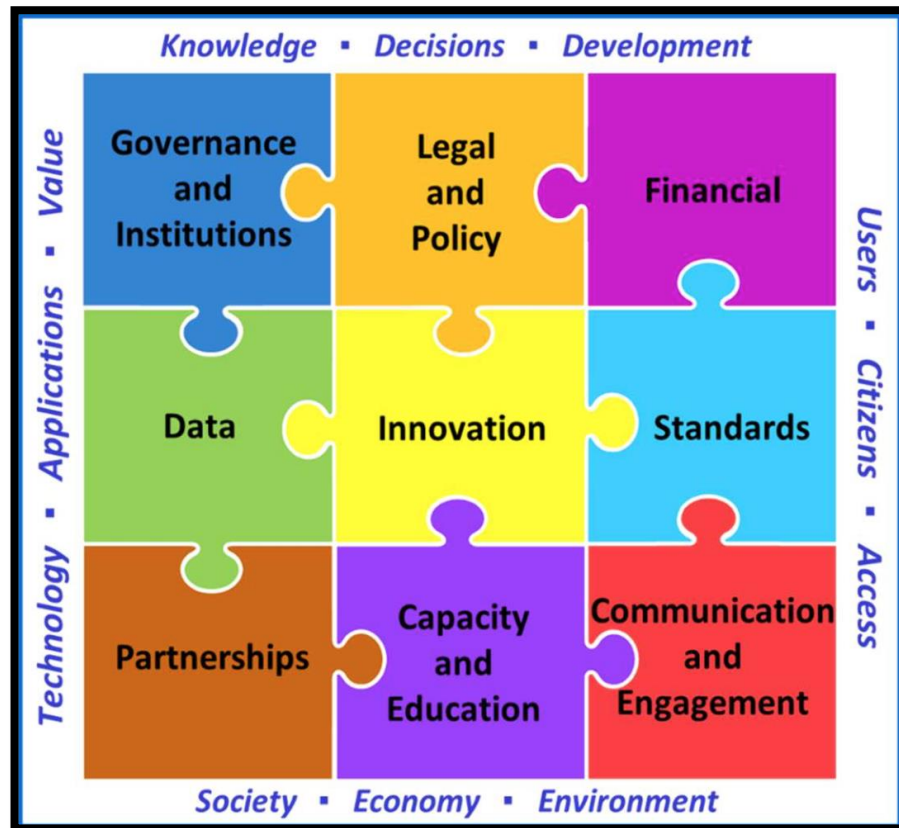
INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK

- 9 strategic pathways
- 3 main area of influence:
 - governance;
 - technology; and
 - people.
- Seek to maximise the geospatial information by making it **available and accessible** to governments, community, businesses, academia, and civil societies innovate, co-create and develop new products, services, and applications that deliver new **knowledge for evidence-based policy and decision-making**.

Governance →

Technology →

People →

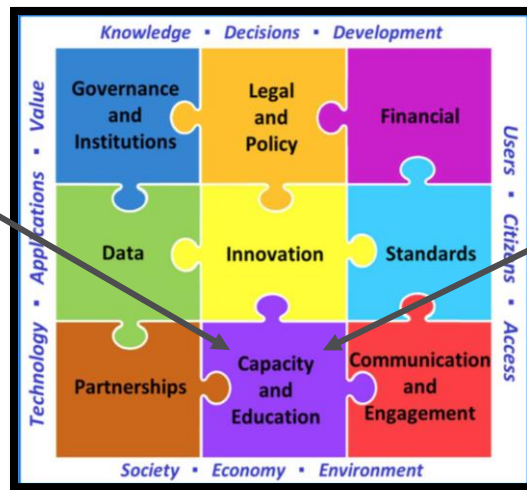


Standardise our description of spatial data



TARGET 4.3

By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.



TARGET F:

Substantially enhance international cooperation to developing countries through adequate and sustainable support to complement their national actions for implementation of the present framework by 2030;

Describe country / agency spatial data infrastructure using standardised language and makes it more efficient to track progress of countries ability to meet targets to Sustainable Development Goals, Sendai Framework, Paris Accord etc.

2. Identify gaps and develop ‘fit for purpose’ plans

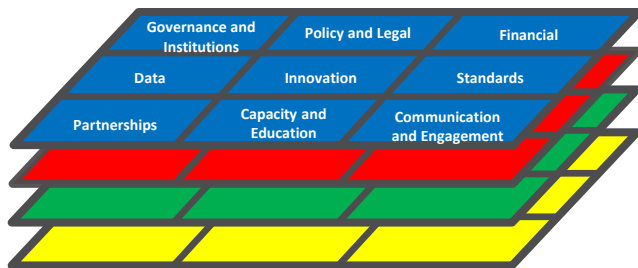
- Identify critical gaps in spatial data infrastructure and describe them in a standardised way. This can be used to support applications for assistance (e.g. World Bank).
- Developing countries can compare their IGIF to developed countries IGIF and develop a plan for further development. This plan can be tailored to individual country's situations and circumstances.

Part 1: Overarching Strategic Framework

The Why – via 7 underpinning principles, 8 goals and 9 strategic pathways

Part 2: Implementation Guide

The What – expanding on each of the 9 strategic pathways, the Guide comprises reference guides, good practices and specific principles for each of the strategic pathways. The aim is to provide guidance for governments to establish ‘nationally’ integrated geospatial information frameworks



Thematic Layers

Geodesy (*to be developed by UNGGIM SCoG*)

Land Administration (*UNGGIM have a draft prepared*)

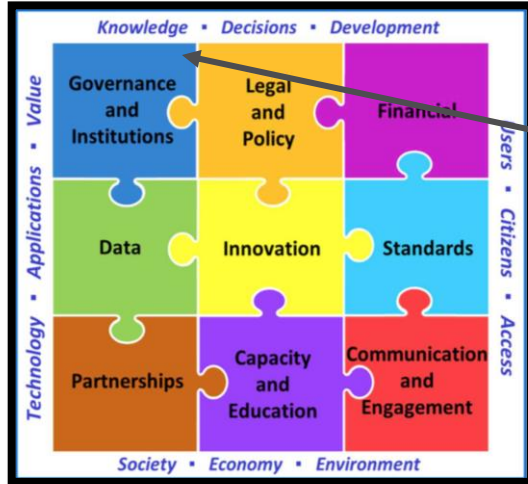
Water

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Part 3: Country-level Action Plans

Practical templates and guides explaining how work will be done.

Part 2: Implementation Guide

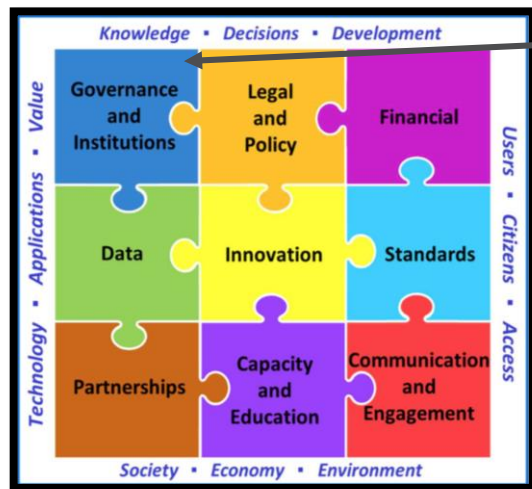


- Reference guides, good practices and specific principles for each of the strategic pathways

1. Governance and Institutions

- Sample governance models
- Institutional structures
- Specialist working groups
- Economic value assessment
- Resourcing requirements

Part 2: Thematic Layer



1. Governance and Institutions

IGIF Deliverable	Proposed for IGIF GGRF Reference Guide
A Steering Committee and agreed Steering Committee Charter	UN-GGIM
A Coordination Unit appropriately staffed and with delegated powers, roles and responsibilities, and funding and computing resources	The SCoG cannot be this entity, as it does not have capacity, mandate and resources to perform this work. ¹ The SCoG has recommended the UN-GGIM investigate the possibility of establishing such an entity and whether an existing geospatial entity can take on or evolve to take on this responsibility. This work should be executed in parallel with the measure of investigating a GGRF convention. ¹
Fully functioning Working Groups (or subcommittees) with specific Terms of Reference	Five focus groups of UN-GGIM SCoG; International Association of Geodesy (IAG), the International Federation of Surveyors (FIG) and other geodetic organisations.

Part 3: Country Action Plans

- Use the advice from Part 2: Implementation Guide and the Thematic Layers to develop a Country Action Plan
- A way of articulating a country's spatial data infrastructure now, future aspirations and a description of 'how' they plan to get there.
- Importantly, it is using standardised descriptions of spatial data infrastructure which makes requests to World Bank (or other donors) simpler when critical gaps are identified.
- Pick and choose elements from other countries Action Plans to improve your own
- Country Action Plans are 'fit for purpose'

Country Action Plan – height determination

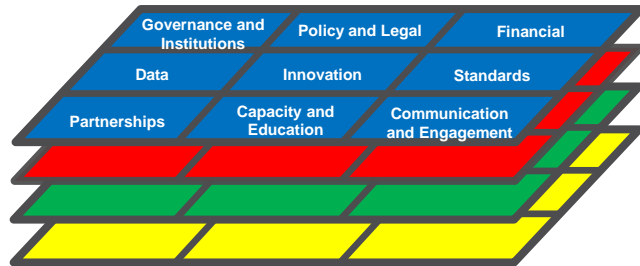
Goal	Action
1. Physical height determination using GNSS with 20 cm accuracy	1a. Enable efficient access to a global gravity model (e.g. EGM2020)
2. Physical height determination using GNSS with 10 cm accuracy	2a. Observe terrestrial and airborne gravity data
	2b. Development of a regional gravity model

Part 1: Overarching Strategic Framework

- UN-GGIM have completed this

Part 2: Implementation Guide

- UN-GGIM have started on this
- UN-GGIM SCoG will develop the Geodesy Thematic Layer
- IAG and regional entities (e.g. SIRGAS) can develop global and regional science plans (e.g. where do we need more / higher quality observatories?)



Thematic Layers

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Part 3: Country-level Action Plans

- FIG / National science agencies can develop science and action plans