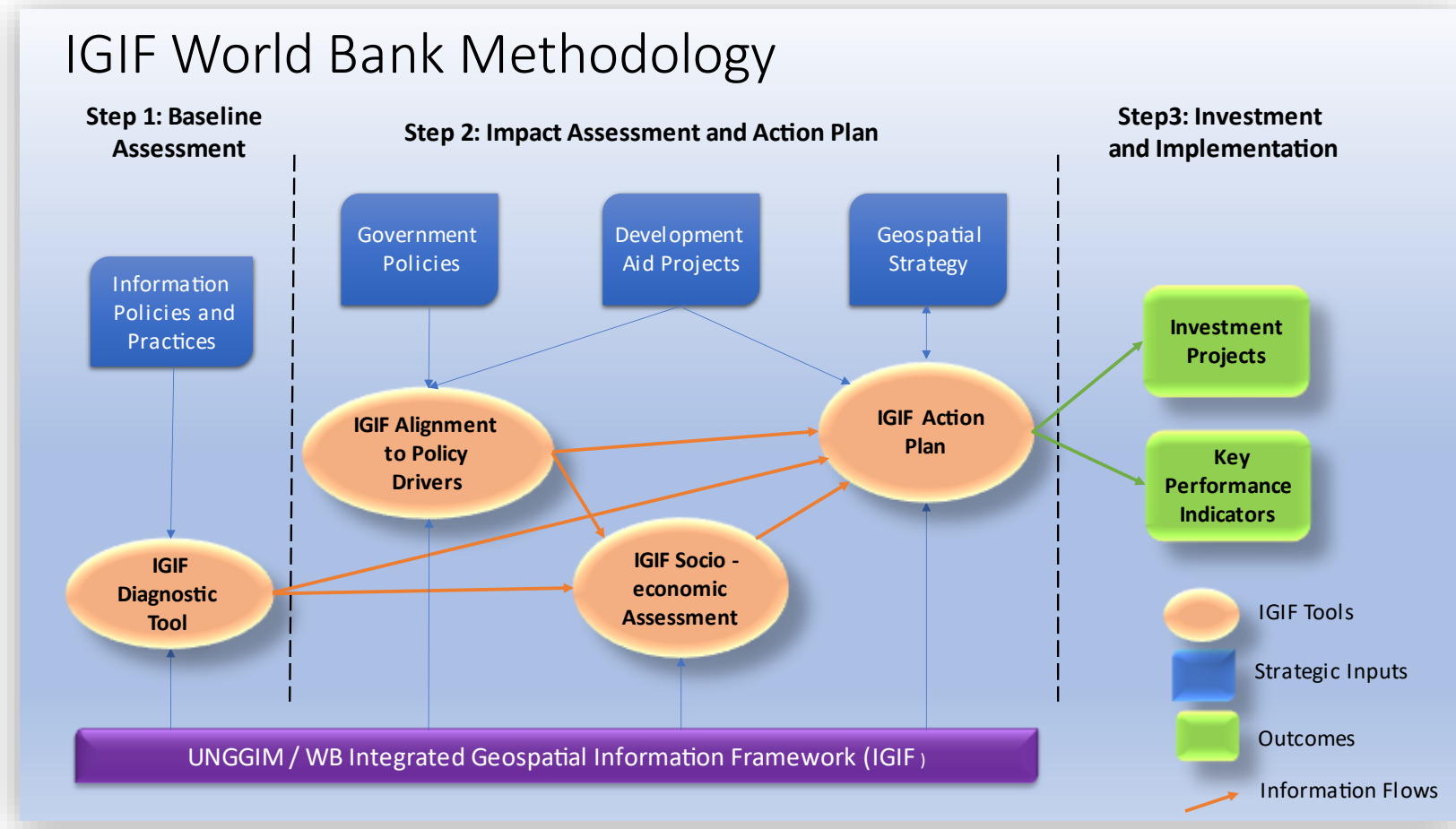


# Extending the World Bank IGIF Methodology into the Marine Domain



The World Bank Group has established an IGIF Implementation Methodology and corresponding analytical toolkit to support the use of the IGIF ...

- **Incrementally strengthen geospatial information management:** Customized to specific countries and priorities.
- **Link to financing:** Based on analytics, using standard WBG infrastructure model.



The diagram shows the analytical tools (in orange), key inputs (in blue), the IGIF in purple, outcomes (in green). Arrows show the different types of information flows

•Diagnostic/Baseline Assessment



Add country logo here

Business case  
-Alignment to Policy/ Business Drivers  
-Socio-Economic Impact Assessment



Add country logo here



Add country logo here

Action/Investment Plan



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The templates are available [here](#)



# Baseline Diagnostic Tool

**IGIF Baseline Diagnostic Tool (DT) and Assessment Template** provide an assessment of the “as is” position of geospatial information management, structured around the nine IGIF pathways.

The DT is applicable to **any geographical entity including city, region and country levels.**

Used to engage stakeholders through a consultation and verification workshop.

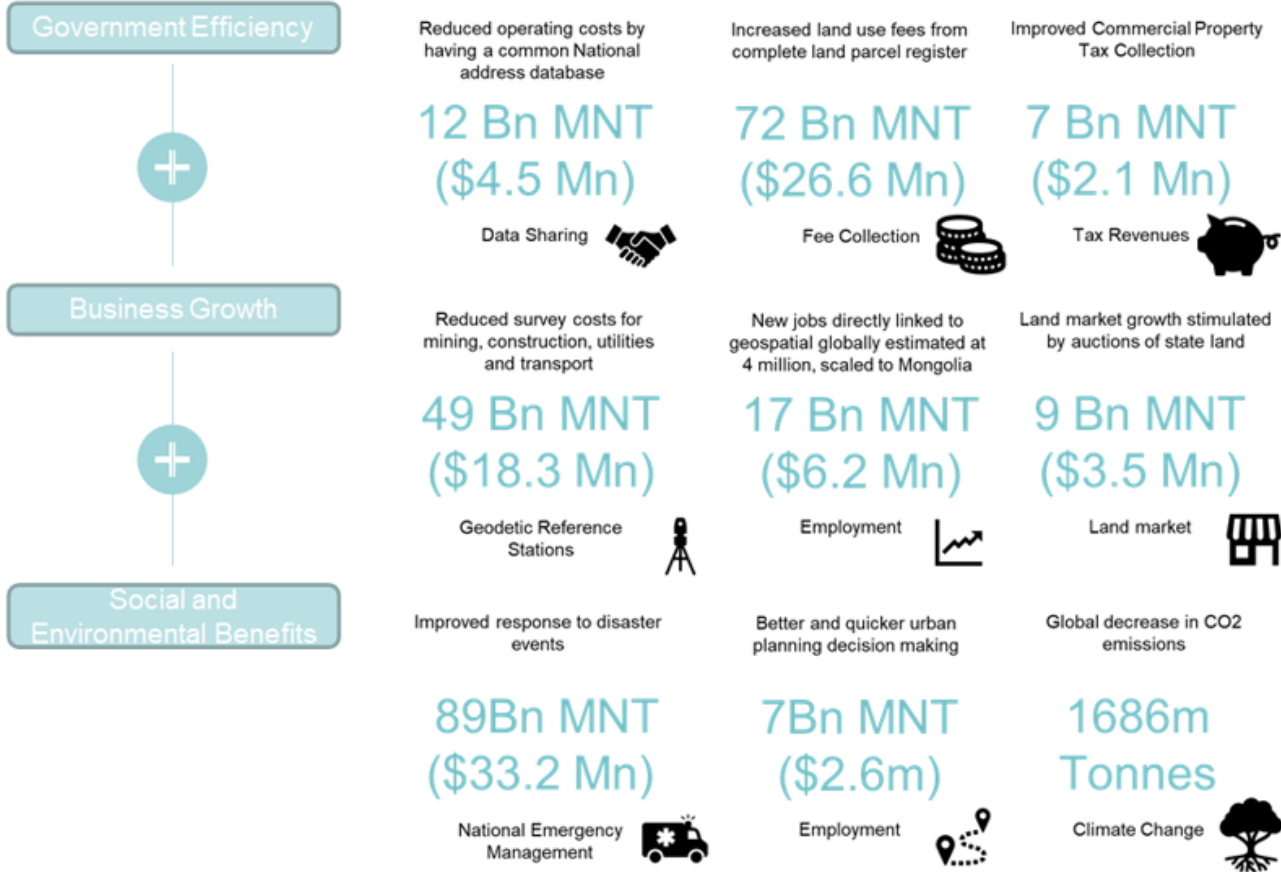
The Baseline Assessment Diagnostic Tool Template is available for download [here](#):



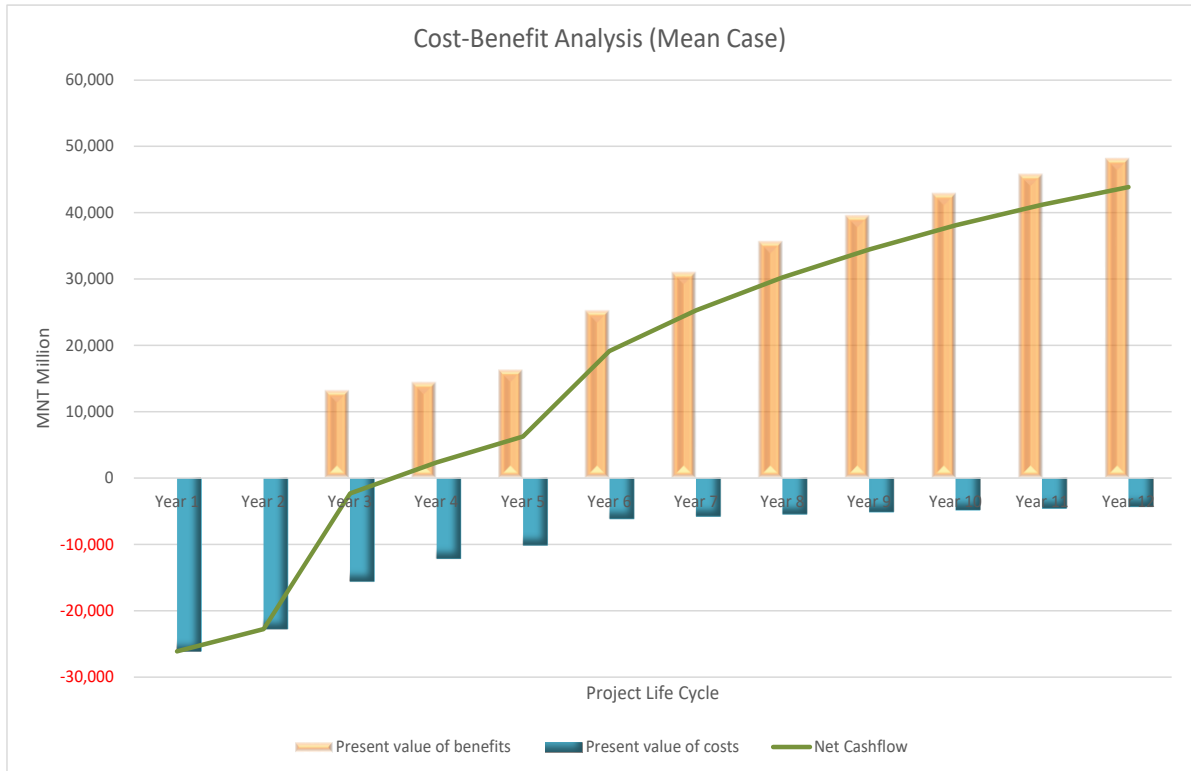
The Baseline Assessment Report Template is available for download [here](#).



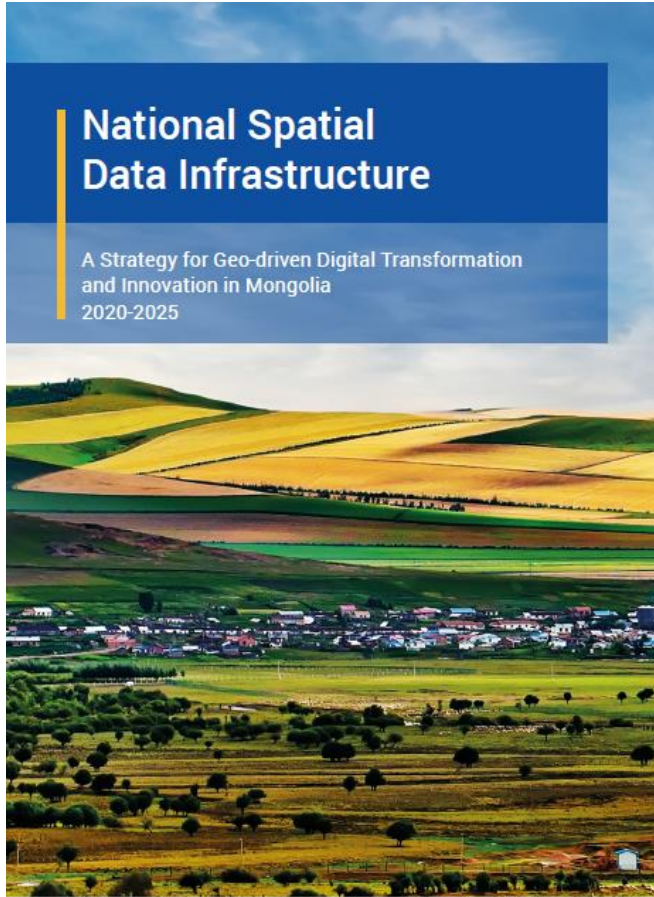
Benefit to Cost Ratio: **2.5:1**  
 Return on Investment: **250%**  
 Net Present Value: **US \$66,1 million**



- ### World Bank Infrastructure Project Model
- Project Life Cycle:
    - 5 years development
    - 7 years operation
  - Discount Rate: 6%

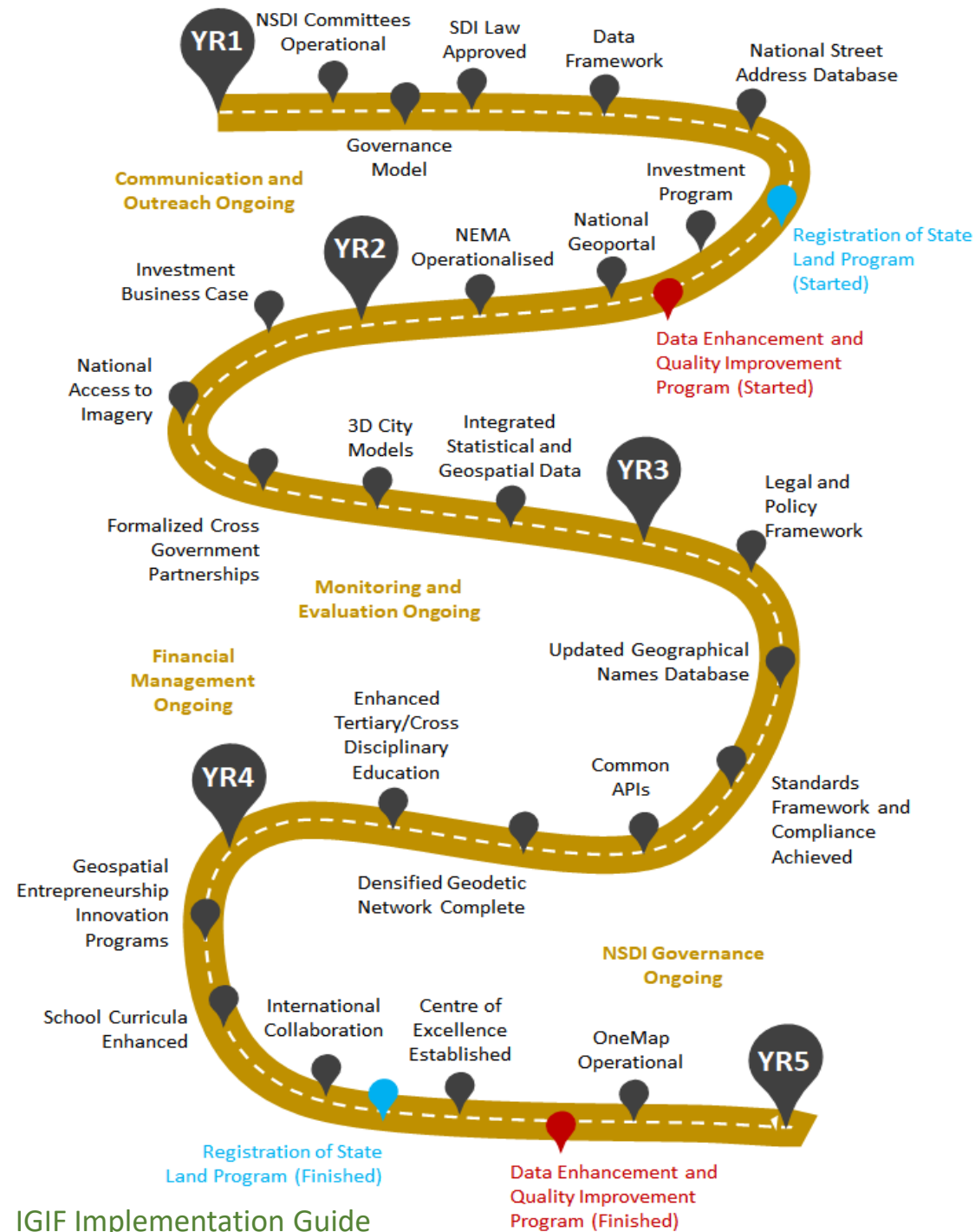


# IGIF Action/Investment Plan: Mongolia



*Vision: Geo-driven eGovernment and innovation that empowers efficient and effective use of geospatial information towards national sustainable development and economic growth.*

**Potential financing through the new WB-financed Digital Development Project: Delivery 2022**



# IGIF Implementation using WB Methodology



Source: World Bank





UK Hydrographic  
Office



Open  
Geospatial  
Consortium

# IGIF-MSDI Maturity Roadmap

“Quick-Start Guide for undertaking an IGIF-aligned MSDI”

EUR ING **Dr Gerald J Wong** MPhys MBA EngD MIET MInstP CEng CPhys  
UKHO Data Strategy and Information Governance Lead







# Six-Point Summary of the IGIF-MSDI Maturity Roadmap

## 1. Who?

For Hydrographic Offices (or national equivalents) and their marine/maritime geospatial data stakeholders.

## 2. Why?

Cross-agency engagement is crucial for delivering complex future capabilities such as Digital Twins.

## 3. What?

Alignment of an MSDI implementation with the IGIF, leveraging World Bank expertise in SDI assessment.

## 4. When?

Pre-implementation to the early and middle stages of an IGIF-aligned MSDI transformation programme.

## 5. Where?

As a stepping-stone to the full IGIF-MSDI ecosystem for national, regional, and port-specific MSDI solutions.

## 6. How?

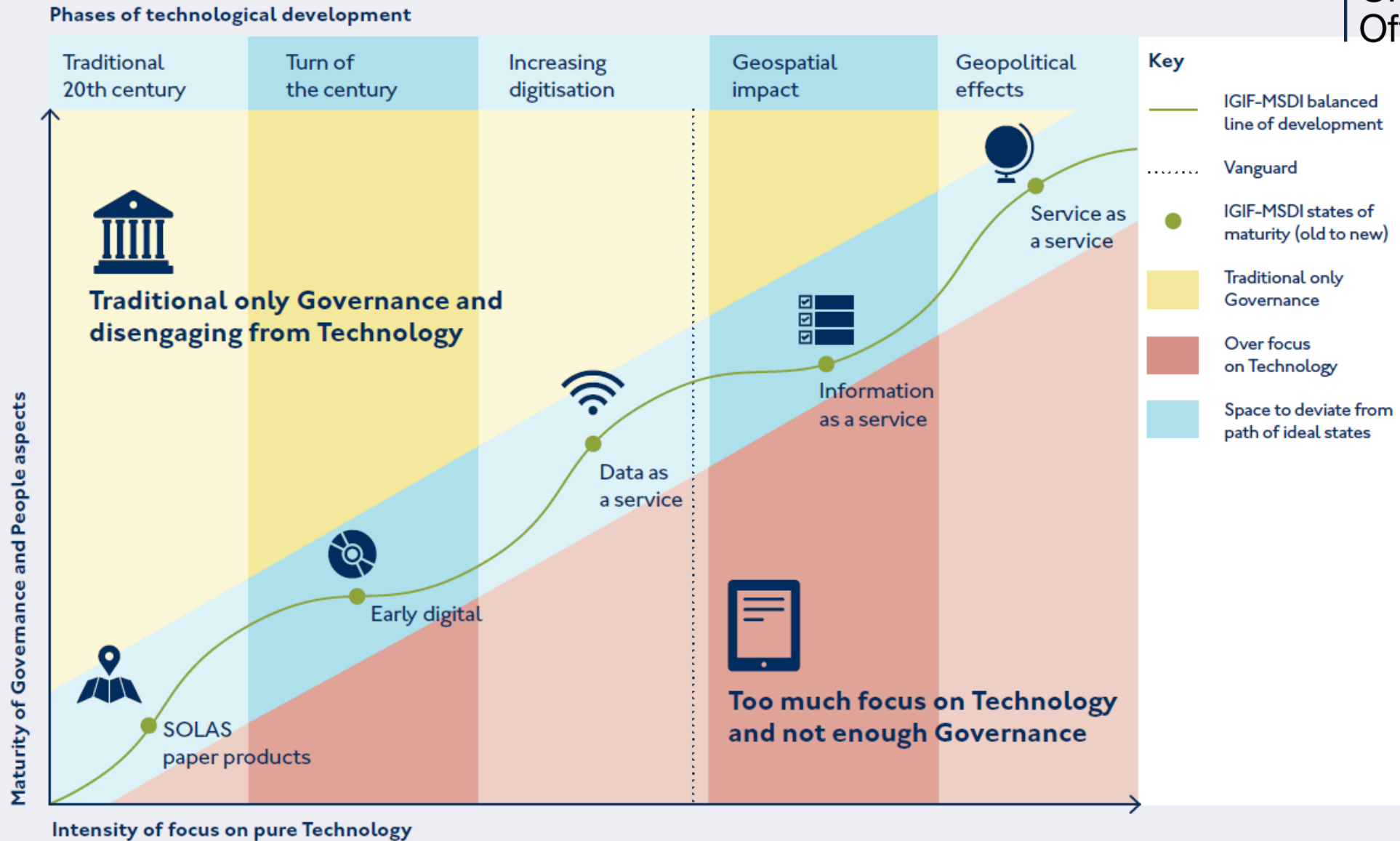
Early alignment will reduce future costs of divergence by ensuring interoperability with an All-Domain NSDI<sup>(1)</sup>.

<sup>1</sup> All-domain: Air, land, sea, space, and cyberspace (if applicable). NSDI: National Spatial Data Infrastructure.

# IGIF-MSDI is a Pathway, Maturity is a State



UK Hydrographic Office



# Embedding an IGIF-Aligned MSDI into wider Geospatial considerations



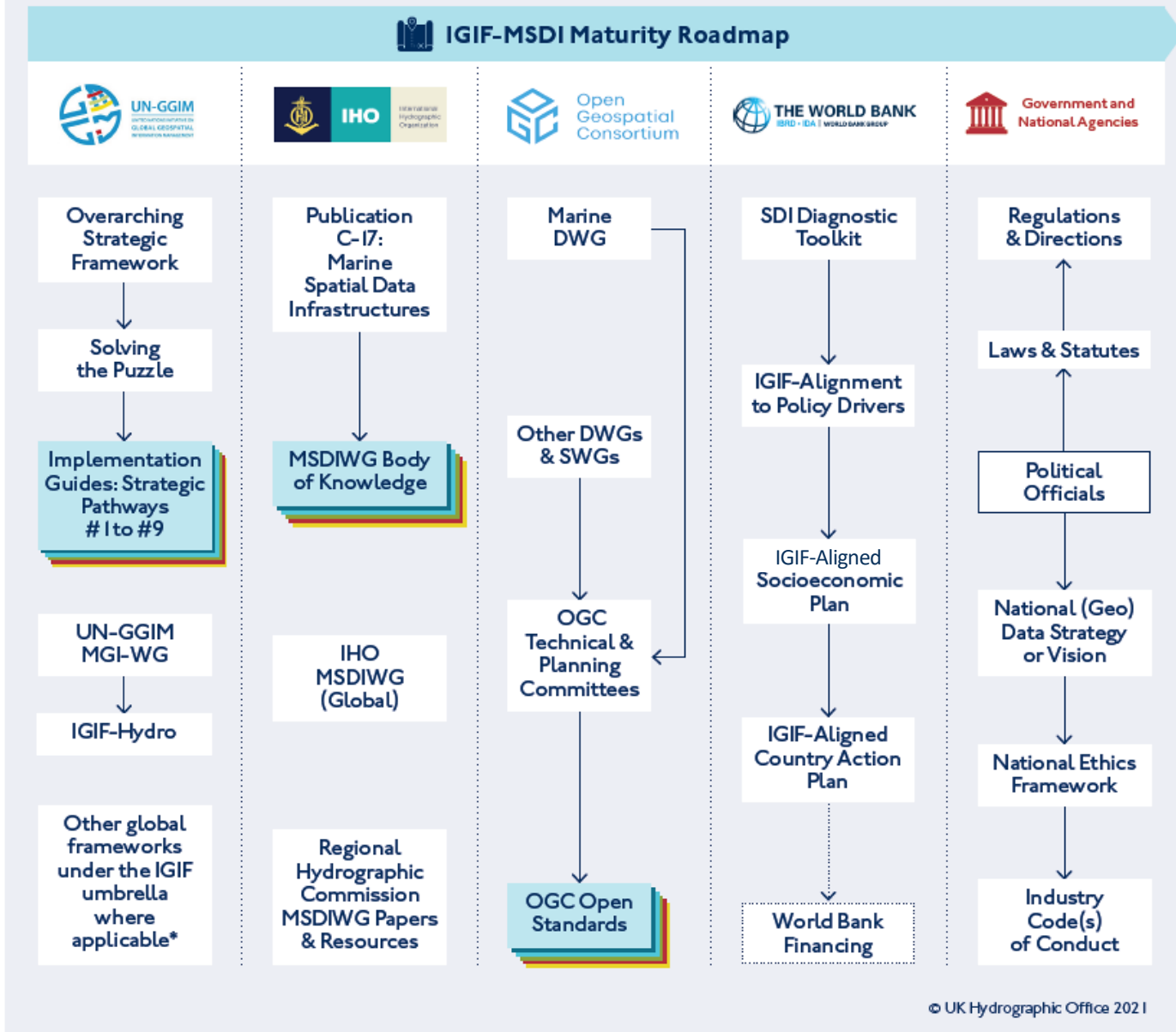
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# (Simplified) Ecosystem of IGIF and MSDI Resources



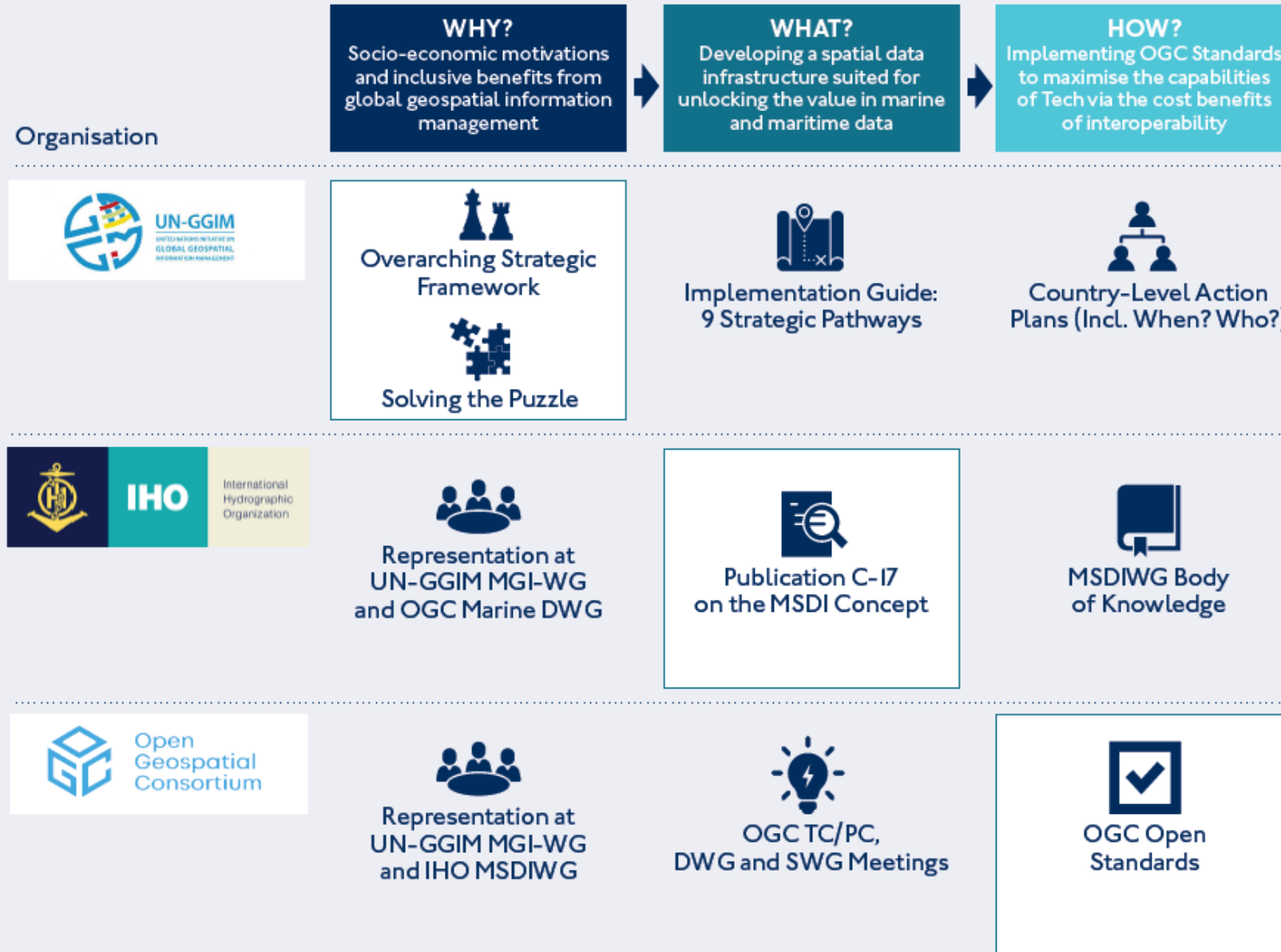
UK Hydrographic Office



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\*Including the Fundamental Geospatial Data Themes and the Global Statistical Geospatial Framework

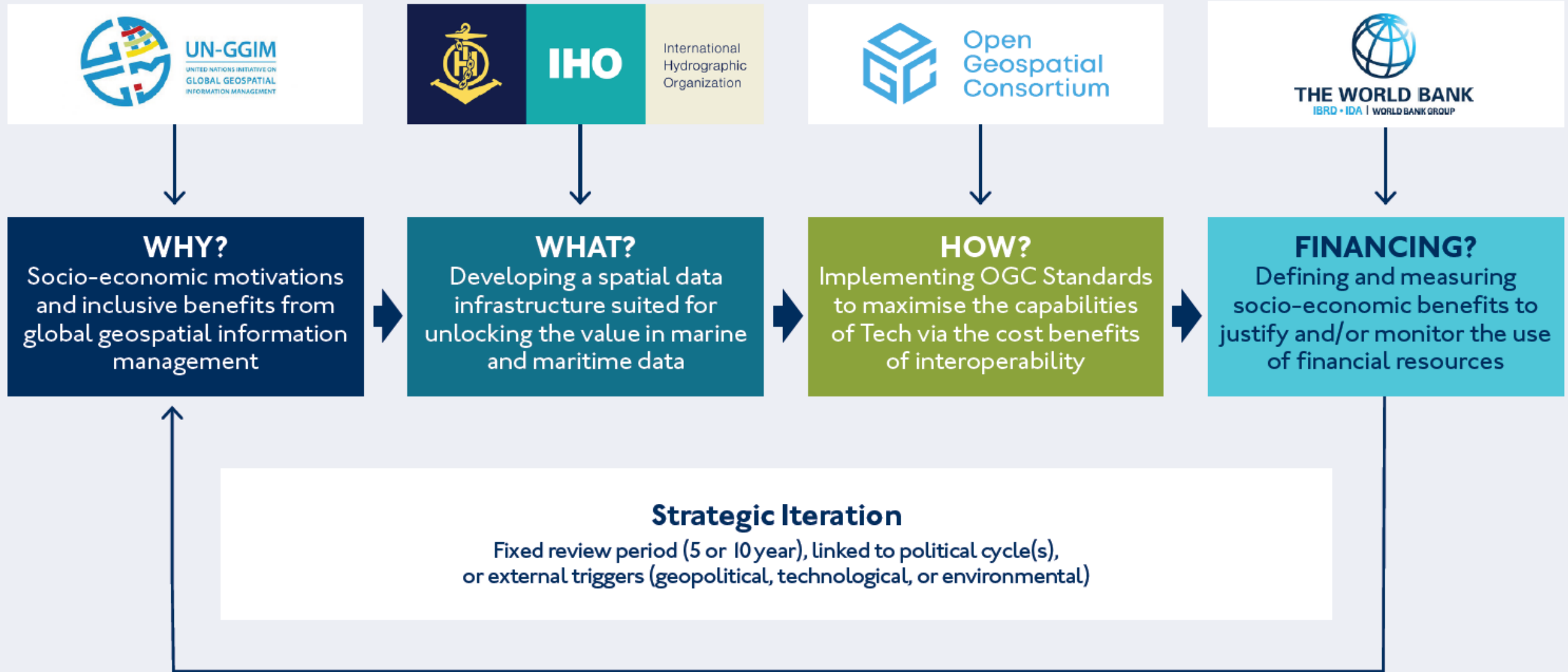
# The Context of the UN-GGIM, IHO, OGC, and World Bank



## Foundation Elements: Financing & National Ecosystem



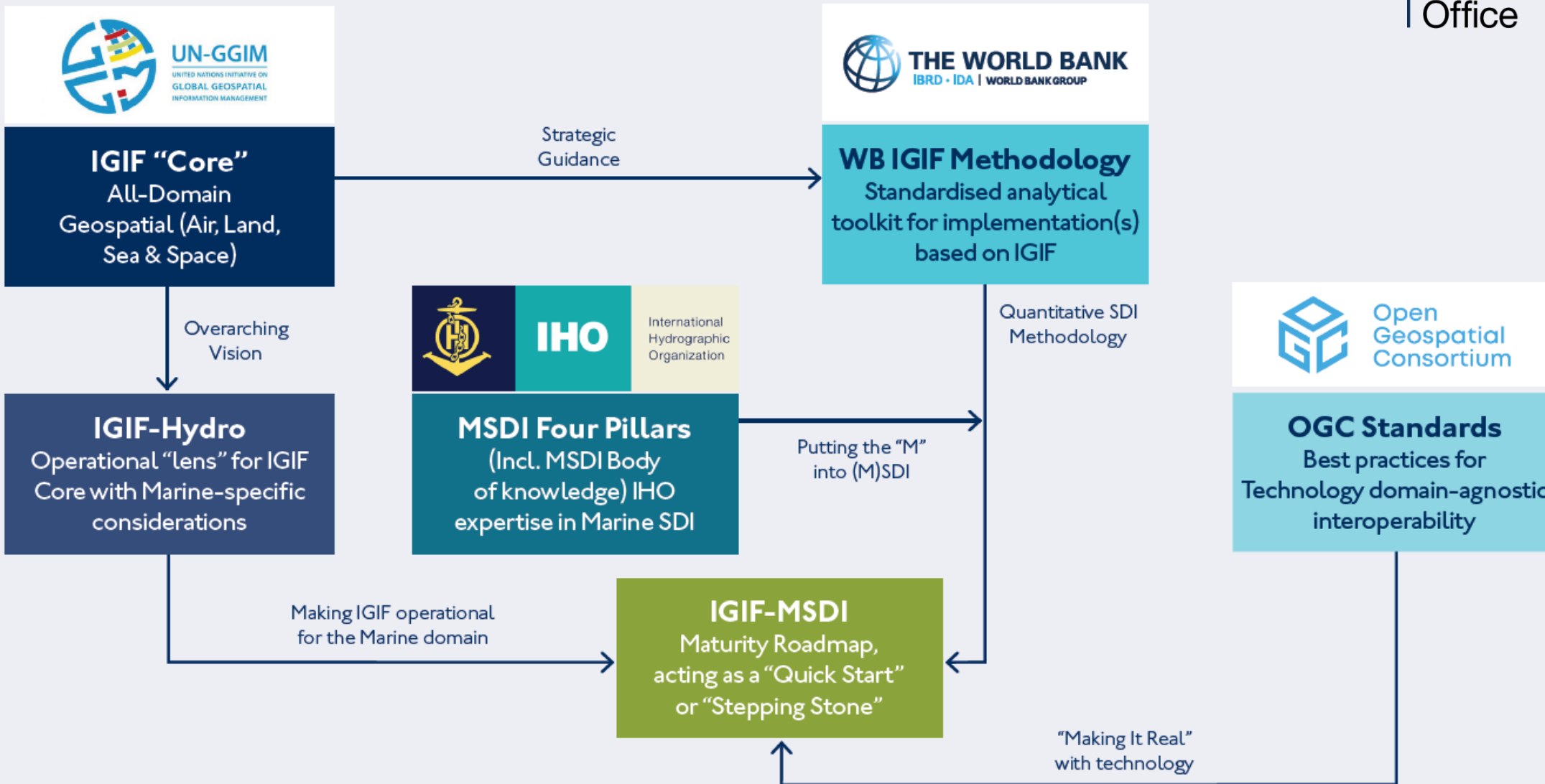
# Holistic Approach to an IGIF-Aligned MSDI



# Key inputs for an IGIF-Aligned MSDI



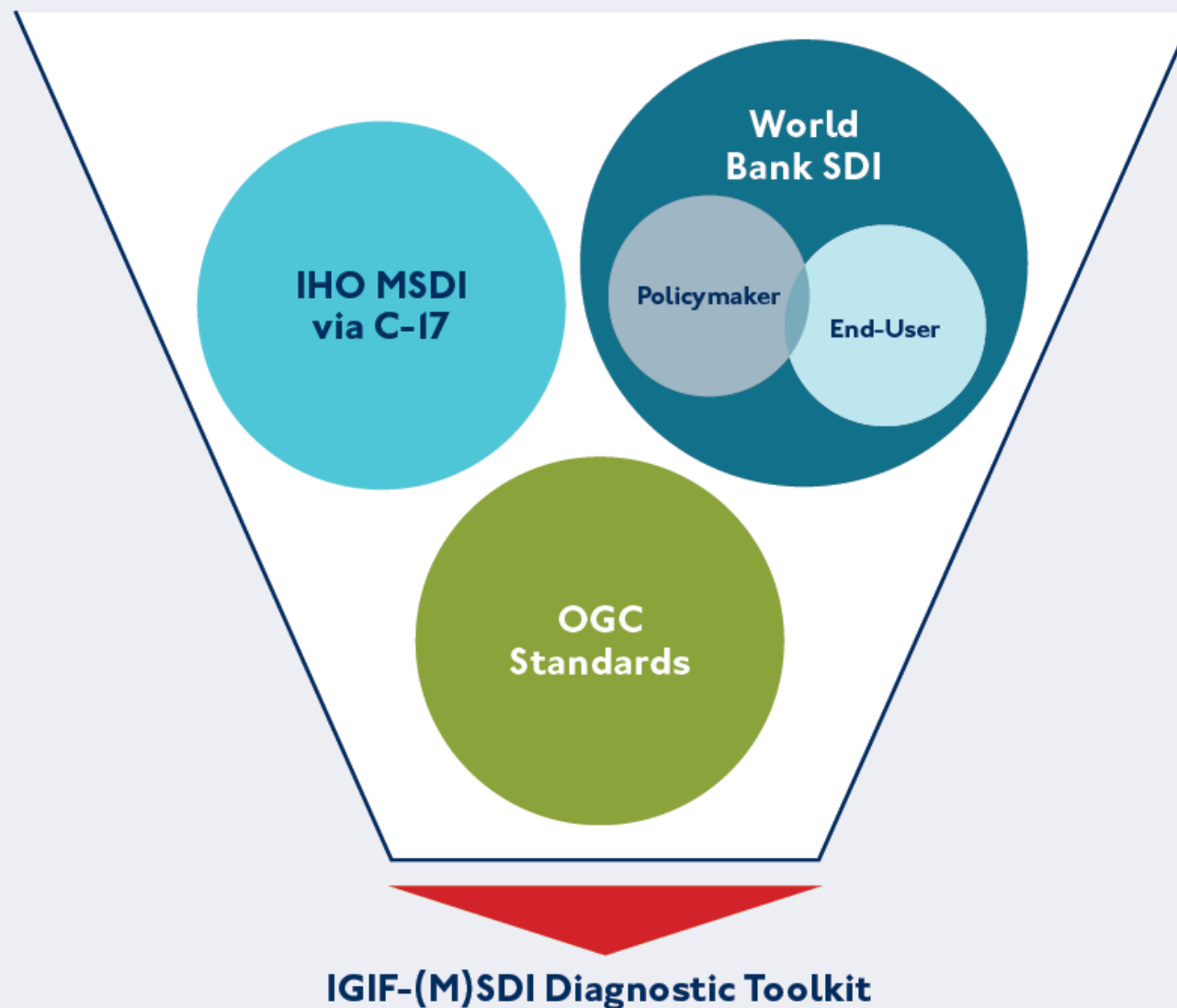
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# Components of the IGIF-(M)SDI Diagnostic Toolkit



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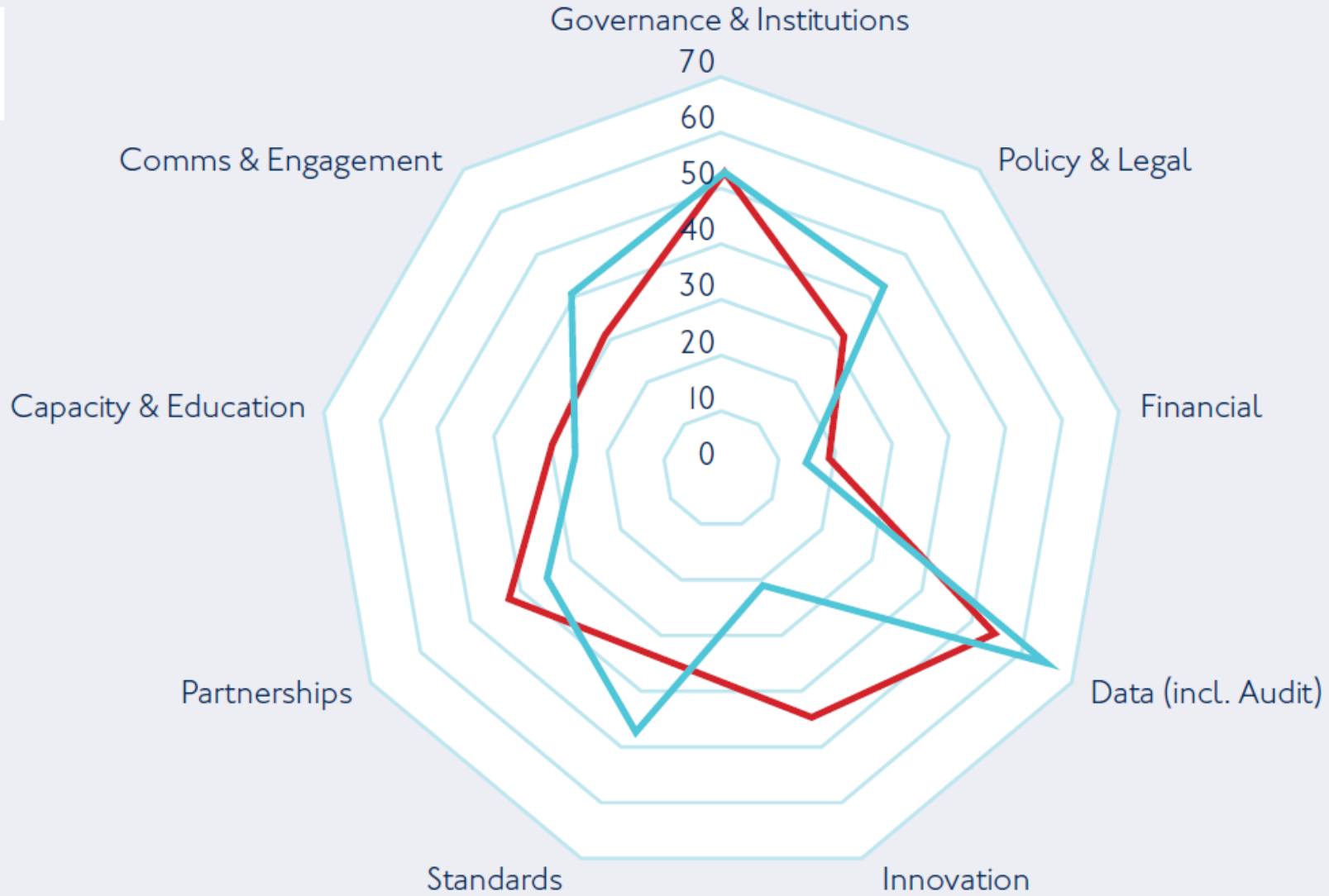
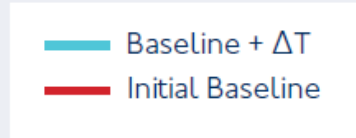




# IGIF-MSDI Maturity Assessment



UK Hydrographic Office



# Lead Authorship, Contributors, Reviewers, and Facilitators



**Dr Gerald J Wong**

Co-Chair of OGC Marine  
DWG & OGC Planning  
Committee Delegate

United Kingdom  
Hydrographic Office



**Kathrine Kelm**

Senior Land  
Administration Specialist  
The World Bank Group



**Jens Peter Hartmann**

Chair of IHO MSDIWG  
Danish Geodata Agency,  
Kingdom of Denmark



**John Nyberg**

Co-Chair of UN WG-MGI  
National Oceanic and  
Atmospheric  
Administration, United  
States of America



**Pearlyn Peng**

Co-Chair of UN WG-MGI  
Vice-Chair of IHO MSDIWG  
Maritime and Port  
Authority, Republic of  
Singapore



**Chee Hai Teo**

UN-GGIM Secretariat,  
Department of Economic  
and Social Affairs  
United Nations



**Gregory Scott**

UN-GGIM Secretariat,  
Department of Economic  
and Social Affairs  
United Nations



**Trevor Taylor**

Senior Director, Member  
Success & Development  
Open Geospatial  
Consortium



**Leonel Manteigas**

Assistant Director,  
Coordination & Capacity



**Andrew Coote**

Principal NSDI  
Consultant



Special thanks for Side Event support and/or endorsement:

IHO SecGen Mathias Jonas

OGC CEO Nadine Alameh

ISO/TC-211 Chair Peter Parslow

- A. Feedback on the IGIF-(M)SDI Maturity Roadmap from Expert Reviewers ...
  - i. Chairs of the IHO MSDI WG and UN-GGIM WG-MGI respectively
- B. Secure commitment from countries to pilot its value in use and refine (*as necessary*)
  - i. Developed Country Candidate(s)
  - ii. Developing Country Candidate(s)

1. Does the Maturity Roadmap help meet your (M)SDI requirements?
2. If **yes**, how can it be refined to even better meet your needs?
3. If **not**, what tools or guidelines *would* accelerate the strengthening of marine geospatial information management at the country-level?
4. Other Questions ...