

Virtual High Level Forum on UN-GGIM 26 May 2020

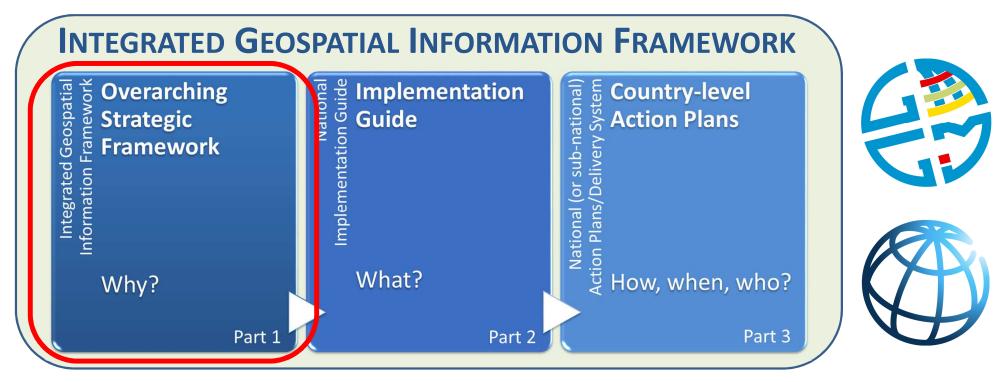
The Integrated Geospatial Information Framework: Strengthening the Geospatial Landscape

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United Nations, New York







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



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

http://ggim.un.org/IGIF/part1.cshtml



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



Overarching Strategic Framework: Vision and Mission

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.

Vision

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.

Mission

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.



VISION

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

MISSION

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.

STRATEGIC DRIVERS

National Development Agenda • National Strategic Priorities • National Transformation Programme • Community Expectations • Multilateral trade agreements • Transforming our World: 2030 Agenda for Sustainable Development • New Urban Agenda • Sendai Framework for Disaster Risk Reduction 2015–2030 • Addis Ababa Action Agenda • Small Island Developing States Accelerated Modalities of Action (SAMOA Pathway) • United Nations Framework Convention on Climate Change (Paris Agreement) • United Nations Ocean Conference: Call for Action

UNDERPINNING PRINCIPLES

Strategic Enablement	Transparent and Accountable	Reliable, Accessible and Easily Used	Collaboration and Cooperation	Integrative Solution	Sustainable and Valued	Leadership and Commitment
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GOALS

Effective Geospatial Information Management

Sustainable Education and Training Programs Increased Capacity, Capability and Knowledge Transfer

International Cooperation and Partnerships Leveraged

Integrated Geospatial Information Systems and Services

Enhanced National Engagement and Communication

Economic Return on Investment

Enriched Societal Value and Benefits



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.



The 7 Principles are

and values that

the key characteristics

provide the compass

for implementing the

for methods to be tailored to individual

country needs and

circumstances.

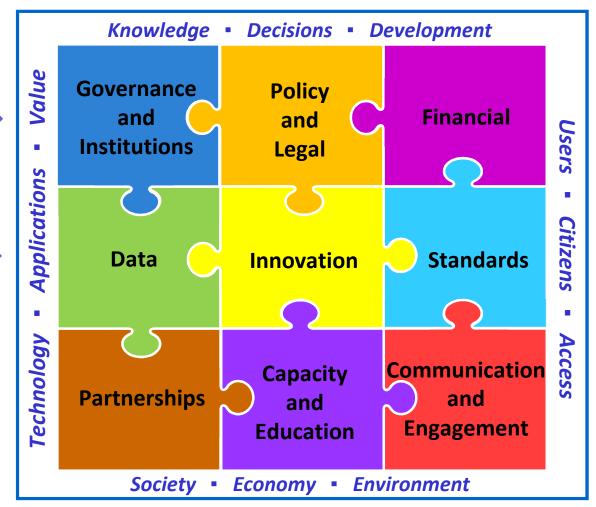
Framework, and allow

9 Strategic Pathways

Governance _____

Technology

People |

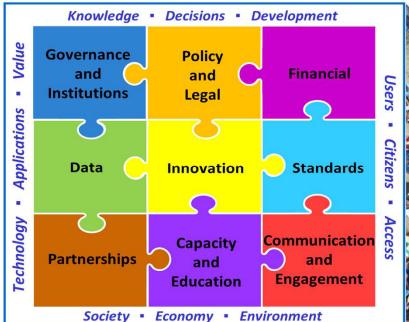




Anchored by 9
Strategic Pathways,
the Framework is a
mechanism for
articulating and
demonstrating
national leadership
in geospatial
information, and
the capacity to take
positive steps.



Summary

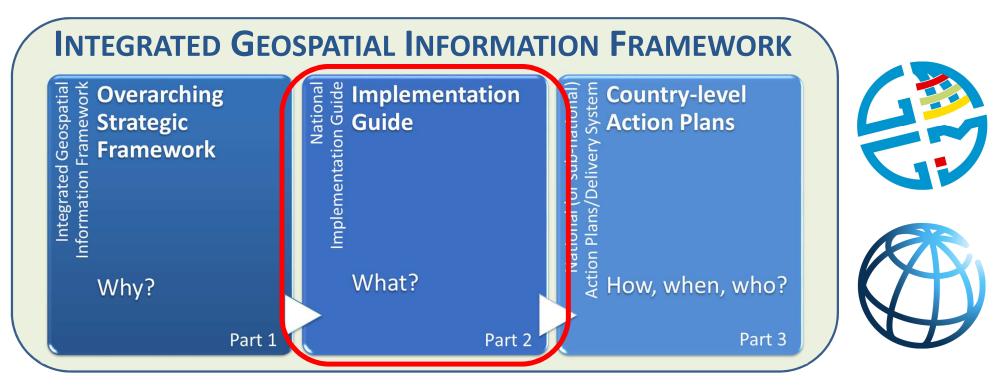


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Strengthening geospatial information management will assist countries in bridging the geospatial digital divide, secure socio-economic prosperity, and leave no one behind.

The Integrated Geospatial Information Framework is a reference guide for <u>developing</u> and <u>strengthening</u> 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 <u>improve</u> and <u>coordinate</u> activities to achieve <u>alignment</u> between and across existing national agency capabilities and NSDIs in developed countries.



- 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.

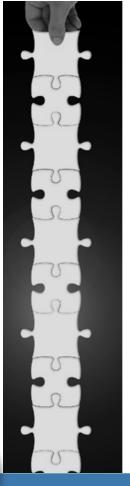
IGIF: Implementation Guide - Foundations

- The Implementation Guide expands on each of the 9 strategic pathways of the IGIF and provides the 'what' – the specific <u>guidance</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.
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http://ggim.un.org/IGIF/part2.cshtml



Implementation Guide - Solving the Puzzle



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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>quidance</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.

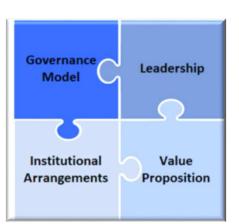
INSPIRE is a legislative framework which aims to create a European Union SDI for the purposes of ensuring that geospatial information is able to be more accessible and interoperable to support primary environmental policies and policy-making, including sustainable development, across Europe. Entered 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).

Positioning geospatial information to address global challenges

United Nations Secretariat
Global Geospatial Information Management

IGIF: Implementation Guide





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- Abstract
- 2. **Summary**
- 3. Introduction
- 4. Context and Rationale
- 5. Approach
- 6. Elements
- 7. Guiding Principles
- 8. Actions
- 9. Deliverables
- 10. Outcomes
- 11. Resources



Strategic Pathway 1

Governance and Institutions

This strategic pathway establishes the leadership, governance model, institutional arrangements and a clear value proposition to strengthen multi-disciplinary and multi-sectoral participation in, and a commitment to, achieving an integrated Geospatial information Framework.

The objective is to attain political endorsement, strengthen institutional mandates and build a cooperative data sharing environment through a shared vision and understanding of the value of an Integrated Geospatial Information Framework, and the roles and responsibilities to achieve the vision.

Summary

Geospatial information is increasingly being harnessed to interconnect and integrate government functions and commercial services - making cities more livable, citizens more engaged and informed, and agricultural areas more productive. Traffic congestion, weather reports, air pollution, bus locations, pest monitoring, flood sensors, and electricity outage applications are all underpinned by geospatial information that can be synthesized into a seamless knowledge environment so that information can be accessed quickly by users to make informed decisions. For government this means streamlining operations, reducing costs and improving overall economic and social sustainability.

This level of geospatial capability can only be achieved through cooperative governance frameworks and with strong leadership that penetrates across sectors and through all levels of government. Institutions need to work together to share information and work towards common strategic priorities and goals.

By interconnecting government functions through well-functioning governance frameworks, it is possible to bring together geospatial information from multiple sources so that it can be used seamlessly on any digital device.

Good governance and cooperative institutional arrangements are the first priority in the geospatial information reform agenda. They enable geospatial information challenges to be met head on, provide flexibility to accommodate the rapidly changing environment, and the ability to embrace community and business participation within a culture of digital reform and transformation.

Common to all governance and institutional arrangements are four key elements that are required to build a cooperative data sharing environment and an appreciation of the value of geospatial information for decision-making.

Strategic Pathway 1: Governance and Institutions

Page 13

The first 3 pages of the Chapter define the high-level 'Summary', and can be used as a stand-alone flyer if required.

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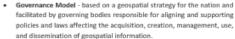
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The four elements are:





- · Value Proposition that measures, monitors, and communicates the economic benefit of integrated geospatial information to national priorities including citizen and societal benefits.
- · Institutional Arrangements that define roles and responsibilities across government for tasks associated with all aspects of geospatial information management, including appropriate coordination, management and oversight for meeting national priorities.

These elements are underpinned by principles that promote successful governance and institutional arrangements that can be adopted by each country. The principles are put into practice through several strategic actions that deliver and strengthen participation and commitment to achieving the IGIF. Tools, such as matrices, examples and checklists, are provided in the appendices to assist countries to work through concepts and processes to successfully complete each action. The overall structure for governance and institutional arrangements is illustrated in and anchored by Figure 1.1.

When implemented the actions (and their interrelated actions1) will enable the achievement of the four elements, which in turn will deliver significant and sustainable national outcomes and benefits for a country. These outcomes include attaining:

- · Efficient planning and coordination of the government's geospatial information resources;
- · Strengthened leadership, institutional mandates and political buy-in;
- · A cooperative data sharing environment: and
- · A shared understanding of the value of integrated geospatial information management.



Model

Facilitate

Strategic Outlook

Credibility

Participatory:

Governance Mode

Policy Framework (SP2)

Tools to Assist Guidance for Vision Steering Committee in Completing the Actions Mission and Goal Charter Example

Leadership

Open and Transparent

Accountability

Guidance

Settling Direction

Change Strategy

Country level Action

Value Proposition

Evaluation Template Strategic Alignment Success Indicators Country-level Action Plan Template

Institutional

Arrangements

Project Management

Oversight.

Communication and

Evaluation

Legal Interoperability

Tracking Success

Success Indicators

Deriving Value

Value Assessment

Sepapatial Econor

Monitoring and

Cooperative Data

ICT Capacity Review ICT Needs Assessment and Gap Analysis (SP5)

ICT Needs Assessment Legal and Policy Birview and Gap Analysis (SP5) Stakeholder Engagement Data Inventory and Gap Strategy (SP9)

Strengthened Leadership. and Political Buy-in

Efficient Planning and Coordination Geospatial Information

Figure 1.1: Overall structure for the Governance and Institutions Strategic Pathway - shawing the four key elements, guiding principles, actions and interrelated actions, and the tools provided

¹ The interrelated actions across all Strategic Pathways are described in detail in the introductory Chapter; Solving the Puzzle: Understanding the Implementation Guide.

Strategic Pathway 1: Governance and Institutions

Page | 2

Strategic Pathway 1: Governance and Institutions

in the Appendices to support and achieve the autcomes.

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Strategic Pathway 1: Governance and Institutions

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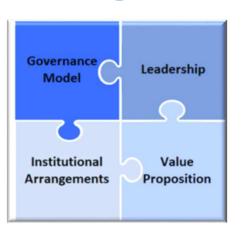
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IGIF: Implementation Guide





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the Chapter



Elements

of Governance

and Institutions

Guiding

Principles

Key Actions for

Strengthening

Management

Interrelated

Prerequisite

Actions

Outcomes

Steering Committee Charter Example

Policy Framework (SP2)

ICT Capacity Review

(SP5)

Strengthened

Leadership,

Institutional Mandates

and Political Buy-in

Governance

Facilitate

Strategic Outlook

Credibility

Participatory

Forming the Leadership

Governing Board

Geospatial Coordination

Unit(s) Specialist Working Groups

Establishing

Accountability

Governance Model

Model

Leadership

Open and Transparent

Accountability

Guidance

Clarity

Setting Direction

Strategic Alignment Study

Geospatial Information

Management Strategy

Creating a Plan of

Change Strategy

Country-level Action

Plan

Strategic Alignment
Template

Guidance for Vision, Mission and Goal Statements

Country-level Action Plan Template

ICT Needs Assessment Legal and Policy Review and Gap Analysis (SP5) (SP2)

Institutional

Arrangements

Project Management

Oversight
Communication and

Evaluation

Legal Interoperability

Tracking Success

Monitoring and Evaluation

Success Indicators

Deriving Value

Geospatial Economic

Value Assessment

Monitoring and

Evaluation Template

Success Indicators

Example

Data Inventory and Gap

Analysis (S4)

Value Proposition

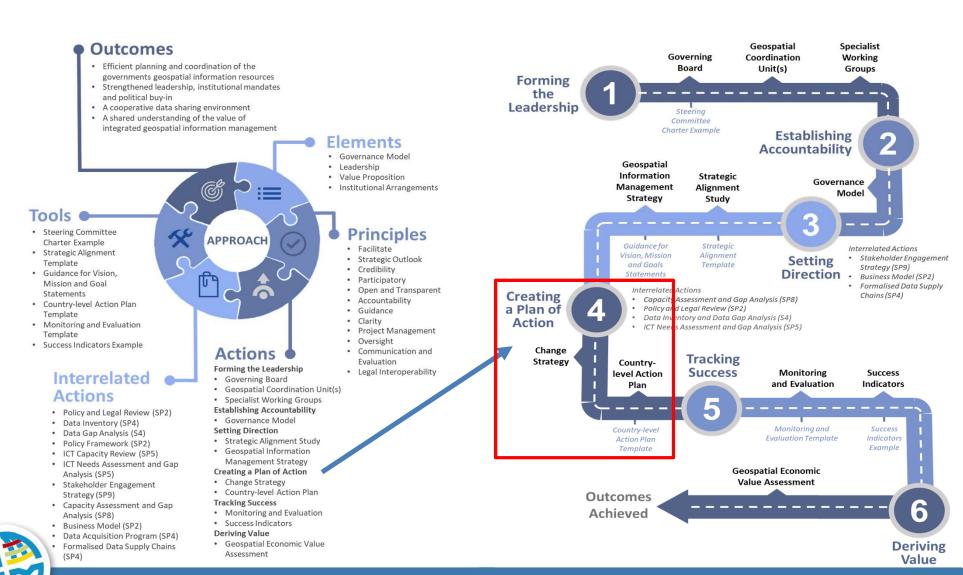
ICT Needs Assessment and Gap Analysis (SP5) Stakeholder Engagement Strategy (SP9)

Efficient Planning and Coordination

Geospatial Information is Valued

Cooperative Data Sharing

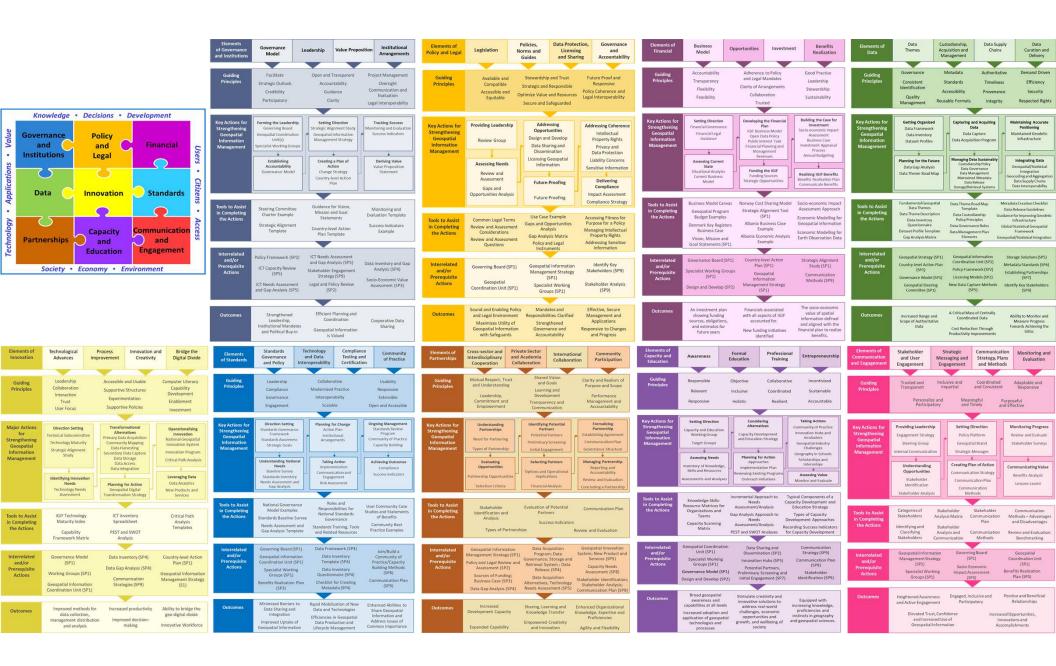


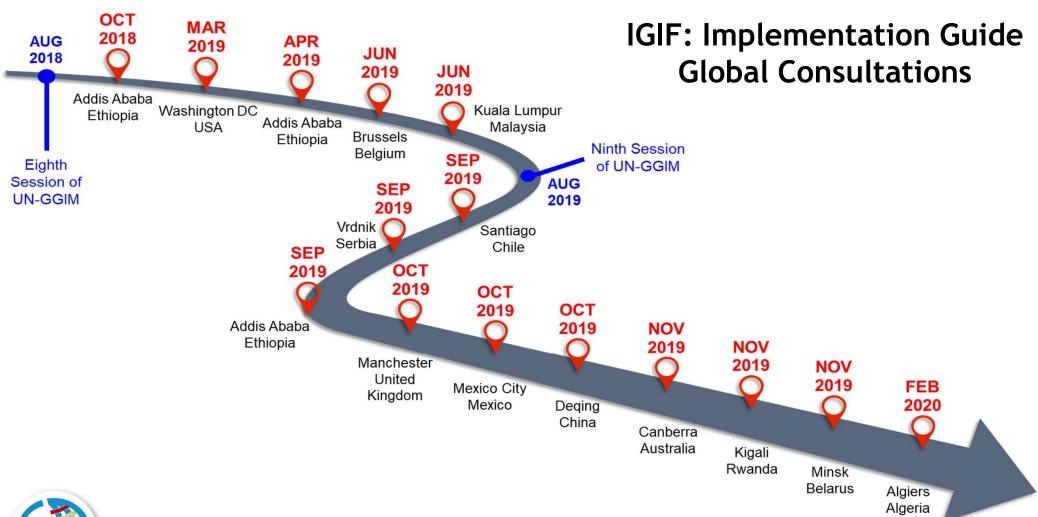


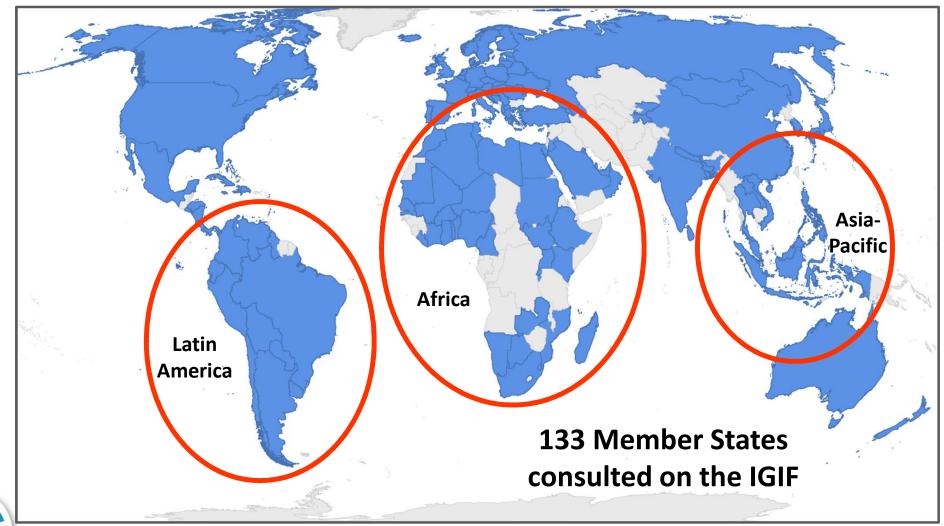
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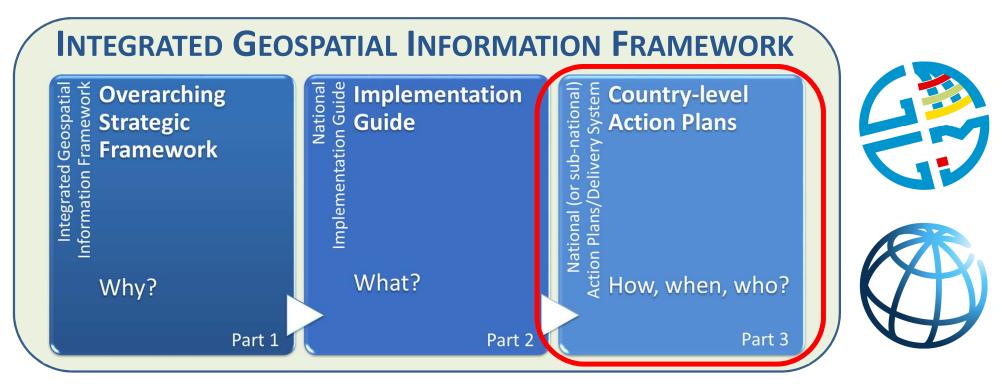
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Positioning geospatial information to address global challenges









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IGIF: Country-level Action Plans (CAPs)

- 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.
- A CAP references the specific guidance, options and actions provided in the Implementation Guide and addresses each of the Strategic Pathways, while taking into account the strategic and operational needs of a country when implementing the Framework.
- The CAP is a plan, not a programme that is implemented. The CAPs contain the processes, templates and tools that are available and necessary to <u>first develop a national action plan</u>, and then operationalize the IGIF through its <u>subsequent implementation</u>, and aligned with national priorities.
- The CAPs will include elements such as the economic impact and value of geospatial information systems, identification of investment needs and priorities, and sequenced implementation options.

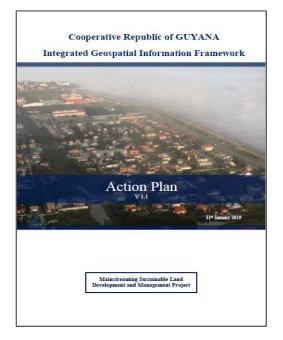


IGIF: Country-level Action Plans - Approaches

United Nations and the 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)



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Thank You ©



