

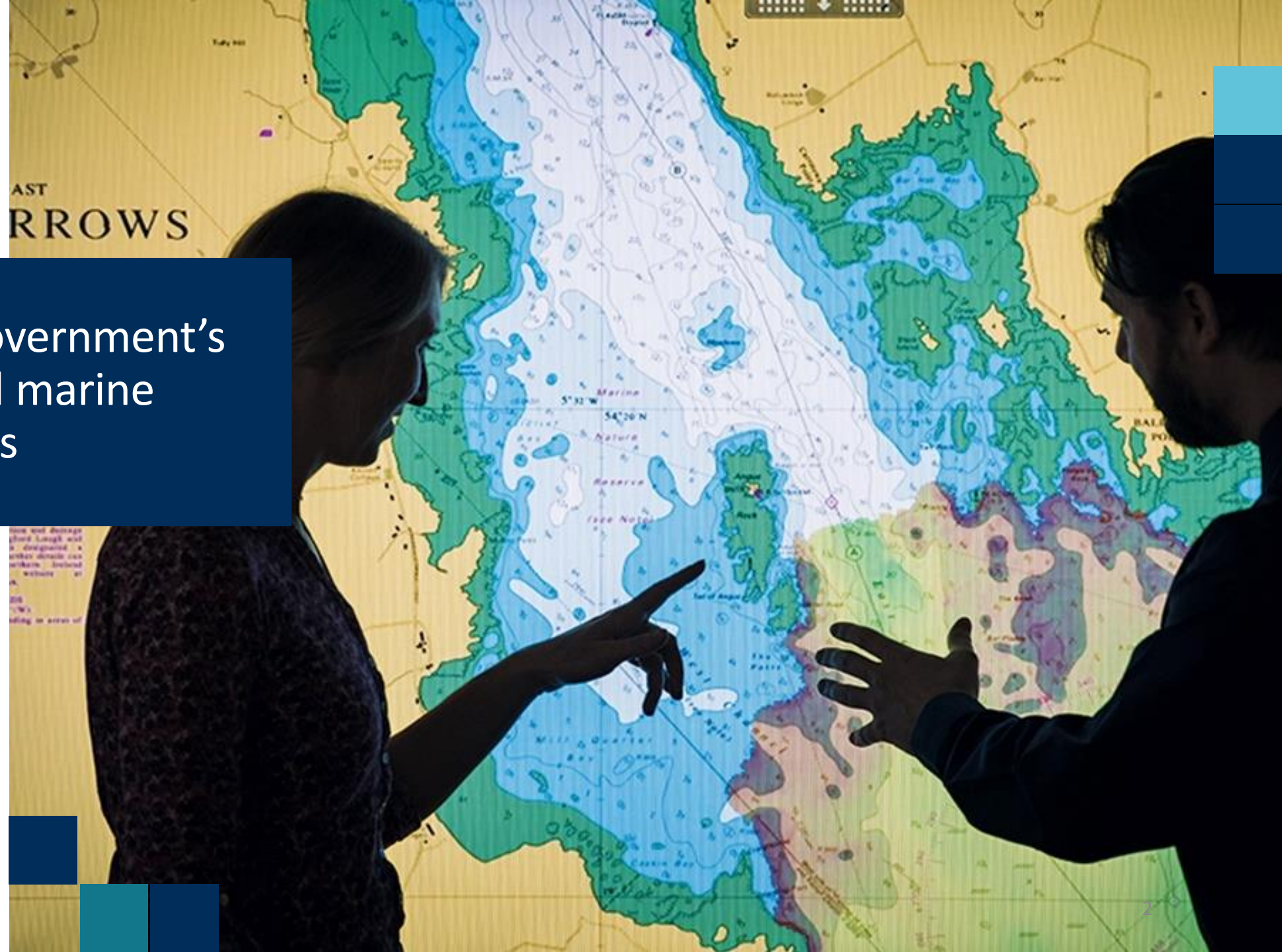
# Hydrographic Data, the IGIF and Digital Twins of the Oceans

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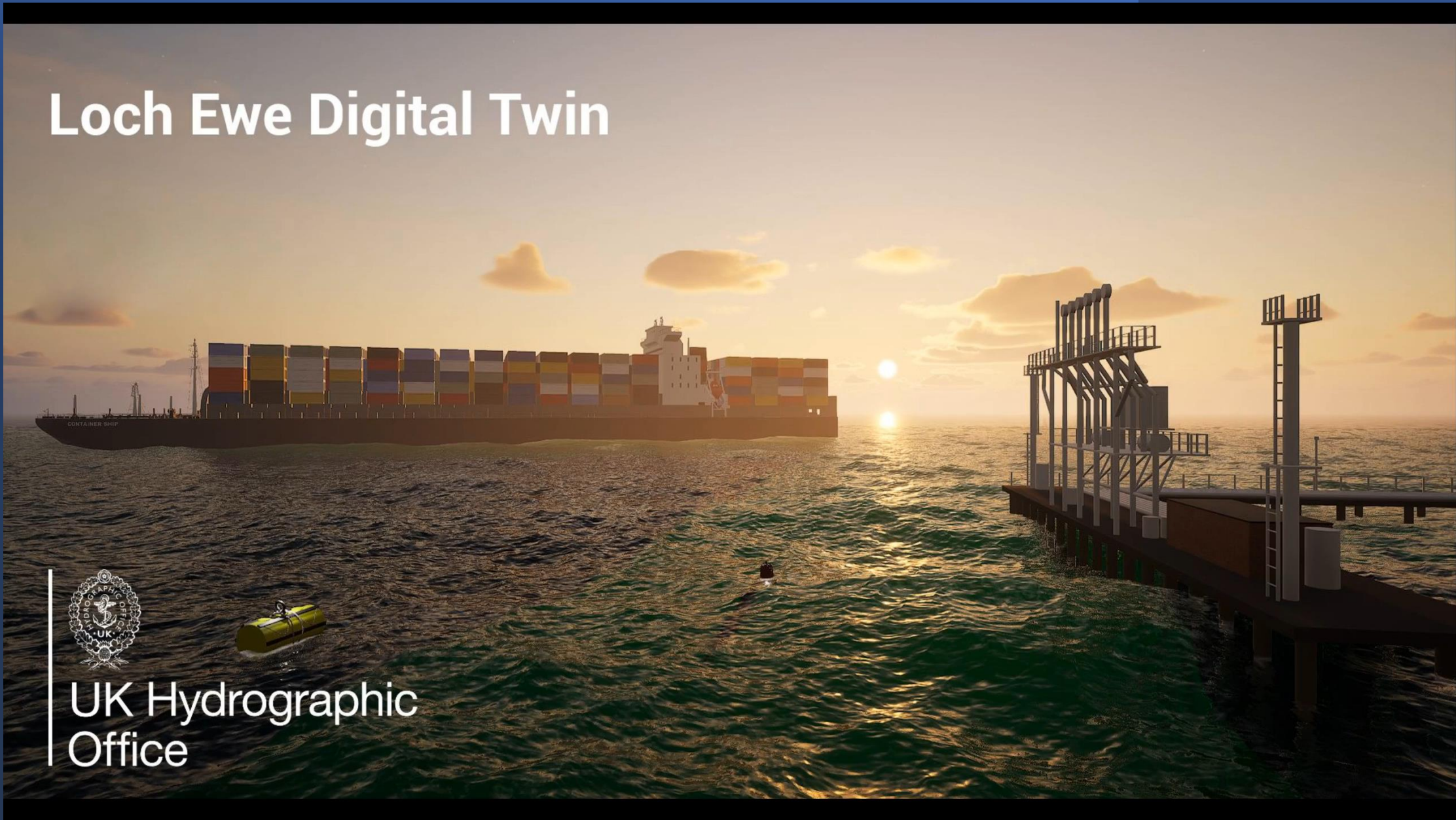
We are the UK government's hydrographic and marine geospatial experts



# Enabling better use of the marine environment



# Loch Ewe Digital Twin

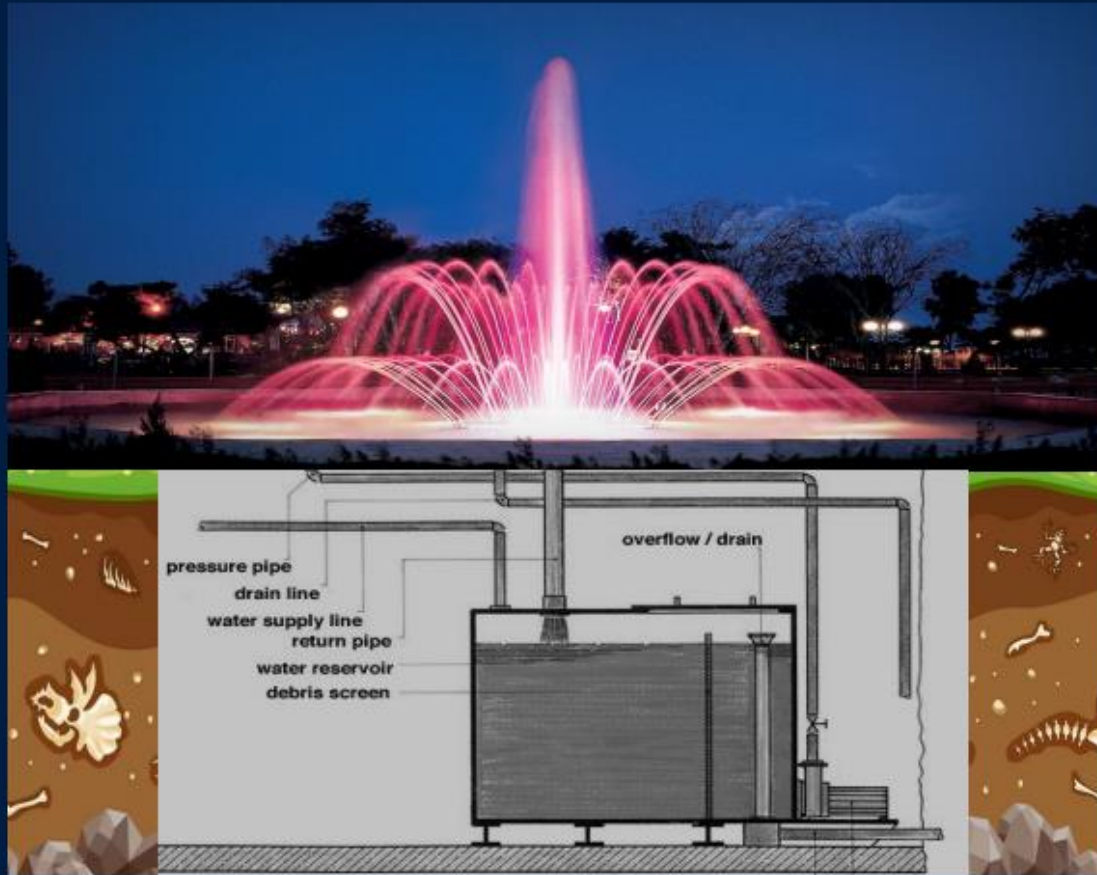


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# What is a Digital Twin?

The sparkly fountain

Presented by Terry McConnell  
Fugro DITTO22



Digital Twins:

Are the visible part of a complex digital data eco-system

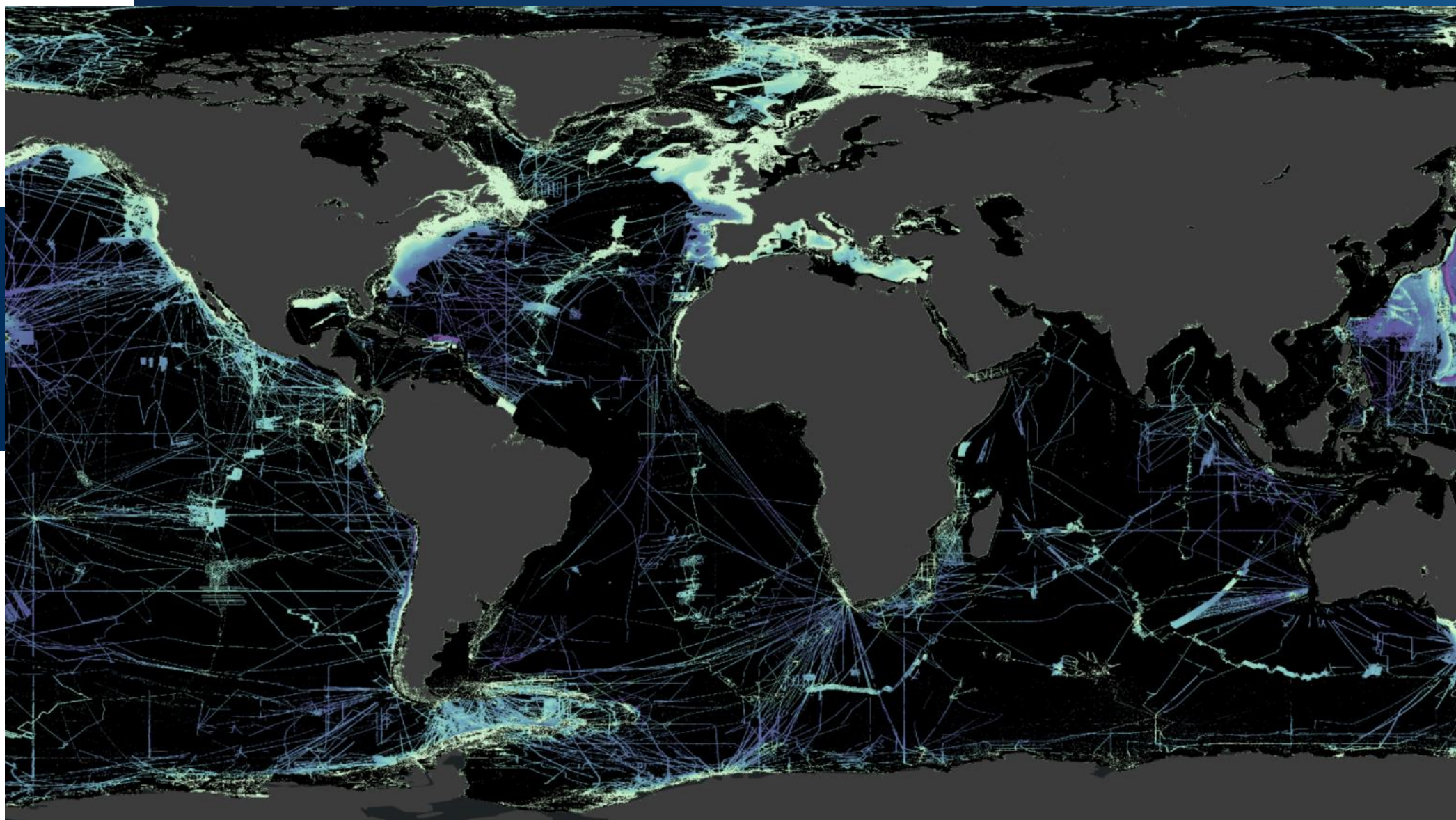
Are empowered by that digital data eco-system

and

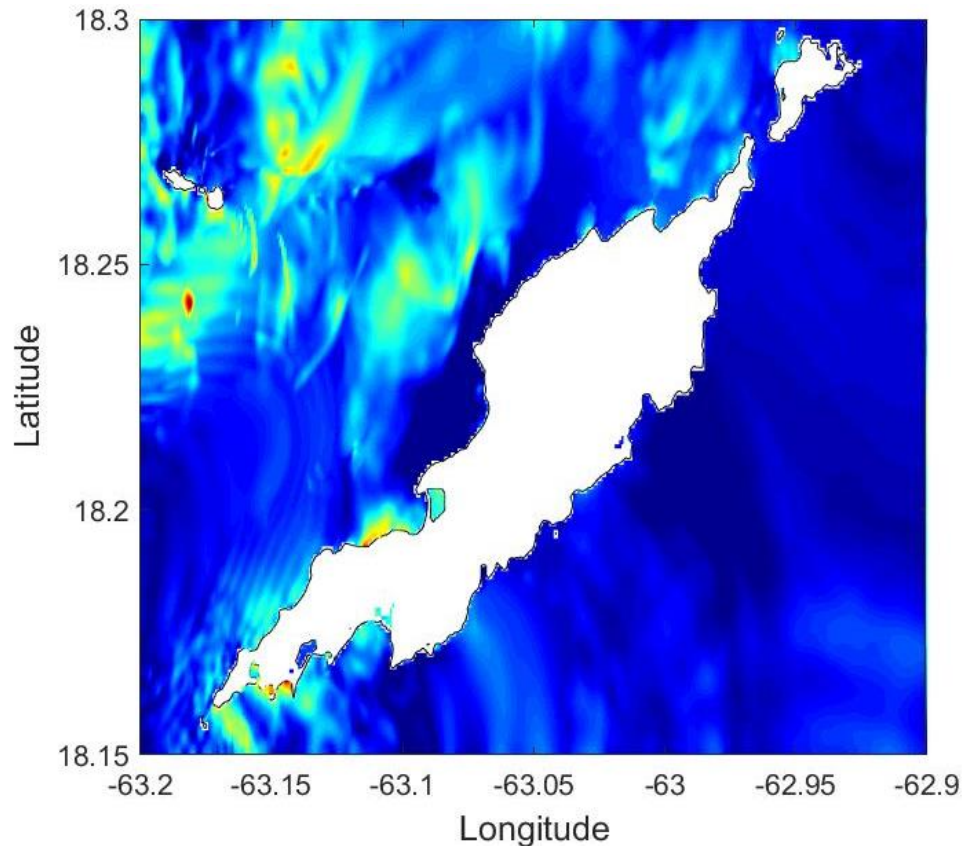
Dictate the design of the digital data eco-system.

Seabed

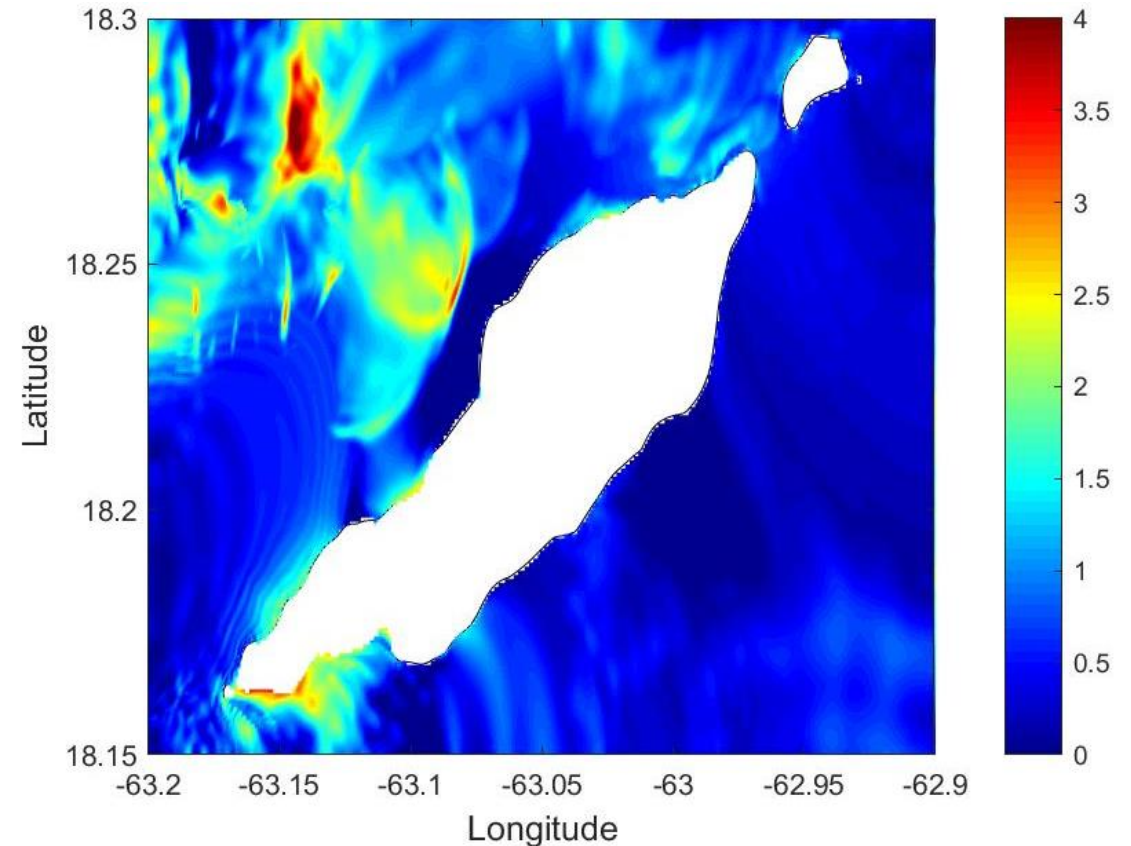
2030



# Q-FAIR: Quality



***Figure 5-13: Simulated Run-up heights along Anguilla coast (source LA2 with 10m bathymetry)***



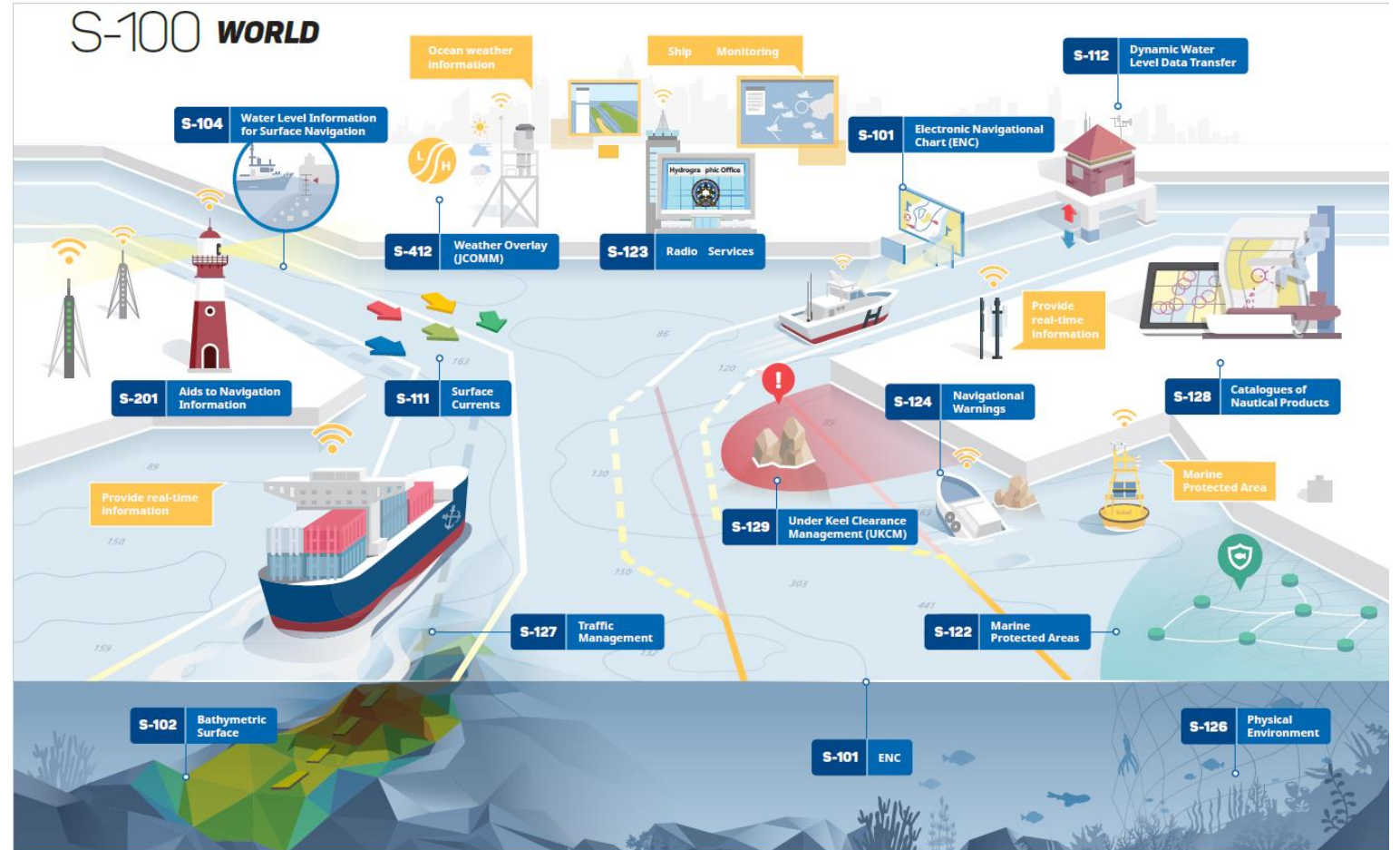
- Figure 5-15: Simulated Run-up heights along Anguilla coast (source LA2 with GEBCO bathymetry)***



Q-FAIR: Findability  
and Accessibility



# Q-FAIR: Interoperability and Reusability



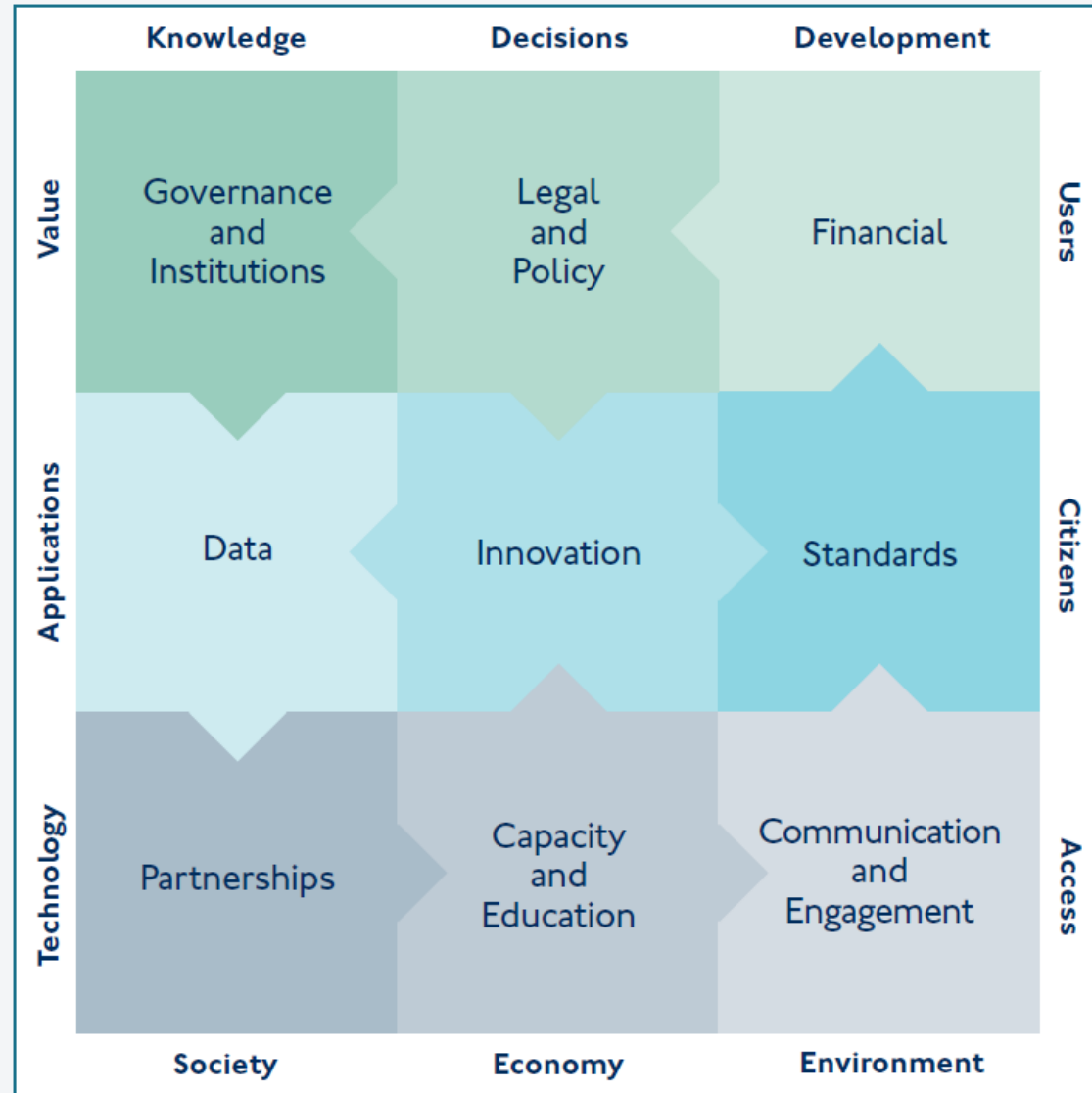
# The UN-GGIM IGIF Nine Pathways model



**Governance**

**Technology**

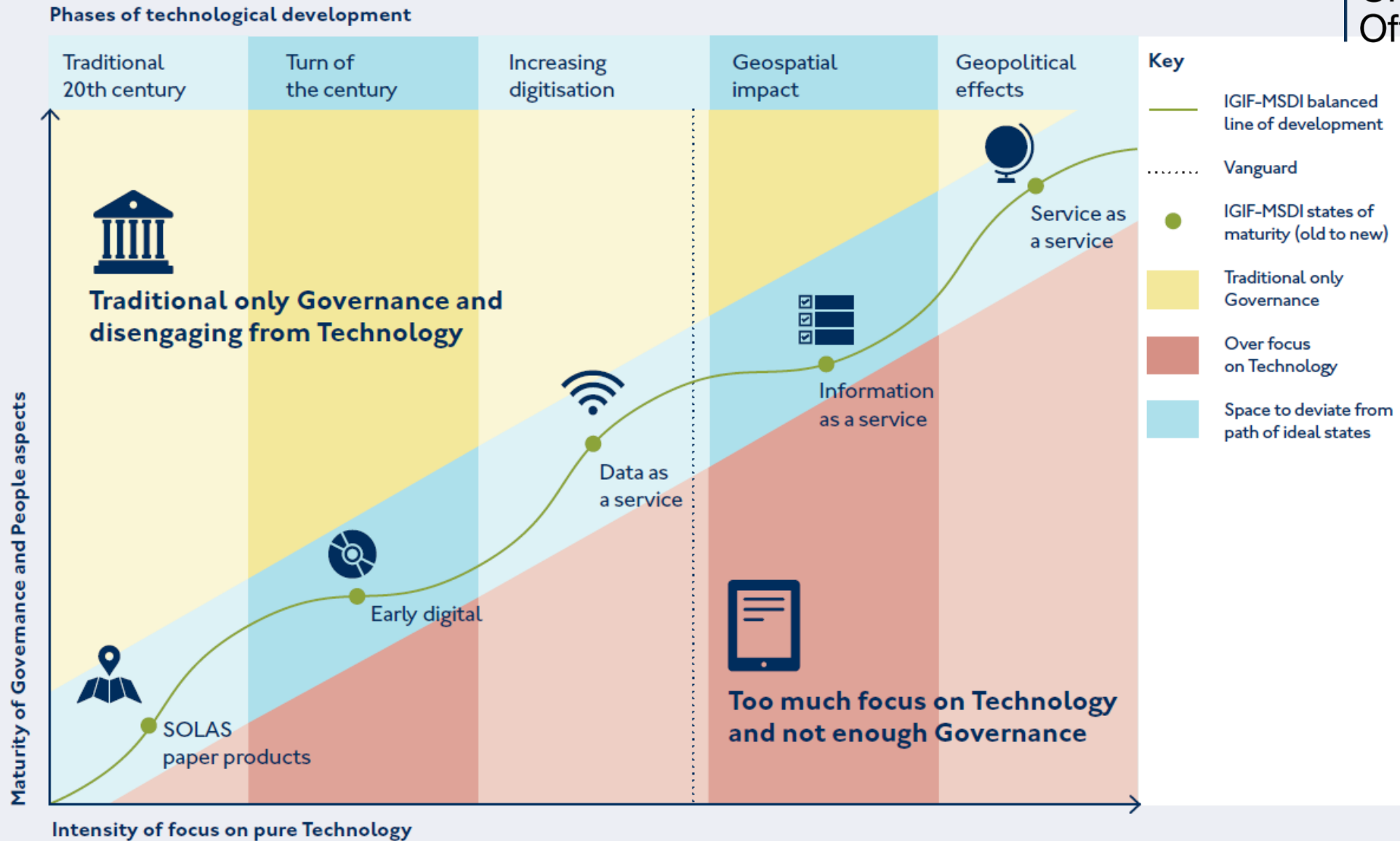
**People**



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



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# Embedding an IGIF-Aligned MSDI into wider Geospatial considerations



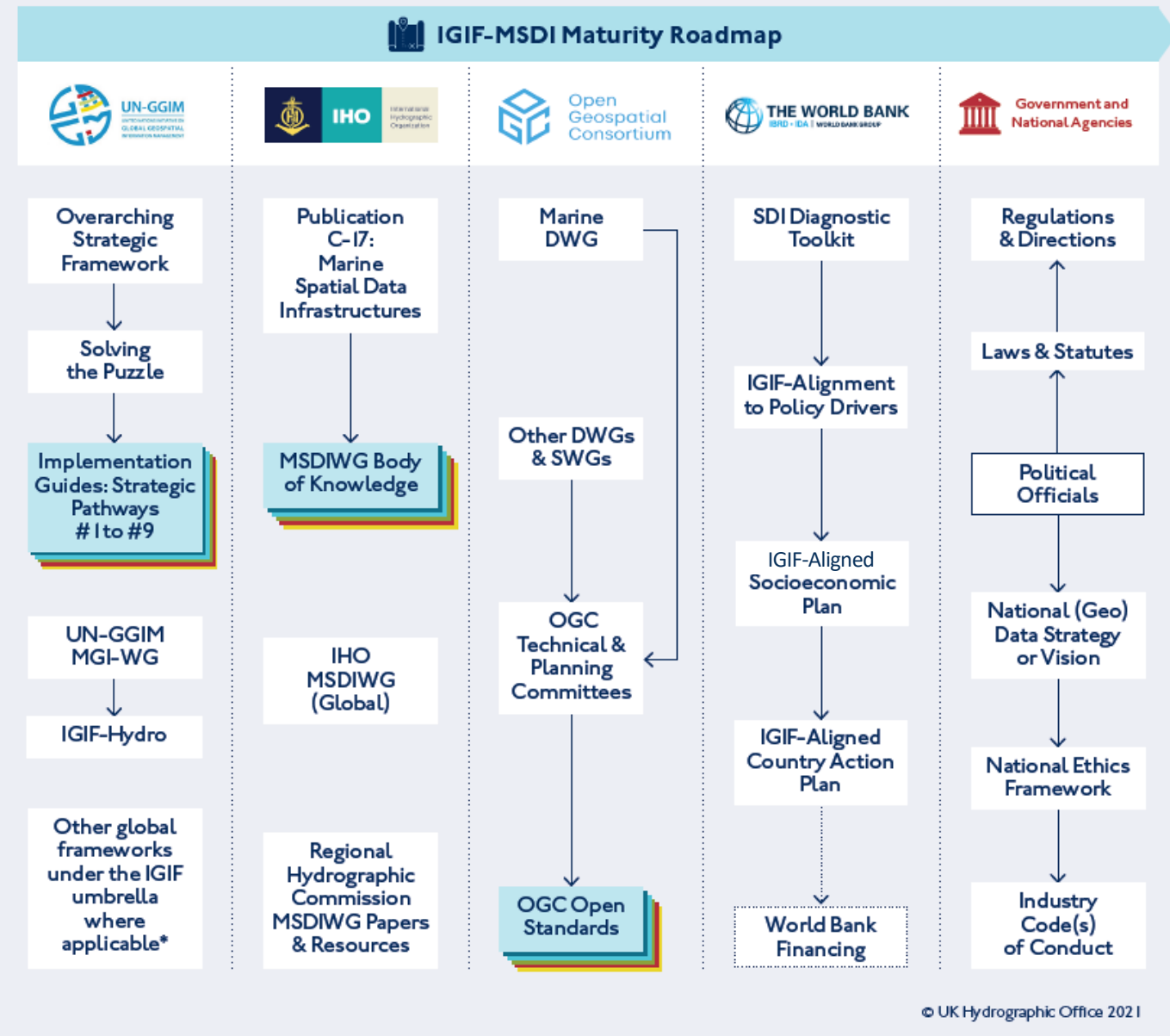
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# (Simplified) Ecosystem of IGIF and MSDI Resources



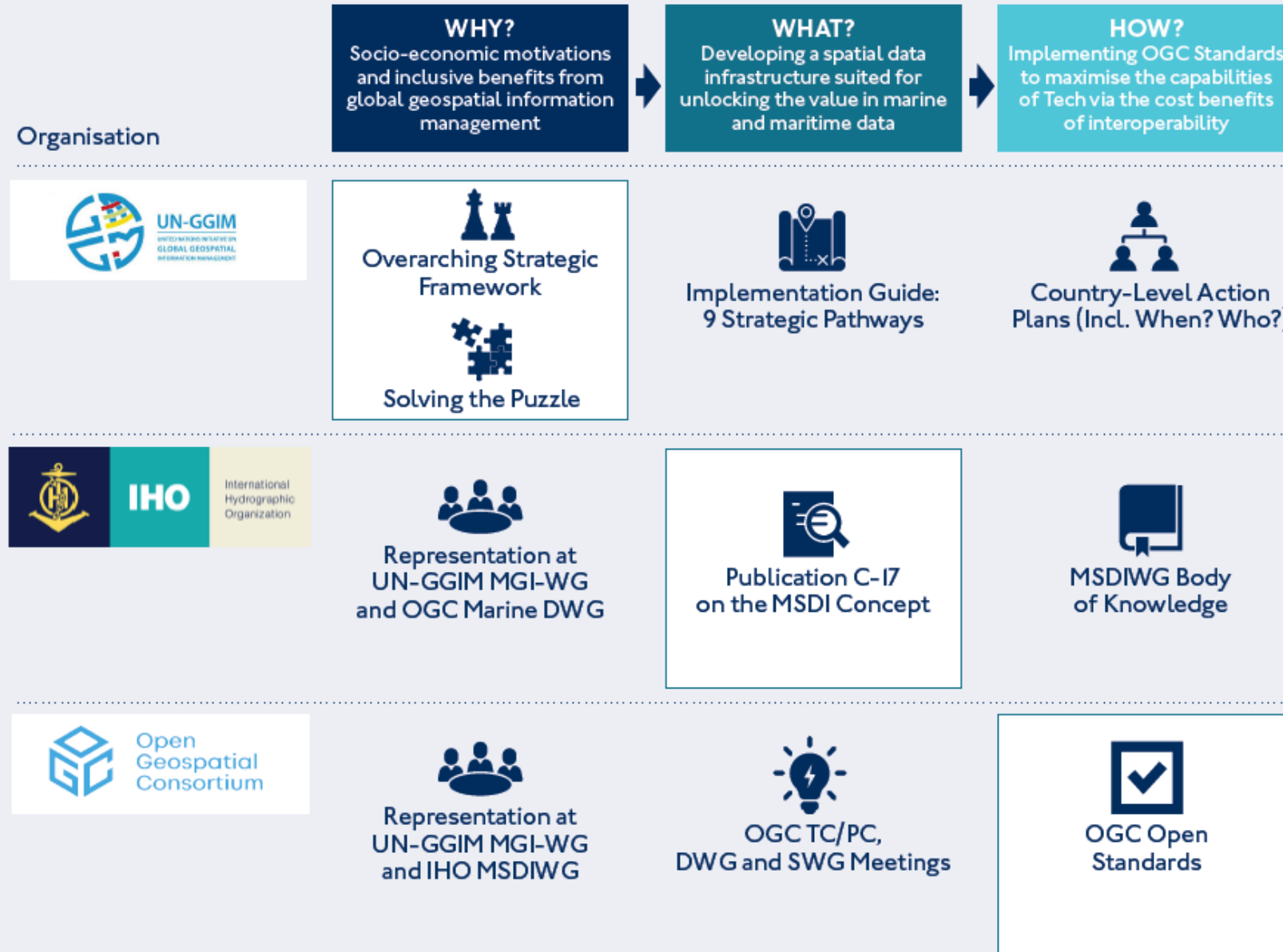
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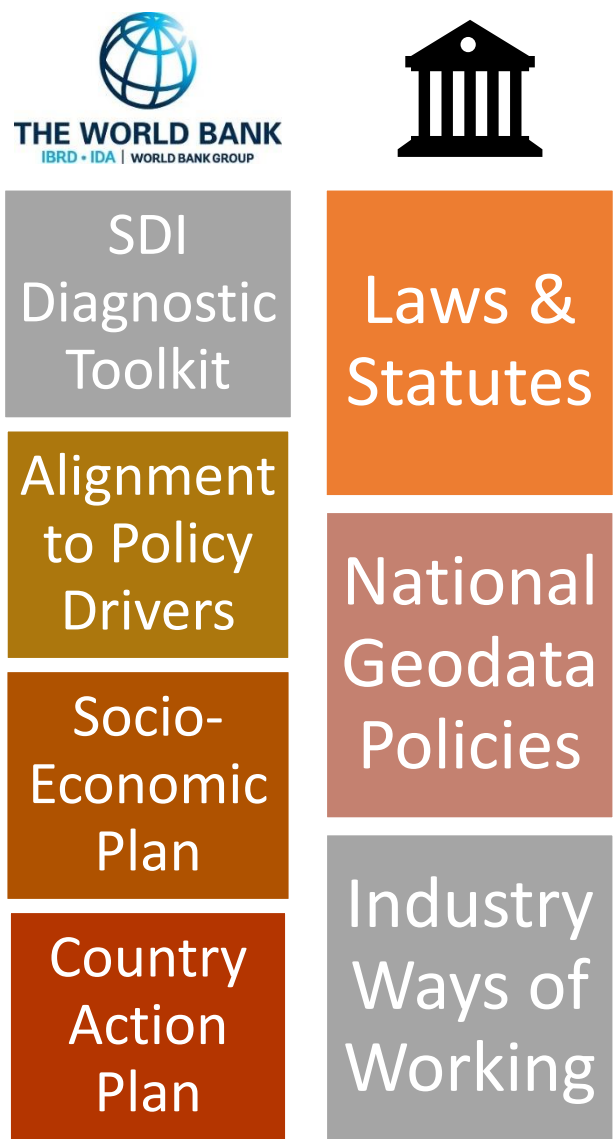
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\*Including the Fundamental Geospatial Data Themes and the Global Statistical Geospatial Framework

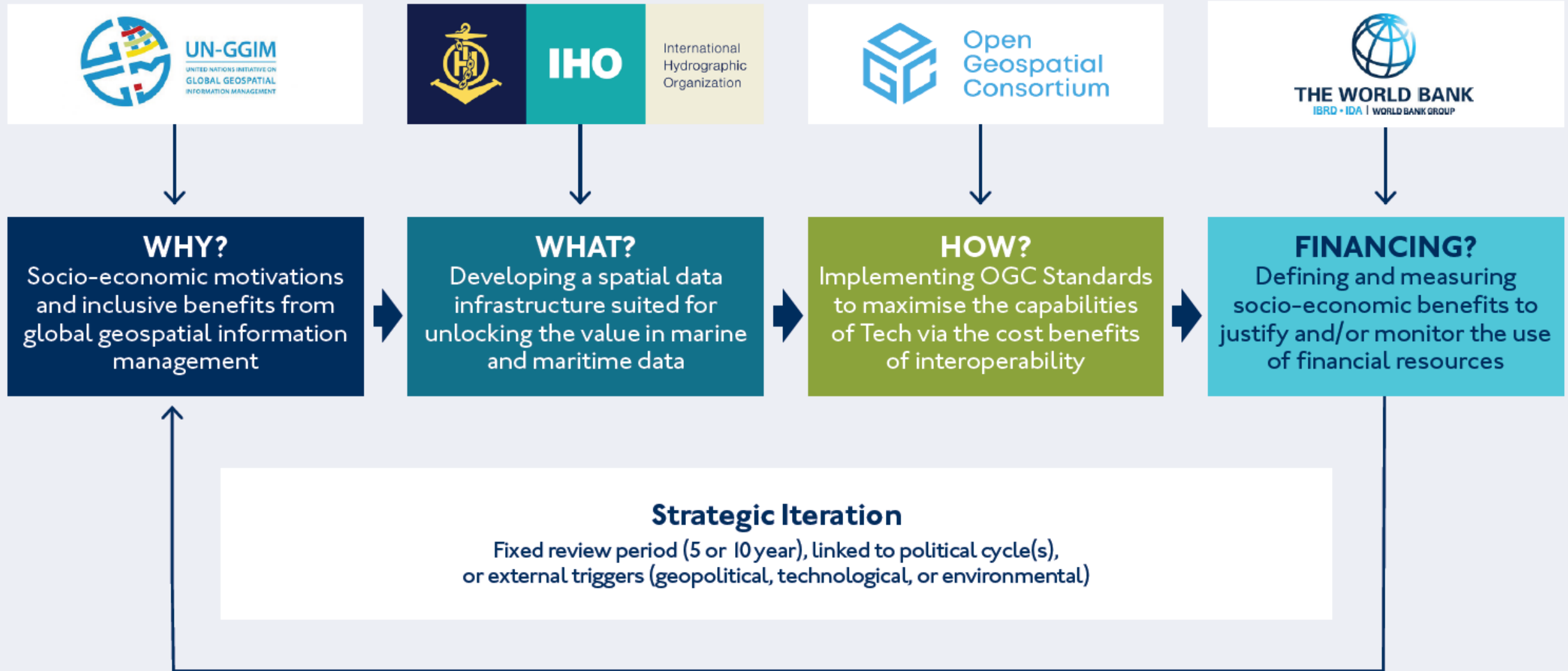
# The Context of the UN-GGIM, IHO, OGC, and World Bank



## Foundation Elements: Financing & National Ecosystem



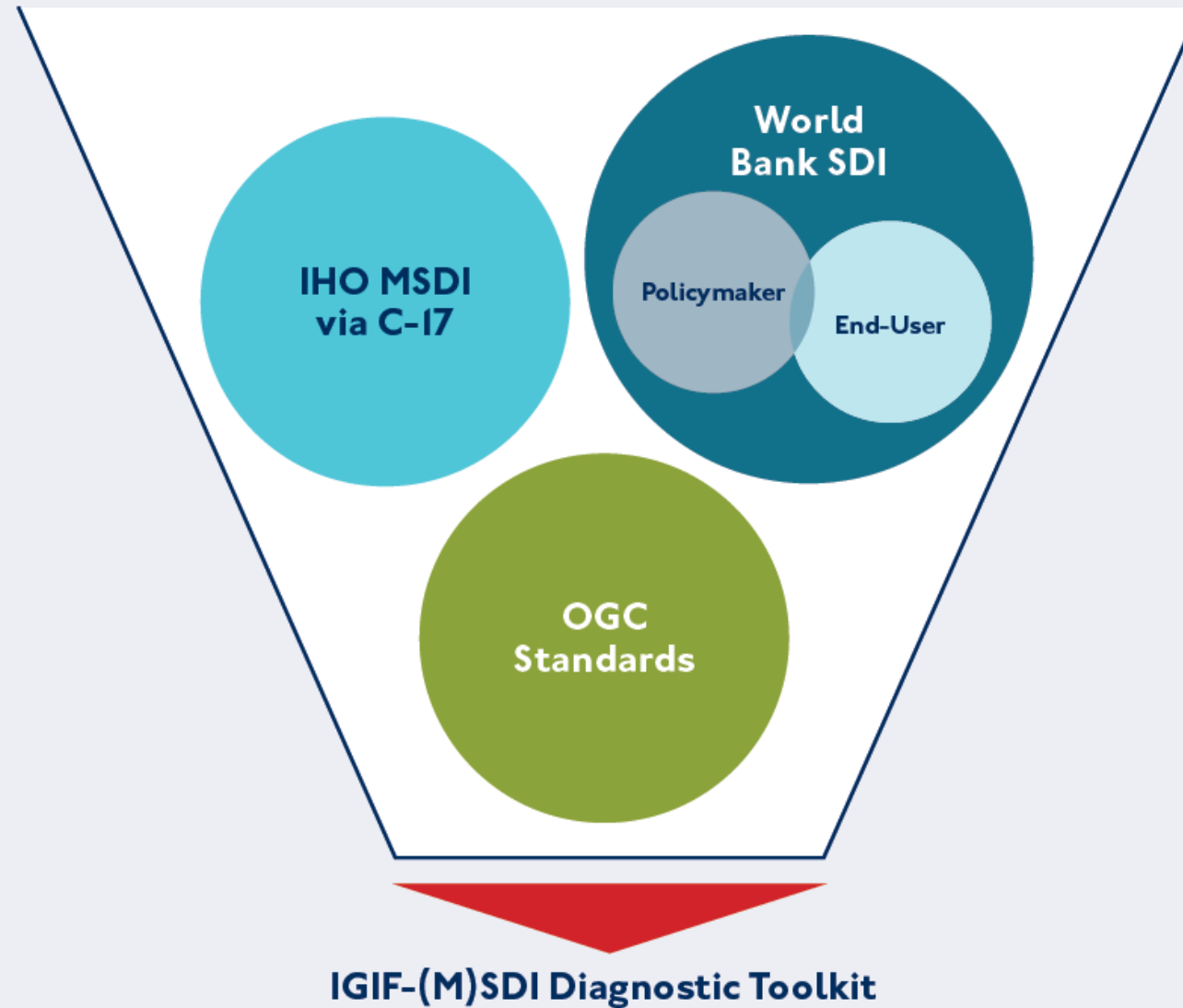
# Holistic Approach to an IGIF-Aligned MSDI



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



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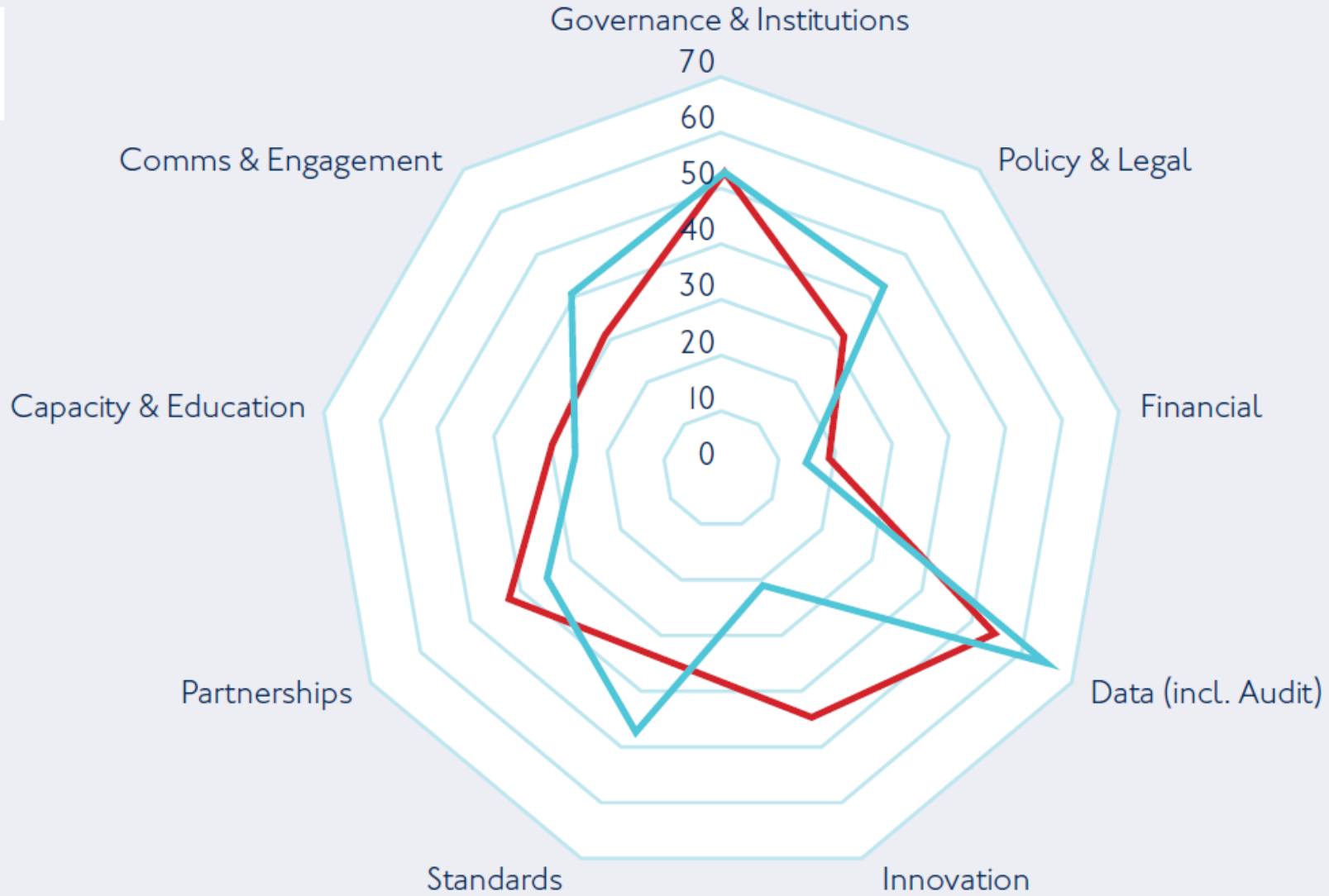
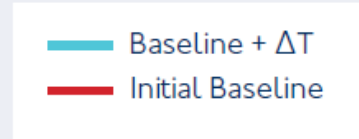
IGIF-(M)SDI Diagnostic Toolkit



# IGIF-MSDI Maturity Assessment



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Special thanks for Side Event support and/or endorsement:

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OGC CEO Nadine Alameh

ISO/TC-211 Chair Peter Parslow



# Next Steps

- A. Publish following feedback from reviewers
- B. Secure commitment from countries to pilot its value in use and refine

Thank you

