#### **Embedding an IGIF-Aligned MSDI into wider Geospatial considerations**

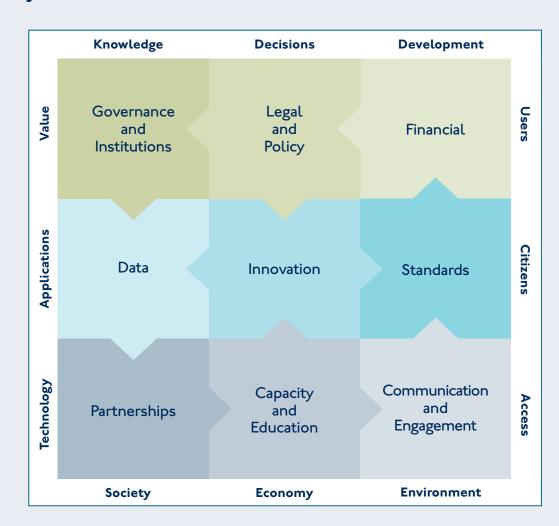


## The UN-GGIM IGIF Nine Pathways model

Governance

**Technology** 

**People** 

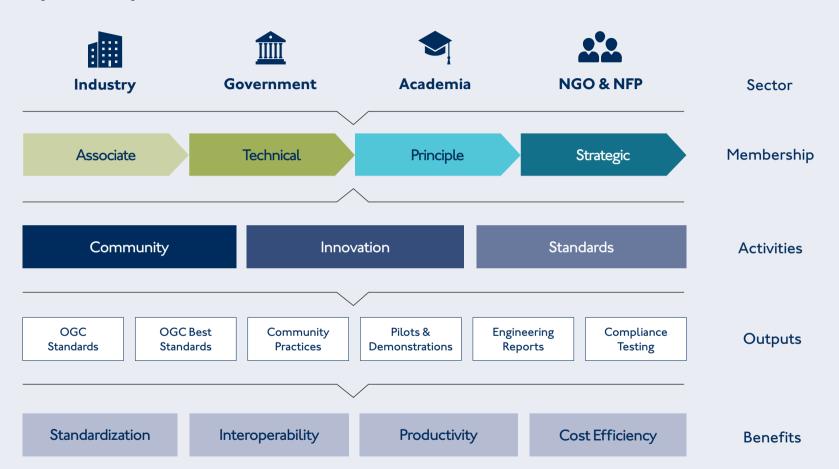


#### **MSDI Four Pillars**

IHO Publication C-17



#### **Open Geospatial Consortium**



## (Simplified) Ecosystem of IGIF and MSDI Resources

# IGIF-MSDI Maturity Roadmap

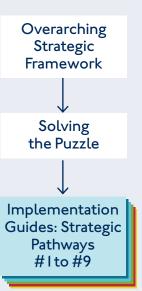














**OGC Marine DWG** Other DWGs & SWGs OGC Technical & **Planning** Committees **OGC Open** 

**Standards** 

**SDI Diagnostic** Toolkit **IGIF-Alignment** to Policy Drivers Socio-economic **Impact** Assessment IGIF-Aligned **Country Action** Plan Potential funding from Government. IFIs. or PPPs

Regulations & Directions Laws & Statutes **Political** Officials National (Geo) Data Strategy or Vision **National Ethics** Framework Industry Code(s) of Conduct

UN-GGIM WG-MGI ↓ IGIF-Hydro

Other global frameworks under the IGIF umbrella where applicable\*

Regional Hydrographic Commission MSDIWG Papers

& Resources

IHO

**MSDIWG** 

(Global)

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

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

#### WHY?

Socio-economic motivations and inclusive benefits from global geospatial information management

Developing a spatial data infrastructure suited for unlocking the value in marine and maritime data

WHAT?

#### HOW?

Implementing OGC Standards to maximise the capabilities of Tech via the cost benefits of interoperability

#### Organisation







Solving the Puzzle



Implementation Guide: 9 Strategic Pathways



Country-Level Action Plans (Incl. When? Who?)





Representation at **UN-GGIM WG-MGI** and OGC Marine DWG



Publication C-17 on the MSDI Concept



**MSDIWG** Body of Knowledge





Representation at **UN-GGIM WG-MGI** and IHO MSDIWG





Foundation Elements: Financing & National Ecosystems



SDI Diagnostic Toolkit | Alignment to Policy Drivers | Socio-Economic Plan | Country Action Plan



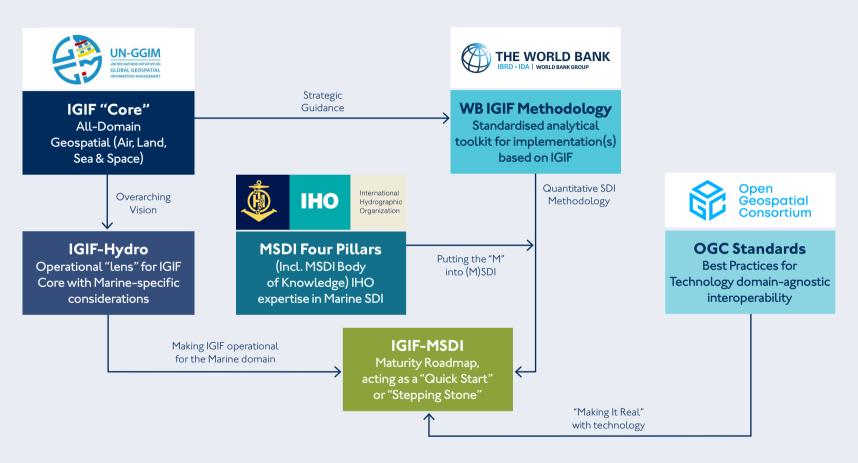
Laws & Statutes | Regulations & Directives | National Geodata Policies | Industry Ways of Working

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

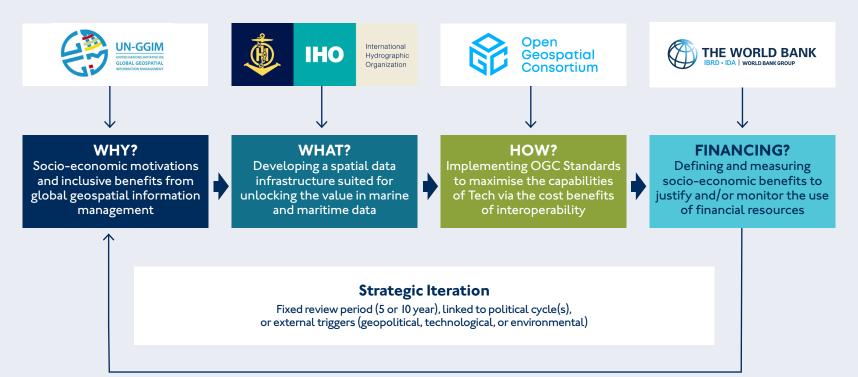
#### Phases of technological development Geospatial Geopolitical Key **Traditional** Turn of Increasing 20th century the century digitisation impact effects IGIF-MSDI balanced line of development Vanguard Service as IGIF-MSDI states of maturity (old to new) a service Traditional only Traditional only Governance and Governance disengaging from Technology Over focus on Technology Information Maturity of Governance and People aspects Space to deviate from as a service path of ideal states Data as a service Early digital Too much focus on Technology **SOLAS** and not enough Governance paper products

Intensity of focus on pure Technology

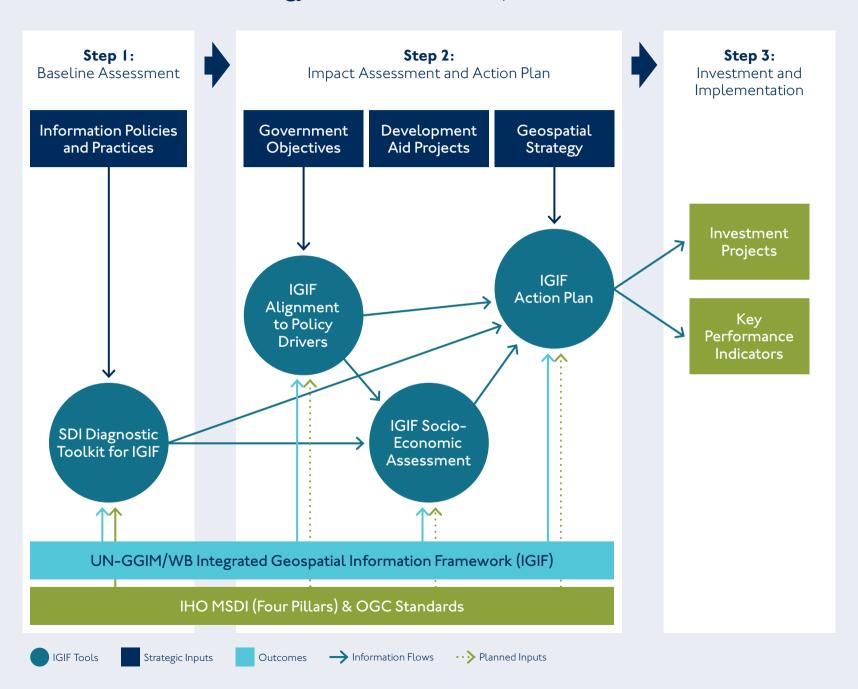
#### **Key inputs for an IGIF-Aligned MSDI**



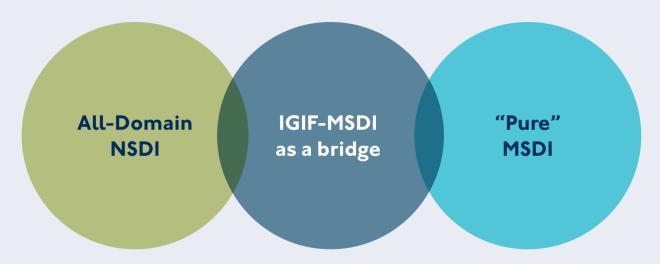
#### Holistic Approach to an IGIF-Aligned MSDI



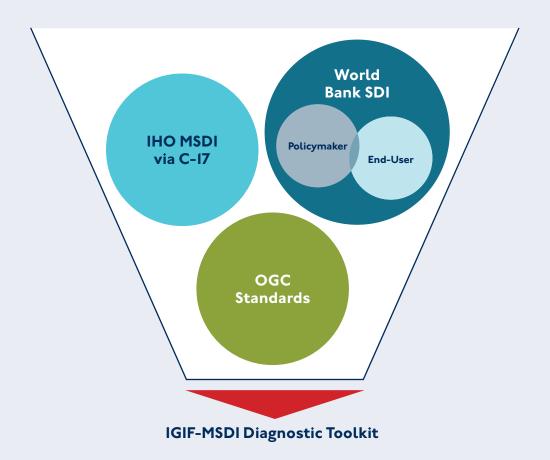
## World Bank IGIF Methodology (with IHO and OGC inputs)



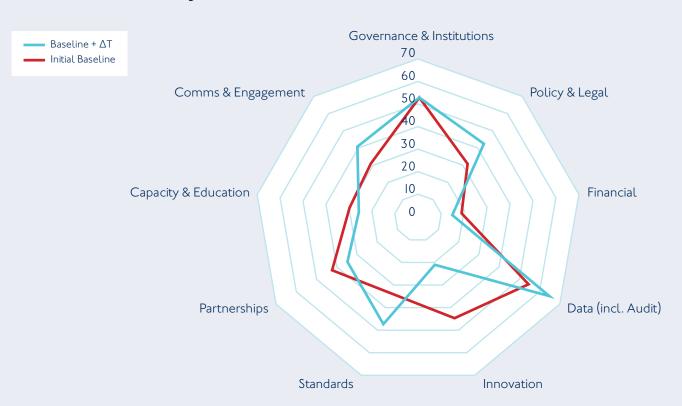
# **Bridging towards an NSDI**



## Components of the IGIF-MSDI Diagnostic Toolkit



## **IGIF-MSDI** Maturity Assessment



#### Part 1: Fundamental Data Themes



Global Geodetic Reference Frame



Addresses



Buildings and Settlements



Elevation and Depth



Functional Areas



Geographical Names



Geology and Soils



Land Cover and Use



**Land Parcels** 



Orthoimagery



Physical Infrastructure



Population Distribution

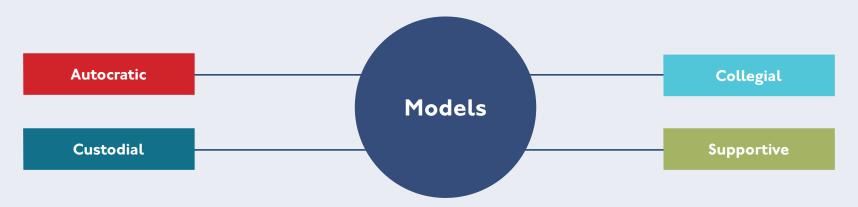


Transport Networks



Water

# **Models of Organizational Change**

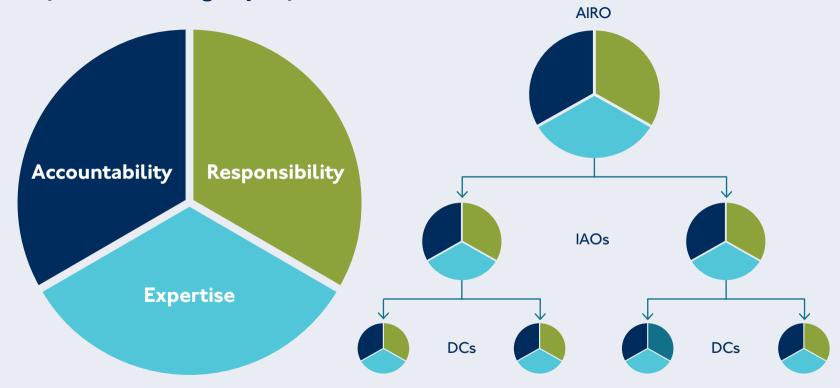


	Autocratic	Custodial	Collegial	Supportive
Basis of Model	Power	Economics	Partnership	Leadership
Managerial Orientation	Authority	Money	Teamwork	Support
Employee Orientation	Obedience	Security and Benefits	Responsible Behaviour	Job Performance
Employee Behaviour	Dependence on Management	Dependence on Organisation	Self-Discipline	Participation
Employee Needs Met	Subsistence	Security	Self-Actualisation	Status and Recognition
Performance Result	Minimum	Passive Cooperation	Moderate Enthusiasm	Awakened Drives

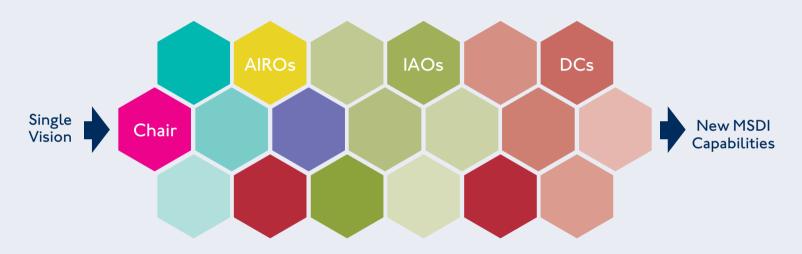
## Basic key elements of the multiagency IGIF-MSDI umbrella Governance model



## **Empowerment of Agency Representatives**



## Virtual IGIF-MSDI Enterprise



#### **Virtual IGIF-MSDI Enterprise**



Collaborative, cooperative and consensus **decision-making** via representatives or ambassadors from each Agency.

#### **IGIF-MSDI** Governance and Management

