South West Pacific Hydrographic Commission
Marine Spatial Data Infrastructures Working Group (MSDIWG)

Why should we share data?
What is a MSDI

Spatial Data Infrastructure (SDI)
- collection of technologies, standards, data and governance arrangements that facilitate the sharing, access and re-use of spatial data.

Marine SDI (MSDI)
- collection of technologies, standards, data and governance arrangements that facilitate the sharing, access and re-use of marine spatial data.

National SDI (NSDI)
- collection of technologies, standards, data and governance arrangements that facilitate the sharing, access and re-use of a spatial data at a national level, across government and society
Not a single database
Components of SDI / MSDI & NSDI

The Four Pillars of SDI
from C17 - SPATIAL DATA INFRASTRUCTURES "THE MARINE DIMENSION" Guidance for Hydrographic Offices

UNGGIM IGIF – 9 Strategic Pathways
The value and importance of an MSDI

• Why we should share data?
Overview of the MSDI WG

FIND US ONLINE

icho.int/en/MSDIWG-0
The Data Sharing Value Proposition is available to download from the SWPHC MSDI Working Group Web Page.

[Why should we share data.pdf (iho.int)]
Obligations and Public Good

• Public access to trusted marine spatial data creates many opportunities to understand the marine environment

• It is crucial data for almost every maritime activity, supporting more intelligent and sustainable decision-making
Social Benefits

The SWPHC MSDI Working Group identified **seven crucial social benefits of sharing Marine Geospatial Data** and aligned these with the 17 UN Sustainable Development Goals that may stem from the public release of hydrographic offices’ data:

- Food security
- Education and capacity development
- Safety
- Sustainable resources
- Environmental sustainability
- Public release sovereignty
- Heritage
### Hydrographic data and its uses beyond navigation:

<table>
<thead>
<tr>
<th></th>
<th>Food security</th>
<th>Education and capacity development</th>
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<tbody>
<tr>
<td>Bathymetry, seabed backscatter, and water column backscatter data can inform fishing industry management, including future planning.</td>
<td>✔️</td>
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<td>Bathymetry, seafloor backscatter and water temperature data can help to identify potential aquaculture sites.</td>
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<td>Seafloor backscatter data supports marine habitat mapping.</td>
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<td>Sea level and water characteristics data, such as temperature and salinity enable a better understanding of climate changes impact on marine environments.</td>
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<td>Bathymetric, geomorphic features and historical data help community groups understand their local marine environment.</td>
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<td>Access to and reuse of open hydrographic data supports exciting real-world projects that inspire students to become the maritime workforce of tomorrow.</td>
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<td>Hydrographic data and derived products can help identify marine locations suitable for renewable energy production.</td>
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Why should we share data? Developed by members of the SWPHC MSDI Working Group
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<td>Hydrographic data and derived products support commercial uses, including site selection, engineering, and start-up industries.</td>
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<td>Hydrographic data and derived products support tourism through transport and other planning in coastal areas.</td>
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<td>Hydrographic data and derived products help communities, regulators, and companies make data-based decisions about deep-sea mining.</td>
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<td>Scientific research develops an understanding of the marine environment across many disciplines which may not have direct contact with hydrographic offices. High-quality, trusted hydrographic data:</td>
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<td>› Increases confidence in policy decisions to better use and protect ocean resources.</td>
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What next?

• Use, Share and distribute document

• Consider potential value of sharing data

• Visit the IHO website for more information - IHO.INT

• Full link to Data Value Proposition here:
  https://iho.int/uploads/user/Inter-Regional%20Coordination/RHC/SWPBC/MSDIWG/Why%20should%20we%20share%20data.pdf
What next for the Working Group?

• Action 19 - Adoption and implementation of UN GGIM-IGIF-H
• Explore Data Sovereignty
• Continue to support member states
• Please get in touch if you would like to join us