Advancing UN-IGIF Implementation

International Advisory Committee Meeting

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DC-2, UNHQ, 3 August 2025

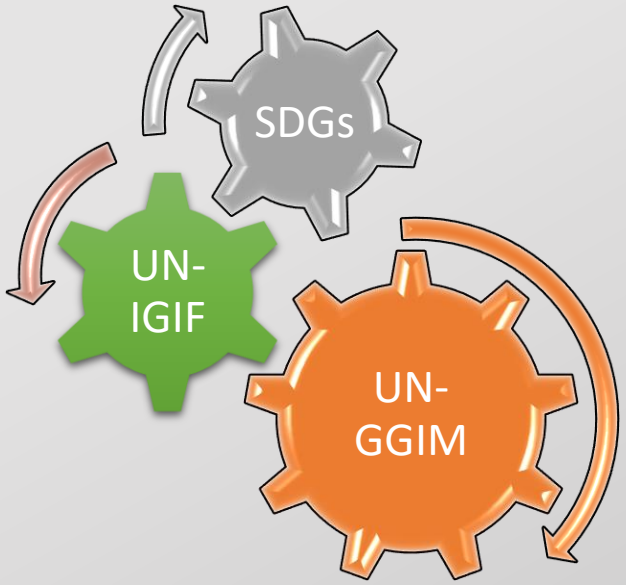
Agenda Outline

I. Introduction
II. Workplan Review & Development on Communication
III. GeoNOW 2025
IV. Capacity Development, UN-IGIF Survey
V. Geo-Empower Webinar Series
VI. Geospatial Leadership
VII. Policy Brief
VIII. Closing

UN-GGKIC

Established by an agreement between the United Nations and the Government of the People's Republic of China on 20 May 2022

Develop and promote the required knowledge, innovation, and leadership to strengthen the adoption of geospatial information to support the implementation of national development priorities and the SDGs, leveraging the United Nations Integrated Geospatial Information Framework (UNIGIF)



UN-GGKIC and Strategic Goals

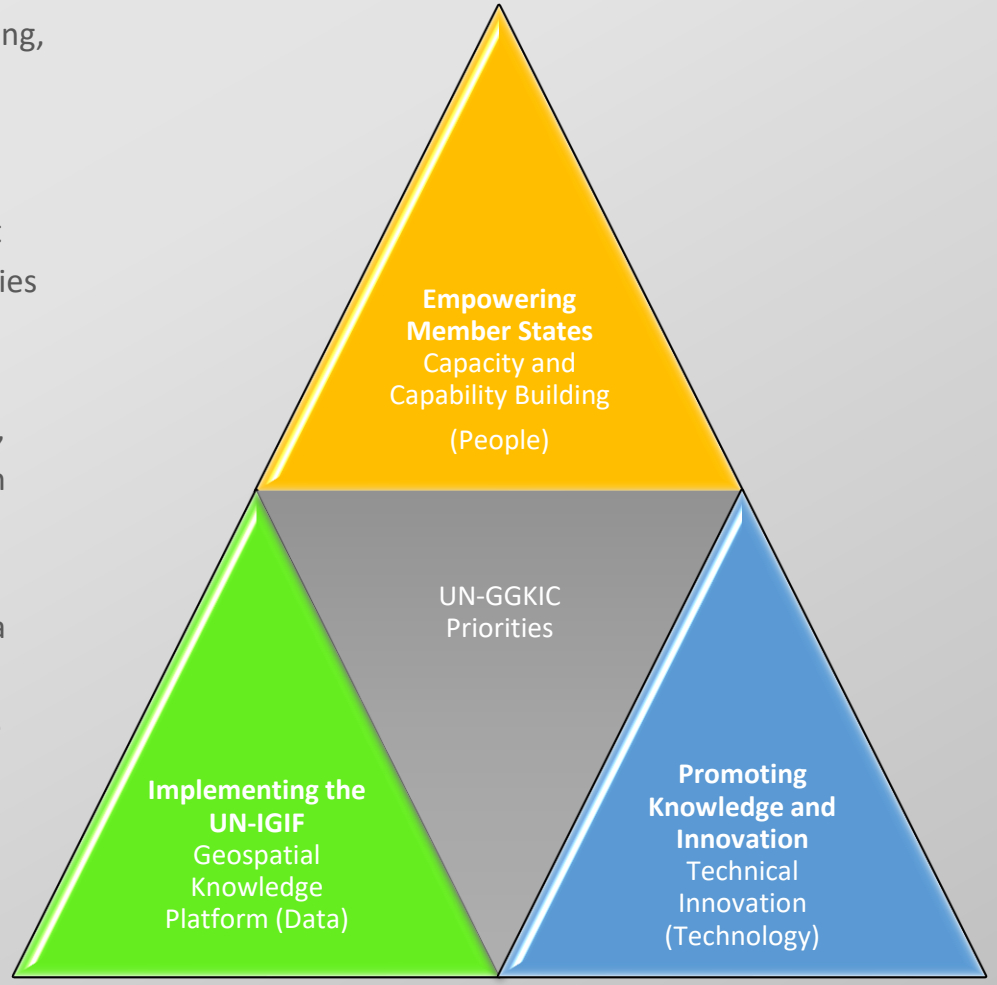
1. **Developing leadership and collaboration:** Support countries in advancing, integrating, managing, and using geospatial information resources, leveraging the UN-IGIF for social, economic, and environmental benefits.

2. **Addressing National Priorities:** Accelerate the achievement of national to global development goals by developing strategies, policies, and national geospatial information capacity in countries through the implementation and knowledge-sharing of the UN-IGIF.

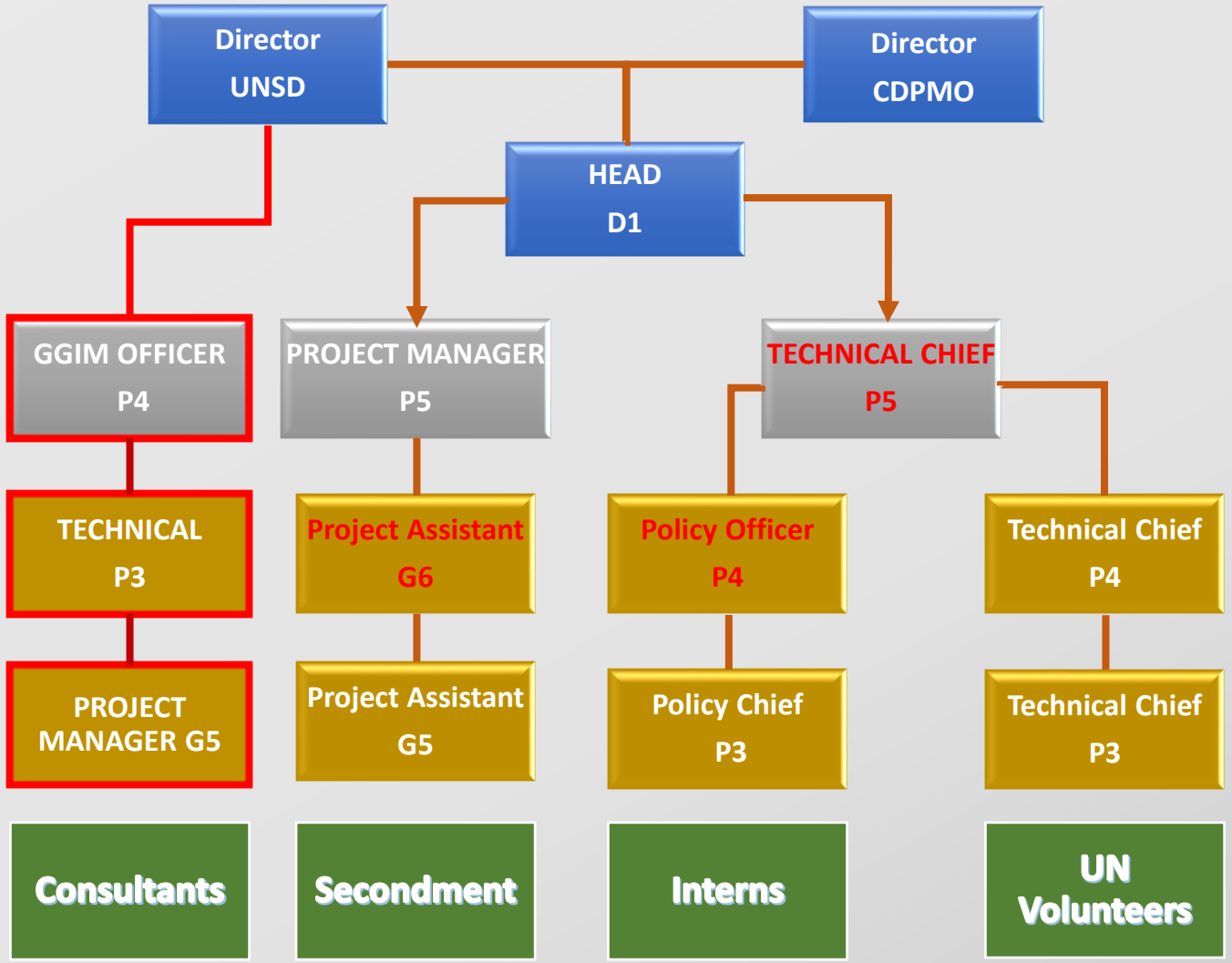
3. **Progressing Geospatial Knowledge:** Enhance the country-level implementation of the UN-IGIF, including resources and stakeholder relationships, for efficient and effective collaboration with partners, and to maximize impacts for countries.

4. **Enabling Innovation and Technological Advancement:** Deploy country-led and integrated data hubs to assist countries in developing geospatial resources and innovative capacities for sub-national, national, regional, and global monitoring and reporting on national priorities and the SDGs within reliable, secure, and scalable platforms.

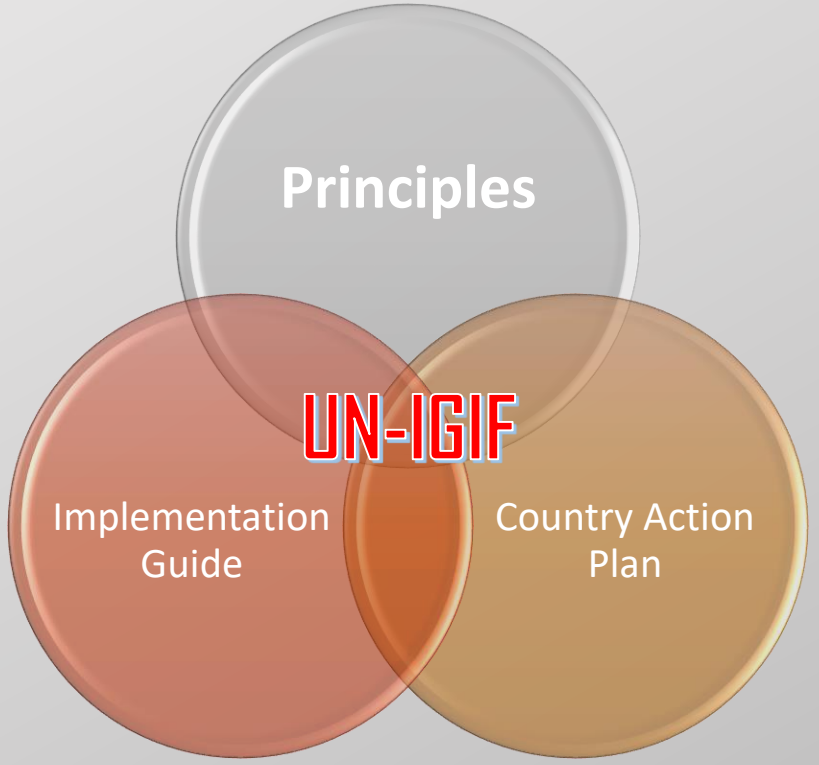
5. **Enhancing Communication and Awareness:** Promote the value and usefulness of geospatial information and share geospatial knowledge and innovation for the benefit of society, the economy, and the environment.



Man-Power and Work Force



UN-GGIM High Level Group on UN-IGIF



9 Strategic Pathways

Governance

Technology

People

Knowledge ▪ Decisions ▪ Development

Governance and Institutions

Policy and Legal

Financial

Data

Innovation

Standards

Partnerships

Capacity and Education

Communication and Engagement

Value ▪ Applications ▪ Technology

Users ▪ Citizens ▪ Access

Society ▪ Economy ▪ Environment

Anchored by 9 Strategic Pathways, the IGIF is a mechanism for articulating and demonstrating national leadership in geospatial information, and the capacity to take positive steps. The Strategic Pathways 'implement' the IGIF through actions.

II. Workplan Review (+ Comm Strategy)

HLG Priority	Merged UN-IGIF Activities List	GGKIC - Objective	GGKIC - IA / Planned activity	GGKIC Responsible
10	**Geospatial Leadership Training** - Develop and implement geospatial leadership training programs for policymakers in developing countries, in collaboration with UN-GGIM regional committees and partners (ESCAP, ECA, ESCWA, ECLAC), to support the creation and execution of Country-level Action Plans. Training will cover senior leadership, management, change management, financial management, data quality, and project management.		Convene expert consultation and meeting to design and scope leadership development courses for regional committees (1Q) ▪ Convene the 2025 meeting of the Centre's International Advisory Committee together with one-day expert consultation on leadership development activities for regional committees (2Q) ▪ Contribute and facilitate the attendance up to 10 geospatial information management leaders and senior executives from Member States to key events Support and contribute to the eleventh plenary meeting of UN-GGIM: Africa including a joint workshop and/or regional leadership development dialogue and exchange (4Q) ▪ Support and contribute to the twelfth plenary meeting of UN-GGIM: Americas including a joint workshop and/or regional leadership development dialogue and exchange (4Q) ▪ Support and contribute to the fourteenth plenary meeting of UN-GGIM-AP including a joint workshop or expert meeting and/or regional leadership development dialogue and exchange (4Q) Planned Activity 2026: Convene a leadership activity/course for the benefits of regional committees	R
11	**Country-level Action Plan Development** - Develop and implement a comprehensive process for Country-level Action Plan development to support Member States in achieving their priorities. This activity includes engaging with communities, working groups, and thematic groups; conducting workshops with briefing and follow-up feedback sessions to guide tasks; creating tailored support materials to aid implementation; and establishing a Virtual Technical Advisory Group of experts to provide region-specific technical assistance.	Objective 2: Addressing National Priorities by accelerating the achievement of national to global development goals by developing strategies, policies, and national geospatial information capacity in Member States through the implementation and knowledge-sharing of the UN-IGIF	IA 2.2 Support the development of national geospatial information management strategies by respective Member States in at least 10 Member States that support their national development priorities by the end of the fifth year (2023 – 2027) Planned Activity: Convene consultations with Member States and regional committees (virtual and in-person) and hire consultants to conceptualize and scope regional or sub-regional activities to support Member States identify and articulate their operational requirements to strengthen national geospatial information management leveraging the UN-IGIF (1Q) Planned Activity: Assemble a Resource Team, possibly drawing from the UNSD and SDG Data Alliance resource team, to provide technical support to Member States to prepare and develop their country-level Action Plan leveraging the UN-IGIF	R
12	**Capacity Building Workshops** - Organize Expert Group Meetings and capacity-building workshops, focusing on the needs of developing countries, to support UN-IGIF implementation and promote awareness and adoption at the subregional level.	Obj 3 Progressing Geospatial Knowledge by enhancing the country-level implementation of the UN-IGIF, including resources and stakeholder relationships, for efficient and effective collaboration with partners, and to maximize impacts for Member States.	IA 3.2 Regular webinars on Geospatial knowledge and innovations for stakeholders, totaling twenty-four webinars by 2030 Planned Activity 25: Deliver the 2025 quarterly webinar series to enhance sharing of geospatial knowledge, innovation, experiences and good	R

HLG Priority	Merged UN-IGIF Activities List	GGKIC - Objective	GGKIC - IA / Planned activity	GGKIC Responsible
25	**Self-Assessment** - Encourage member states to self assess on aligning geospatial activities within UN-IGIF and reflect as main implementation indicator.			R
26	**UN-IGIF Surveys** -Develop and implement annual collaborative surveys to assess the status, progress, and gaps in the global and regional implementation of the UN-IGIF, aligning findings with the priorities of the Regional Committees. Analyze the survey results to provide insights into the evolving use, progress, and changes in UN-IGIF implementation among Member States, supporting data-driven strategies for advancing its adoption.		Obj 3 Planned Activity 25: Evaluate global progress and implementation of Country-level Action plan including through global survey conducted in cooperation with regional committees	R
6	**UN-GGKIC Work Plan** - UN GGKIC develop and implement their work plan, and reports progress to the IAC and also to HLG as accountable body for IGIF before reporting to the CoE.	N/A	N/A	**R**

HLG Priority	Merged UN-IGIF Activities List	GGKIC - Objective	GGKIC - IA / Planned activity	GGKIC Responsible
15	**UN-IGIF Training for Trainers** - Conduct Training for Trainers programs to build a pool of experts capable of delivering effective UN-IGIF training, fostering an exchange of experiences and supporting knowledge sharing across implementing bodies.			R
16	**Knowledge Hub -** Create a Knowledge hub and work towards: - An integrated geospatial dashboard application for SDG indicators, from data creation to presenting outcome embracing dynamic and agile environment. - Compile best practices from UN-IGIF activities and develop the integrated e-learning modules.	Obj 5: Enhancing communication and awareness by promoting the value and usefulness of geospatial information and share geospatial knowledge and innovation for the benefit of society, the economy, and the environment.	Obj 5 Planned 25 activity: Maintain and improve the web-presence and including functionalities to "manage the knowledge" (1Q – 4Q) Obj 4 Planned 25 activity: Coordinate the design and delivery of guidance, procedures and training, in coordination with HLG-IGIF and partners including the SDG Data Alliance, to enable Member States to develop and deploy integrated 'system of systems' data/information hubs for measuring progress and reporting against national, regional and global development agendas (1Q-4Q) IA3.1 Coordinated, comprehensive and curated content on peer-to-peer sharing of geospatial knowledge, innovation, experiences and good practices in the activities of the Centre Peer-to-peer sharing and exchange	R
18	**Technical Assistance** - Facilitate global access to resources, funding, data, and computing platforms to support assistance projects. This includes the creation of a pilot focused on application-oriented activities as decision making support tools in achieving national and sub-national UN-IGIF and work towards capacity-building initiatives, and training programs to support national mapping activities, geodetic infrastructure, and integration of geospatial and statistical information.	Objective 2: Addressing National Priorities by accelerating the achievement of national to global development goals by developing strategies, policies, and national geospatial information capacity in Member States through the implementation and knowledge-sharing of the UN-IGIF	Planned Activity 2025:Provide technical support to six3 Member States, together with the resource team, in their 'country-led, country owned' approach to develop their UN-IGIF Country-level Action Plan (3Q-4Q) Planned Activity 2026: Continue the technical support to six Member States in their country-led approach to develop their UN-IGIF Country-level Action Plan (1Q-4Q) (the 2025 group) Planned Activity 2026: Technical support to six4 more Member States in their country-led approach to develop their UN-IGIF Country-level Action Plan (3Q-4Q)	R
20	**Country-level Action Plan Implementation** - Support the SDG Data Alliance in guiding and assisting Member States, particularly Small Island Developing States, in implementing UN-IGIF Country-level Action Plans, while maintaining momentum through a dedicated resource team and a pool of international experts for ongoing bilateral support.			R

HLG Priority	Merged UN-IGIF Activities List	GGKIC - Objective	GGKIC - IA / Planned activity	GGKIC Responsible
1	**Awareness and Promotion** - Develop and execute communications to promote key UN-IGIF activities and work products—such as translated documents, the Sustainable Funding Guide, the UN-IGIF Global Survey, the Decision Maker Brochure, case studies, webinars, and events—through LinkedIn, social media channels, email communications, and the UN-GGIM websites. This should include quarterly informational brochures and targeted updates to support countries in implementing and understanding the UN-IGIF, ensuring widespread awareness and engagement.	OB-5: Enhancing communication and awareness by promoting the value and usefulness of geospatial information and share geospatial knowledge and innovation for the benefit of society, the economy, and the environment.	IA 5.3 Strategic communication messaging, materials and resources on integrated geospatial information for government agencies, universities and high schools Planned activity: List and discuss with the International Advisory Committee recommended attendance to global and regional events organized by stakeholders to improve the visibility and raise awareness of the significance of integrated geospatial information management, knowledge and innovations for 2026 (4Q)	R
2	**UN-IGIF Communications Materials** - Develop, collect, and publish collaborative UN-IGIF and communications materials, in partnership with the UN-GGKIC, thematic and functional groups, UN agencies, and organizations like OGC, ISO, and IHO, and Member States, to raise awareness and understanding of the UN-IGIF as a tool for national development. These materials—such as decision-maker brochures, sector-specific one-pagers, and case studies—should emphasize the value of the UN-IGIF both within and beyond the geospatial domain and support thematic initiatives, side events, and regional committee engagements.	OB-5: Enhancing communication and awareness by promoting the value and usefulness of geospatial information and share geospatial knowledge and innovation for the benefit of society, the economy, and the environment.	Planned Activity 2025: Implement the communication strategy (3Q – 4Q) Planned Activity 2026: Implement the communication plan (1Q – 4Q) including the development of a knowledge repository with good practices, use cases, videos, resources and databases on successful implementation of enhancing geospatial information management	R
3	**UN-IGIF Communication Toolkit** - Develop and publish a UN-IGIF Communications Toolkit to support Member States in developing their own communication plans.			R
4	**Communications Strategy** - Develop, update, and implement a UN-IGIF Communication Strategy, aligned with UN Centers and HLG Working Groups that targets key stakeholder groups, decision makers and implementers.	OB-5: Enhancing communication and awareness by promoting the value and usefulness of geospatial information and share geospatial knowledge and innovation for the benefit of society, the economy, and the environment.	Planned Activity: Develop a communication strategy and plan with materials, resources, social media and web-presence, and modality to manage and disseminate the knowledge for Member States to enhance the significance of integrated geospatial information at the country-level (2Q – 3Q)	R

Key Performance Indicators in 2025

Strategic Goals	1Q	2Q	3Q	4Q	Note
Developing Leadership and Collaboration	• 5th Plenary Meeting HLG-IGIF, Jeddah, KSA • **Sub-Regional (Southern AFR) IGIF WS, Mozambique**	Leadership & Global Forum, Melbourne, Australia	• 15th Session UUN-GGIM & 6th HLG-IGIF Plenary • GGIM-AP Plenary, Korea	• **GGIM AFR Plenary & Sub-Regional (West AFR) IGIF WS, Ghana** • **GGIM America Plenary & Sub-Regional (Caribbean) IGIF WS, Panama** • GeoNOW Week (Leadership)	
Addressing National Priorities	Sub-Regional (Southern AFR) IGIF WS, Mozambique		**Sub-Regional (Central Asia) IGIF WS, Kazakhstan**	• **Sub-Regional (West AFR) IGIF WS, Ghana** • **Sub-Regional (Caribbean) IGIF WS, Panama**	
Progressing Geospatial Knowledge		• Geospatial Reading Week, Deqing • Intl WS on GIS Tech and Application, Deqing	• GGIM-AP Plenary, Korea • Geo-Empower Webinar	• GeoNOW Week • Geo-Empower Webinar	
Enabling Innovation and Technology	UN-GGKIC Think Tanks, Deqing	Spatiotemporal Intelligence in GIS & Land Governance Seminar, Deqing	Geo-Empower Webinar	• GeoNOW Week • Geo-Empower Webinar • UAV Training	
Enhancing Communication and Awareness		• FIG Conference, Australia • IAC for UN-GGKIC 2025, Online	• UN HLPF 2025, New York, USA • Launch UN-IGIF Assessment Survey	• GeoNOW Week • Geo-Empower Webinar • Train for Trainers	

2025 Key Activities and Future Plan

1. HLG-IGIF (5th Plenary), Expanded Bureau of the Committee of Experts, Jeddah, KSA, February 2025
2. Southern Africa UN-IGIF Workshop, Mozambique, March 2025
3. Leadership Training & Geospatial Forum, Melbourne, April 2025
4. FIG Conference 2025, Brisbane, April 2025
5. IAC meeting, May & August 2025
6. UN-GGIM AP EB Meeting & Seminar on EO for Land Survey, Deqing, June 2025
7. Smart Geoportal for UN-IGIF implementation, June 2025
8. UN-GGIM (15th Session) , HLG-IGIF (6th Plenary), New York, August 2025
9. Geo-Empower Webinar Series: Marine Ecosystem, Heritage Preservation, July-September 2025
10. UN-GGIM Sub-Regional WS on IGIF, Kazakhstan, September 2025
11. GeoNOW 2025, Deqing, October 2025
12. UN-GGIM AFR, Sub-Regional (west) WS, Ghana, October 2025
13. UAV application Training, December 2025

Organizing Sub-regional Activities

- **Expert Consultation and Meeting on Enhancing Geospatial Information Management Arrangements**
- **Accelerating the Implementation of the Sustainable Development Goals Sub-regional Workshop on United Nations Integrated Geospatial Information Framework (UN-IGIF) for Southern Africa**

UN-GGIM Regional Plenary Meetings

- UN-GGIM: AP EB Meeting, 3-4 June 2025, Deqing, China
- UN-GGIM: AP Plenary Meeting, 24-26 September, Seoul, ROK
- UN-GGIM: Americas Meeting, 3-4 November 2025, Santiago, Chile
- UN-GGIM: AFR Plenary Meeting, November 2025, Accra, Ghana

Challenges Identified

1. Lack of (or insufficient) **governance** - legal/policy frameworks for interagency collaboration
2. Unconvinced **buy-in** from highest-level decision makers (cabinet)
3. Lack of qualified GIS professionals, enhancing **geospatial skillset** (#1 for BDI)
4. Lack of data **standard and infrastructure**
5. Sustaining **financial** investment either from national or private sectors in geospatial programs
6. Limited global and regional **coordination** and participation for policy alignment
7. Sustaining **institutional memory** – free from political changes in the country (related to #1)

Progress toward Communication Strategy

- **Objective:**
  - Ensure coherent, timely, and audience-specific communication to **build stakeholder confidence and institutional visibility**
- **Target Audiences:**
  - Internal stakeholders (departments, leadership)
  - External partners and the public (via LinkedIn)
- **Strategic Tools & Channels:**
  - **Social Media Activity** – Official posts aligned with live program milestones
  - **Internal Briefing Notes** – Concise one-pagers circulated immediately post-event
  - **Meeting Minutes** – Rapid documentation to maintain alignment
  - **HLG-Comm WG Consultations** – Periodic sessions for guidance, validation, and knowledge-sharing

Operational Rollout & Governance

Stage	Activity	Mechanism
Planning	Define core messages & identify milestones	Concept note & calendar
Activation	Real-time LinkedIn updates as events unfold	Pre-drafted content, approvals
Internal Sync	Issue 1-pager departmental briefing notes for internal use only	Internal brief templates
Follow-up	Capture meeting outcomes in minutes	Sharepoint, version control
Review & Refine	UN-GGIM web posting	After event knowledge-sharing

Decision makers brochure

Advancing National Sustainable Development with Geospatial Information

FROM DATA TO INSIGHT

In today's rapidly changing world, government leaders are responsible for addressing society's most critical and urgent issues, including climate change, land management, and public health delivery. They must make quick decisions on complex issues, with outcomes that profoundly impact the lives of citizens. Effective decision-making in this context requires not just data, but actionable insights. Governments must capture and integrate data, add context and visualization, and deliver it in real-time to decision-makers to achieve the actionable insights needed for sustainable social, economic, and environmental development.

THE POWER OF LOCATION DATA

At the heart of today's most urgent challenges lies a common factor: **location.** Whether it's managing natural hazards, optimizing agricultural output, or planning urban development—understanding the location context is crucial.

This geospatial information provides a unique perspective through which government leaders can view and address national priorities and issues. It can take a range of different forms from foundational data such as geological, topographic, cadastral, and hydrographic mapping that provides the critical contextual information, on top of which dynamic near-real-time data such as that provided from satellites, mobile phones, and sensors can be overlaid and understood.

By integrating geospatial information with statistical and other data from across sectors, such as public health, energy, transportation, and more, leaders can gain a comprehensive understanding of the challenges and opportunities facing their communities.

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THE KEY ROLE OF THE UNITED NATIONS INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK (UN-IGIF)

Recognizing that countries need support in advancing the full potential of geospatial information and its application, the United Nations and the World Bank developed the Integrated Geospatial Information Framework (UN-IGIF). This framework provides a comprehensive and adaptable guide for enhancing geospatial capabilities, which is crucial for addressing national sustainable development priorities.

The UN-IGIF provides tools to support effective land administration, statistical data management, disaster management, climate resilience, digital transformation, and more. It is built upon and implemented through nine strategic pathways across three key areas: Governance, Technology, and People.

GOVERNANCE- Assisting countries to develop robust geospatial policies, governance structures, legal frameworks, and approaches to identify sustainable funding mechanisms to enable effective geospatial information management.

TECHNOLOGY - Promoting the use of common standards, interoperable systems, and innovative technologies to facilitate seamless data exchange across sectors and organizations, enhancing the efficiency and accuracy of data integration, analysis, and dissemination.

PEOPLE - Emphasizing the importance of engaging stakeholders and building the skills and expertise of the workforce, the UN-IGIF provides resources and guidance for effective communication and collaboration with local communities, government agencies, and other stakeholders who have a critical role in managing geospatial data in the collective pursuit of meeting national development goals.

KEY BENEFITS OF UN-IGIF

The nine strategic pathways provide crucial support for national development. By adopting the UN-IGIF, countries can leverage the full potential of geospatial data, facilitate informed decision-making, foster collaboration, and drive sustainable growth. The benefits of UN-IGIF are wide-ranging, enhancing government, the economy, and society:

Government: Improves policy and decision making, planning, innovation, service delivery, emergency response, and efficiencies across multiple agencies. Enhances management of land and water resources, infrastructure, climate, healthcare, transportation, security, and national development, leading to more effective, resilient, and responsive governance.

Economy: Boosts productivity, fosters innovative new products and services, improves transport and logistics, enables efficient resource management, drives economic growth, sparks innovation and technology advancements, and enhances profits, leading to a dynamic and thriving economy.

Society: Improves access to services, public health outcomes, standards of living, community development, environmental conservation, public safety, education, disaster preparedness, and social equity, fostering a more inclusive and resilient society.

Leaders are encouraged to leverage this powerful tool to navigate national challenges and steer their countries toward a more prosperous future.

A STRONG RETURN ON INVESTMENT

Investing in geospatial information and infrastructure is an economically wise decision that has significant direct financial benefits. Many studies, including those by the World Bank, have shown significant returns on investment (ROI) of up to 250%. For example, improved disaster preparedness helps to minimize recovery costs, while effective land administration can boost revenues.

Investing in geospatial information and infrastructure also provides many indirect benefits. It enhances the efficiency and effectiveness of citizen services, optimizes resource allocation and deployment, resulting in raised living standards. It improves environmental impact measurement and modeling, and enhances the sustainable use and management of natural resources. When both direct and indirect economic benefits are considered, the UK Public Sector Geospatial Agreement demonstrated a very impressive 8:1 benefit-cost ratio.

However, without planned and coordinated data capture and sharing, geospatial data can become more costly for governments. Various departments and ministries might already be collecting location data for cadastral, defence, land administration, emergency managment, or disaster response. If geospatial data and supporting technologies are not effectively shared between departments, it can lead to cost duplication and the inefficient use of resources.

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The nine strategic pathways of the UN-IGIF

GETTING STARTED

To help you get started, the UN-IGIF provides guidance to build and strengthen geospatial information management through three key components:

1. Overarching Strategy: Sets the context for why geospatial information management is critical for sustainable social, economic, and environmental development.

2. Implementation Guide: Offers detailed guidance, standards, and recommended actions to implement the UN-IGIF to strengthen national geospatial capabilities.

3. Country Level Action Plan: Includes a recommended process and resource materials to help countries evaluate their current situation and develop specific plans tailored to their national priorities.

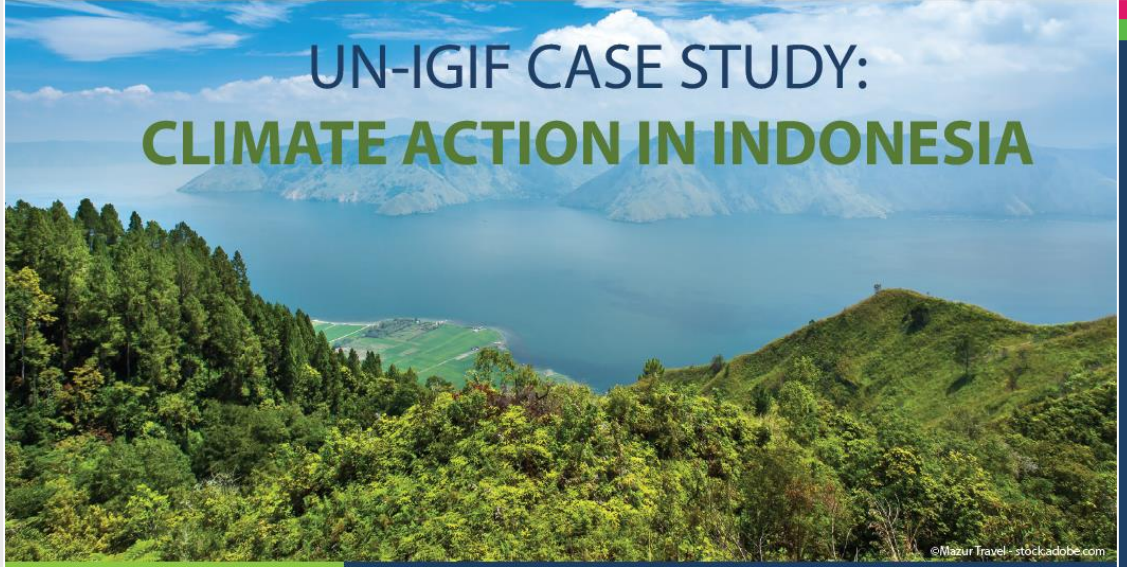
The early stages require minimal investment and enable the creation of a costed action plan or budget to focus the allocation of future resources. A costed action plan can also attract additional support and funding from philanthropic organizations, the World Bank, and other groups that help nations build geospatial capabilities to support digital transformation, disaster response, land administration, climate resilience, and other critical priorities. Given the broad benefits of the UN-IGIF, implementation can be funded as part of almost any national development program.

Many UN Member States are already using the UN-IGIF to strengthen geospatial capabilities and support national development, making it a tried-and tested approach.

To get started, visit **https://ggim.un.org/ UN-IGIF/** to review the UN-IGIF materials and determine how your country can start the process today. By utilizing the UN-IGIF to improve geospatial information management and infrastructure, you will be better positioned to deliver the change your nation needs to improve people's lives, protect the environment for future generations, and deliver sustainable economic prosperity for all.

Case studies

UN-IGIF CASE STUDY:
CLIMATE ACTION IN INDONESIA



CASE HIGHLIGHTS

SECTOR

- Climate Action/Environment
- Forestry and Other Land Use (FOLU)

CHALLENGE

Indonesia faced significant challenges effectively monitoring and managing its vast and diverse landscapes to achieve emission reduction committments set under the Paris Agreement.

SOLUTION

The FOLU Net Sink 2030 Initiative set forth an ambitious vision for transformative climate action, with geospatial information and infrastructure recognized as key components of its success. To support this vision, the United Nations Integrated Geospatial Information Framework (UN-IGIF) provided a comprehensive, structured approach to geospatial information management, serving as the foundation for data-driven forestry, land use, and emissions management.

IGIF PATHWAYS UTILIZED

All nine Strategic Pathways were used to support climate action.

OVERVIEW

Indonesia's rapid economic growth throughout the late 20th Century drove extensive logging, conversion of forests to agricultural land, and peatland drainage. These activities released large amounts of greenhouse gases, especially carbon dioxide and methane, significantly contributing to climate change issues.

Recognizing the urgent need to address these issues, Indonesia signed the Paris Agreement and committed to ambitious voluntary Nationally Determined Contributions (NDCs) to reduce its greenhouse gas emissions and combat climate change. Indonesia's NDC included a commitment to reduce greenhouse gas emissions 29% by 2030, with the potential to increase this to 41% with international support.

Indonesia struggled to meet the NDC targets due to strong economic pressures, deforestation, and land-use changes. Transformative change was needed in the FOLU sector to deliver the NDC. The FOLU Net Sink 2030 Initiative, launched in 2022, laid out a path to transform the sector into a net carbon sink by 2030, focused on reducing deforestation, promoting reforestation, and implementing key sustainable land management practices. This bold new initiative empowered Indonesia to set more ambitious targets, updating their NDC in 2022 to reduce emissions 31.89% by 2030 and 43.20% with international support.

CHALLENGE

Indonesia's diverse landscapes span over 17,000 islands and include tropical rainforests, peatlands, mountain ranges, vast coastal ecosystems, and grasslands. Effectively monitoring and managing these varied environments presents significant challenges to achieving emission reduction goals.

Despite efforts to curb deforestation, illegal logging and forest and peatland conversion for agriculture remained significant issues, hindering emission reduction efforts. Indonesia's peatlands and grasslands are also prone to frequent fires, which increase emissions. Coastal degradation in Indonesia, such as the destruction of mangroves and coral reefs also increase emissions and further complicate the achievement of reduction goals.

Historically, environmental data was siloed across ministries, local governments, and institutions, making it difficult to track emissions, monitor land-use changes, and enforce policies effectively. Without a unified approach, decision-making lacked precision, and opportunities for targeted interventions were often missed. Strengthened cross-sector coordination, improved data-sharing policies, and collaborative financing were needed to successfully support the initiative. Innovative new data sources, geospatial technologies, and targeted training were also needed to provide comprehensive and integrated data to more effectively monitor and manage these diverse landscapes to achieve emission reduction goals.

UN-IGIF INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK

Enabling a Better Future with Location Data

SOLUTION

Geospatial information was pivotal to Indonesia's FOLU Net Sink 2030 Initiative, with the nine strategic pathways of the UN-IGIF providing a strong framework to enhance geospatial information management and infrastructure—ensuring the program's ambitious goals were both achievable and sustainable.

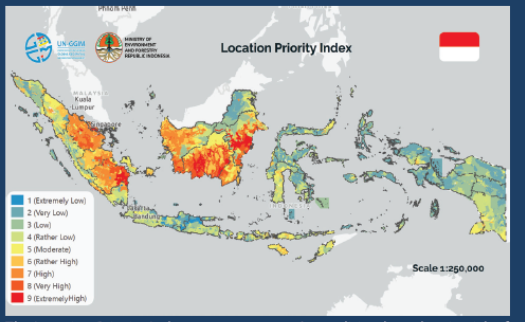
The **Governance and Institutions Pathway** outlined the formal arrangements that clearly defined geospatial information management roles and responsibilities, and the processes for coordination and management within the Ministry of Forestry and across various agencies, local governments, forest management units, and academic institutions. The **Policy and Legal Pathway** established new geospatial regulations and guidelines in 2021 to strengthen the administration and use of geospatial data to support Indonesia's climate action strategies. The **Finance Pathway** ensured the long-term sustainability of geospatial information for the FOLU Initiative, securing funding from national, state, and regional budgets, alongside private sector investments, international grants via government to government schema with the Norweigian Ministry of Climate and Environment, and funding from partners like the United Nations Development Program and the World Bank. These efforts ensured the robust governance essential for success.

The Ministry of Forestry implemented the **Data and Innovations Pathways** to advance innovative new data sources and geospatial technologies like remote sensing and the SIGAP geospatial information system. The SIGAP system enabled the collection, processing, integration, and visualization of spatial data, incorporating 103 thematic datasets from 35 geospatial data producers. These innovations facilitated precise analyses like the Location Priority Index and Environmental Services Index, improved monitoring, and enabled targeted mitigation strategies such as improved forest conservation, peatland restoration, and low-impact logging. The Ministry leveraged the **Standards Pathway** to issue national decrees and geospatial standards to enhance data consistency, interoperability, and accessibility. Together, these pathways empowered data-driven analysis and informed decision-making, driving innovative advancements in forestry and environmental management.

The **Communications and Engagement Pathway** enabled an inclusive stakeholder engagement strategy, including government, international organizations, academia, industry, and communities at all levels—from local to global. The **Partnership Pathway** strengthened collaboration for data-sharing, finance, and capacity-building efforts, ensuring sustainable geospatial support for Indonesia's climate initiatives. Through the **Capacity and Education Pathway**, spatial analysis training was conducted at 22 Environmental Governance Units and multiple provinces, providing the knowledge and skills to apply remote sensing and GIS technologies in support of the FOLU Initiative, including through collaboration with the Centre for Climate Risk and Opportunity Management at IPB University.

The nine strategic pathways of the UN-IGIF provided a solid foundation for Indonesia's FOLU Net Sink 2030 Initiative, strengthening geospatial management, collaboration, and sustainable climate action.

Staff of local Environmental Governance Units receive spatial analysis training.



The Location Priority Index assesses an area's condition based on its risk of deforestation and forest fires and its potential for carbon sequestration. By integrating these factors, the index helps determine which areas should be prioritized for mitigation actions.

PROJECT BENEFITS

The UN-IGIF's comprehensive approach to climate action served as the foundation for Indonesia's FOLU Net Sink 2030 Initiative, enhancing geospatial information management, strengthening partnerships and collaboration, and enabling targeted environmental interventions. As a result, the project has achieved many critical benefits essential for its long-term success, including:

1. Improved inter-ministerial cooperation and coordination, especially between the Ministry of Forestry, the Geospatial Information Agency (BIG), and other relevant stakeholders involved in climate governance and land use planning.
2. Enhanced data integration and interoperability across agencies, allowing for real-time monitoring and evidence-based policy decisions.
3. Strengthened national capacity in geospatial data governance, including improved standards, metadata management, and data sharing practices.
4. Increased transparency and accountability in carbon accounting and deforestation monitoring, supporting national and international reporting obligations.
5. Better alignment of local, regional, and national efforts in forest and land use programs through spatially-enabled planning tools.
6. Empowerment of subnational governments and communities through access to accurate, up-to-date geospatial data for localized climate action.
7. Optimization of land-based mitigation strategies through spatial analysis, enabling identification of priority areas for conservation, restoration, and sustainable land use.
8. Strengthened international collaboration and donor engagement by demonstrating measurable, data-driven progress towards Indonesia's climate commitments.

Quick Reference Guide

Quick Reference Guide: UN-IGIF Nine Strategic Pathways

	DESCRIPTION AND OBJECTIVE	ELEMENTS OF THE STRATEGIC PATHWAY	POTENTIAL TOOLS AND METHODOLOGIES	KEY ACTIONS TO STRENGTHEN GEOSPATIAL INFORMATION MANAGEMENT	OUTCOMES	RELATED PATHWAYS	POSSIBLE DELIVERABLES
1 Governance and Institutions	**DESCRIPTION:** Establishes the leadership, governance model, institutional arrangements and a clear value proposition to strengthen multi-disciplinary and multisectoral participation in, and a commitment to, achieving the UN-IGIF. **OBJECTIVE:** Attain political endorsement, strengthen institutional mandates and build a cooperative data sharing environment through a shared vision and understanding of the value of the UN-IGIF, and the roles and responsibilities to achieve the vision.	• Governance Model • Leadership • Value Proposition • Instiutional Arrangements	• Steering Committee Charter Example • Strategic Alignment Template • Guidance for Vision, Mission, and Goal Statements • Country-level Action Plan Template • Monitoring and Evaluation Template • Success Indicators Example	**FORMING LEADERSHIP:** Governing Body, Geospatial Coordination Unit(s), Specialist Working Groups **ESTABLISHING ACCOUNTABILITY:** Governance Model **DEFINING VALUE:** Strategic Alignment Study, Value Proposition Statement **SETTING DIRECTION:** Geospatial Information Management Strategy, Change Strategy **CREATING A PLAN OF ACTION:** Country-level Action Plan **TRACKING SUCCESS:** Monitoring and Evaluation, Success Indicators	✓ Efficient Planning and Coordination ✓ Strengthened Leadership, Institutional Mandates and Political Buy-in ✓ Cooperative Data Sharing ✓ Valued Geospatial Information Management	2 3 4 5 9	Governance Model Strategic Alignment Study Value Proposition Statement Geospatial Information Management Strategy Change Strategy Success Indicators
2 Policy and Legal	**DESCRIPTION:** Establishes a robust policy and legal framework that is essential for instituting effective, efficient and secure management and exchange of geospatial information-nationally and sub-nationally. **OBJECTIVE:** Address current policy and legal issues by improving the policies and laws associated with, and having an impact on, geospatial information management. This is achieved by proactively monitoring the policy and legal environment, including mandating responsibility for the production of data, and keeping abreast of issues and challenges arising from the evolving, innovative and creative use of geospatial information and emerging technologies.	• Legislation • Policies, Norms and Guides • Data Protection, Licensing and Sharing • Governance and Accountability	• Common Legal Terms • Review and Assessment • Policy Review Questions • Use Case Example • Gap Analysis Matrix • Policy and Legal Instrument • Accessing Fitness for Purpose for Policy • Managing Intellectual Property Rights • Addressing Sensitive Information	**PROVIDING LEADERSHIP:** Policy and Legal Working Group **ASSESSING NEEDS:** Policy and Legal Review, Needs Assesment and GAP Analysis **ADDRESSING OPPORTUNITIES:** Policy and Legal Framework, Data Sharing and Dissemination, Licensing Geospatial Information **FUTURE PROOFING:** Future-Proofing **ADDRESSING COHERENCE:** Intellectual Property Rights, Privacy and Data Protection, Liability Concerns, Sensitive Information **DELIVERING COMPLIANCE**: Impact Assessment, Compliance Strategy	✓ Sound and Enabling Policy and Legal Environment ✓ Maximizes Utility of Geospatial Information with Safeguards ✓ Effective/Secure Management, Integration, and Application ✓ Responsive to Changes and Progress ✓ Mandates and Responsibilities Clarified ✓ Strengthen Governance and Accountability	1 9	Review and Assessment Gaps and Opportunities Analysis Policy and Legal Framework Documented Intellectual Property Rights/Data Protections Impact Assessment Compliance Strategy Methodology for Modernization
3 Financial	**DESCRIPTION**: Establishes the business model, develops financial partnerships, and identifies the investment needs and means of financing for delivering integrated geospatial information management, as well as recognizing the milestones that will achieve and maintain momentum, and realize benefits. **OBJECTIVE:** Achieve an understanding of the financial plans required to establish and maintain integrated geospatial information management, as well as the longer-term investment program that enables government to respond to evolving societal, environmental and economic demands for geospatial data.	• Business Model • Opportunities • Investment • Benefits Realization	• UN-IGIF 'Current and Desired Future Dual Response' Survey • UN-IGIF Baseline Survey • World Bank/FAO SDI Diagnostic Tool • Business Model Canvas • Developing a Business Model • Geospatial Program Budget • Socio-Economic Impact Assessment Approach • Components of a Business Case • Developing an Annual Budget • Financing Models	**SETTING DIRECTION:** Financial Governance, Financial Accountability **SITUATIONAL ASSESSMENT:** Current Operating Environment, Current Business Model, Data Policy, Public Good **FINANCIAL PLAN:** Desired Business Model, Financial Planning **CASE FOR INVESTMENT:** Socio-Economic Impact Assessment, Business Case, Investment Appraisal, Annual Budget **SOURCES OF FUNDING:** Sources of Funding, Strategic Opportunities **DERIVING VALUE:** Benefits Realization, Communicate Benefits	✓ Investment Plan with Funding Sources, Obligations, and Estimates for Future Years ✓ New Funding Initiatives Identified to Meet National Geospatial Information Priorities ✓ Financial Accounting of Costs Associated with all Aspects of National Geospatial Information Program ✓ Socio-Economic Value of Geospatial Information is Defined and Aligned to Financial Plan to Realize Benefits	1 2 7 9	Financial Arrangement and Management Plan Situational Assessment Strategic Opportunities Assessment Desired Business Model Financial Plan Socio-Economic Impact Assessment Investment Appraisal Annual Budget
4 Data	**DESCRIPTION**: Establishes a geospatial data framework and custodianship guidelines for best practice collection and management of integrated geospatial information that is appropriate to ensure cross sector and multidisciplinary collaboration. **OBJECTIVE**: Enable data custodians to meet their data management, sharing and reuse obligations to government and the user community through the execution of well-defined data supply chains for organizing, planning, acquiring, aggregating, integrating, curating, analyzing, publishing and archiving geospatial information.	• Data Themes • Custodianship, Acquisition and Management • Data Supply Chains • Data Curation and Delivery	• Fundamental Geospatial Data Themes • Data Theme Description • Data Inventory Questionnaire • Dataset Profile Template • Gap Analysis Matrix • Data Theme Road Map Template • Data Custodianship Policy Principles • Data Governance Roles • Data Management Plan Elements • Metadata Creation Checklist • Data Release Guidelines • Guidance for Geodetic Infrastructure • Global Statistical Geospatial Framework • Guidance on Geo-Statistical Integration	**GETTING ORGANIZED:** Data Framework, Data Inventory, Dataset Profiles **PLANNING FOR THE FUTURE:** Data Gap Analysis, Data Theme Roadmap **CAPTURING AND ACQUIRING DATA:** Data Capture, Data Acquisition Program **MANAGING DATA SUSTAINABILITY:** Custodianship Policy, Data Governance, Data Management, Maintained Metadata, Data Release, Storage/Retrieval System **MAINTAINING ACCURATE POSITIONING:** Maintained Geodetic Reference Frame **INTEGRATING DATA:** Geospatial/Statistical Integration, Geocoding and Aggregation, Data Supply Chains, Data Interoperability	✓ Increased Range and Scope of Authoritative Data ✓ A Critical Mass of Centrally Coordinated Data ✓ Cost Reduction Through Productivity Improvements ✓ Ability to Monitor and Measure Progress Towards Achieving SDGs	1 2 5 6 7 9	Data Framework Data Inventory Dataset Profiles Data Gap Analysis Data Theme Roadmap Custodianship Policy Data Governance and Management Data Storage/Retrieval Process Maintained Geodetic Infrastructure Data Interoperability Metadata Profiles

The Quick Reference Guide provides a high-level overview of the UN-IGIF Nine Strategic Pathways—along with potential tools, actions, outcomes, and deliverables. Refer to the UN-IGIF Implementation Guide for complete details.

III. GeoNOW 2025

Geospatial Innovation for Global Action

- "'GeoNow' gathering is both a recognition of the critical role that geospatial information... and a call for the urgent and decisive actions our world needs 'Now'!", *Mr. Navid Hanif, 2024*
- Annual UN event aligned with UN-GGIM forums
  - supporting global events: 2026, 2028
  - Home-Based events: 2025, 2027, 2029 in Deqing

Core aims

- Showcase real-world UN-IGIF applications
- Accelerate progress toward the Sustainable Development Goals (SDGs)
- Promote accessibility, inclusivity, knowledge exchange, and collaboration

GeoNow 2025 Objectives

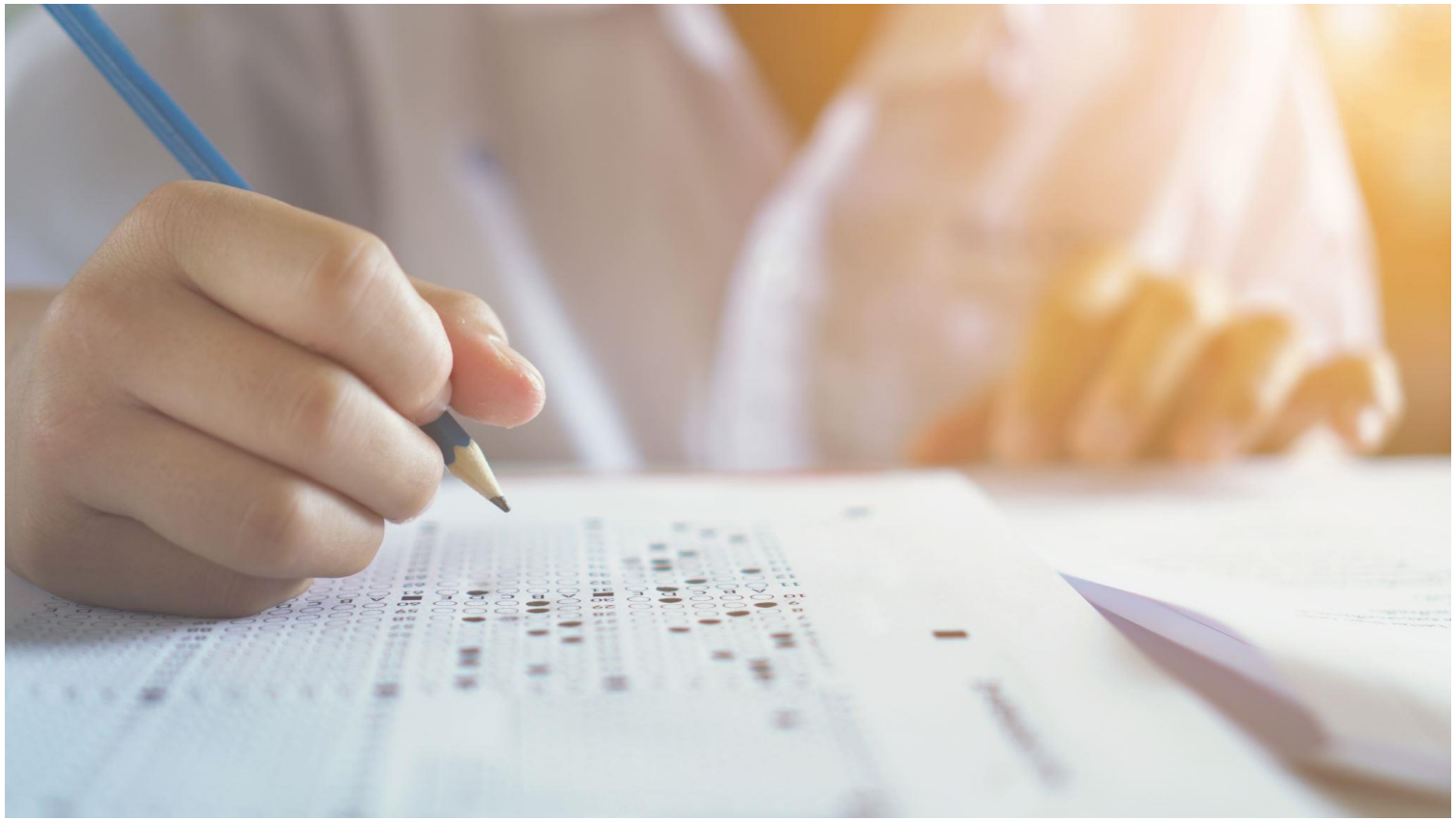
1. Develop international geospatial leadership for global benefits
2. Raise awareness for UN-IGIF & the “country-led” approach
3. Showcase geospatial solutions from local to global levels
4. Inspire innovation across nations & industries
5. Strengthen geospatial capability, especially in developing countries
6. Foster collaboration between governments, academia, industry & NGOs

Expected Outcome

- **Knowledge Exchange**: Share practical experiences and talent resources for UN-IGIF implementation.
- **Youth Engagement**: Empower future leaders through the Global Digital Compact and Future Generations Declaration.
- **Cross-Sector Integration**: Advance geospatial technologies across urban planning, agriculture, energy, and transport etc.
- **SDG Monitoring**: Demonstrate measurable outcomes for environmental protection, health, equality, and sustainable cities.
- **Capacity Development**: Deliver training and seminars to strengthen technical skills.
- **Innovation & Adoption**: Promote scalable geospatial solutions via case studies and experience sharing.
- **International Cooperation**: Build a global network among governments, industry, academia, and NGOs.
- **Public Engagement**: Boost awareness through exhibitions and outreach, encouraging broader SDG support.

IV. Capacity Development, Implementing UN-IGIF

- Conduct four expert consultation and sub-regional workshops in 2025
- Contribute at four GGIM-regional plenary meetings
- Conduct three in-person geospatial trainings/seminars
- Conduct Geo-Empower Webinar Series
  - Marine and coastal ecosystems
  - Cultural heritage preservation



Global UN-IGIF Assessment Survey

UNIGIF Annual Survey - Need and Importance

1. UN-IGIF directly supports the achievement of the SDGs, critical enabler for monitoring progress and guiding national priorities.
2. Success of UN-IGIF implementation depends on ability to understand progress, identify challenges, and share solutions.
3. Annual survey provides the foundation for this understanding, enabling more effective coordination, targeted support, and accelerated progress toward shared objectives of strengthening geospatial information capabilities worldwide.

Global/GGIM

- Regular assessment of progress toward UN-IGIF objectives
- Regular reporting opportunities to member states and partners
- Advocacy efforts by demonstrating implementation progress and impact

UN-GGKIC

- Helps UNGGKIC plans/assess progress against established goals/Actions
- Identifies challenges for interventions, successful practices to be scaled
- Supports internal planning and resource allocation decisions

Member States

- Offers countries benchmarking opportunities against regional and global peers
- Identifies areas where national strategies may need adjustment or additional focus
- Provides evidence for support request/capacity buildings/needs

Knowledge Sharing and Learning	Accountability and Transparency	Strategic Planning Resource Mobilization	Impact Measurement Communication
Best Practice Identification	Progress Monitoring	Gap Analysis	Outcome Documentation
Peer Learning Networks	Stakeholder Engagement	Resource Optimization	Success Story Development

UNIGIF Annual Survey - Activities& timeline

1. Design and Development

- Finalize survey and questionnaire design
- Establish data collection and analysis protocols
- Develop online survey
- Create multi-language versions

2. Stakeholder Engagement

- Conduct outreach to national focal points
- Establish partnerships with regional committees
- Organize regional briefing sessions
- Develop COMM materials and guidance documents

3. Pilot Implementation

- Launch pilot survey (selected countries)
- Test data collection processes and analytical frameworks
- Gather feedback on survey design and implementation approach
- Refine methodology based on pilot

4. Full Launch and Initial Analysis

- Launch first annual survey globally
- Implement a comprehensive outreach and follow-up strategy
- Conduct initial data analysis and report
- Present findings at the 16th GGIM session and relevant international forums/UNGGKIC Workplan

Jul – Aug 2025 → **Sep – Oct 2025** → **Nov – Dec 2025** → **Jan– Apr 2026**

UNIGIF Annual Survey - Content Structure

Part 1: Profiling/awareness

- Country/Region
- One focal person per country
- Data aggregation to region level
- Areas of IGIF Usage
- IGIF adoption/awareness

Part 2: IGIF Implementation

Level of implementation

Initial

- 9 strategic pathways implementation
- Progress/Challenges
- Support & Resources

Advanced

- CAP development
- Challenges /Needs
- Collaboration

Part 3: Outcomes/benefits

- Benefits Realized
- SDG alignment
- Future priorities
- Cooperation

Cooperation & Stakeholder Engagement

UNIGIF Annual Survey - Comparative Analysis and Knowledge Products

- Incorporate lessons learned
- Refine questions and analytical approaches
- Develop enhanced visualization and reporting
- Create automated analysis tools

Conduct a comprehensive analysis of year-over-year trends

Develop specialized reports for different stakeholder groups

Create interactive dashboards for progress monitoring

Produce case studies on significant progress or innovative approaches

Cooperation & Stakeholder Engagement

Global Survey on the Use and Implementation of UN-IGIF

PDF Only

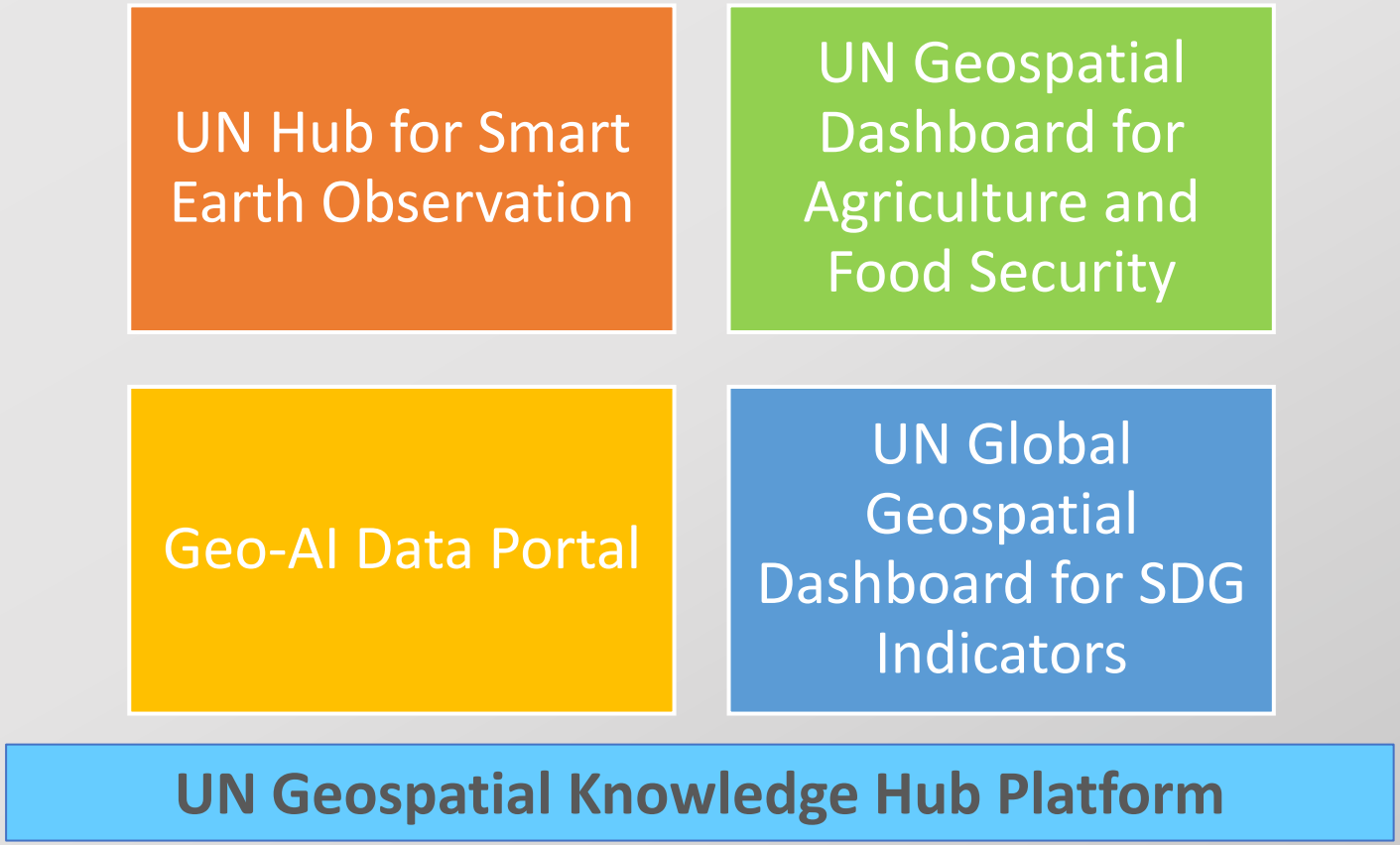
Design and Development

Stakeholder Engagement

Pilot Implementation

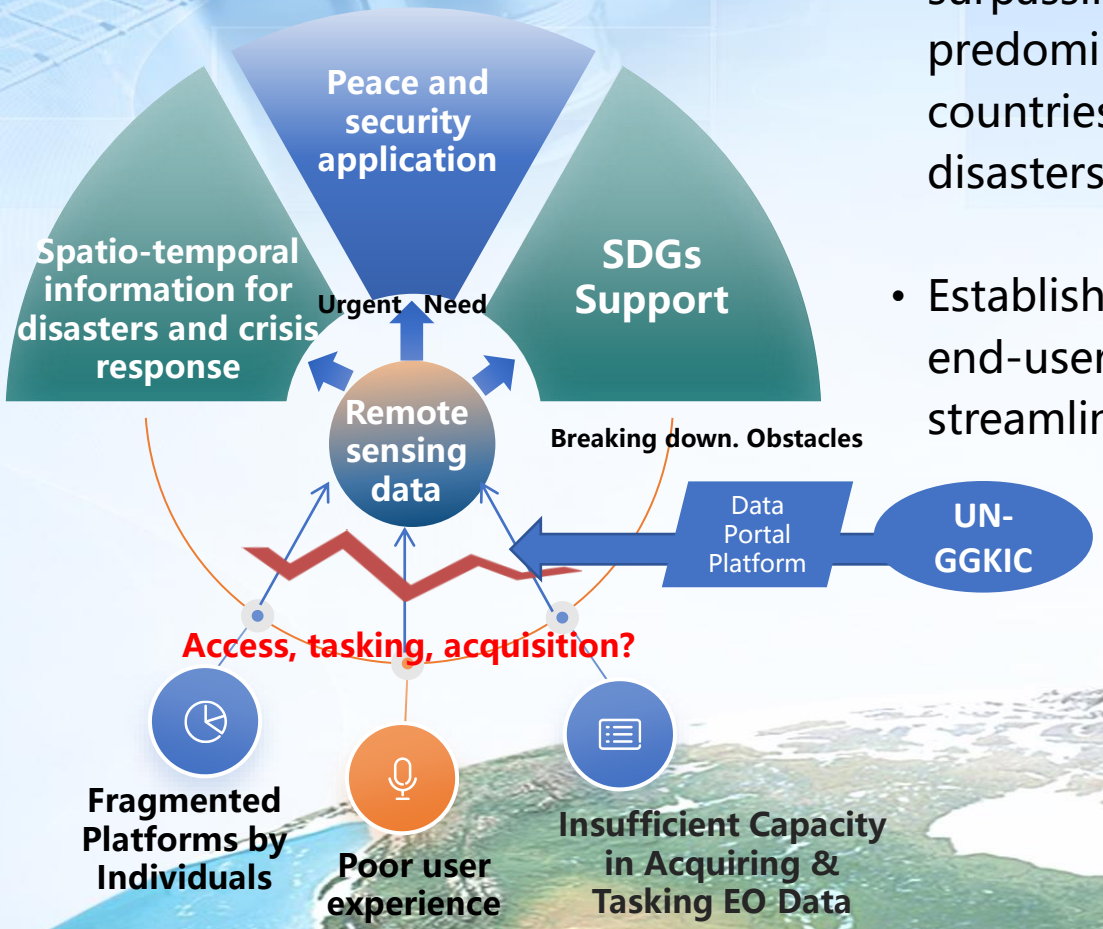
Full Launch and Initial Analysis

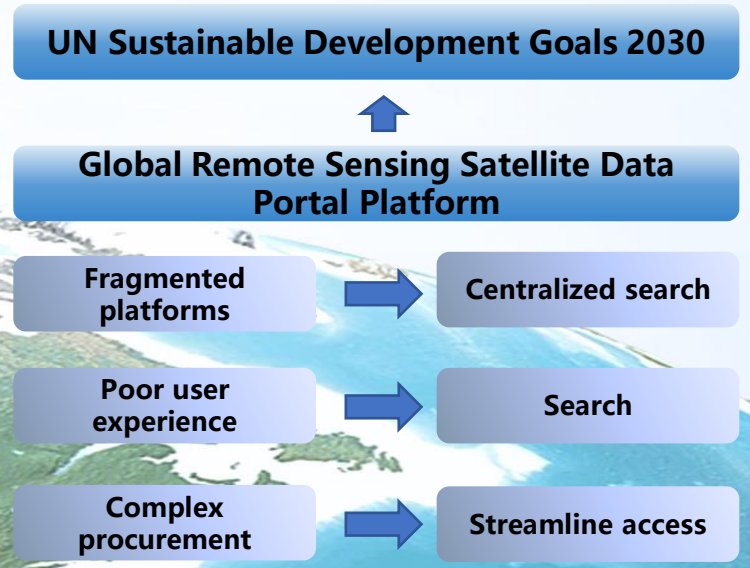
V. Knowledge Hub (proposed)



Global Remote Sensing Data Portal Platform

- The exponential surge in demand for Earth observation data is surpassing the capacity of fragmented, non-standardized, predominantly private satellite systems - hindering developing countries in their efforts to address climate change, manage disasters, and achieve the Sustainable Development Goals (SDGs).
- Establish a neutral, inclusive, and intuitive global portal to connect end-users with diverse remote sensing service providers, streamlining access and usability.





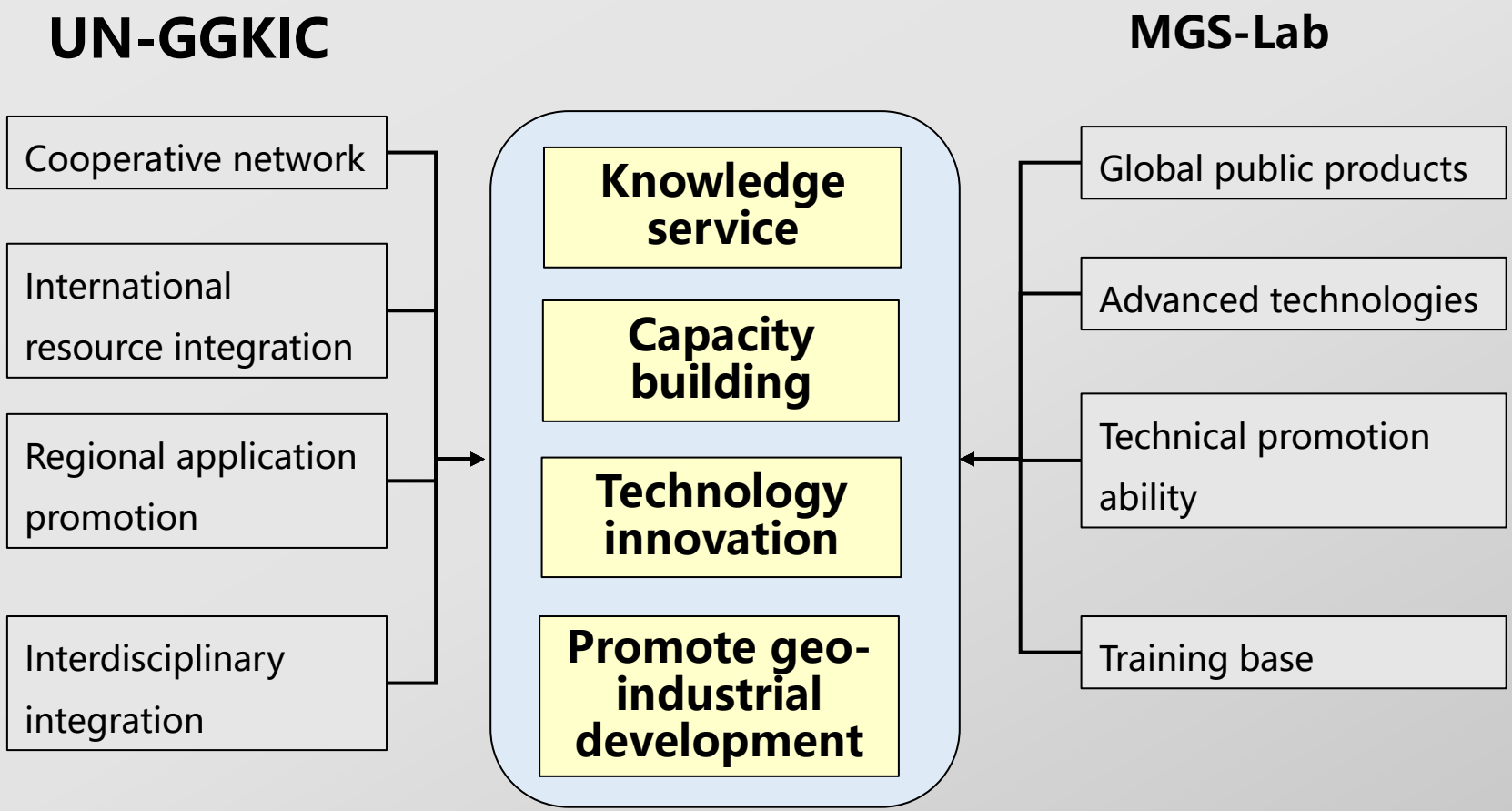
Global geospatial information products for SDGs:

A Project proposal

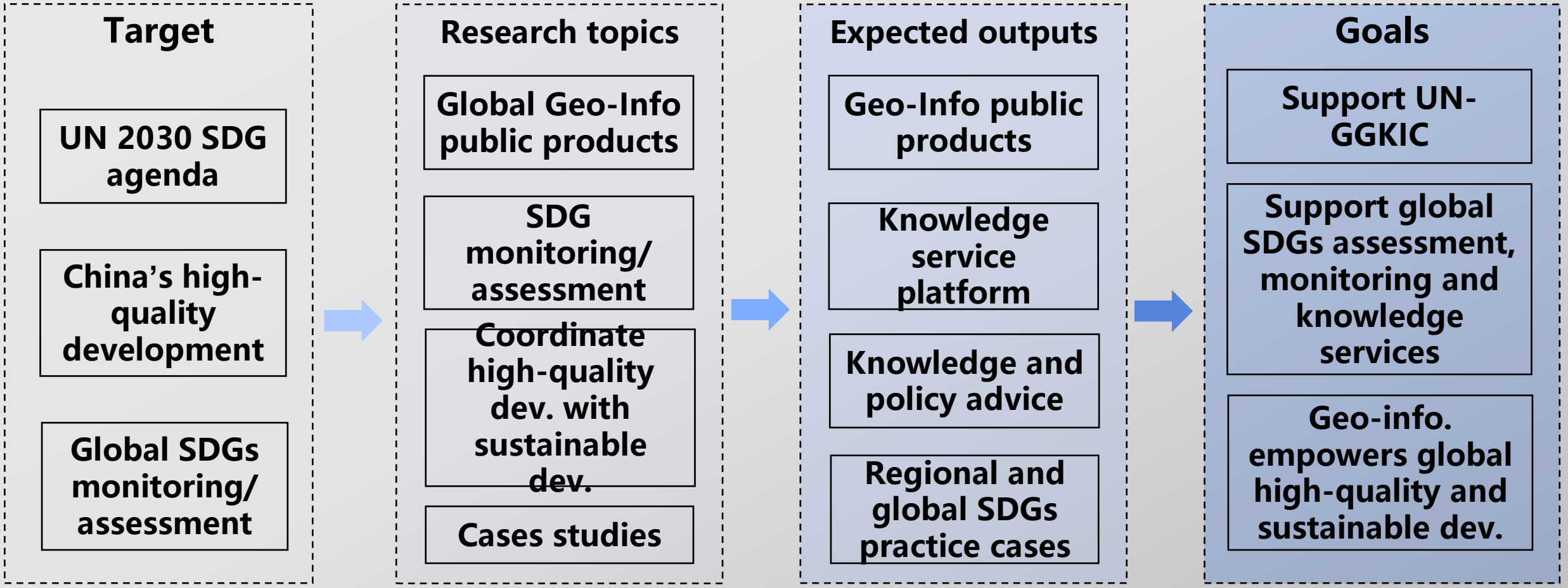
Global Sustainable Development Research Institute,
Moganshan Geospatial Information Laboratory

July 8, 2025

Global geospatial information products for SDGs



Global Sustainable Development Research Institute in MGS-Lab



V. Geo-Empower Webinar Series

1. Geospatial Application in Marine and Coastal Ecosystem Management
   - Mississippi State University, U.S.
   - King Mongkut's University of Technology, Thailand
   - Second Institute of Oceanography, Hangzhou, China
2. Cutting-edge geospatial tools and application in Cultural and Heritage Preservation
   - International Centre on Space Technologies for Natural and Cultural Heritage – UNESCO (HIST-XAB), Northwest University, Xi'an
3. Others

https://seymsp.com/resources/ecosystem-services-report/

What and how can IAC contribute?

What are the key thematic areas you think are most important for webinars (top 7 topics) ?

Who are the key partners the Centre should reach out to deliver or contribute the webinar ?

Beyond our Member States national geospatial offices, who should also be the target audience for the webinars, or for targeted webinar session?

VI. Scoping Geospatial Leadership Development

United Nations

UN-GGKIC

csdila

THE UNIVERSITY OF MELBOURNE

CASM

DBI

Bridging the Gaps: Translating Knowledge Into Action

- **Geospatial Knowledge in Practice**
  - *Application*: Real-world use of AI, GNSS, UAVs, remote sensing for productivity gains (e.g., agriculture, disaster risk reduction)
  - *Translation*: Aligning with frameworks like NSDI and UN-IGIF to shape national strategies
  - *Global Models*: Saudi Arabia's approach - academies, innovation hubs, and business centers
- **Ongoing Barriers**
  - *Data Quality*: Need for high-quality, open, project-specific geospatial data
  - *Responsible Technology Use*: AI/ML integration with practical impact, not buzzwords
  - *Privacy and Ethics*: Balancing regulation (e.g., Australia’s Privacy Act 2023) with tech evolution

Geospatial Leadership: Future Actions and Tasks

- **Current Landscape & Key Challenges**
  - *Governance Gaps*: Absence of legal/policy frameworks hinders interagency coordination
  - *Skills Shortage*: Lack of qualified GIS professionals; urgent need to enhance geospatial skillsets (e.g., vocational, training hubs)
  - *Infrastructure Deficits*: Inconsistent data standards, fragile national infrastructure
  - *Unsustainable Funding*: Limited financial commitment from public/private sectors
  - *Policy Uncertainty*: Limited global/regional policy alignment and lack of institutional memory
- **Why It Matters**
  - Enabling innovations in *smart agriculture*, *urban planning*, *climate response, AI front*
  - Supports cross-sector efficiency, transparency, and resilience

Path Forward-Future Action and Strategic Tasks

- **Institutional & Strategic Actions**
  - Strengthen governance with durable interagency legal/policy frameworks
  - Secure long-term financial commitments from national/private partners
  - Foster global alignment through regional policy forums and cross-border collaboration
- **People-Centered Tasks**
  - Launch vocational schools and certification programs to tackle skill shortages
  - Empower next-gen professionals via mentorship, strategic problem-solving, and leadership training
  - Modernize messaging - link geospatial solutions to real-world business and innovation outcome

Key Challenges & Learning Outcomes

- **Top Challenges**
  - Lack of strategic leadership & governance
  - Low awareness of emerging tech (GeoAI, Digital Twins)
  - Underuse in sustainability & SDG efforts
  - Weak analytical & decision-making capacity
  - Ethics & cybersecurity gaps
  - Widening skills gap & poor project execution
- **Essential Questions**
  - How can leaders integrate innovation, policy & governance?
  - What skills & tools are needed for future-ready leadership?
  - How do we link geospatial solutions to real-world outcomes?

- **Learning Focus**
  - Lead with strategy, ethics & innovation
  - Apply geospatial insights to SDGs & problem-solving
  - Upskill for tech fluency, project impact & secure data governance
- **Final Thought**
  - *Geospatial knowledge is no longer niche - it's essential. Leadership in this realm requires vision, action, and the courage to innovate beyond boundaries.*

Challenges for Leaders & Skills Gaps	Questions to Address Challenges and Skills Gap	Learning Outcomes
Lack of **Strategic Leadership** in Geospatial Initiatives	**Integration of innovation, policy, and governance** into geospatial decision-making Existence of **frameworks** for leading geospatial transformation **Transition** of geospatial professionals into leadership roles	Develop Strategic Geospatial Leadership Skills. Gain the ability to lead geospatial initiatives within organizations, integrating innovation, policy, and governance.
Limited Understanding of **Emerging Geospatial Trends**	**Latest trends** in GeoAI, Digital Twins, and machine-actionable data **Keep pace** with rapid advancements in technology **Role of cloud computing and AI** in next-generation geospatial applications	Understand Emerging Geospatial Trends Build knowledge on GeoAI, Digital Twins, on-demand geospatial ecosystems, and machine-actionable data.
Underestimation of **Geospatial Role** in Sustainability and SDGs	**Effective application** of geospatial intelligence to SDG initiatives key challenges in **leveraging geospatial data** for climate resilience and sustainability **Align** work with global sustainability goals	Strengthen the ability to align geospatial intelligence with sustainability initiatives. Develop actionable strategies to apply geospatial data in SDG-driven policies.

Challenges for Leaders & Skills Gaps	Questions to Address Challenges and Skills Gap	Learning Outcomes
Weak **Decision-Making and Analytical** Capabilities	Effective use of **geospatial insights** for real-world problem-solving **Methodologies** improve analytical capabilities vs complex geospatial challenges Role of leaders in ensuring data accuracy and **reliability in decision-making**	Enhance Decision-Making and Problem-Solving & Strengthen analytical skills to leverage geospatial insights in complex decision-making processes.
Limited Awareness of **Ethical and Cybersecurity** Issues	**Cybersecurity risks** impact geospatial intelligence **Ethical considerations** for addressing data governance Improve **transparency and trust** in geospatial data usage	Improve Ethical and Secure Data Management & Understand cybersecurity, ethics, and responsible geospatial data governance.
Challenges in Addressing the **Geospatial Skills Gap**	**Strategies** to strengthen national geospatial programs and public digital infrastructure **leadership training** for narrowing technical skills gap in the geospatial sector **Policies and initiatives** to support workforce development	Bridge the Geospatial Skills Gap & Learn how to apply technical and leadership skills to strengthen national geospatial programs and digital public infrastructure.
Lack of **Practical Implementation** of Geospatial Projects	Key steps in developing and executing **successful geospatial projects** Assurance of **work-based geospatial projects** deliver real-world impact Design **frameworks** to measure project success	Implement Practical Work-Based Projects & Develop and execute impactful projects that translate course learnings into real-world applications.

VII. Policy Brief

- Top 3 topics for ministerial engagement – 10 mins

Others

1. What strategic changes/realignment may require in the next two years?
2. Recommendations on having a pool of IGIF expert (ToR)?
3. Guidance on establishment of strategic partners across five UN-GGIM regions.
4. Accommodating rapidly advancing technology and innovation (e.g, low altitude economy, AI) beyond current mandate (IGIF)in support of UN operational support to member states?

VIII. Summary and Takeaway

1. Substantial progress has been made most priorities identified by HLG-IGIF
2. Comm Strategy: Working closely with Comm WG for further development
3. Transparent and timely reporting in work
4. Sharing materials ahead of meeting
5. Potential IAC + HLG meeting in the future
6. Global UN-IGIF Survey – continue working with capacity building WG
7. GeoNOW 2025 – UNSD discussion will be taken place for future role of GeoNOW, not UN-GGIM event, UN-GGKIC supported event.
8. Leadership training – develop scalable and specific target group (materials from 49 presentations, Melbourne event), current & future leaders
9. Geo-Empower Webinar – learn from others', develop specific content in coordination with GGIM regional committees.
10. Policy Brief – develop and made available in UN official languages

Thank You!

SIDSs from Indian Ocean and Atlantic and South China See

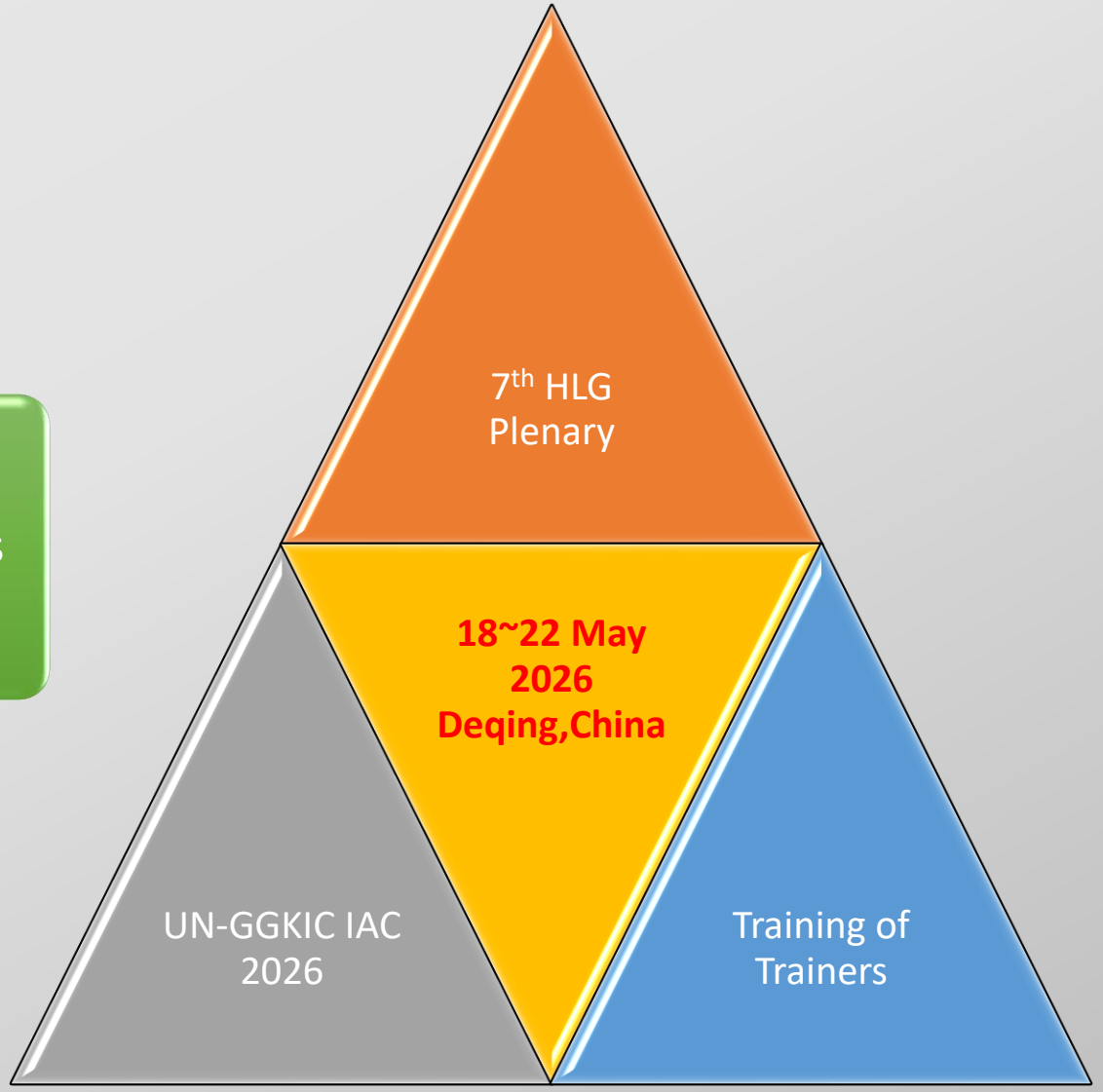
Caribbean Islands

Pacific Islands

International Forum and Workshop on Geospatial Knowledge for SIDSs

19—23 Jan.

Hainan, China



Developing leadership and collaboration

Addressing national priorities

Progressing geospatial knowledge

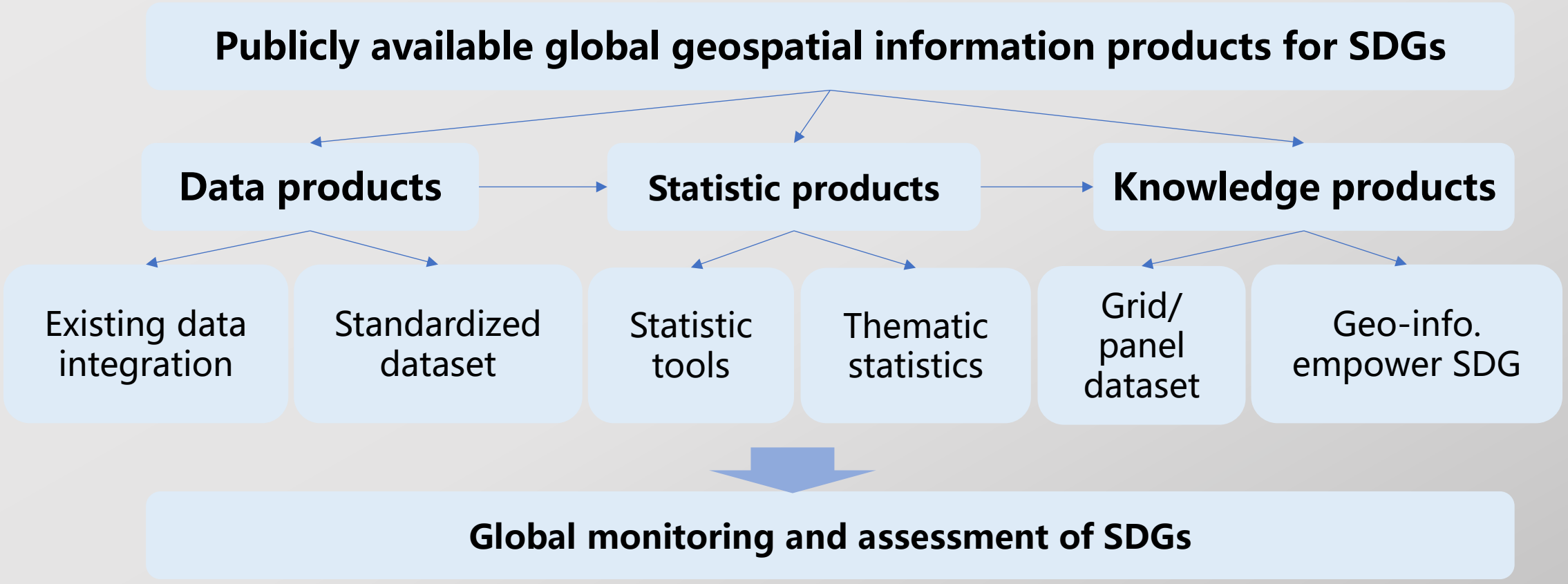
Enabling innovation and technology

Enhancing communication and awareness

Annual Work Plan for the period 2025 - 2027[1]

Objective: Developing Leadership and Collaboration by supporting Member States in advancing, integrating, managing, and using geospatial information resources, leveraging the United Nations Integrated Geospatial Information Framework for social, economic, and environmental benefits		
Outcome – OC 1 Improved national capacities and capabilities in promoting, managing and utilizing integrated geospatial information and resources for societal, economic and environmental benefits		
Indicators	*Baseline (2025)*	*Target (2030)*
IA 1.1 Partnership arrangements with all five UN-GGIM regional committees for capacity and capability development	Three partnership arrangements with all five UN-GGIM regional committees for capacity and capability development GGIM Africa (1Q, 4Q), GGIM AP (3Q), GGIM Americas (4Q)	Active partnership arrangements with UN-GGIM: Africa; UN-GGIM: Americas; UN-GGIM: Arab States; UN-GGIM-AP and UN-GGIM: Europe, with at least one yearly joint capacity and capability development activity
IA 1.2 Leadership development for geospatial information management leaders and senior executives from at least 25 Member States	Two geospatial leadership development activities for geospatial information management leaders and senior executives Melbourne, AUS (2Q), 15th GGIM (3Q), GeoNOW 2025 (4Q)	A geospatial leadership development activity annually for geospatial information management leaders and senior executives from developing countries, the location rotated through the regions
IA 1.3 Annual regional (or sub-regional) dialogues and workshops to foster peer-to-peer collaboration among national geospatial information management leaders.	Expert consultations, meetings, dialogues and workshops that foster peer-to-peer collaboration among national geospatial information leaders are ad-hoc based-on availability of resources GGIM Africa (1Q, 4Q), GGIM AP (3Q), GGIM Americas (4Q)	At least one regional (or sub-regional) expert consultations and meetings per annum incorporating dialogues and workshops that fostered peer-to-peer collaboration among national geospatial information management leaders, the location rotated through the regions
Planned activities		
2025	*2026*	*2027*
▪ Convene Fifth plenary meeting of the High-level Group of the Integrated Geospatial Information Framework and the meeting of the Bureau and its Expanded Bureau of the Committee of Experts (1Q) **Jeddah, KSA** ▪ Convene focus group expert consultation and meeting to understand, conceptualize and scope leadership	▪ Convene focus group expert consultation and meeting to understand, conceptualize and scope regional activity on the operationalization of UN-IGIF for resilient and sustainable development for SIDS (1Q). ▪ Convene the Seventh Plenary Meeting of the High-level Group of the Integrated Geospatial Information Framework (2Q)	▪ Convene focus group expert consultation and meeting to understand, conceptualize and scope regional activity on the operationalization of UN-IGIF for resilient and sustainable development (1Q) (LLDC) ▪ Convene the Eighth Plenary Meeting of the High-level Group of the Integrated Geospatial Information Framework (2Q)

Framework


Publicly available global geospatial information products for SDGs
Data products
Statistic products
Knowledge products
Existing data integration
Standardized dataset
Statistic tools
Thematic statistics
Grid/ panel dataset
Geo-info. empower SDG
Global monitoring and assessment of SDGs