Ninth Session of the Committee of Experts on Global Geospatial Information Management

“Operationalizing the Integrated Geospatial Information Framework”


The IGIF Journey so far...

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UNSD – WORLD BANK STRATEGIC PARTNERSHIP
SEVENTH SESSION OF UN-GGIM
AUGUST 2017
“develop an overarching Geospatial Framework……”

“prepare and implement country level Action Plans…..”

ROADMAP FOR COLLABORATION

BETWEEN

WORLD BANK’S GLOBAL PRACTICE ON SOCIAL, URBAN AND RURAL DEVELOPMENT, AND RESILIENCE

AND

UNITED NATIONS STATISTICS DIVISION

TO ASSIST COUNTRIES TO BRIDGE GEOSPATIAL DIGITAL DIVIDE
INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK
EIGHTH SESSION OF UN-GGIM
AUGUST 2018
The Integrated Geospatial Information Framework provides a basis and guide for developing, integrating and strengthening geospatial information management.

**INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK**

A STRATEGIC GUIDE TO DEVELOP AND STRENGTHEN NATIONAL GEOSPATIAL INFORMATION MANAGEMENT

PART 1: 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.
The Integrated Geospatial Information Framework (IGIF) comprises 3 separate, but connected, documents. The Overarching Strategic Framework was completed and adopted by UN-GGIM in August 2018. The structure and main elements of the Implementation Guide were provided for discussion, and had ‘in-principle’ approval by UN-GGIM. The Country-level Action Plans were acknowledged as ‘work in progress’ and to be developed through case studies.
IGIF: Overarching Strategic Framework

- 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.
The **Vision** recognizes the responsibility for countries to plan for and provide better outcomes for future generations, and our collective aspiration to ‘leave no one behind’.

The **Mission** is designed to stimulate action towards bridging the geospatial digital divide; to find sustainable solutions for social, economic and environmental development; and to influence inclusive and transformative societal change for all citizens according to national priorities and circumstances.
Positioning geospatial information to address global challenges

<table>
<thead>
<tr>
<th>VISION</th>
<th>The efficient use of geospatial information by all countries to effectively measure, monitor and achieve sustainable social, economic and environmental development – leaving no one behind</th>
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<tbody>
<tr>
<td>MISSION</td>
<td>To promote and support innovation and provide the leadership, coordination and standards necessary to deliver integrated geospatial information that can be leveraged to find sustainable solutions for social, economic and environmental development.</td>
</tr>
<tr>
<td>UNDERPINNING PRINCIPLES</td>
<td><strong>Strategic Enablement</strong> ● <strong>Transparent and Accountable</strong> ● <strong>Reliable, Accessible and Easily Used</strong> ● <strong>Collaboration and Cooperation</strong> ● <strong>Integrative Solution</strong> ● <strong>Sustainable and Valued</strong> ● <strong>Leadership and Commitment</strong></td>
</tr>
<tr>
<td>GOALS</td>
<td><strong>Effective Geospatial Information Management</strong> ● <strong>Increased Capacity, Capability and Knowledge Transfer</strong></td>
</tr>
</tbody>
</table>

The 7 Principles are the key characteristics and values that provide the compass for implementing the Framework, and allow for methods to be tailored to individual country needs and circumstances.

The 8 Goals reflect a future state where countries have the capacity and skills to organize, manage, curate and leverage geospatial information to advance government policy and decision-making capabilities.
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.
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.
The Integrated Geospatial Information Framework is a reference guide for developing and strengthening arrangements in national geospatial information management. It has been designed specifically for low to middle income countries and small island developing States. But, it is also being used to improve and coordinate activities to achieve alignment between and across existing national agency capabilities and infrastructures in developed countries.
INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK
DEVELOPING THE IMPLEMENTATION GUIDE
JANUARY - AUGUST 2019
IGIF: Implementation Guide - Process

• At its Eighth Session in August 2018, the Committee of Experts agreed in principle with the structure and main elements of the Implementation Guide, as the detailed document that will provide the specific guidance and options to be taken in implementing the IGIF.

• Recognizing the urgency of completing the Implementation Guide and Action Plans in a timely manner, the Committee supported the suggestion that the completed documents be provided to the Committee for adoption at this ninth session, in August 2019.

• The Committee further requested a ‘broad consultation period’ for Member States to review and comment on the Implementation Guide.

• In December 2018, given the time and resources available, and the requirement for broad consultation, UNSD and the World Bank decided it not possible to have the Implementation Guide completed and ready for final adoption by the Committee at this ninth session.

• However, it is intended that a final draft will be ready to initiate the broad global consultation with all Member States and relevant stakeholders by the end of September 2019.
IGIF: Implementation Guide - Foundations

- The Implementation Guide provides 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; while not being detailed and prescriptive – Country-level Action Plans do that.

- Expanding on each of the 9 Strategic Pathways, the Guide comprises references, good practices and specific principles and actions for each of the Pathways, including those generated through each of the Subcommittee, Expert and Working Groups of UN-GGIM.

- 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. The Guide’s benefits will cascade right down to the citizen.

- While intended to benefit low to middle income countries and small island developing States, the Guide can be used to establish and/or improve national geospatial information management arrangements. The Guide can also be used to coordinate activities to achieve alignment between already existing national agency capabilities and infrastructures.
IGIF: Implementation Guide - Consultations

- **25 March**: Consultation/Information Session on the zero draft Implementation Guide at World Bank Land and Poverty Conference.
- **22-25 April**: Regional consultation on the draft Implementation Guide with UN-GGIM: Africa and Arab States.
- **22-26 April**: FIG Working Week in Hanoi. World Bank convene a session on the IGIF and Action Plans.
- **5-6 June**: Regional consultation on the draft Implementation Guide with UN-GGIM: Europe.
- **7-9 August**: Ninth session of UN-GGIM and IGIF Information Forum convened on 6 August.
- **9-11 September**: Sub-Regional Awareness Raising Workshop on the draft Implementation Guide at ECLAC in Santiago, Chile.
- **30 September**: Initiation of global consultation for the Final Draft Implementation Guide.
Proposed “structure, shape and form”

• The ‘IGIF’ pieces and relationships need to be understood: IGIF; Guide; Appendices; Case Studies; Country-level Action Plans, etc. Every country will be different in their response. Every country has a vision and/or strategy. The elements of the Guide will feed into these.

• The initial proposed Guide ‘structure, shape and form’ is suitable, but expand to 10 Chapters.

• First Chapter will be the Index: To describe and explain the flow and structure of the Guide; bring each of the introductory diagrams together; look at interlinkages across each of the Strategic Pathways; address NSDI perspectives; and articulate the ‘level of detail’ of the Guide.

• The remaining chapters of the Guide will begin with a Summary (to articulate the value proposition the pathway offers) and an Introduction that includes a schematic flow diagram.
Positioning geospatial information to address global challenges

Guiding Principles

Interlinked Activities

Activities or Actions

Outcomes and Benefits

National Implementation Guide

Overarching Strategic Framework

Country-level Action Plans

Integrated Geospatial Information Framework

Part 1

Part 2

Part 3

UN-GGIM
United Nations Secretariat
Global Geospatial Information Management

ggim.un.org
Proposed Document Structure

- Abstract
- Summary
- 1.1 Introduction
- 1.2 Context and Rationale
- 1.3 Approach
- 1.4 Elements
- 1.5 Principles
- 1.6 Actions
- 1.7 Deliverables
- 1.8 Outcomes
- 1.9 Resources
The first 3 pages of the Chapter define the high-level ‘Summary’, and can be used as a stand-alone flyer if required.
The overall structure diagram for the Chapter as part of the 3-page Summary. Shows what is in the Chapter and the relevance between sections.

**Proposed Document Structure**

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- 1.6 Actions
- 1.7 Deliverables
- 1.8 Outcomes
- 1.9 Resources

*“Tools” and “Interrelated Actions” are identified throughout the Chapter*
Proposed Document Structure

- **Abstract**
- **Summary**
- **1.1 Introduction**
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- **1.9 Resources**

The ‘Approach’ to the Chapter. Repeats what is in the Summary diagram, but goes into more detail. Items will be hyperlinked for ease of search and navigation.
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Actions repeated here as a different schematic, but with more detail regarding the ‘Tools’ and ‘Interrelated Actions’. Will be hyperlinked for ease of search and navigation.
Positioning geospatial information to address global challenges

Strategic Pathway 1: Governance and Institutions

This strategic pathway establishes the leadership, governance, institutional arrangements and a clear value proposition for a multi-disciplinary and multi-sectoral participation in, and adoption of, an Integrated Geospatial Information Framework. The objective is to achieve political endorsement, strengthen ownership and build a cooperative data sharing environment, shared vision and understanding of the value of an Integrated Information Framework, and the roles and responsibilities in this regard.

Summary
Geospatial information is increasingly being harnessed to integrate government functions and commercial services – making it available, citizens more engaged and informed, and agriculture productive. Traffic congestion, weather reports, air pollution, bus monitoring, flood sensors, and electricity outage application underpinned by geospatial information that can be synthesized in real-time and shared with stakeholders so that information can be accessed quickly to make informed decisions. For governments this means reduced costs and improvement in overall economic and social sustainability.

This level of geospatial capability can only be achieved through governance frameworks and with strong leadership that provides direction and strategies. It is only through this level of government that institutions need to share information and work towards common strategic priorities.

By interconnecting government functions through well-functioning frameworks, it is possible to bring together geospatial information from sources that can be used across government. The implementation of good governance and cooperative institutional arrangements is necessary to facilitate the use of geospatial information and to ensure that the information remains relevant and useful.

Common to all governance and institutional arrangements are the elements that are required to build a cooperative data sharing environment, an appreciation of the value of geospatial information for decision-making, and the development of common standards and protocols for data exchange and sharing.

Strategic Pathway 4: Data

This strategic pathway establishes best practices for the use and sharing of geospatial data in the public sector and is guided by the evolving needs of stakeholders. The objective is to establish a robust data management infrastructure that is sustainable and supports decision-making.

Summary
Geospatial data is a fundamental part of modern life. It is used in policy development and in the process of making decisions. Geospatial data is a valuable tool for improving the quality of life and decision-making by providing comprehensive and accurate information.

As the amount, variability and availability of geospatial data is increasing, so too is the importance of these data sets. Geospatial data is growing exponentially across all sectors of society, and this growth is expected to continue. It is important for governments to ensure that geospatial data is collected, managed and shared in a way that ensures its quality, accuracy, security and accessibility.

A cornerstone of this effort is the establishment of a governance framework that is aligned with the evolving needs of stakeholders. This framework should be designed to support the development of a sustainable geospatial data management infrastructure.

Strategic Pathway 7: Partnerships

This strategic pathway establishes cross-sectoral cooperation, coordination and collaborative governance, the geospatial industry and an international community, in an important effort to support the use of geospatial information in decision-making.

The objective is to create and sustain the value of geospatial information in a culture based on inclusion, trust and alliances that recognize common needs, aspiration, achieving national priorities and outcomes.

Summary
The 2030 Agenda for Sustainable Development among other things envisions partnerships as a key to achieving the Sustainable Development Goals. It highlights the importance of partnerships in achieving the goals of the Agenda, and the need for a cross-sectoral approach.

This strategic pathway aims to support partnerships between governments, the private sector, civil society, academia and international organizations. It seeks to create a culture of inclusion, trust and alliances that recognize common needs, aspirations and priorities.

Strategic Pathway 9: Communication and Engagement

This strategic pathway recognizes the importance of effective communication and engagement to achieve the Sustainable Development Goals. It seeks to create a culture of inclusion, trust and alliances that recognize common needs, aspirations and priorities.

Summary
Communications and engagement partnerships are critical to achieving the Sustainable Development Goals. This strategic pathway aims to foster effective communication and engagement partnerships at all levels and across sectors. It seeks to create a culture of inclusion, trust and alliances that recognize common needs, aspirations and priorities.

Strategic Pathway 5: Communication and Engagement

This strategic pathway aims to promote effective communication and engagement partnerships to support the Sustainable Development Goals. It seeks to create a culture of inclusion, trust and alliances that recognize common needs, aspirations and priorities.

Summary
Communications and engagement partnerships are critical to achieving the Sustainable Development Goals. This strategic pathway aims to promote effective communication and engagement partnerships to support the Sustainable Development Goals. It seeks to create a culture of inclusion, trust and alliances that recognize common needs, aspirations and priorities.
IGIF: Implementation Guide - First Chapter

- **Chapter title:** *Solving the Puzzle: Understanding the Implementation Guide*
- **Introduction** elaborates: What is the Framework, the Implementation Guide, the relationships with the Overarching Strategic Framework and the Country-level Action Plans. What is the purpose of the Implementation Guide, what is it to be used for and how we got here?
- ‘Solving the Puzzle’ Chapter will contain **nine** sections, namely:
  1. Executive Summary;
  2. Introduction;
  3. Describing the Guide;
  4. Examples of How the Guide will be Used and Managed;
  5. Describing the Strategic Pathways;
  6. How to Use the Guide;
  7. Country-level Action Plans;
  8. Benefits; and
  9. Interlinkages.
<table>
<thead>
<tr>
<th>Strategic Pathways</th>
<th>Content created and provided</th>
<th>Review – Content and editorial</th>
<th>Review – Consistency and proofing</th>
<th>First Draft ready</th>
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<td>#5 – Innovation</td>
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<td>#7 – Partnerships</td>
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<td>#9 – Communication and Engagement</td>
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</table>
INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK
DEVELOPING THE COUNTRY-LEVEL ACTION PLANS
JANUARY - AUGUST 2019
IGIF: Country-level Action Plans

• Part 3: Country-level Action Plans reference the specific guidance, options and actions provided in the Implementation Guide and addresses each of the 9 strategic pathways to capture strategic-to-operational needs of a country when implementing the Framework.

• Country-level Action Plans are now being developed in parallel, and in coordination with, the Implementation Guide. They are being implemented in several ways.

Part 1: Overarching Strategic Framework – **WHY** geospatial information management needs to be strengthened.

Part 2: Implementation Guide – **WHAT** types of actions can be undertaken to strengthen geospatial information management.

Part 3: Country-level Action Plans – **HOW** the actions will be carried out, **WHEN** and by **WHOM**.
IGIF: Country-level Action Plans - Approaches

UNSD and World Bank are actively engaged in assisting countries to develop Country-level Action Plans

Development Account Project
UNSD
(self-paced learning and execution)

Technical Assistance Programs
World Bank and FAO
(assisted execution)
Part 1: Overarching Strategic Framework – **WHY** geospatial information management needs to be strengthened.

Part 2: Implementation Guide – **WHAT** types of actions can be undertaken to strengthen geospatial information management.

Assessment and Analysis Tools – capacity building (learning) activities to work out **WHICH** actions are a priority and **WHERE** they will have most impact.

Part 3: Country-level Action Plans – **HOW** the actions will be carried out, **WHEN** and by **WHOM**.
Establish leadership, governance model, institutional arrangements and a clear value proposition to achieve multi-disciplinary and multi-sectoral participation and commitment.

1.1 AGENCIES INVOLVED
In this section, identify the stakeholders with interest or responsibilities for Strategic Pathway Actions. For example:
- Lead Ministry: Ministry of Land and Land Development
- Stakeholder Community: Organizations responsible for generating data, such as the Survey Department, Land and Land Use Policy Development, Forestry Department, Census and Statistics Department; and government departments who are significant users of geospatial information.

1.2 CONTACT PERSONS
In this section, identify the person(s) to be contracted for more information on the Strategic Pathway Actions. For example: Additional Secretary, Ministry of Land and Land Development

1.3 BACKGROUND AND RATIONALE
In this section, provide information for the reader so that they understand why the activities have been identified. This section includes a brief statement on the current situation and gaps in capabilities.

For example: Institutional coordination and collaboration are to be strengthened in order to strengthen integrated geospatial information management. Currently, institutional arrangements are based on official channels of information flows. The approach is subject to a high degree of bureaucracy for data requests, preparation and signing of agreements, and data transfers. Delays are frequent and the process is costly.

Fast tracking procedures is possible in the event of emergencies. However, the process is reliant on personal relationships, which while assisting with communication and action, can collapse when changes in personnel occur.

There is a need to develop enduring underpinning structures. The emerging changes in the geospatial information industry require new governance arrangements that take into account the balance between public and private sectors, data sources and data users. It is also important to recognize the potential contribution from research and development bodies.

1.6 ACTIONS
In this section, list the actions and tasks that you will deliver. These actions can then be incorporated into a Gantt chart (see section below).

Actions are to be determined through the (Country) Needs Assessment and Gap Analysis.

Use the Integrated Geospatial Information Framework Part 2: Implementation Guide as a reference to determine what activities can be implemented to address the following:

Action 1. Establish the [Country] Geospatial Information Coordination Unit (or Office) as the central hub for the coordination and accountability for all integrated geospatial information activities.
  - Seek Administration Approval
  - Establish the organisational structure
  - Develop Terms of Reference, roles and responsibilities and code of conduct.
  - Determine number of staff required and create Position (Job) Descriptions for permanent/part-time roles
  - Identify funding required for resourcing the office
  - Identify staff delegations and reporting structure

Action 2. Establish Leadership Committees
  - Appoint an Executive
  - Establish Specialized Working groups and resource
  - Establish an NGO
  - Designate an NGO
  - Seek Cabinet Approval
  - Identify Committee Support
  - Develop Terms of Reference, roles and responsibilities
  - Frequency of Meetings, and Monitoring and Reporting Structure

Action 3. Develop a Governance Model - that defines the roles and responsibilities of key institutions, and processes and procedures

Action 4. Develop a National Geospatial Information Strategy

Action 5. Conduct a Geospatial Socio-Economic Value Assessment

Action 6. Develop a Monitoring and Evaluation Framework (This document – Section 12)

Detailed IGIF Guidance embedded within Country-level Action Plan

Positioning geospatial information to address global challenges

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INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK ROADMAP AHEAD
Positioning geospatial information to address global challenges

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.
The Framework will augment and build upon existing NSDI arrangements, providing a holistic, integrated national information system-of-systems approach to the data life cycle.
Positioning geospatial information to address global challenges

“The technology, policies, standards, human resources and related activities to acquire, process, distribute, use, maintain and preserve spatial data” (OMB 2002).
Implementation Guide - Roadmap Update

- **7-9 August**: Ninth session of UN-GGIM and Information Forum on 6 August.
- **9-11 September**: Sub-Regional Awareness Raising Workshop on the draft Implementation Guide at ECLAC in Santiago, Chile.
- **30 September**: Initiation of global consultation for the Final Draft Implementation Guide.
- **11 October**: Regional consultation on the Draft Implementation Guide with UN-GGIM Americas at its Sixth Plenary Meeting in Mexico City, Mexico.
- **4-5 November**: Regional consultation on the Draft Implementation Guide with UN-GGIM Asia-Pacific at its Eighth Plenary Meeting in Canberra, Australia.
- **18-20 November**: Regional consultation on the Draft Implementation Guide with UN-GGIM Africa at its Sixth Plenary Meeting in Kigali, Rwanda.
- **31 December**: Global consultation for the Final Draft Implementation Guide concludes.
IGIF: Report to this Ninth Session

The Committee of Experts will be invited to:


b) Express its views on the process of the expert consultative meetings and the subsequent preparations of the Implementation Guide and the ensuing global consultation;

c) Express its views and provide guidance on the way forward for Part 3: Country-level Action Plans, with expert support from UNSD, the World Bank and a number of pilot countries; and

d) Provide any further guidance regarding the way forward on new developments regarding strengthening national geospatial information management, and to assist countries to bridge the geospatial digital divide.
THANK YOU 😊