

Virtual High Level Forum on UN-GGIM

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# The Integrated Geospatial Information Framework: Solving the Puzzle

### Greg Scott, UN-GGIM Secretariat

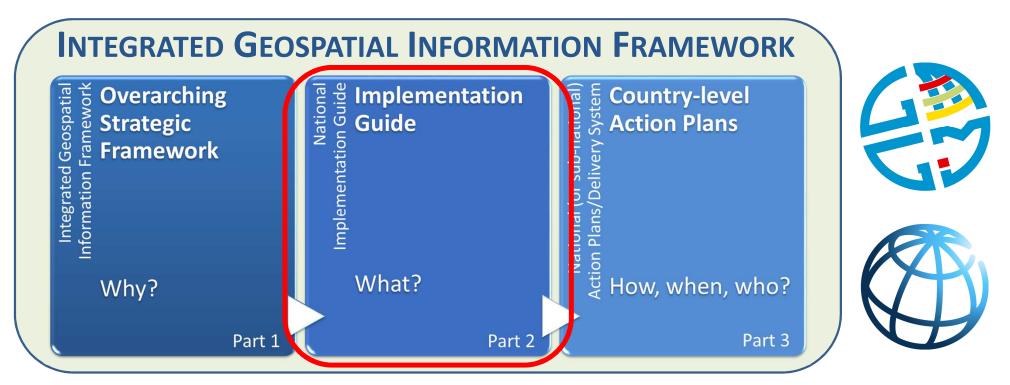
Environmental Statistics and Geospatial Information Branch United Nations Statistics Division Department of Economic and Social Affairs United Nations, New York



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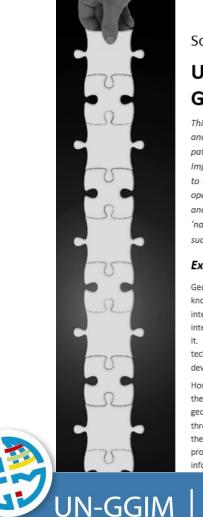
Part 1: Overarching Strategic Framework - WHY geospatial information is a critical element of national social and economic development, and needs to be strengthened.

Part 2: Implementation Guide - WHAT <u>actions</u> 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.



### **IGIF Implementation Guide - Solving the Puzzle**



#### Solving the Puzzle

## Understanding the Implementation Guide

This introductory chapter, **Solving the Puzzle**, describes how to understand and use the Implementation Guide. Expanding on each of the nine strategic pathways of the Integrated Geospatial Information Framework (IGIF), the Implementation Guide provides the 'what', the specific <u>auidance</u> and <u>options</u> to be taken by countries in implementing the IGIF. It captures strategic to operational needs with guiding principles, actions deliverables, outcomes and resources. The aim is to provide guidance for governments to establish 'nationally' integrated geospatial information frameworks in countries in such a way that transformational change is enabled, visible and sustainable.

#### **Executive Summary**

Geospatial information is a critical component of the national infrastructure and knowledge economy; a blueprint of what happens where, and the means to integrate and leverage a wide variety of government services. It provides the integrative platform and 'glue' for all digital data that has a location dimension to it. All countries and all sectors need geospatial information and enabling technologies for making decisions on national policy, priorities and sustainable development.

However, many countries continue to face a series of impediments that exacerbate their ability and 'opportunity' to participate fully in transformational change with geospatial information, support national development, economic prosperity, and through that, a global and thriving information economy; as they still need to bridge the geospatial digital divide. Bridging this divide – enabling people, governance, processes, data and technology to implement and sustain national geospatial information capabilities – requires the realization and implementation of an

The Implementation Guide illustrates how the IGIF builds on the previous and considerable efforts in planning and implementing national and regional Spatial Data Infrastructures (SDIs). What are the differences between the traditional regional and national spatial data infrastructures (SDIs) and the IGIF?

The Implementation Guide illustrates how the IGIF builds on the previous and considerable efforts in planning and implementing national and regional Spatial Data Infrastructures (SDIs), which have historically focused on the technical aspects of collecting, maintaining and then sharing the various themes or layers of geospatial information, throughout all levels of government and society.

National circumstances are a primary force guiding the need for and management of geospatial information capabilities. However, global and regional needs also justify investment in the creation and maintenance of a geospatial framework. At the global level, the SDGs will operate as a reminder of the critical importance of geospatial information as countries consume and evaluate the information from the Guide, working toward developing and ultimately implementing their CAP.

At this time, human activity is the dominant catalyst of change on the environment and various natural ecosystems. This means that each individual's actions have an impact on our planet's future, no matter how small or inconsequential they may seem. Local geospatial information capacities and capabilities contribute valuable information for local decision-making and management, but also now serve as critical indicators of regional and global impacts. The benefits of a collective regional approach toward coordinating national efforts on geospatial information management are realized through formal and informal harmonization methods. In Europe, one example of a coordinated formal regional approach is the Infrastructure for Spatial Information in the European Community (INSPIRE) Directive.

INSPIRE is a legislative framework which aims to create a European Union SDI for the purposes of ensuring that geospatial information is able to be more accessible and interoperable to support primary environmental policies and policy-making, including sustainable development, across Europe. Entered into force in May 2007 by the European Union, INSPIRE provides an SDI framework based on the infrastructures for spatial information established and operated by the Member States of the European Union for 34 spatial data themes, and are compatible and shared according to common implementing rules that are supplemented with measures at the community level (European Union, 2007).

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# **IGIF Implementation Guide - Solving the Puzzle**

- Expands on each of the 9 strategic pathways of the IGIF. Provides the 'what' the specific <u>guidance</u> and <u>options</u> to be taken by countries in implementing the IGIF.
- Each of the 9 Strategic Pathways representing a uniformly structured Chapter. Captures strategic to operational needs with guiding principles, actions, <u>interrelated actions</u>, deliverables, outcomes and resources.
- Describes the Guide structure, shape, form, management and its validation.
- Tells us how the Guide is best used and managed, benefits, and connections to Country-level Action Plans.
- Captures linkages to the NSDI. Builds on the previous efforts in planning and implementing NSDIs. Explains the differences.
- Explains what additional value and benefit the IGIF is able to bring to NSDI development.

http://ggim.un.org/IGIF/part2.cshtml





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### **IGIF:** Linkages to the NSDI

- Virtues of NSDIs are their ability to promote geospatial data sharing throughout all levels of government and society, enabling effective use of geospatial data for national development and every day requirements.
- Three factors now challenge the limitations of a traditional NSDI:
  - 1. The principal focus of NSDIs has been focused on 'creating an NSDI' rather than developing national geospatial capacity.
  - 2. The growing availability of more diverse data, types and needs, more relevant and dependent on geospatial data than were originally considered.
  - 3. Growing demand for data integration and analytics to deliver useable outcomes. Today, data assets must meet diverse and specific local and national requirements, and need to be 'integrated' with other data and sectors.



National Spatial Data Infrastructure

The Framework will augment and build upon existing NSDI arrangements, providing a holistic, integrated national information systemof-systems approach to the data life cycle

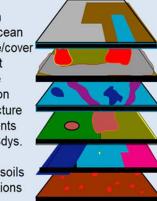


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### **IGIF:** Linkages to National Priorities

- The IGIF complements the NSDI, allowing countries that have already implemented NSDI capabilities to build upon and strengthen previous efforts and existing arrangements in planning and implementing NSDIs.
- Importantly, the IGIF offers a new paradigm and comprehensive mechanism to further strengthen nationally integrated geospatial information management and the desired transformational change that is required.
- The IGIF provides a holistic, integrated national information systems-ofsystems approach to the data life cycle. It shows you how to do it.
- The approach, and comprehensive guidance for countries, recognizes the importance of capacity and capability development from the outset, beginning with the process to develop and prepare a Country-level Action Plan, a process that is participatory and inclusive for whole-of-government.

Geodetic Elevation Water/Ocean Land use/cover Transport Cadastre Population Infrastructure Settlements Admin. Bdys. Imagery Geology/soils Observations etc.

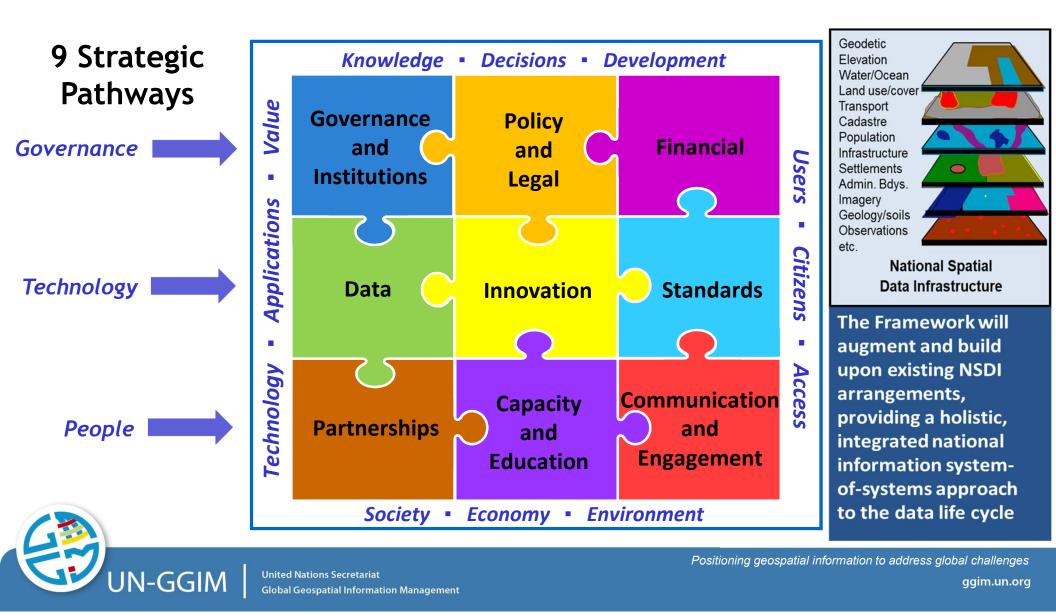


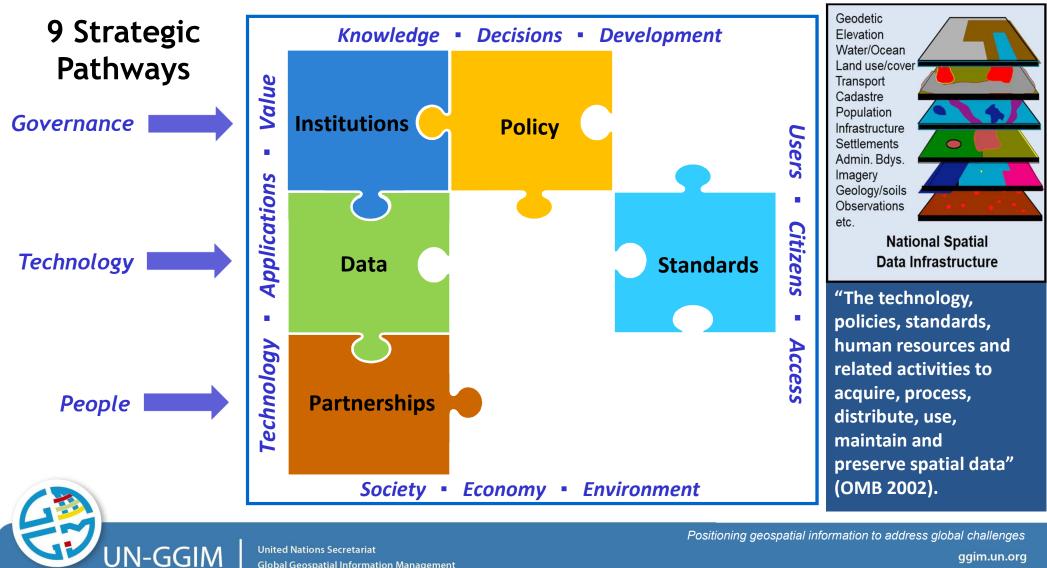
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### **IGIF:** Linkages to National Priorities

Convened jointly with AfricaGIS 2019, Fifth Plenary Meeting of UN-GGIM Africa, in Kigali, Rwanda, 18-22 November 2019. Attended by more than 80 participants, including from 27 African countries.



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