



Activities and Progress of the IHO MSDIWG

Report to JWGMGI-01

Chiang Mai, Thailand
4-8 May 2026

By Caitlin Boatright



IHO

International
Hydrographic
Organization



Open
Geospatial
Consortium.





IHO

Meeting Overview

International
Hydrographic
Organization

Hybrid Meeting

MSDIWG16 gathered 49 participants, both in-person and virtually for collaborative discussions on marine spatial data.

Multidisciplinary Session on Portuguese MSDI Initiatives

The session featured presentations on Portuguese marine geospatial data management and blue economy priorities.

Global Collaboration and Reports

Reviewed national and regional reports emphasizing collaboration and alignment with evolving marine data standards.

IHO – UN-GGIM WG Merger

Deliberated the pros and cons of merging the IHO MSDIWG with the UN-GGIM WG MGI



IHO

Multidisciplinary Session on Portuguese MSDI Initiatives

International
Hydrographic
Organization

IHO

MSDIWG16

Multidisciplinary Session



➔ **10h45** – CDR Telmo Dias (Hydrographic Institute)
Advancing Marine Geospatial Data



➔ **11h00** – Dr. Miguel Santos (Instituto Português do Mar e da Atmosfera)
Marine Geospatial Data Management



➔ **11h15** – Dra. Joana Simões (Open Geospatial Consortium)
OGC API Overview and Applications in the Marine Domain



➔ **11h30** – Dr. Rodrigo Oliveira (Fórum Oceano)
Blue Economy



➔ **11h45** – Dr. João Vitorino (Hydrographic Institute)
Blue Cloud Project



➔ **12h00** – Dra. Zoi Konstantinou (European Commission)
European Digital Twin of the Ocean



➔ **12h15** – Dr. André Barriguiha (NOVA – Information Management School)
Atlantic Smart Cities - Bridging cities and ocean with Digital Twins and Generative AI

Lisbon, March 18th, 2025



MSDIWG16 Multidisciplinary Session

Delegates are welcomed by Rear Admiral João
Paulo Ramalho Marreiros



IHO

Key Workplan Updates

International
Hydrographic
Organization

Collaboration with Innovation Centers

Advancing task C.1 to partner with innovation centers to explore new S-100 use cases in non-navigational domains.

Metadata Harmonization Efforts

Plan developed for Task D.2 on mapping S-100 with ISO 19115 and other standards to improve metadata harmonization across land and sea data.

MGI Portal Maintenance

Task B.2 supports ongoing maintenance of the IHO Marine Geospatial Information Portal to unify thematic layers and improve access.

List of Actions Review

Status updated and new actions added



First day of meetings



IHO

Regional and Technical Developments

International
Hydrographic
Organization

Regional Coordination and Reporting

On aggregate, the Regional MSDI Working Groups reports highlighted the importance of information sharing to enable coordinated approaches and align best practices in marine geospatial information management.

Arctic Region MSDI WG (ARMSDIWG) application of the Integrated Geospatial Information Framework Methodology (IGIF)

ARMSDIWG shared their study into the use of the IGIF at the country and regional level to assess marine data gaps and share best practices. A breakout session explored use of IGIF-Hydro in member states and as a tool to support cross-border development.

Technical Innovations and Tools

Transition of IHO Publication C-17 to GitHub and development of the MGI Portal enhance collaboration and data access.

Federated MSDI Pilot and Data Gaps

OGC engaged with the MSDIWG on their Federated MSDI Pilot project, *Bridging Land and Sea*, which aims to address challenges like data gaps and data interoperability at the land-sea interface.



[Phase Five](#)



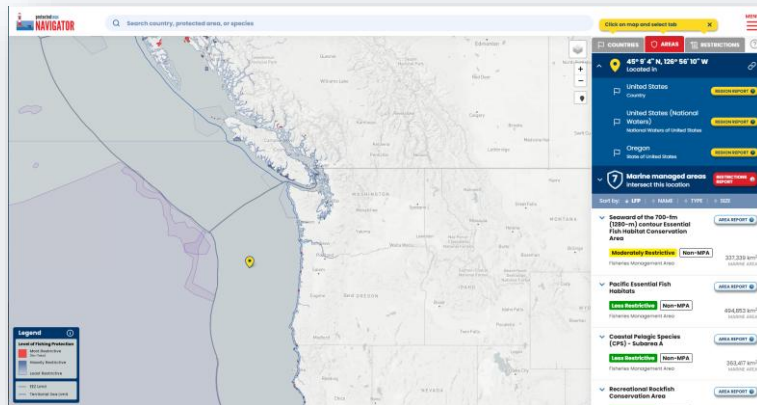
IHO

Progress on IRCC Action Items

International
Hydrographic
Organization

MSDI Ambassadors Appointment

Communication sent to Regional Hydrographic Commissions encouraging them to appoint MSDI Ambassadors, with three still to provide contact information.



ProtectedSeas Navigator

S-122 Marine Protected Areas Liaison

In progress – The WG designated a liaison to coordinate with NIPWG on S-122/ MPAs and agreed to explore options to make S-122 data publicly available. The MSDIWG also continued its liaison with ProtectedSeas and noted their plans for a demo of S-122 in their interactive Navigator map at a side event at the UN Ocean Conference.



IHO

UN-GGIM Collaboration

International
Hydrographic
Organization

Discussion on Collaboration Options

MSDIWG explored options including status quo, merging under IHO, or merging under the UN system.

Concerns and Challenges

Concerns for status quo included likelihood that UN-GGIM WG MGI would dissolve and the marine sector would lose influence at the UN. Loss of marine sector influence was also a concern with merging under IHO. Merging under the UN surfaced potential challenges for hydrographic representatives to get approval to participate, resulting in potential loss of hydrographic expertise in the meetings.

Benefits of Merging Under UN

Merging reduces duplicated efforts, strengthens UN integration, increases member engagement beyond IHO member states, enables possibility of continued regular UN seminars and improves resource efficiency.

Formation of Joint Working Group

MSDIWG supported a merger forming the UN-GGIM and IHO Joint Working Group on Marine Geospatial Information and formed a team to prepare Terms of Reference. Proposed merger was approved.



UN-GGIM

UNITED NATIONS
COMMITTEE OF EXPERTS ON
GLOBAL GEOSPATIAL
INFORMATION MANAGEMENT



IHO

Conclusions, Current Status & Next Steps

International
Hydrographic
Organization

Successful Reporting Period

MSDIWG16 achieved strong progress on technical, strategic, and administrative marine spatial data initiatives worldwide.

Global Collaboration Importance

Strong support from hydrographic offices, and ongoing partnerships with international bodies, and industry groups are essential for MSDI advancement.

Current Status

The proposed merger between the IHO MSDIWG and the UN-GGIM WG MGI was endorsed in 2025 by the UN-GGIM at its 15th Session and by the IHO Council at its 9th meeting.



IHO

International
Hydrographic
Organization

Thank you!