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# ALIGNING EARTH OBSERVATION WITH THE UN 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT GOALS



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General Administrator  
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# Aligning Earth Observation with the UN 2030 Agenda for Sustainable Development Goals

the work of the United Nations Committee of experts on global geospatial information management

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Co-Chair UN-GGIM



**UN-GGIM**

United Nations Secretariat  
Global Geospatial Information Management

*Positioning geospatial information to address global challenges*

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## GLOBAL DEVELOPMENT POLICY FRAMEWORK

## The 2030 Agenda for Sustainable Development

**Sendai Framework  
for Disaster Risk  
Reduction 2015-2030**

**SIDS Accelerated  
Modalities of Action  
(SAMOA) Pathway**

## Paris Agreement on Climate Change

**HABITAT III**  
**Urban Agenda**

## How does Digital Transformation



# How do we bridge the Digital Divide?

## Achieve Sustainable Development





# UN-GGIM

*Positioning geospatial information to address global challenges*



Intergovernmental United Nations Committee of Experts from  
UN member states

Established in 2011, reports annually to ECOSOC



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# What does UN-GGIM do?

- Discuss, enhance and coordinate global geospatial information management activities by involving Member States at the highest level.
- Make joint decisions and set directions on the use of geospatial information within national, regional and global policy frameworks.
- Address global issues and contribute collective knowledge as a community with shared interests and concerns.
- Develop effective strategies to build geospatial capacity in developing countries.
- Make accurate, reliable and authoritative geospatial information readily available to support national, regional and global development.



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# UN-GGIM: Integration of communities



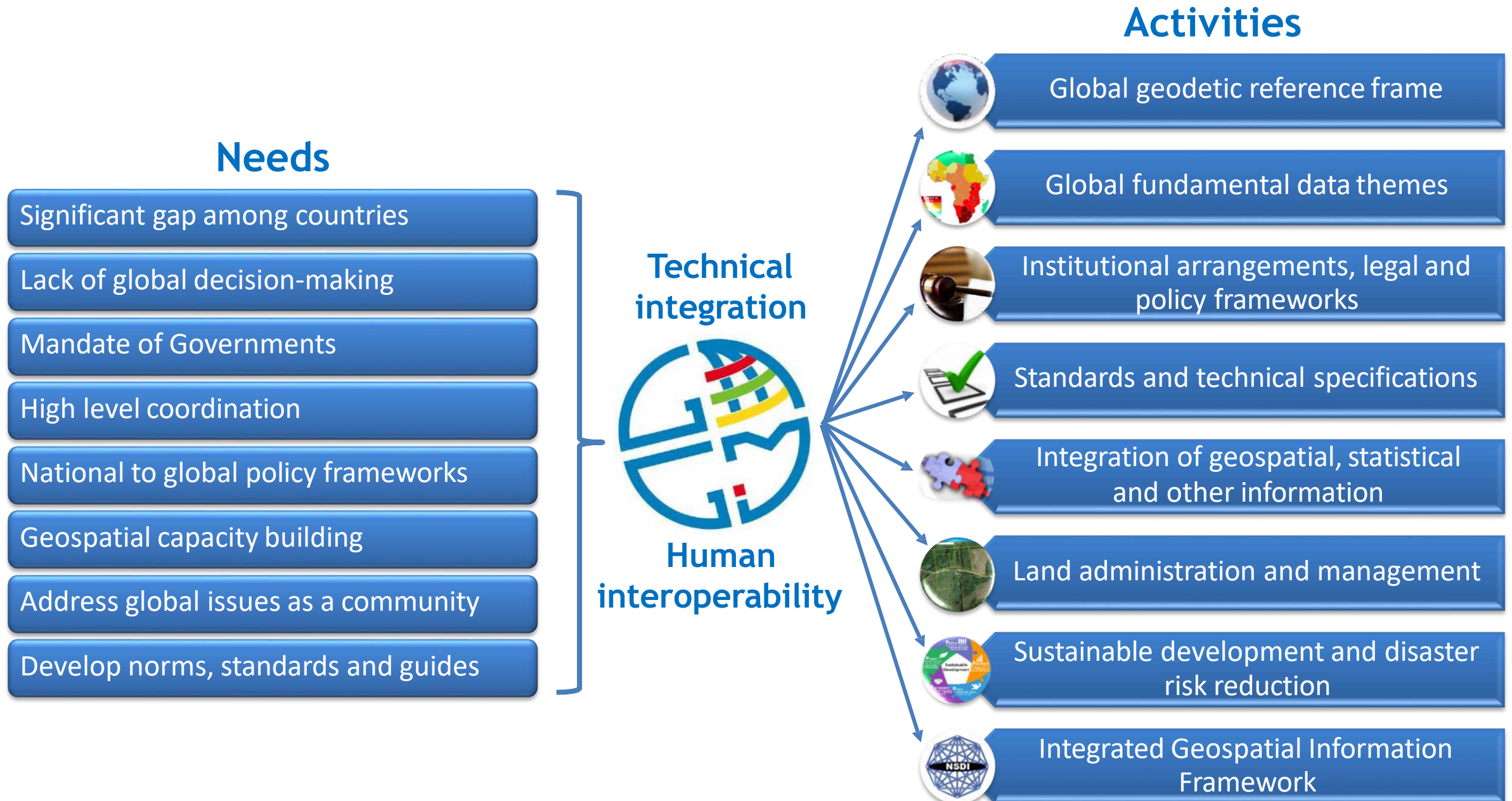
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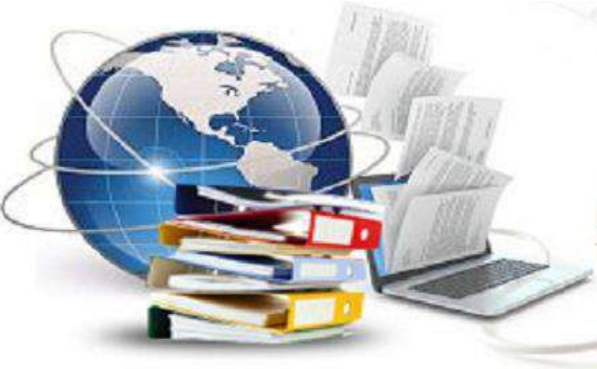
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# UN-GGIM: Integration of needs and activities





# Frameworks, guides, norms, standards and methodological development



Strengthening global geospatial information management



Contribution of regional committees, thematic groups and networks



Legal and policy frameworks and issues related to authoritative data



Trends in national institutional arrangements



Adoption of standards and technical specifications



Strengthening collaboration with UNGEGN



United Nations activities in geospatial information management



Secretariat programme management



**UN-GGIM:  
Strengthening  
the Global Data  
Ecosystem**

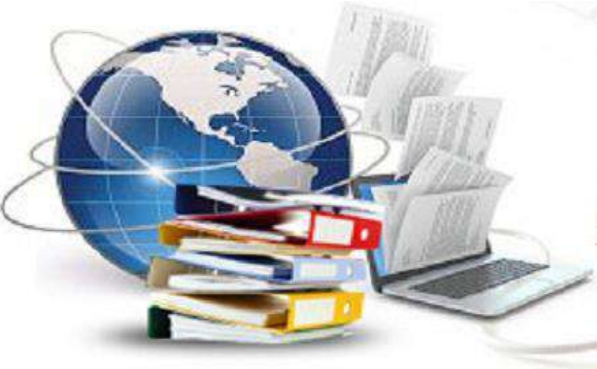


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# Normative strengthening, capacity building and implementation of GGIM in support of the 2030 Agenda



Global geodetic reference frame



Global fundamental geospatial data themes



Integration of geospatial, statistical and other information



Geospatial information and services for disasters



Land administration and management



Geospatial information for sustainable development



Integrated Geospatial Information Framework



Marine geospatial information

**UN-GGIM:  
Strengthening  
the Global Data  
Ecosystem**

# Intertwined on a global scale

## 2030 Agenda for Sustainable Development

Sendai Framework  
for Disaster Risk  
Reduction 2015-2030

Paris Agreement on  
Climate Change

SAMOA  
Pathway for  
SIDS

Addis Ababa  
Action  
Agenda

HABITAT III  
New Urban  
Agenda

Our Ocean,  
Our Future:  
Call for  
Action



Anchored by nine  
Strategic Pathways,  
the IGIF is a  
mechanism for  
articulating and  
demonstrating  
national leadership in  
geospatial  
information, and the  
capacity to take  
positive steps

## Integrated Geospatial Information Framework (IGIF)

Strategic Framework  
on Geospatial  
Information and  
Services for Disasters

Global Statistical  
Geospatial  
Framework (GSGF)

Framework for  
Effective Land  
Administration (FELA)

Global  
Fundamental  
Geospatial  
Data Themes

Global  
Geodetic  
Reference  
Frame (GGRF)

National  
Institutional  
Arrangements  
in Geospatial  
Information  
Management

Role of  
Standards in  
Geospatial  
Information  
Management

Compendium  
on Licensing  
of Geospatial  
Information

Statement of  
Shared  
Guiding  
Principles for  
Geospatial  
Information  
Management

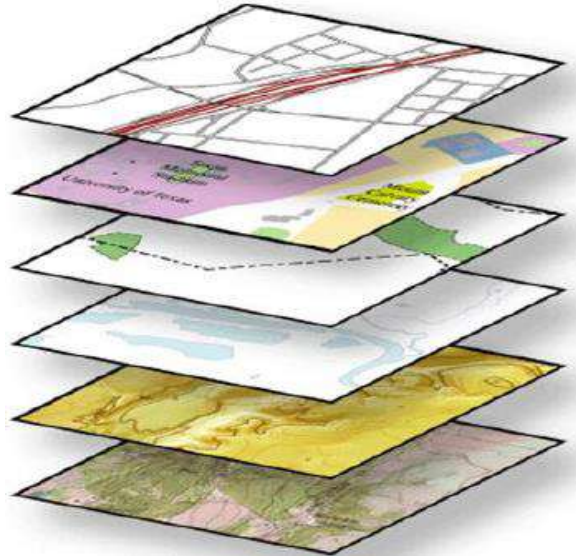


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# What is the IGIF

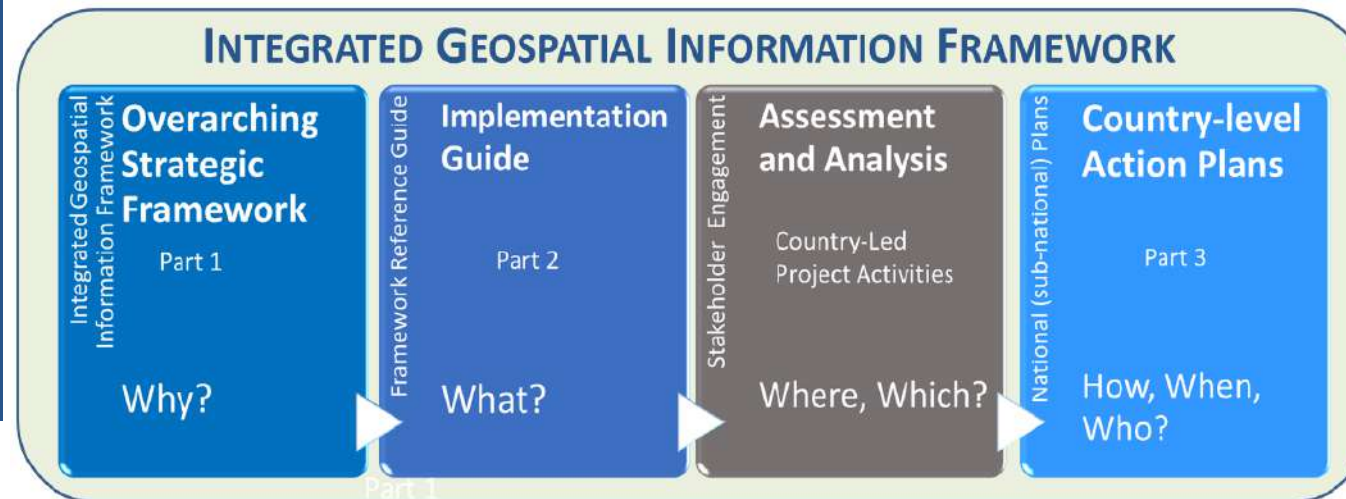
The IGIF is a multi-dimensional Framework aimed at strengthening national geospatial information management, particularly in developing countries.

With a focus on the ability for geospatial information to be integrated with any other meaningful data to solve societal and environmental problems, the IGIF acts as a catalyst for economic growth and opportunity and stimulates improved understanding and decision-making for national development priorities and the SDGs.

Geospatial information is a critical component of the national infrastructure and knowledge economy; a blueprint of what happens where, and the means to integrate a wide variety of government services.



There needs to be more institutional collaboration, coordination, interoperability and integration across the various national data information systems and platforms.

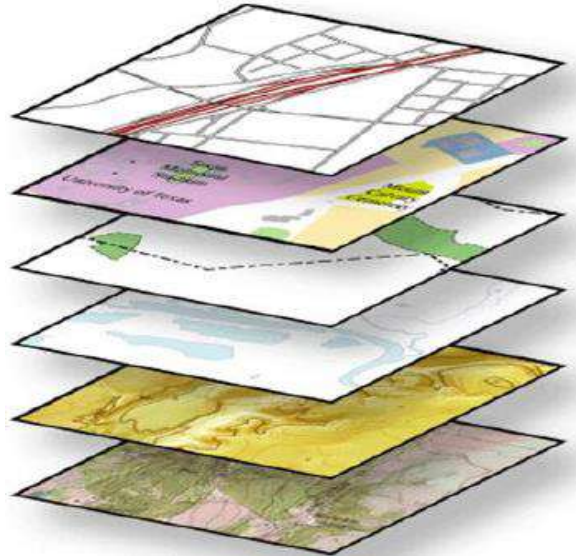


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**Geospatial information**

- critical component of the national infrastructure and knowledge economy
- blueprint of what happens where
- means to integrate a wide variety of government services.

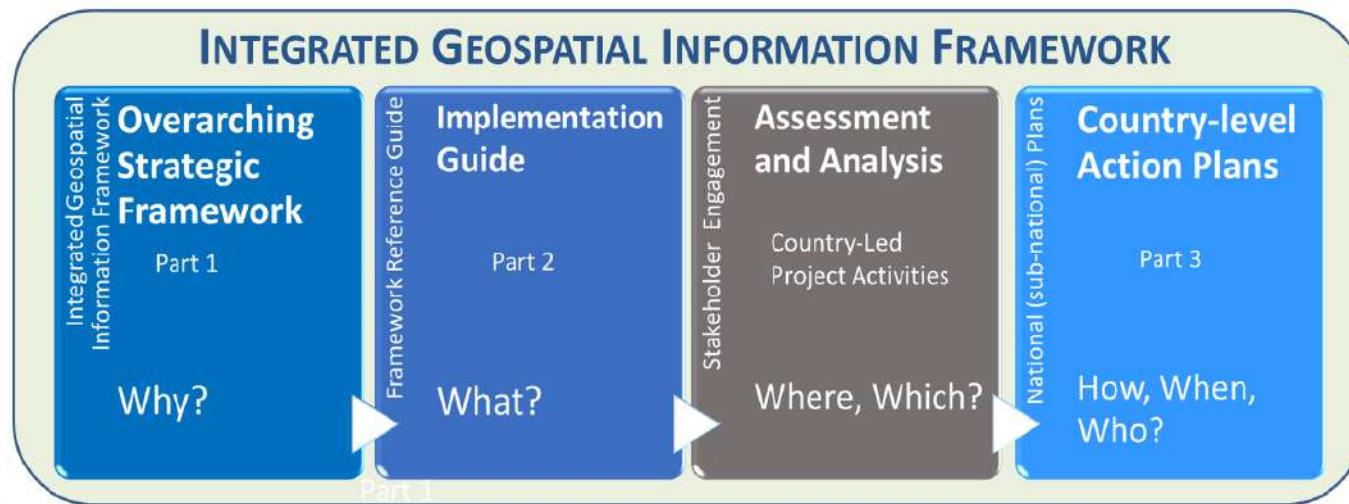
# Why the IGF was needed

**Geospatial information** = major contributor to economic transformation in many countries, including e-government, e-service and e-commerce.

**Considerable lack of awareness and understanding** of the vital and integrative role of geospatial information and related enabling architectures, such as National Spatial Data Infrastructures (NSDIs), in contributing to national development.



**There needs to be more institutional collaboration, coordination, interoperability and integration across the various national data information systems and platforms.**



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Integrated Geospatial  
Information Framework

# Overarching Strategic Framework

Why?

Part 1

National  
Implementation Guide

# Implementation Guide

What?

Part 2

National (or sub-national)  
Action Plans/Delivery System

# Country-level Action Plans

How, when, who?

Part 3

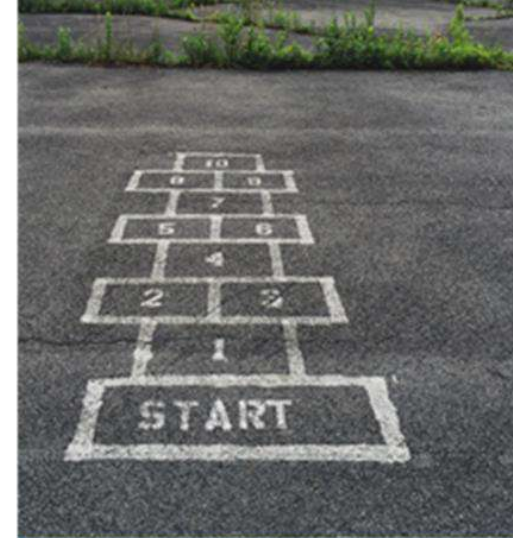
- Part 1: Overarching Strategic Framework - **WHY** geospatial information management needs to be strengthened.
- Part 2: Implementation Guide - **WHAT** actions can be taken to strengthen geospatial information management.
- Part 3: Country-level Action Plans - **HOW** the actions will be carried out, **WHEN** and by **WHOM**.



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# IGIF: Overarching Strategic Framework



The Overarching Strategic Framework is a mechanism for articulating and demonstrating national leadership, cultivating champions, and developing the capacity to take positive steps.

- A forward-looking Framework built on national needs and circumstances.
- Provides the overarching strategic messages and integrated national framework, focusing on policy perspectives and elements of geospatial information.
- Sets the context of ‘why’ geospatial information management is a critical element of national social and economic development.
- **Vision** and **Mission** statements communicate the overarching aim of the Integrated Geospatial Information Framework.
- The Framework achieves this via **7 Underpinning Principles**, **8 Goals** and **9 Strategic Pathways** that lead to a national approach that takes account of national circumstances, priorities and perspectives.
- The **Overarching Strategic Framework** is intended for a wide range of stakeholders - these primarily being high-level policy and decision makers, institutions and organizations within and across government.



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# IGIF: Implementation Guide - Foundations

- the ‘what’, the specific guidance and options to be taken by countries in implementing the IGIF. It captures strategic to operational needs with guiding principles.
- for each of the 9 Strategic Pathways, the Guide comprises references, good practices and specific principles and actions.
- guidance for governments to establish ‘nationally’ integrated geospatial information frameworks in countries in such a way that transformational change is enabled, visible and sustainable.
- intended to benefit low to middle income countries and small island developing States, but can be used to establish and/or improve national geospatial information management arrangements everywhere.
  - *IGIF analysis done in Germany (BKG) and Netherlands (Kadaster) to improve their current situation*
- useful to coordinate activities to achieve alignment between already existing national agency capabilities and infrastructures.

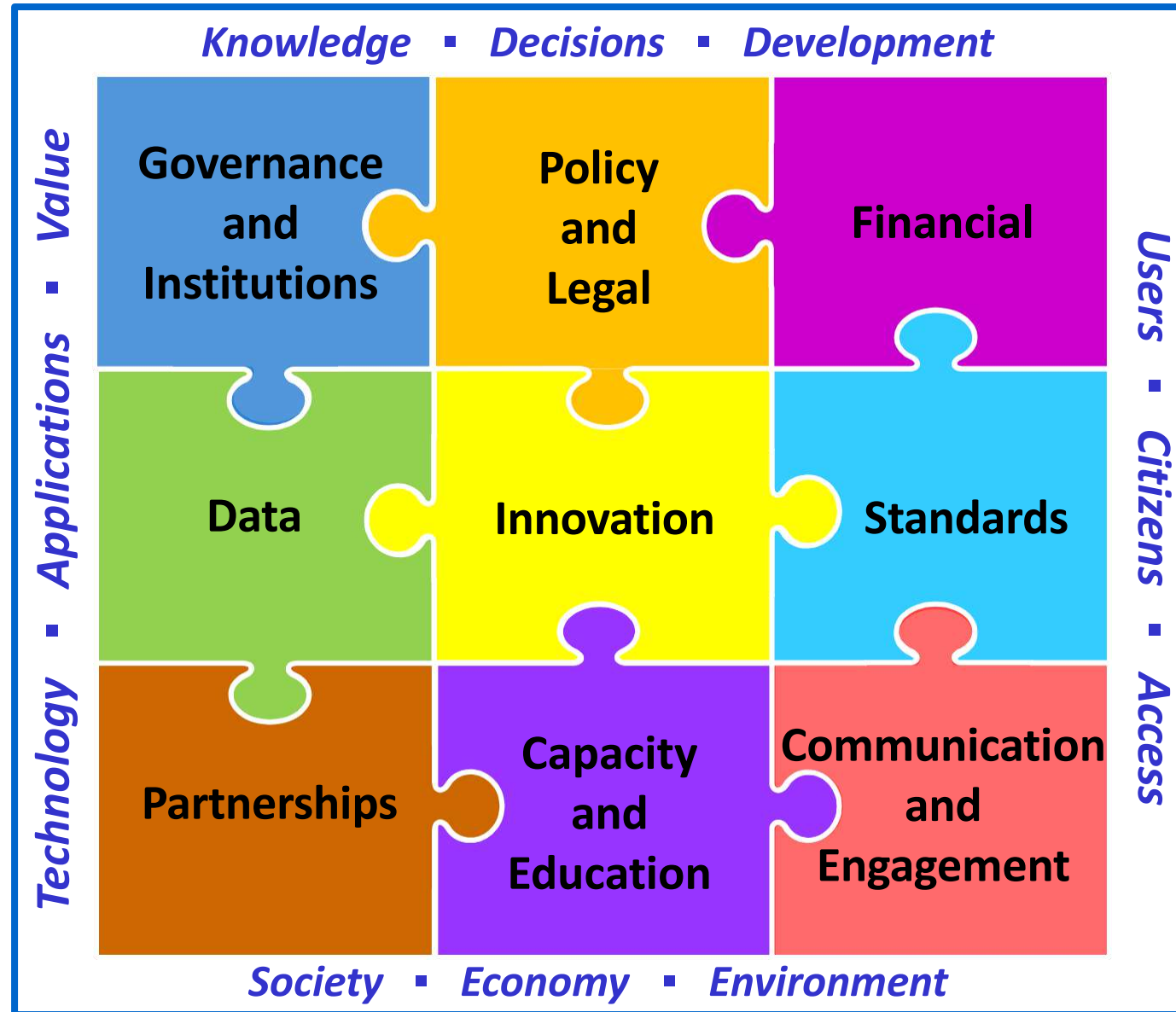


# 9 Strategic Pathways

Governance →

Technology →

People →



Anchored by 9 Strategic Pathways, the Framework is a mechanism for articulating and demonstrating national leadership in geospatial information, and the capacity to take positive steps.



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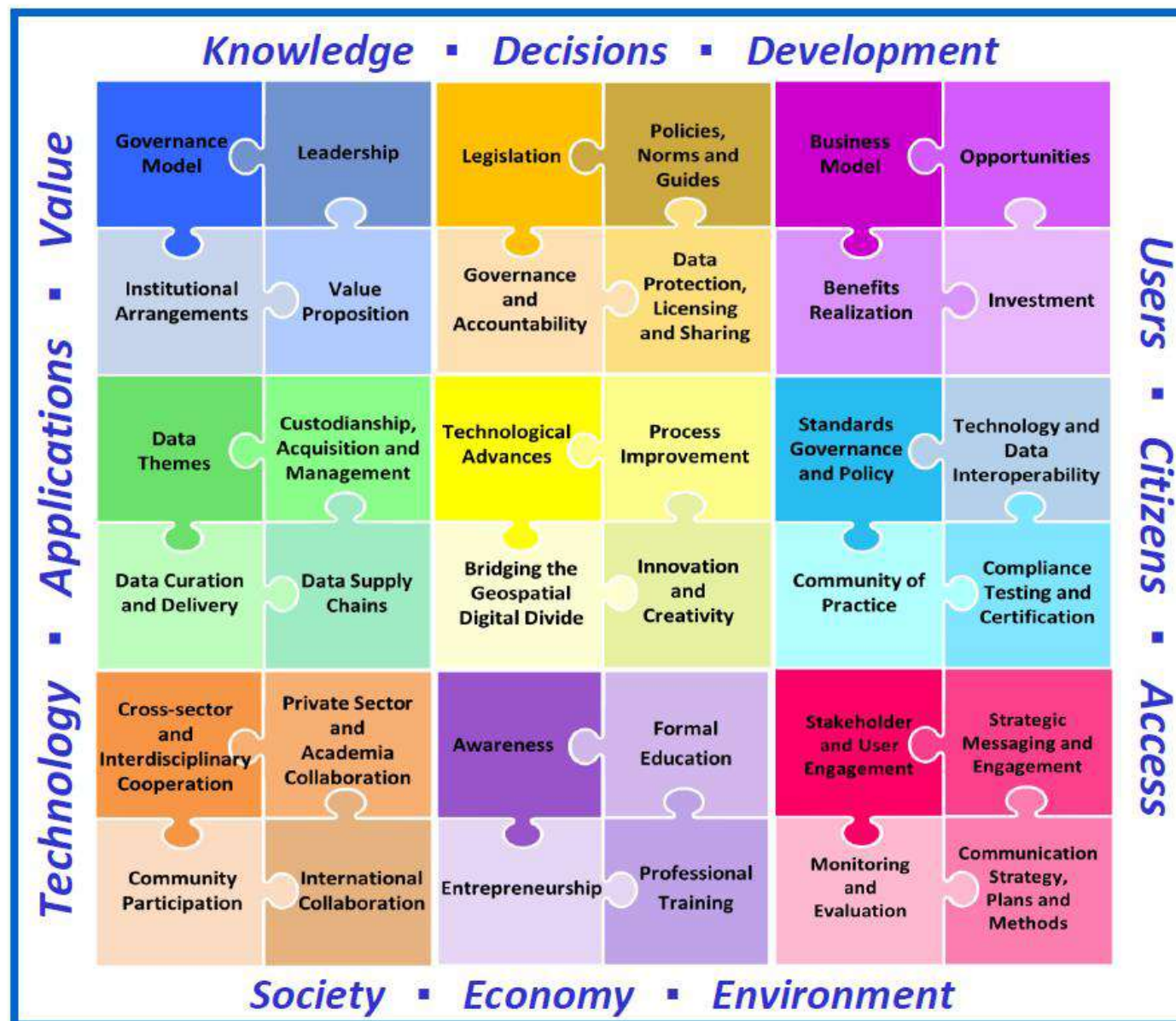


# 9 Strategic Pathways solve the IGIF puzzle ...with 36 Key Elements

Governance →

Technology →

People →



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# IGIF: Country-level Action Plans (CAPs)

- provide the process to build an IGIF for a nation, beginning with specific plans that align with a nation's priorities and circumstances.
- reference the specific guidance, options and actions provided in the Implementation Guide and address each of the Strategic Pathways
- taking into account the strategic and operational needs of a country when implementing the Framework.
- a plan, not a programme that is implemented.
- include elements such as the economic impact and value of geospatial information systems, identification of investment needs and priorities, and sequenced implementation options.



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# SDG DATA Alliance

The SDG Data Alliance's technology, expertise, and financial support enables countries to more precisely allocate resources to address all forms of inequity - reducing inequalities of all kinds, including equity for women, reducing hunger, poverty, improving access to clean water and taking action to reduce the impact of climate change.



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# Find all about UN-GGIM on [ggim.un.org](http://ggim.un.org)

Thank you to Greg Scott  
and UN-GGIM secretariat for ppt-material

## UN-GGIM Secretariat

Environmental Statistics and Geospatial Information Branch  
United Nations Statistics Division  
Department of Economic and Social Affairs  
United Nations, New York



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**Strengthening  
geospatial  
information  
management will  
assist countries  
in bridging the  
geospatial digital  
divide, secure  
socio-economic  
prosperity, and  
leave no one  
behind.**



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