# United Nations – Integrated Geospatial Information Framework (UN-IGIF)

Sustainable Funding Guide

Mohammad AlMabrook Kingdom of Saudi Arabia





Ms Odete Semiao Mozambique

# Introduction



| Ms Odete Semiao<br>Work Group Co-Lead            | Agência Nacional de Desenvolvimento Geo-Espacial, Mozambique                             |
|--|--|
| Eng Mohammad Almabrook<br>Work Group Co-Lead     | General Authority for Survey and Geospatial Information (GEOSA), Kingdom of Saudi Arabia |
| Ms Maroale Chauke<br>Previous Work Group Co-Lead | Department of Agriculture and Reform and Rural Development, South Africa                 |
| Ms Simone Lloyd<br>Previous Work Group Co-Lead   | Ministry of Economic Growth and Job Creation, Jamaica                                    |
| Mr Johannes Ven Geerstom<br>Member               | Nationaal Geografisch Instituut, Belgium   |
| Ms Emily Carlson<br>Member                       | U.S. Census Bureau, United States of America   |
| Dr Zaffar Sadiq Mohamed-Ghouse<br>Member         | General Authority for Survey and Geospatial Information (GEOSA), Kingdom of Saudi Arabia |
| Mr Andy Coote<br>Member                          | ConsultingWhere, United Kingdom  |
| Mr Alan Smart<br>Author                          | General Authority for Survey and Geospatial Information (GEOSA), Kingdom of Saudi Arabia |
| Mr Syed Nasrullah Zafarullah<br>Member           | General Authority for Survey and Geospatial Information (GEOSA), Kingdom of Saudi Arabia |
| Mr Nisar Ul Haq Syed<br>Member                   | General Authority for Survey and Geospatial Information (GEOSA), Kingdom of Saudi Arabia |
|  |  |



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# Sustainable Funding Work Group: Original Work Plan

# Goal 4 - Tasks [1] and [2]

| ( | Goal 4 – Mobilize Sustainable Funding   |   |  |   |   |   |  |                           |  |
|---|---|---|--|---|---|---|--|---------------------------|--|
|   | Tasks   | Strategic Objective   | Actors and/or Stakeholder  | Channels/ methods   | Responsible<br>HLG-IGIF Member                            | Resources Required  | Deliverable(s) - Current Status -<br>Completion Date   | Priority                  |  |
| 9 | 1] Help Member States to understand potential funding sources and modalities to foster and support implementation of the UN-IGIF. | To provide guidance on sustainable funding for countries to implement UN-IGIF, including feasible sources of funding from donors, bilateral and multi-lateral development assistance agencies, and philanthropic organizations. | Goal co-Leads; co-Chairs;<br>Member States; donors;<br>experts with knowledge of<br>the world of development<br>assistance/donor<br>support/funding. | Official direct communication and exchanges including letters and emails.                 | Jamaica, Belgium,<br>Private Sector,<br>Academic Network. | Persons with recent experience and knowledge of the work of development assistance and donor support. | Knowledge on feasible and available funding sources including terms and conditions.  |                           |  |
| ā | a) Identify and understand applicable bilateral and donor driven funding requirements and potential sources.                      | To identify feasible and sustainable funding sources, development assistance, and their requirements and terms/ conditions/applicability.   | Goal co-Leads; co-Chairs;<br>HLG-IGIF; known experts;<br>Member States.  | Direct communication and exchanges; virtual meetings.                                     | Jamaica, Belgium,<br>Private Sector,<br>Academic Network. | Knowledgeable professionals/benef iciaries/recipients of bilateral assistance or funding.             | UN-IGIF Funding Guide Section on donor funding sources and requirements  | July 2022 –<br>Aug 2024   |  |
| ā | a) Communicate possible donor funding sources and requirements to Member States.  | To develop and maintain a list of potential development assistance and donor organizations to inform on feasible funding sources.   | Member States.   | Direct communication and exchanges, events, virtual meetings, workshops, forums, website. | Jamaica, Belgium,<br>Private Sector,<br>Academic Network. | Professional communication expertise.   | <ol> <li>UN-IGIF Funding Guide<br/>Section on donor funding<br/>sources/requirements</li> <li>One-page flyer to help<br/>Member States<br/>communicate need for/<br/>benefits of donor funding</li> </ol>                          | June. 2023 -<br>Aug. 2024 |  |
| i | 2] Provide guidance towards<br>dentifying available resources within<br>Vlember States.   | To help Member States enlist human,<br>technical, and financial resources within<br>their country to develop and implement<br>Country-level Action Plans.   | Member States.   | Official direct communication and exchanges including letters and emails.                 | South Africa  | Knowledgeable colleagues from within and across government.   | Help to identify feasible and<br>available funding sources such as<br>in-country budgetary/allocation<br>modality.   |                           |  |
| ā | •   | To identify sustainable resources to operationalize the UN-IGIF.  | Member States.   | Official direct communication and exchanges including letters and emails.                 | South Africa  | Knowledgeable colleagues from within and across government.   | One-pager to help Member<br>States speak to internal<br>ministries/decision makers on<br>the importance, benefits, and<br>resources needed for UN-IGIF,<br>with the goal of helping them<br>identify needed internal<br>resources. | Dec. 2022 –<br>Aug. 2024  |  |



# Goal 4 - Task [3]

#### Goal 4 – Mobilize Sustainable Funding

| [3] Provide guidance to help identify funding and estimate budget/investment for UN-IGIF Country-level Action Plan implementation in developing countries. |   | To promote effective investment for nationally integrated geospatial information management arrangement.                            | Member States.  | Direct communications and exchanges including letters and emails, meetings, peerto-peer learning events, forums and workshops. | Kingdom of Saudi<br>Arabia. | Knowledgeable professionals in UN-IGIF countries functional/thematic groups.                            | Guidance and methodology for estimating investment/budget and identifying funding sources.  |                          |
|--|---|---|---|--|-----------------------------|---|---|--------------------------|
| а  | Identify items for dedicated funding (i.e., training, software, or hardware purchases), investment/ budget needs, and associated cost/benefits. | To sustain the implementation of country-level Action Plans.  | Member States; bilateral development/donor organizations. | Direct communication and exchanges on the guide, meetings, peer-to-peer learning events, forums and workshops.                 | Kingdom of Saudi<br>Arabia. | Knowledgeable professionals and countries getting UN-IGIF development assistance/donor support/funding. | Section of the UN-IGIF Funding<br>Guide that helps Member<br>States identify/target actions<br>and activities that need<br>funding internally or by<br>external sources/donors. | Aug. 2022 –<br>Dec. 2023 |
| а  | Collect, collate, and share best practices, cost/benefit analysis, benefits realized and positive impacts of investing in UN-IGIF.              | To effectively support and sustain efforts to operationalize the UN-IGIF at the country-level with key messages and good practices. | Goal co-Leads; co-Chairs;<br>HLG-IGIF; Member States.     | Direct communication and exchanges on the guide, meetings, peer-to-peer learning events, forums and workshops.                 | Kingdom of Saudi<br>Arabia. | One-page Flyer template.  | Section of UN-IGIF Funding<br>Guide that highlights best<br>practices, benefits and positive<br>impacts of investing and<br>cost/benefit analysis.                              | Nov. 2022 –<br>May. 2024 |





# Deliverable of the Work Plan

# Program of Work

- Work commenced in January 2023
- Task 1 Jamaica
- Task 2 South Africa
- Task 3 Saudi Arabia

Saudi Arabia took on Tasks 1 and 2 in December 2023



# Program of Work



1

#### Literature search



Search of academic data bases using search terms related to benefit cost methodologies.. Four searches refining search terms at each iteration. Additional search of grey literature for reports published by governments. 2

#### **Consultations**



Consultations with 10 representative member states /financial institution and donor.

Aim to establish status of investment requirements and investment criteria and procedures

3

# Draft funding guide for Task 3[a]



Section of funding guide that helps Member States identify/target actions that need funding internally or by external sources 4

# Draft funding guide for Task 3[b]



Section of the IGIF Funding Guide that highlights best practices, cost benefit analysis, benefits realised and positive impacts of investing. 4

# Draft funding guide for Task 1&2



Section of the IGIF Funding Guide that highlights best practices, cost benefit analysis, benefits realised and positive impacts of investing.



# Task [3] - Literature review

- Bibliographic data base search to capture academic literature for economic evaluation methodologies
- 165 reports reviewed
  - 40 highly relevant
  - 49 somewhat relevant
- Submitted to Work group September 2023.

| Referenc<br>e | ID                            | Title   | Author(s)  | Abstract  | Key points   | Relevance         |
|---------------|-------------------------------|---|--|---|--|-------------------|
| 1             | Craglia (2020)                | Manual of digital earth<br>(Chapter 9)  | Max Craglia & Katarzyna Pogorzelska A              | In this chapter, we approach the economic value of Digital Earth with a broad definition of economic value, i.e., the measure of benefits from goods or services to an economic agent and the trade-offs the agent makes in view of scarce resources. The concept of Digital Earth has several components: data, models, technology and infrastructure. We focus on Earth Observation (EO) data because this component has been undergoing the most dramatic change since the beginning of this century. We review the available recent studies to assess the value of EO/geospatial/open data and related infrastructures and identify three main sets of approaches focusing on the value of information, the economic approach to the value of EO to the economy from both macro- and microeconomic perspectives, and a third set that aims to maximize value through infrastructure and policy. We conclude that the economic value of Digital Earth critically depends on the perspective: the value for whom, what purpose, and when. This multiplicity is not a bad thing: it acknowledges that Digital Earth is a global concept in which everyone can recognize their viewpoint and collaborate with others to increase the common good.   | economic value of digital earth. It argues that value should be  — The value of information  — The value to the economy both macro and micro | 1 Highly relevant |
| 2             | Zwirowicz-Rutkowska<br>(2013) | Economic Dimension Of<br>Spatial Data<br>Infrastructure -<br>Overview Of<br>Assessment<br>Approaches And<br>Methods | Agrileszka Zwirowicz-Rutkowska                     | One of the special interest matter of a spatial data infrastructure (SDI) life-cycle is the economic dimension estimation, taking both complex and multi-faceted nature of infrastructures into consideration. The economic assessment, covering business nature of the spatial data infrastructure, plays an important role in the management tasks, including the set up and maintenance ones, but also the development of the SDI. There can be distinguished a few different approaches, which allow to assess the economic impact of the SDIs, and different valuation methods for the detailed assessment approach. The paper provides an overview what the economic dimension of the spatial data infrastructure means and how it can be measured. Furthermore, the analysis of the different spatial data infrastructure assessment approaches in relation to the economic dimension and indicators is presented.   | Tabulates SDI assessment approaches in relation to the aspects of the  | 1 Highly relevant |
| 3             | PwC (2016)                    | Study to examine the socioeconomic impact of Copernicus in the EU   | Pricewaterhouse Coopers for EU                     | Following the assessment of the Copernicus programme's impacts on the upstream segment, this study aims at characterising the benefits of and the barriers to the Earth Observation (EO) downstream and end user markets in Europe, in order to identify the levers that can support the development of economic activity exploiting Copernicus. After a review of the existing literature, the EO downstream market is characterised by using the US Landsat programme as a benchmark, by the role of large ICT players, the flourishing of platforms and cloud computing, and the overall Big Data trend. The European market is then investigated in detail for 8 promising value chains through consultation with a wide panel of stakeholders, to characterise the current impact of Copernicus according to economic, social, environmental and strategic perspectives, and to forecast the evolution or its contribution to growth and employment up to 2020. Based on the identified strengths, weaknesses, opportunities and threats, recommendations are provided globally and specifically for each value chain, to foster market uptake by European companies. Though still rather low, the penetration of Copernicus data in the EO market is expected to grow in the future, with substantial benefits for both intermediate and end users. | future potential for the program.  | 1 Highly relevant |
| 4             | Cet (2008)                    | Cost-benefit analysis of<br>the improvement of<br>spatial data infrastructure<br>Case study Croatia                 | Vlado Cell<br>Miodrag Roić<br>Siniša Mastelić Ivić | The thesis upon which this paper is based is existence of a spatial data infrastructure in a specific form, at a specific moment and at a specific level, which is directly linked to the level of technological and social development. Establishing a spatial data infrastructure actually means improving the existing infrastructure and can be defined as a number of activities aiming at easier access to and dissemination of the existing spatial data, and easier and more efficient use of them. This paper considers improvement of the spatial data infrastructure in Croatia as a public project of permanent character and of special social interest. Taking into consideration a four-year improvement period, a cost-benefit analysis was made, the financial indicators of which show that the best efficiency is accomplished if the project initial time period is shorter.  | I he paper includes details of cost and benefit assessment, and  | 1 Highly relevant |



# Findings from the literature review

- Different approaches to assessing the impact geospatial information management services, including:
  - Cost benefit analysis most common
  - Cost effectiveness analysis not applicable to impact assessment
  - Input- output analysis can give estimates of direct and indirect effects but can overestimate impacts as it assumes no resource constraints in the economy
  - Computable general equilibrium modelling useful for economy wide impacts
  - Multicriteria analysis is typically assessed on scoring, ranking and weighting the impacts rather than expressing the impact in monetary terms.



# Consultations

#### Purpose:

- To gather data on the current situation with financing activities under the UN-IGIF
- to learn of the current situation with respect to the use of geospatial information
- the investment requirements of governments
- the investment evaluation techniques that have been adopted for investment appraisal.

# Criteria for selection of Member States:

- Regional representation
- Availability of data and information
- Accessibility

#### Financial institutions:

- Multilateral development bank
- Donor organisation



# Consultations

| Region                | Country                        | Personnel  |
|-----------------------|--------------------------------|--|
| Americas              | Chile                          | Ms Raffaella Anilio Olguin, Geospatial Analyst at La Infrastructura de Datos Geospaciales de Chile (IDE-Chile) within the Ministerio de Bienes Nacionales.  Ms Pamela Castillo Retamales, Executive Secretary of the UN-GGIM Americas  |
| Europe                | Georgia                        | Ms Mari Khardziani, National Agency of Public Registry, Ministry of Justice of Georgia   |
| Africa                | Republic of Mozambique         | Ms Odete Semiäo, General Manager, National Geospatial Agency (NGA) (Agência Nacional de Desenvolvimento Geo-Espacial)  |
| Africa                | Republic of South Africa       | Ms Maroale Chauke, Director, National Spatial Information Framework Ms Karen Harrison, National Treasury   |
| Asia Pacific          | Fiji                           | Ms Meizyanne Hicks, Director of Geospatial Information Management, Ministry of Lands and Mineral Resources   |
| Western Asia          | United Arab Emirates           | H.E. Eng. Hamed Khamis Al Kaabi, Director General, UAE Federal Geographic Information Centre   |
| Western Asia          | Kingdom of Saudi Arabia        | Eng. Mohammad Almabrook, Executive Director for International Partnership and cooperation and Advisory, EGEOSA Eng. Khalid Abdullah AlMazroa, GEOSA, Assistant to President for Strategic Planning Dr Zaffar Sadiq Mohamed-Ghouse, Chief Advisor to H.E. The President, GEOSA Mr. Meshal Ali AlOtaibi, Finance, GEOSA Mr. Ali Abdullah AlZahrani, Finance, GEOSA Eng. Syed Nasrullah, Consultant, Office of the President, GEOSA |
| Asia                  | Republic of Indonesia          | Dr Antonius Wijanarto, Deputy Director General, Baden Informasi Geospatial, Deputy Chair for Geospatial Information, Chair of UN-GGIM Asia Pacific Dr Dheny Trie Wahyu Sampurno, Integrating Geospatial Information and Statistics Dr. Tandang Yuliadi Dwi Putra, Mapping Surveyor, Center for Thematic Mapping and Integration, Geospatial Information Agency of Indonesia (BIG), Indonesia                                     |
| Financial institution | World Bank<br>PVLIC Foundation | Ms Kathrine Kelm, Senior Land Administration Specialist. Global Land and Geospatial Unit   |
| Financial institution | World Bank<br>PVLIC Foundation | Mr Stephen Keppel, PVBLIC Foundation President   |





## Current situation



UNITED NATIONS
INTEGRATED GEOSPATIAL
INFORMATION FRAMEWORK

**FUNDING GUIDE** 

- Draft funding guide submitted to HLG Co-Chairs in July 2024
  - awaiting clearance
- Once cleared the septs of Task 4 of Goal 4 can commence.
- -The intended audience is any person or organization that is involved in developing geospatial information management strategies and Country Level Action Plans (CAPs) to support UN-IGIF implementation.

| 1 | Intro | duction   |
|---|-------|---|
| 2 | Fund  | ling sources  |
|   | 2.1   | Introduction  |
|   | 2.2   | Funding from internal country resources                           |
|   | 2.3   | External funding sources  |
|   | 2.4   | Conclusion  |
| 3 | Budg  | geting – estimating costs and benefits                            |
|   | 3.1   | Introduction  |
|   | 3.2   | Actions and activities for dedicated funding and investment needs |
|   | 3.3   | Aligning investment with sources of funding                       |
|   | 3.4   | Benefits from investing in UN-IGIF implementation                 |
|   | 3.5   | Summary   |
| 4 | Cost  | benefit analysis  |
|   | 4.1   | Socio -economic impact assessment                                 |
|   | 4.2   | The steps in undertaking a cost benefit analysis                  |
|   | 4.3   | Identify and forecast benefits and costs                          |
|   | 4.4   | Valuing benefits and costs  |
|   | 4.5   | Assessing the economic performance                                |
|   | 4.6   | Identify distribution and qualitative impacts                     |
|   | 4.7   | Assess risk and test sensitivities                                |
|   | 4.8   | Selecting the preferred option and reporting the key findings     |
| 5 | Valui | ing benefits and costs  |
|   | 5.1   | Introduction  |
|   | 5.2   | Approaches to estimating value of geospatial data                 |
|   | 5.3   | Valuing tangible (market) benefits                                |
|   | 5.4   | Valuing intangible (non-market) benefits                          |
|   | 5.5   | Conclusion  |

## Contents

- General arrangement:
  - Introduction
  - Funding sources
    - domestic and external
  - Budgeting
    - Actions requiring dedicated funding
    - Benefits from investing in UN-IGIF
  - Best practice cost-benefit analysis
    - Steps involved
    - Cash flows and discounting
    - Reporting results
  - Valuing benefits and costs
    - Market valuations
    - Non-market valuations.
  - Appendix other methods of economic impact assessment

# 5 One page flyer



#### Unlocking opportunities with the UN-IGIF

#### WHAT IS THE UN-IGIF?

A Framework developed by the UN and the World Bank to help coordinate, develop, strengthen and modernize approaches to Geospatial Information Management.

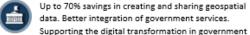
#### DO WE NEED IT?

Geospatial infrastructure is a fundamental and important element of a modern economy as it underpins all planning and development. It is critical to meeting the United Nations sustainable development goals and national development priorities of your country. Geospatial information is underpinned by spatial data infrastructures established by governments.



#### WHAT ARE THE BENEFITS?

#### Government



Up to 70% savings in creating and sharing geospatial data. Better integration of government services.

Protecting the nation from biosecurity and natural disaster risk: Improving delivery of government services, water, and energy, delivery of better health services.

#### Industry



Advancing productivity in agriculture, planning, land development, infrastructure, construction, mining ar resources, transport and logistics, maritime operatio commerce, financial services, and insurance.

#### Society



Access to accurate property and mapping data, savings in travel times, locating access to services, collaboration with governments on

planning and development options, locationally based search functions on devices and greater inclusivity for

#### Environment and sustainability



Remote sensing for monitoring physical features, emissions of greenhouse gases, water resources, coastal environments, land cover and land use.

#### WHAT DOES IT COST?

Capital costs include investment in hardware including IT, storage and communications, data acquisition, software including data storage protocols, data security and data sharing, physical assets including buildings, furniture, facilities, cooling systems and security systems, digitization of topographic and cadastral maps, and periodic upgrades of software and hardware. Capital requirements can range from US\$5 million to \$40 million.

Operating costs include wages and salaries, licence fees, professional services, rent and insurance, interest expense, taxes, licenses and royalties and overheads. Operating costs can range from US\$1 million to US\$3 million per year.



#### IS IT WORTH THE INVESTMENT?



The answer is yes. The collection, management, and effective utilization of location data can be a significant national investment, but it is proven to return substantial social, economic, and environmental value and benefits well in excess of this investment.

Recent socio-economic assessments in developing countries estimated a benefit cost ratio of between 3 and 4 to 1 for investment in spatial data infrastructure. These studies also showed that society and the environment were also significant beneficiaries.

#### WHO BENEFITs?

The UN-IGIF is a powerful framework that helps governments build geospatial capacities analyze data and images associated with specific geographical locations integrate all other data, to provide powerful insights, guide decision making, transform government, advance global and national priorities.

| For governments  | For industry  |
|--|---|
| Emergency management - reduced damage from natural disasters   | Improved productivity in agriculture                              |
| Biosecurity – reduced costs of incursions of pests and disease | More efficient mining operations                                  |
| Asset management – major savings in managing government assets | Faster planning approvals and higher productivity in construction |
| Land management – improvements in planning approvals           | More efficient delivery and management of infrastructure          |
| Management of the coastal zone and marine environments.        | Improved transport and logistics                                  |
| Environmental and sustainable resource management              | Better management of the blue economy                             |
| Managing water resources and water quality                     | Productivity in energy, water and telecommunications              |
| Managing climate change  | Efficiencies in road transport and asset management               |
| Heath care and social assistance                               | Safer skies and seas  |
| National security  | More efficient commerce   |
| More efficient government and municipal services               | For consumers and society   |
| Provision of air and sea navigation services                   | Time saved from geocoded internet searches                        |
| Improved transport planning                                    | Time saved in travel and commuting                                |
| More efficient traffic management and public transport         | Easier and faster location of primary health care                 |

#### HOW CAN WE FUND IT?

UN-IGIF has significant benefits across all sectors of government, funding is often shared across multiple agencies and because of its broad benefits across government, industry and society, funding for UN-IGIF can legitimately be a component of major national investments funded by governments and development assistance programs. It will reduce duplication in development assistance. But it will need funding from the international development assistance community and the private sector.

# 6 Implementation Plan

# Goal 4 – Task [4]

|   | To provide needed information to help Member States justify the investment needed to advance UN-IGIF and geospatial data                |  | Online combined with direct communication through meetings, events, forums, and webinars. | Private Sector,<br>South Africa, U.S.                                     | Technical<br>expertise and<br>value study<br>knowledge | Online inventory of<br>Geospatial Value Studies,<br>Promotional materials | Jan. 2023 -<br>Dec. 2025  |
|---|---|--|---|---|--|---|---------------------------|
| a)Collect, summarize, and<br>share Geospatial Value<br>Studies                                    | To provide Member States with<br>studies developed by other<br>Member States/Organizations to<br>help justify investment in UN-<br>IGIF | , ,  | Online  | Private Sector,<br>South Africa, U.S.,<br>Member States, SF<br>Work Group | Technical<br>expertise and<br>value study<br>knowledge | Online Geospatial Value<br>Study Inventory (GeoVSI)                       | Jan. 2023 –<br>Aug. 2023  |
| b)Promote the Geospatial<br>Value Studies and solicit<br>additional studies from<br>Member States | To raise awareness of available geospatial value studies and make them easily accessible and usable to all Member States                | Member States,<br>geospatial organizations | Regional plenaries, webinar, meetings,  | Private Sector,<br>South Africa, U.S.,<br>Member States, SF<br>Work Group | Communications expertise                               | PowerPoint presentation One-page flyer                                    | Sept. 2023 –<br>Dec. 2025 |
| c)Update GeoVSI with new<br>studies provided by Member<br>States                                  | To widen coverage of the GeoVSI to become a trusted, comprehensive and authoritative source of value studies.                           | Member States,<br>geospatial organizations | Online  | Private Sector,<br>South Africa, U.S.,<br>Member States, SF<br>Work Group | Technical<br>expertise and<br>value study<br>knowledge | Updated Geospatial Value<br>Study Inventory (GeoVSI)                      | Sept. 2023 –<br>Dec. 2025 |



# Goal 4 – Task [5]

| [5] Finalize and promote the Sustainable Funding Guide and support tools to broaden knowledge and awareness.                    |   | Member States   | Meetings, webinars, social media, website, Newsletter  | Kingdom of Saudi<br>Arabia, SF work<br>group, HLG-IGIF,<br>Comms Work Group  |   |  |                           |
|---|---|---|--|--|---|--|---------------------------|
| a) Bring all sections and tools together into one seamless guide  | •   | Co-Leads, Co-Chairs, HLG-<br>IGIF   | UN-GGIM Fourteenth Session,<br>Webinar, Events, Meetings,<br>Newsletter, Twitter, Website  | Kingdom of Saudi<br>Arabia, Co-Leads,<br>with input from SF<br>Work Group, Co-<br>Chairs, HLG-IGIF                       |   | UN-IGIF Sustainable Funding Guide  | Jan. 2024 –<br>May. 2024  |
| b)Develop launch plan and presentation  | To develop a plan to launch the Funding Guide at appropriate meetings and events.   | Regional Committees,<br>Member States   | Develop a one-year plan<br>(Schedule) of activities to<br>promote the utilization of the<br>Funding Guide and launch<br>presentation | Kingdom of Saudi<br>Arabia, Co-Leads, Co-<br>Chairs, SF Work<br>Group, Comms Work<br>Group.                              | SMEs in planning                            | PowerPoint presentation for UN-GGIM Fourteenth Session Launch Plan listing one year of events. | Aug. 2024 -<br>Nov. 2024  |
| c)Conduct a Sustainable Funding<br>Webinar  | To share the guidance, principles, and best practices laid out in the Sustainable Funding Guide and document questions and suggestions from Member States and other participants. | Regional Committees, Member State Treasury/Finance Ministers, National Mapping agencies, other related agencies | Conduct a global webinar to launch and promote the Funding Guide   | Kingdom of Saudi<br>Arabia, Co-Leads, Co-<br>Chairs, SF Work<br>Group, HLG-IGIF,<br>Comms Work Group,<br>other partners. | SMEs in Economic<br>Impact and<br>Financing | Power point presentation  Completed Webinar with documented feedback                           | First half 2025           |
| d)Conduct consultations at<br>meetings with regional<br>committees, regional UN-IGIF<br>working groups and Thematic<br>Networks | To share the guidance, principles, and best practices laid out in the Sustainable Funding Guide and gather feedback from other UNGGIM groups.                                     | Thematic Networks,<br>Regional UN-IGIF Work<br>Groups, Regional<br>Committees                                   | Develop a feedback mechanism on the utilization of the funding guide   | Kingdom of Saudi<br>Arabia, Co-Leads, Co-<br>Chairs, Comms Work<br>Group.  |   | Power point presentation<br>Completed consultations with<br>documented feedback                | Late 2024 –<br>early 2025 |
| e)Promote funding guide in all<br>UN-GGIM Reginal Plenaries   | To share the funding guide with regional contacts and Member States and document feedback and questions.  | Regional Committees,<br>Member States   | Develop content and promote<br>the guide in UN-GGIM regional<br>plenary meetings where<br>possible.                                  | Kingdom of Saudi<br>Arabia, Regional<br>Committee Chairs.  | SMEs in Economic<br>Impact and<br>Financing | Power point presentation<br>Completed meetings with<br>documented feedback                     | Late 2024 –<br>early 2025 |
| f)Update Sustainable Funding<br>Guide with all feedback   | Incorporate suggestions and feedback from events and consultations.   |   | Produce an updated version based on feedback gathered from meetings.   | Kingdom of Saudi<br>Arabia, Co-Leads,<br>with input from SF<br>Work Group.   |   | Updated UN-IGIF Sustainable Funding Guide  | Aug. 2025                 |



7

# Geospatial Value Study Inventory (GeoVSI)

# GeoVSI Purpose

- Almost IGIF Country Action Plans require investment to realise their outcomes, this maybe in data, human resources, equipment, services or training all have associated **costs**.
- To convince decision makers to provide the finance, national mapping and cadastral agencies need to provide justification that explains the **benefits** of these investments.
- Although this may be possible by advocacy linked to key national priorities alone, it is in our experience that this is facilitated by estimating the **value of both the costs and benefits**.
- A Socio-economic Impact Assessment (SEIA) is the generic term used to describe such value analysis.
- It answers a **need identified at UN-GGIM event held in New York in August 2022**, for a resource to assist Member States to access existing studies.
- The GeoVSI provides direct support to the objectives of the IGIF guide to Sustainable Finance.



# **Example Studies**

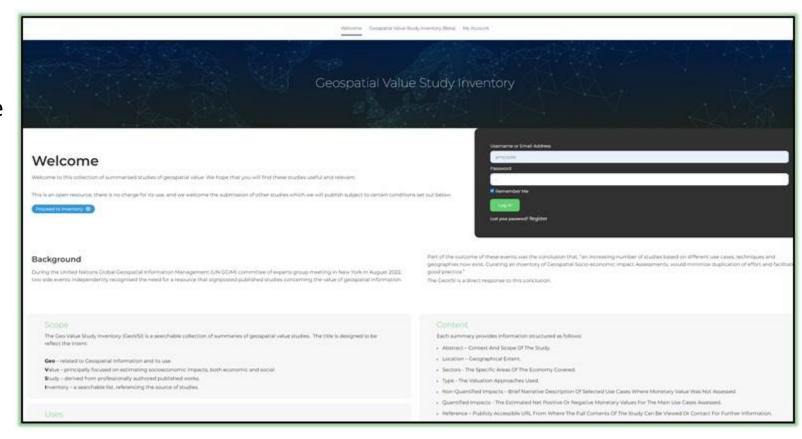
- APEC value add across multiple marine industries
- Google global willingness
   to pay for digital mapping
- Georgia cost-benefit analysis of SDI investment
- UK Geospatial Commission –
   benefits appraisal guidance
   and case studies
- Saudi Arabia use case benefits





## Access

- A community resource –
   developed under the direction
   of the IGIF Sustainable Finance
   Working Group
- Open and Free no charge
- Simple registration process name, organisation and email address only required.
- Copyright to studies remains with authors



Register now at: https://geovsi.org/

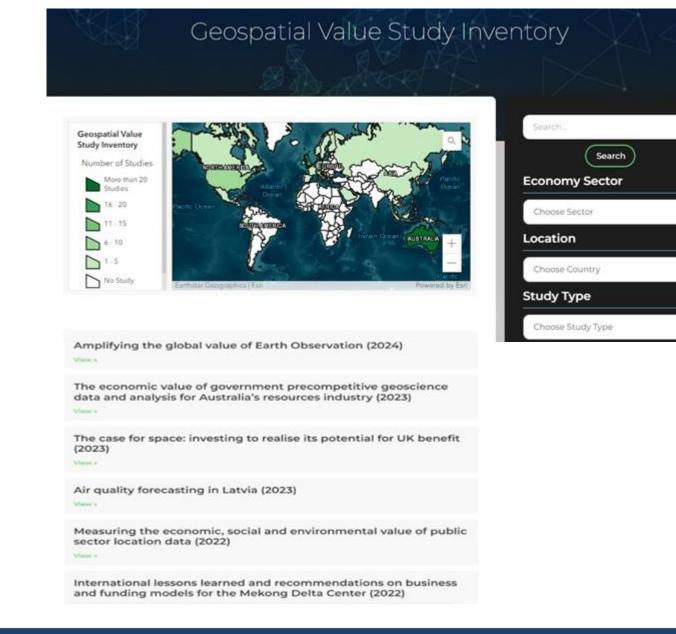


# Search

The content can be filtered by:

- Economic Sector e.g. central government, transport
- Location by country
- **Study Types** e.g. case studies or cost-benefit analysis

The assistance of Esri (South Africa) is gratefully acknowledged in the development of the map interface.





# Content

#### Each entry contains:

- Overview context and scope of the study
- Location geographical extent
- Sectors the specific areas of the economy covered.
- Type the valuation approaches used.
- Socio-economic Impacts summary of selected use cases where value was assessed in financial terms and others not quantified but with significant social value.
- Reference –publicly accessible URL where the full contents of the study can be viewed or provides a contact for further information.



# GeoVSI: Current Statistics

#### Inventory:

- 85 studies cover a total of 62 countries.
- North America, Australasia and Europe are well represented.
- For Asia and the Arab States coverage is patchy.
- The inventory only included **3** countries in **Africa** (Tunisia, Morocco, Libya), **3** LATAM region (Chile, Mexico, Peru) and **no small island states**.
- Summaries for 8 additional studies in process

#### Users:

- Total approved users: 63 from 23 countries
- New users: 4 added in July 24

#### Volumes:

- Approved user accesses: 10-20 per week
- Cyber-security 56 phishing attempts prevented in last 24hour period



## Recent enhancements

- Updated user guide
- 10 new studies researched and added over last 12 months
- Support for enhanced keyphrase search e.g. 3D, Copernicus, open data
- Results ordered chronologically by date of publication (most recent appear at top of search)
- Links on home page to related inventories:
  - European Space Agency (SEBS)
  - Environmental Value Research Inventory (EVRI)



# **Next Developments**

- Marketing campaign to publicise availability (starts at this meeting)
- Workshop to explain usage in IGIF economic studies, particular as a tool to facilitate benefits transfer (Autumn 24)
- Reference within the forthcoming IGIF Sustainable Finance Guide (Autumn 24)
- Add new studies 10 currently in pipeline
- Improved map interface
- Implement feedback on usability and enhancement (on-going)



# A Call to Action

The Sustainable Finance
Working Group need your help
to be able to help you!

We need more studies, particularly covering:

- Latin America and Caribbean
- Africa, Asia







# **QUESTIONS**

