

Session IV-2: Financial resources and IGIF implementation

Open discussion on mobilizing and sustaining financial resources, fostering strategic investment and advancing national IGIF implementation through prioritized actions and long-term financing approaches.

John Kedar

Panama City, Panama

4 December 2025



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On Day 1, who stated that finance was a key challenge?

“Funding” (Belize)

“Financial sustainability” (Chile)

“Financial sustainability” (Colombia)

“Budgets” (Ecuador)

“Financial availability” (The Honduras)

“Ensure institutional and financial sustainability” (Panama)

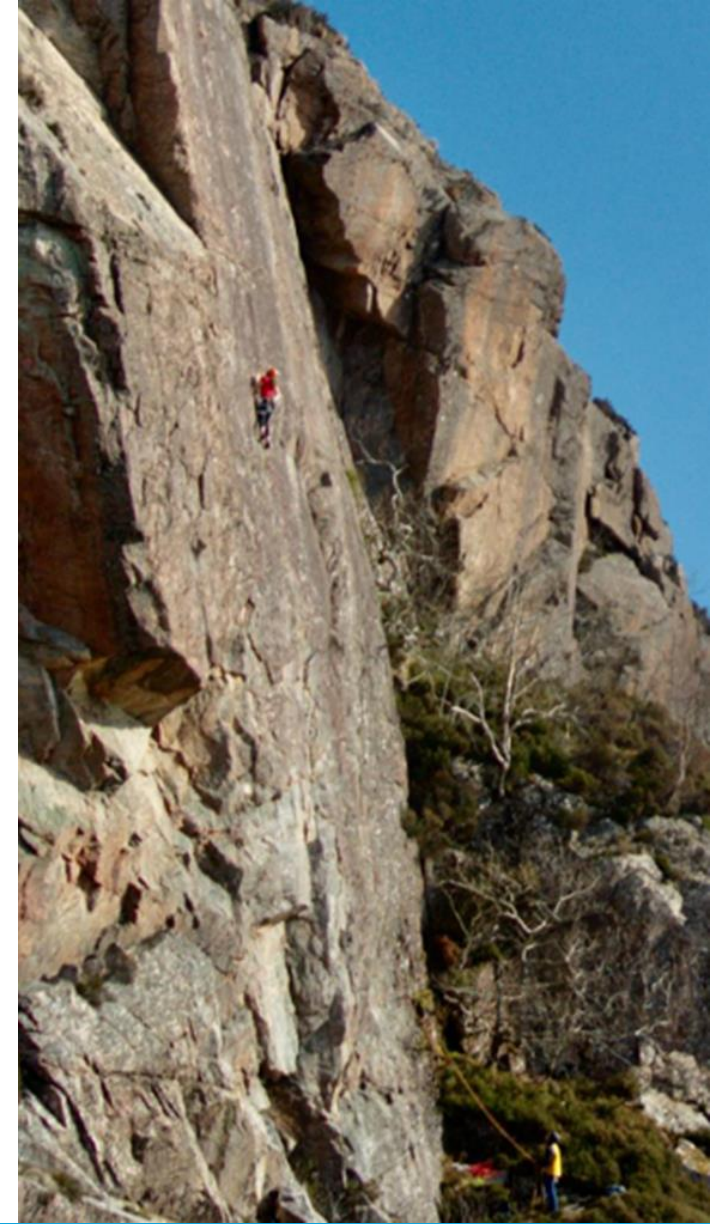


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Cambridge Conference 2017 – Geospatial Agency **leader** challenges

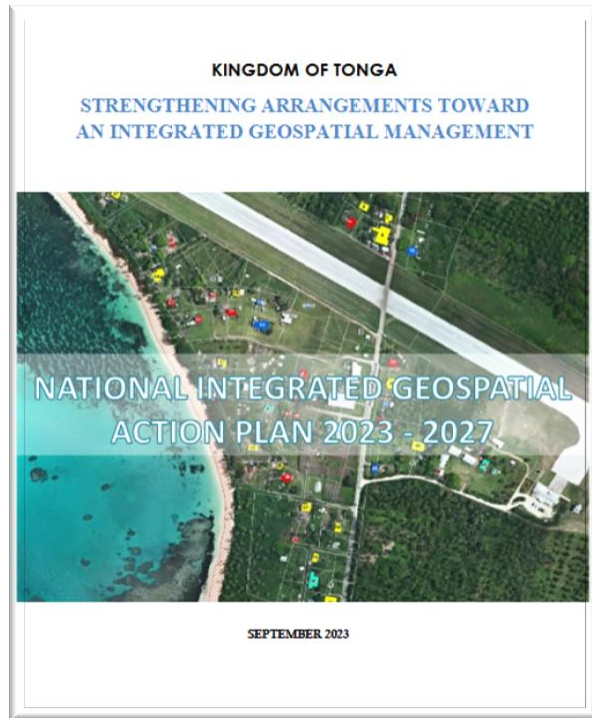
- Competition – Crowd, Google etc, other government agencies.
- Growth in users and demands, e.g. Web 3.0 and autonomy.
- Requirements – currency, accuracy, detail.
- Converting raw data to actionable data.
- Pace of change in geospatial technologies.
- Conflicting pressures: public task v open data v commercial business.
- **Access to political and fiscal investment.**
- Capacity to change.



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Finance - from plan to impact



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Country-level Action Plan Considerations for Implementation



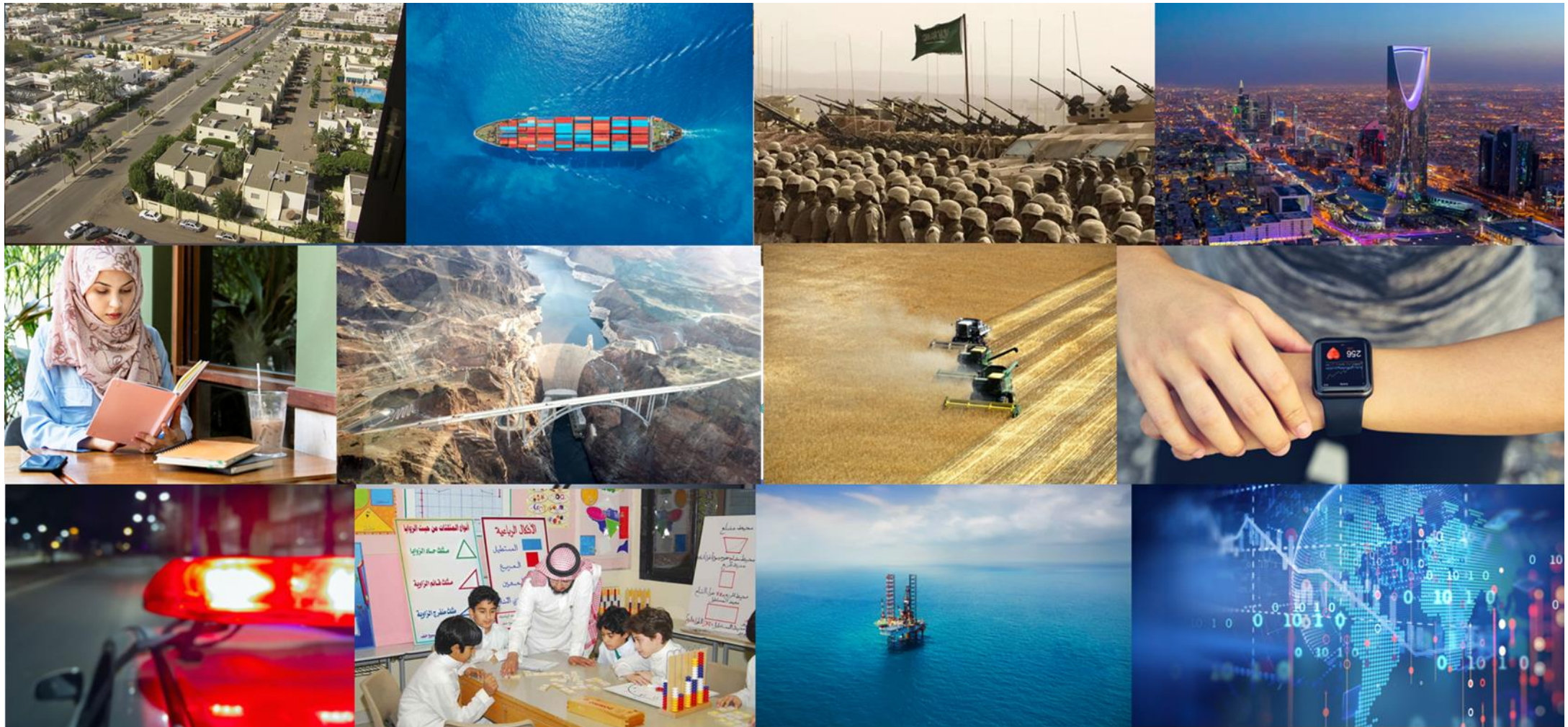
AUTORIDAD NACIONAL DE ADMINISTRACIÓN DE TIERRAS



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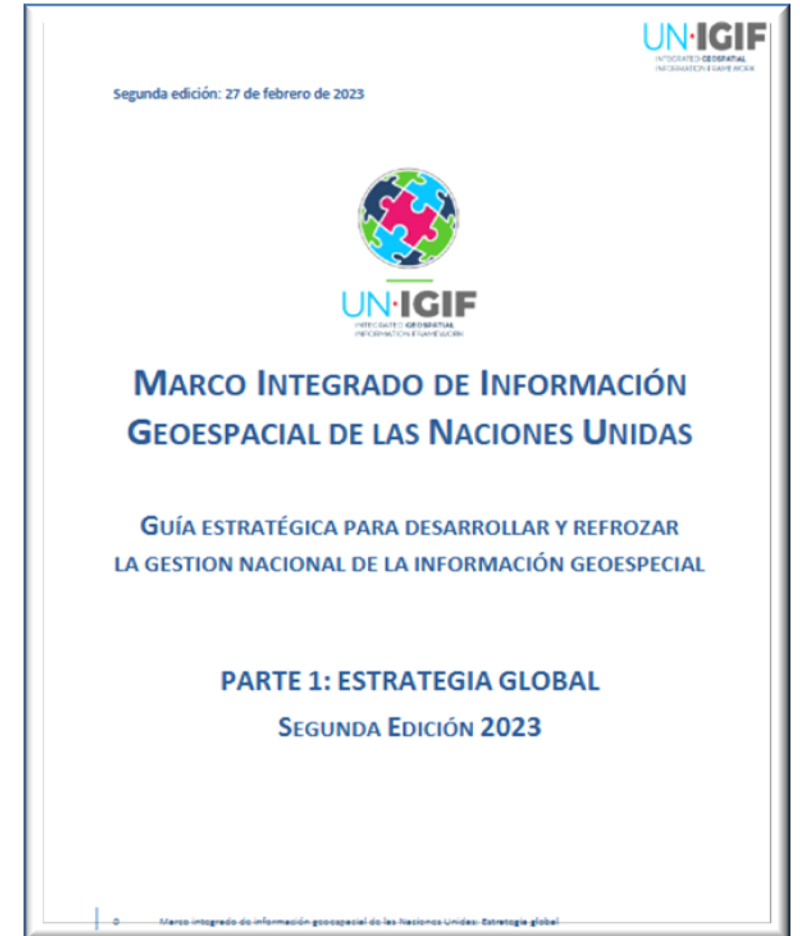
The opportunities and benefits for nations



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Why write the UN-IGIF?

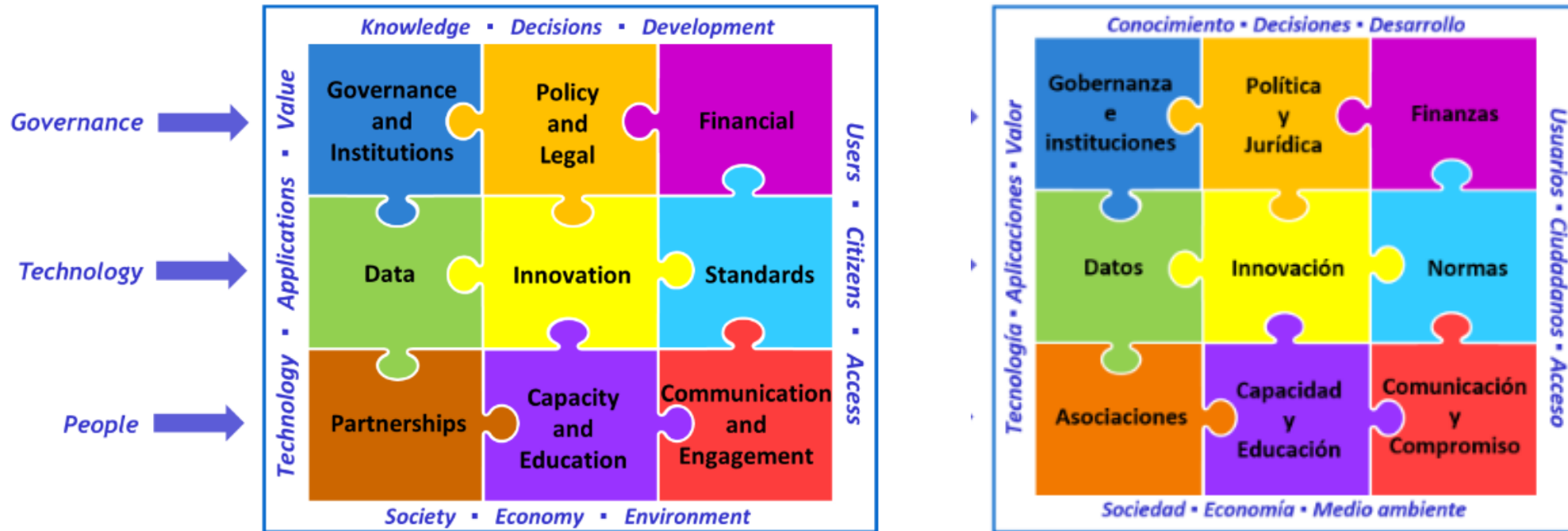
- No framework addressed that breadth of issues necessary to ensure countries managed and used geospatial information for national benefit
- The UN- IGIF provides a basis and guide for developing, integrating and strengthening national arrangements in geospatial information management.
- Specific focus on geospatial information management **sustainability**



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Why include Strategic Pathway 3, Finance?



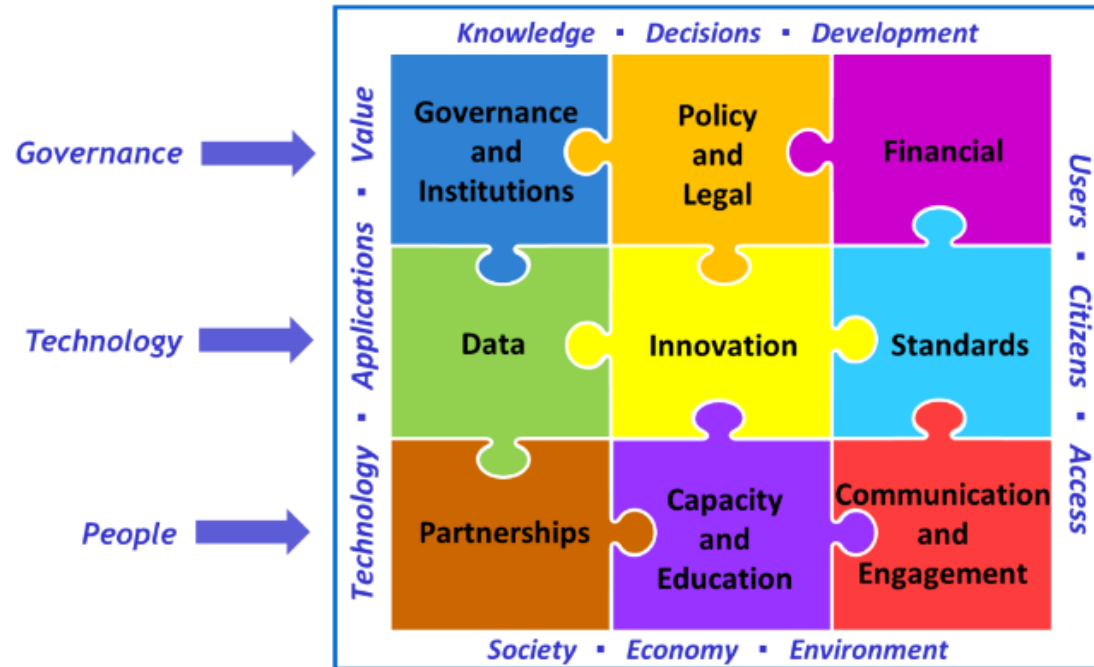
- Other frameworks and infrastructures had overlooked finance.
- Without finance, there are no Geospatial agencies, data and systems.
- Finance is a cornerstone of sustainability.



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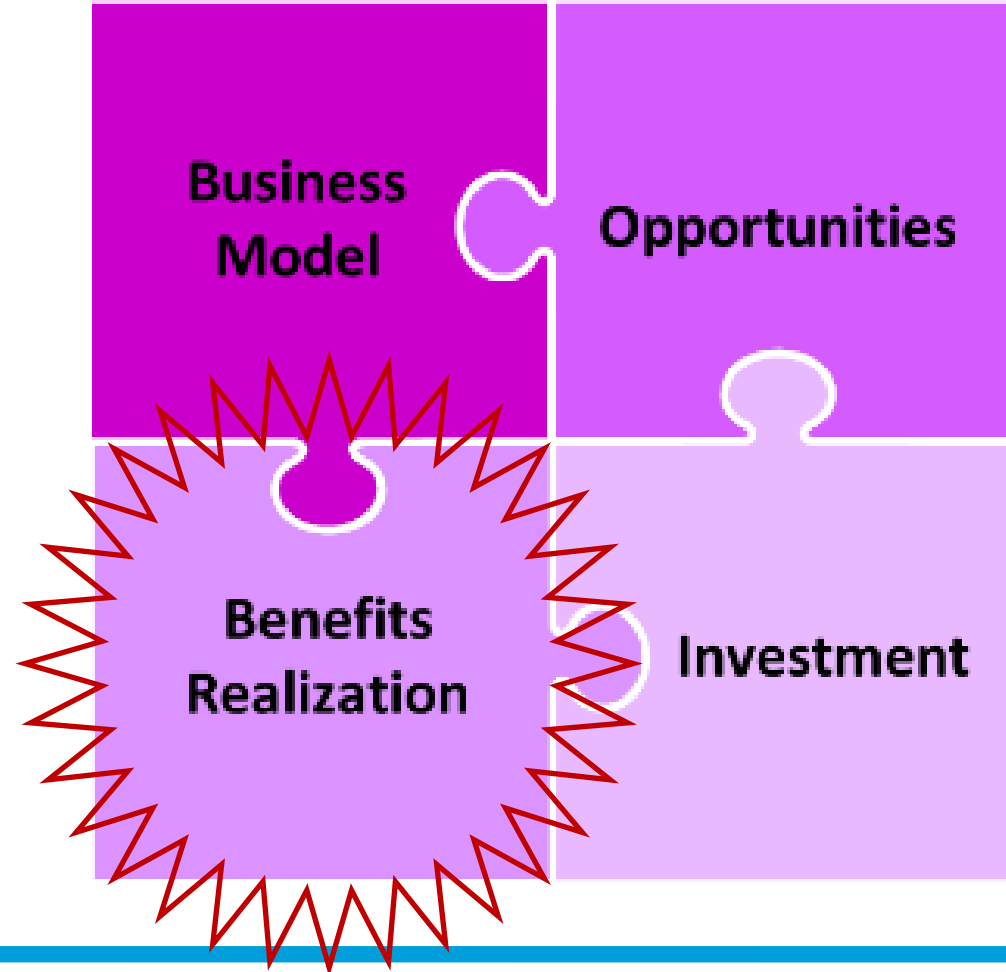
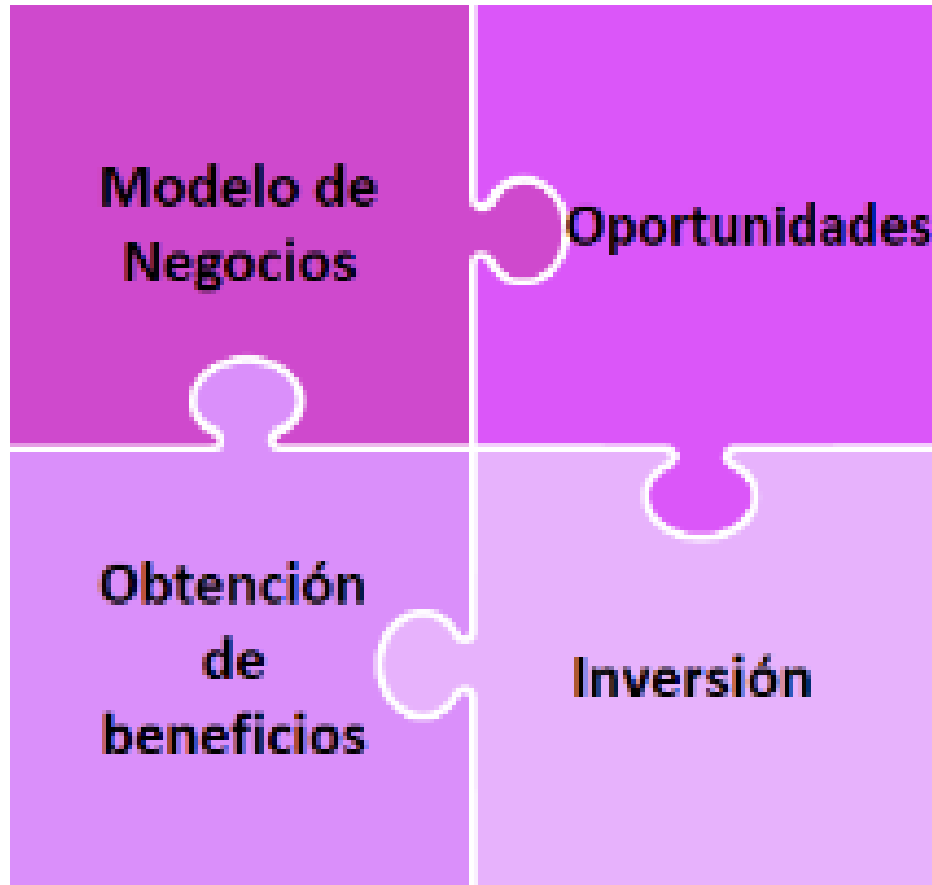
Finance does not stand alone in the UN-IGIF



- SP1: Governance and Institutions
- SP9: Communications and Engagement
- SP7: Partnerships
- Strategic Alignment
- Key stakeholders:
 - Ministries of Finance – steady-state funding
 - Customers – identifying their use cases
 - All geospatial agencies.
 - Donors for technical expertise and capital projects.



What does SP 3 cover?



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Examples of finance actions in country-level action plans - Moldova



- Develop a Sustainable Business Model for SDI to cover budgets, funding options, and to align this with government programs including EU Twinning Project objectives.
- Commission a sustainability strategy to outline plans for ongoing support of existing products and services currently covered by donor funds.
- Measure and document benefits realization through the definition of the KPI's and performance measures.



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https://ggim.un.org/UN-IGIF/documents/Tonga_National_Geospatial_Action_Plan_2023-2027.pdf
American countries

Session II-4 asked “what should we be considering as we write the country-level action plan?”

- Endorsement
- Engagement and communication
- **Mobilising resources**
- Implementation planning
- National governance
- Starting to deliver benefits

- Determine budgetary and project planning/endorsement processes.
- Engage with funding and budgeting staffs.
- Understand donor funding environment
- Discussions with MoF
- Find an initial implementation program management resource



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UN GGIM Americas online workshop


5th CONVERSATORIO VIRTUAL
5th VIRTUAL WEBINAR


**CONVERSEMOS SOBRE EL MARCO
INTEGRADO DE INFORMACIÓN GEOESPACIAL
(UN-IGIF)**
CONVERSATIONS ON THE INTEGRATED GEOSPATIAL INFORMATION
FRAMEWORK (UN-IGIF)

21 de octubre de 2025
October 21, 2025

Online Transmission
Via Zoom

Vía Estratégica N°3: Finanzas
Strategic Pathway No. 3: Financial

 UN-GGIM:Americas
REGIONAL COMMITTEE OF UNITED NATIONS
ON GLOBAL GEOSPATIAL INFORMATION
MANAGEMENT FOR THE AMERICAS

 UN-IGIF
GLOBAL GEOSPATIAL INFORMATION
MANAGEMENT

- Lilia Patricia Arias Duarte, SDI Leader for Colombia
- John Kedar
- Andrew Coote, ConsultingWhere



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Question 1: Who might provide funds in your countries/region? List potential sources (internal and external to countries)

Pregunta 1: ¿Quién podría proporcionar fondos en vuestros países/región? Lista fuentes potenciales (internas y externas a los países)

Question 2: How will you justify the costs of implementing the country-level action plan and what tools will help?

Pregunta 2: ¿Cómo justificará los costes de implementar el plan de acción a nivel nacional y qué herramientas ayudarán?

Question 3: How will you help ensure funding is sustainable?

Pregunta 3: ¿Cómo ayudarás a garantizar que la financiación sea sostenible?



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Who might provide funds?

In Country

- Budget appropriation
- User charges
- Special purpose state-owned enterprises
- Partnerships within Government and with private sector

External Sources

- UN organisations such as UNDP, FAO
- Multi-lateral development banks
- Bilateral Official Development Assistance (ODA)
- Non-Government Organisations (NGOs)



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How will you justify the costs?

- Capital and operating costs
 - Budget requirements
 - Business cases – return on investment
 - Aligning with existing programs
 - Implementation flexibility
 - Engagement
 - Link to national strategic priorities
- Capital costs including:
 - New datasets
 - Infrastructure
 - Policies
 - Quick wins
 - Operating costs including:
 - Data maintenance
 - Software and cloud services
 - Facilities



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How will you justify the costs?

- Capital and operating costs
- **Budget estimates**
- Business cases – return on investment
- Aligning with existing programs
- Implementation flexibility
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- Link to national strategic priorities

- Experience
- Other nations
- Other country-level action plans
- Industry



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How will you justify the costs?

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 - Budget estimates
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 - Link to national strategic priorities
- Cost Benefits Analysis.
 - Socio-Economic Impact Assessment.
 - The value of your existing data to the nation.
 - Geo VSi



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Cost Benefit Analysis (CBA)

Steps in CBA analysis	Actions and activities	
1 Statement of objectives	Alignment with government policy goals	Intended outcomes of the initiative
2 Define evaluation case and base case	Define activities and, if appropriate, options to realise the intended outcomes	Define the base case scenario that would emerge if the initiative does not proceed.
3 Identify benefits and costs	Identify costs and benefits expected to accrue from the activities and options under evaluation	Estimate the timeframes over which the costs and benefits are expected to occur
4 Value benefits and costs	Value quantifiable benefits and costs for options being assessed	Prepare cash flow of benefits and costs over the evaluation period.
5 Assess the net benefits	Prepare financial model for each option being assessed	Calculate Net Present Value and Benefit Cost ratio for each option
6 Identify qualitative and distributional impacts	Provide qualitative description of environmental and social benefits	Identify major beneficiaries along the supply chain and among user groups
7 Assess risk and test sensitivities	Outline risks associated with each option	Prepare sensitivity tests
8 Select preferred option and report key findings	Select the preferred option considering economic parameters, qualitative and distributional impacts.	Outline the preferred option stating how it meets the economic and social objectives



Source: ACIL Allen drawing on references listed on page 68.

Example of a use case based upon a user's problem



Broadband Infrastructure Development - efficient roll out of national broadband infrastructure.

Fibre-optic cable and open access points roll-out is an expensive program. Planning efficient networks is enhanced by GIS and national data on roads, terrain, cadaster, buildings and infrastructure. Reduces cost of “OpenNet” to Government and Citizen, also aiding faster roll-out. Good records will also reduce maintenance and disruption costs caused by wider infrastructure development.



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Estimating benefits - example

- A single addressing system for Georgia will have many benefits.
- The costs of maintain multiple address database is clearly a duplication of effort.

Ref	Description	Quantity	Value (GEL)	Comments
A	Duplicated National Datasets	18		
B	Cost of maintenance (per annum)		240 000	
C	Total Realisable Savings		4 320 000	Calculated A*B

- This is only one saving – a quality single unified database available through an API leads to better outcomes

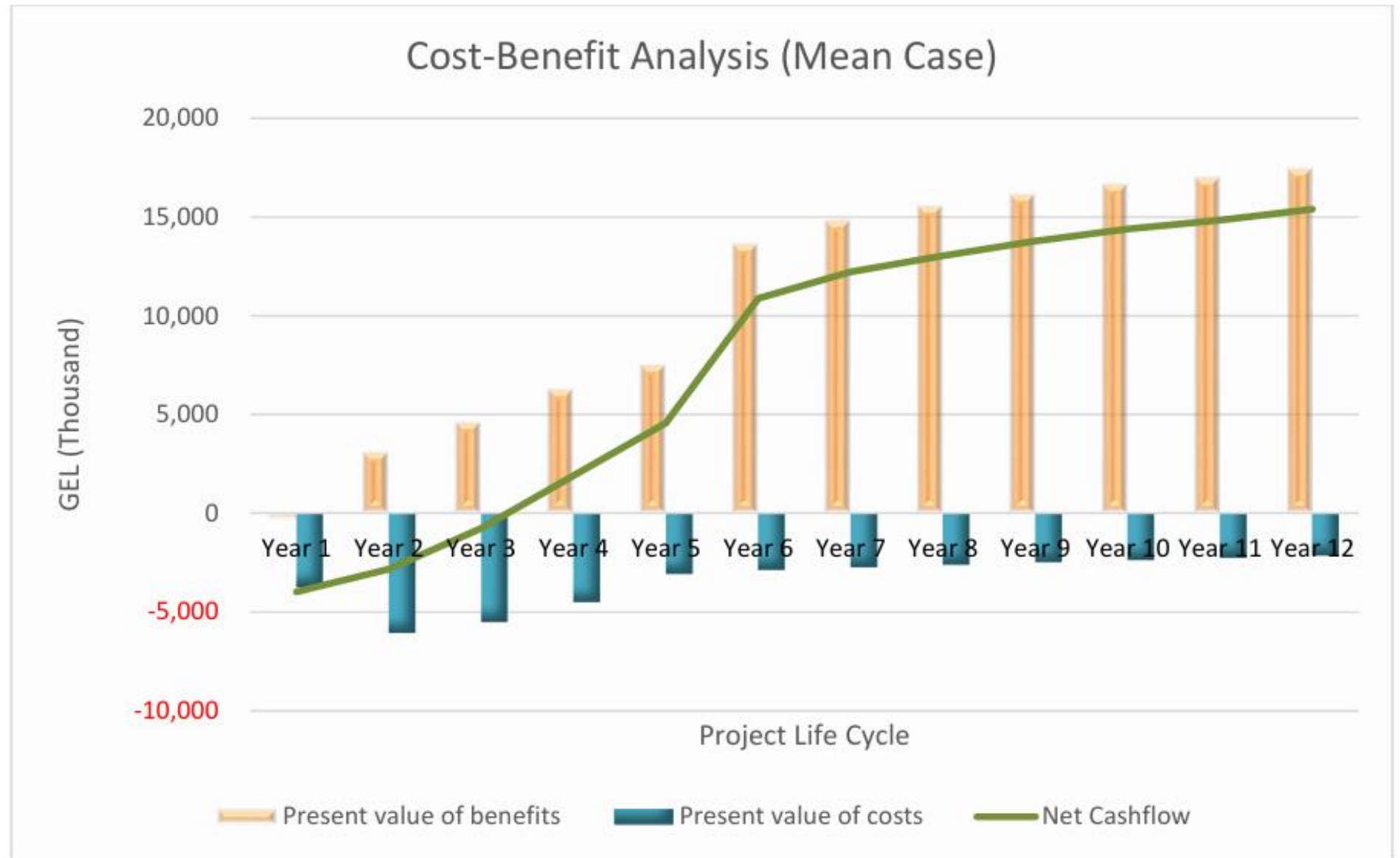


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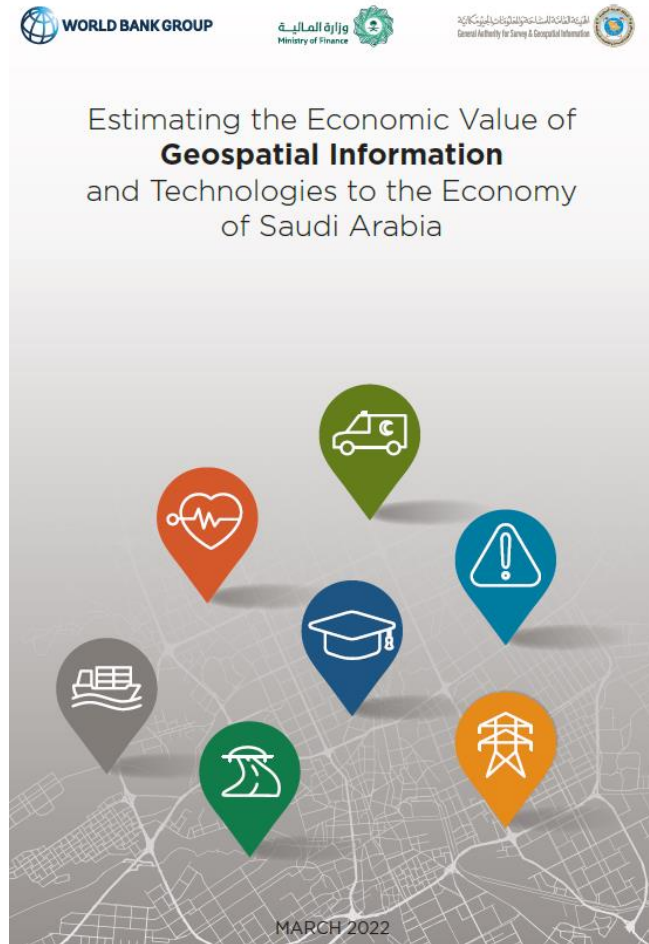
Cost Benefit Analysis





Georgia CAP



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Saudi Arabia Economic Value



SECTOR	US\$ PER YEAR
 DISASTER RISK MANAGEMENT	3.8 million – 47.8 million
 EDUCATION	63 million – 239 million
 ENERGY	564 million
 COMMERCE	56.2 – 122 million
 PUBLIC SAFETY	2.1 billion – 3.9 billion
 PUBLIC HEALTH	1.6 billion – 3.2 billion
 INFRASTRUCTURE	1.5 billion – 2.6 billion



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<https://geovsi.org/geospatial-value-estimating-the-economic-value-of-geospatial-information-and-technologies-to-the-economy-of-saudi-arabia-2022/>

Geospatial Value Study Inventory (GeoVSI)

- Collection of International Studies of Geospatial Value.
- Assists value calculation using benefits transfer approach
- The content can be filtered by sector, location, study type.
- Community Resource
 - Registration required
 - Free to Access
 - www.geovsi.org

Geospatial Value Study Inventory

Search...

Search

Economy Sector

Choose Sector

Location

Choose Country

Study Type

Choose Study Type

Geospatial Value Study Inventory

Number of Studies

- More than 20 Studies
- 16 - 20
- 11 - 15
- 6 - 10
- 1 - 5
- No Study

The power of effective geospatial information management in South Korea: development and application (2020)
View >

Measuring the economic, social and environmental value of public sector location data (2022)
View >

International lessons learned and recommendations on business and funding models for the Mekong Delta Center (2022)
View >

Moldova – socio-economic impact assessment (2022)
View >



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How will you justify the costs?

- Capital and operating costs
 - Budget estimates
 - Business cases – return on investment
 - **Aligning with existing programs**
 - Implementation flexibility
 - Engagement
 - Link to national strategic priorities
- Many of your actions will align and enable:
 - Government programs
 - Development Bank & donor programs
 - Industry programs
 - **RESEARCH, ENGAGE, BE BOLD, SOLVE CUSTOMER PROBLEMS, BECOME PART OF CUSTOMER PROGRAMS**



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 - Aligning with existing programs
 - **Implementation flexibility**
 - Engagement
 - Link to national strategic priorities
- Plan is just a plan – your vision points the way.
 - Find funding, don't wait because it's not in sequence.
 - Innovate – spot opportunities



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 - Aligning with existing programs
 - Implementation flexibility
 - Engagement
 - Link to national strategic priorities
- Leadership requires engagement and action:
 - Communicate impact.
 - Learn about government challenges.
 - Proactively seek to solve.
 - Demonstrate a solution.
 - Gain the funds.

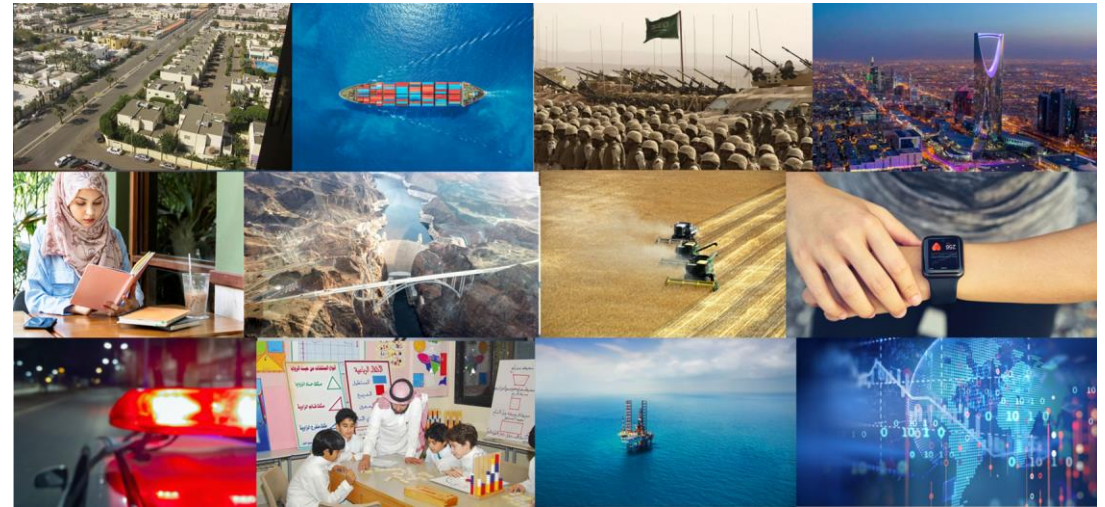


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How will we ensure funding is sustainable?

- Benefits realisation
- Spill over
- Increase numbers of beneficiaries
- Support of your users
- Quick wins

Process of identifying and evaluating the benefits over the complete life cycle of the program.

(a) identifies the benefits that can be reliably measured.

(b) Key performance indicators as the basis for evaluating and quantifying the benefits

(c) Measuring the benefits in terms of the program outputs.

Communicate



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Creating data and services for one use-case or project – make them available for others too.



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Quick wins

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Summary of 2020/21 Quick Wins



New Governance Structure (ACTION 1.1)

- Strengthen ties to delivering One Government benefits and enhance customer engagement.

Sustainable Business Model (ACTION 3.1)

- Grow revenue stream from selling premium geospatial products more widely through new business partner structure
- invest back into resilient geospatial infrastructure with extra resources to better support GoJ users

Data Upgrades (ACTION 4.2)

- Open access to more datasets
- 3D coverage for whole island
- Integration of land and marine data
- Better support to Government digitization leading to better services. Particularly confirming whether/what can be done short term for integrated emergency services and Jersey Property Holdings.
- Topographic data continuous revision – better support to planners and architects

Create New Digital Business Opportunities (ACTION 5.2/5.3)

- Closer collaboration with Digital Jersey, free access to premium data for Start-ups

CAF workflow rationalisation (ACTION 6.4)

- Reduce inefficiencies in addressing system

Upskill GoJ staff (ACTION 8.1)

- Better to use of spatial analytics to enhance evidenced based decisions.

Jersey Annual Geospatial Conference (ACTION 9.2)

- More customer engagement, demonstrate GoJ leadership.



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The UN-IGIF SP3 Finance - documentation



- [UN-IGIF Part 1 Overarching Strategy](#)
- [UN-IGIF Part 2 Implementation Guide Strategic Pathway 3, Finance](#)
- [UN-IGIF Funding Guide](#)
- [UN-IGIF Funding Flyer](#)
- [Geo-VSI](#)



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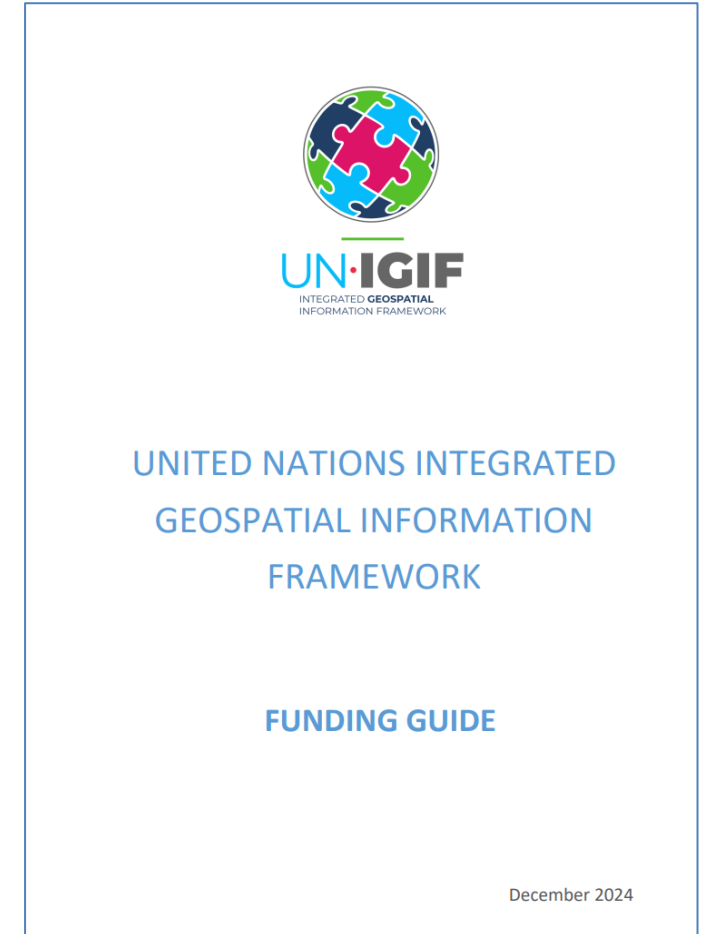
UN-IGIF Funding Guide

Objective

- To assist Member States in securing financial support for Geospatial Initiatives

Content

- The guide provides practical guidance on:
 - identifying potential funding sources
 - estimating budget expenditure
 - performing cost/benefit analysis.
- It also shares resources and experiences from other Member States.



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Open discussion on mobilizing and sustaining financial resources, fostering strategic investment and advancing national IGIF implementation through prioritized actions and long-term financing approaches.

Discussion



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