



Marine Spatial Data Infrastructure for Marine Spatial Planning



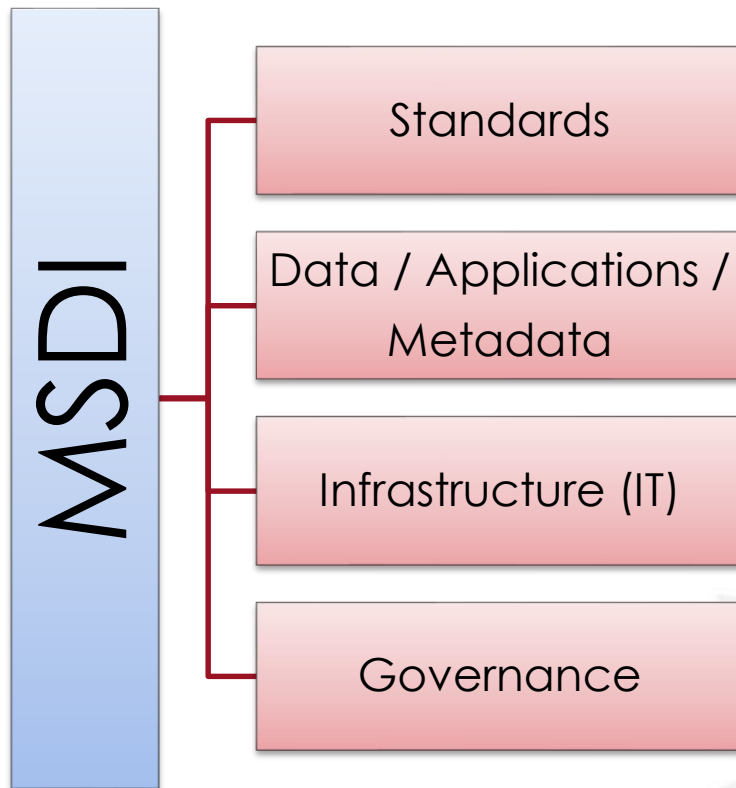
UNGGIM – August 5th 2019
Claude Guay, Canadian Hydrographic Service





What a Marine Spatial Data Infrastructure (MSDI) is built on:

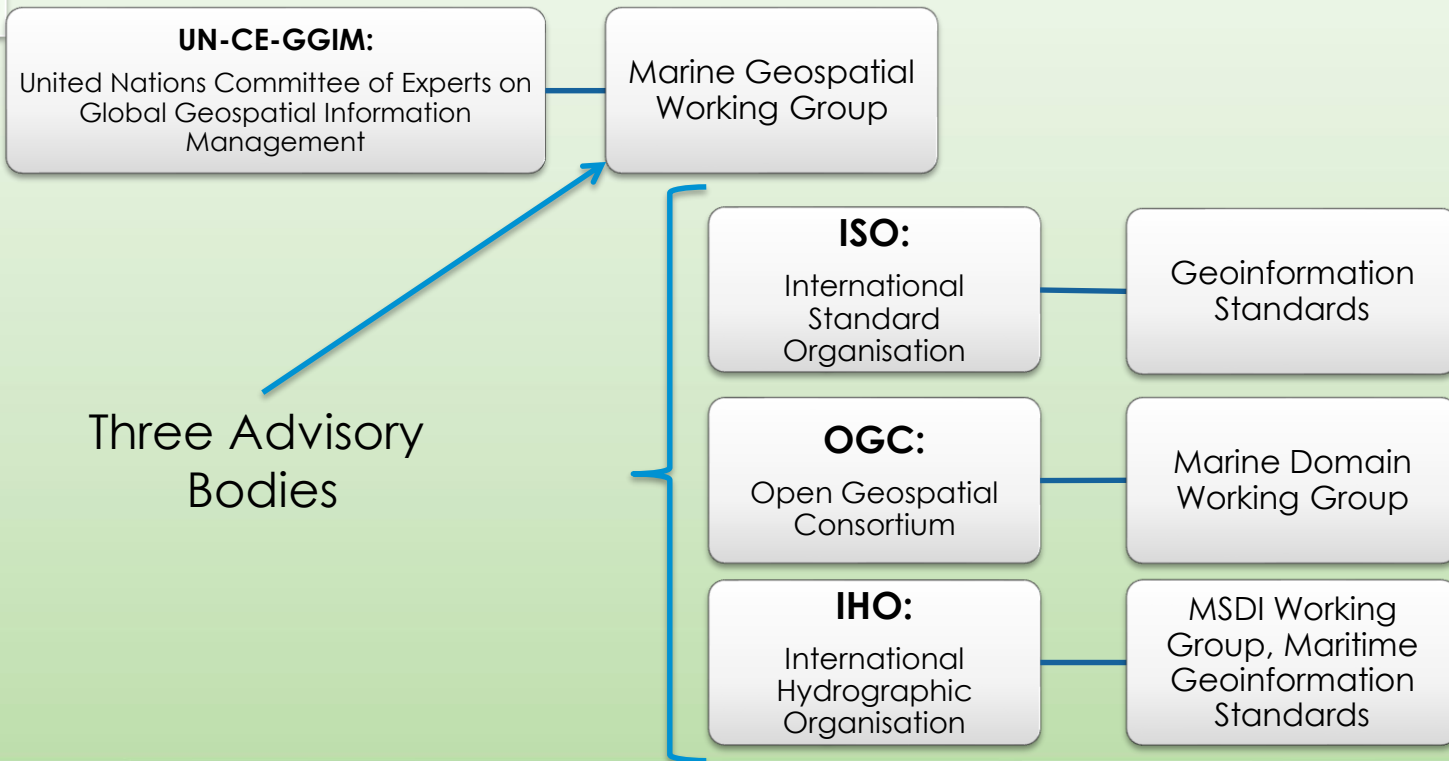
“Authoritative – Accessible – Accurate Data”





Marine Spatial Data Infrastructure (MSDI) International

International





IHO – MSDI Comparative Study

- Led by the Canadian Hydrographic Service
- Presented to the Marine Spatial Data Infrastructure Working Group – January 2016

- Available at https://www.iho.int/mtg_docs/com_wg/MSDIWG/MSDIWG7/MSDIWG7-1.8A-MSDI Comparative Study.docx

International Hydrographic Organization
Organisation Hydrographique Internationale

Home Letters & Documents Standards & Publications IHO Council, Committees & WG Capacity Building ENCs & ECDIS IHO Calendar External Liaison IHO Membership IHO GS

You are here: Home » IRCC » MSDIWG

English / **Français**

MARINE SPATIAL DATA INFRASTRUCTURES WORKING GROUP (MSDIWG) / **GRUPE DE TRAVAIL SUR LES INFRASTRUCTURES DE DONNEES SPATIALES MARITIMES (MSDIWG)**

Chair: Mr Jens Peter HARTMANN (Denmark)
Vice-Chair: Mr Sebastian CARISIO (USA)
Secretary: Mr Alberto COSTA NEVES (IHO Secretariat)

Président: M. Jens Peter HARTMANN (Danemark)
Vice-Président: M. Sebastian CARISIO (EUA)
Secrétaire: M. Alberto Costa Neves (Secrétariat de l’OHI)

Objectives:
Identify the Hydrographic Community inputs to National Spatial Data Infrastructures (NSDI). More details can be found in the full Terms of Reference for MSDIWG.
This group is open to representatives of IHO Member States’ Hydrographic Offices and, as expert contributors, to entities and organisations that can provide a relevant and constructive contribution to the work of the WG.

Objectifs:
Identifier les contributions de la communauté hydrographique aux infrastructures de données spatiales nationales (NSDI). On peut trouver de plus amples détails dans le mandat du MSDIWG.
La participation à ce groupe est ouverte aux représentants des Services hydrographiques des Etats membres de l’OHI et, en qualité de collaborateurs experts, aux entités et organisations qui peuvent fournir une contribution pertinente et constructive aux travaux du GT.

Terms of Reference / **Mandat**

Work Plan / **Programme de travail**

Members / **Membres**

MSDIWG Letters / **Lettres MSDIWG**

Body of Knowledge / **Le corpus de connaissances**

SDI/MSDI portals around the world / **Portails SDI/MSDI dans le monde**

Next Meetings

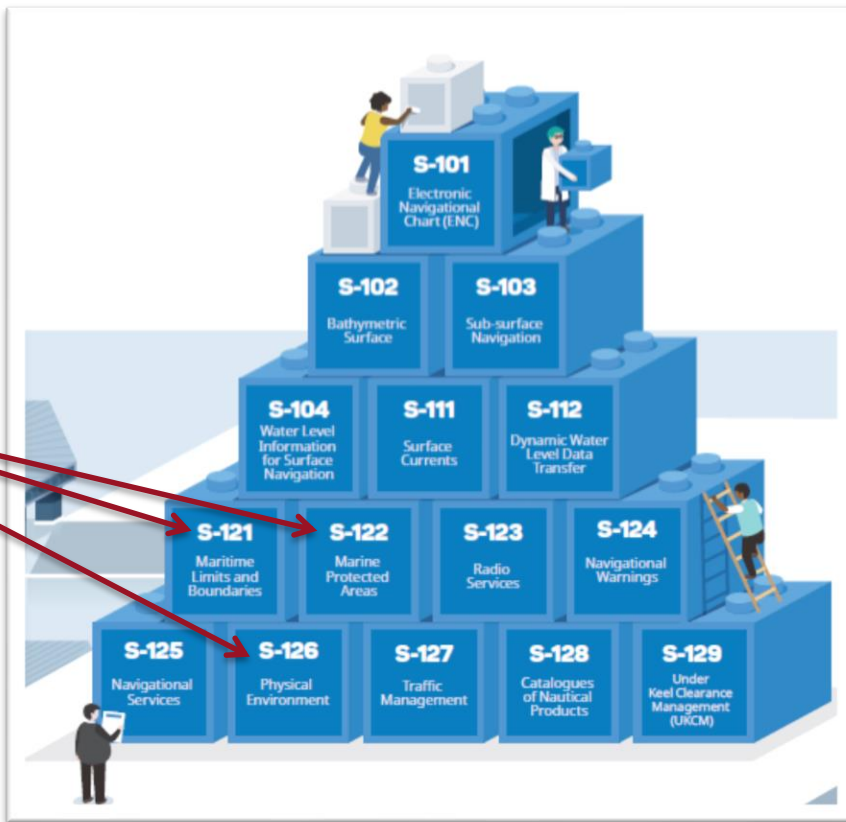
Meeting	Documents
MSDIWG11 - Germany (24-27 February 2020) (MSDI Open Forum on 24 February, joint IHO-OGC Marine DWG session on 26 February) UN-GGIM WGMG12 meeting is provisionally set for 28 February	Documents
MSDIWG12 - Singapore (2021, exact dates and venue TBD)	Documents
MSDIWG13 - Colombia (2022, TBC)	Documents
Past Meetings	
MSDIWG10 - Busan, Republic of Korea (4-5 March 2019) Followed by the OGC Marine DWG (6 March 2019) and UN-GGIM WGMG11 (7-9 March 2019)	Documents

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HYDROGRAPHY : MUCH MORE THAN JUST NAUTICAL CHARTS



Graphic courtesy of the
International Hydrographic
Organization (IHO)

&

Korea Hydrographic &
Oceanographic Agency
(KHOA), Republic of Korea



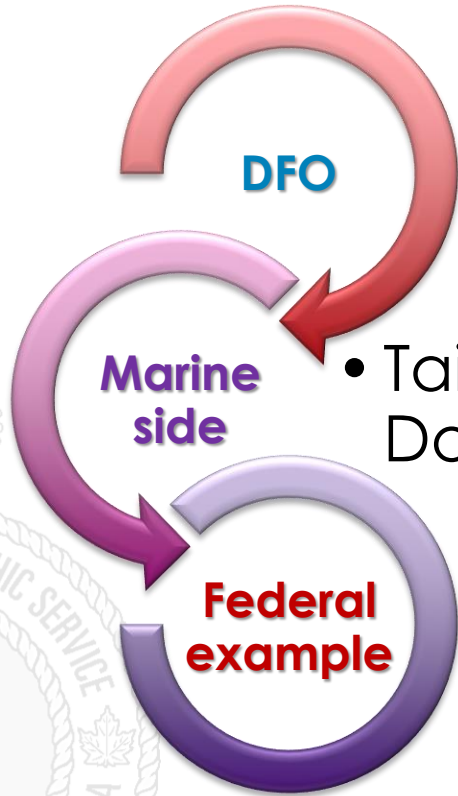
Marine Spatial Data Infrastructure (MSDI) Federal Context



Federal

Governed by the Federal Committee on Geomatics and Earth Observation (FCGEO) and the Interdepartmental Committee Oceans (ICO)
Inline with Open Government directives
Leverages the Federal Geospatial Platform (FGP)

What an MSDI is for:



- Clean-up the house

- Data
- Metadata
- Applications

- Tailored to the needs of the Marine Domain

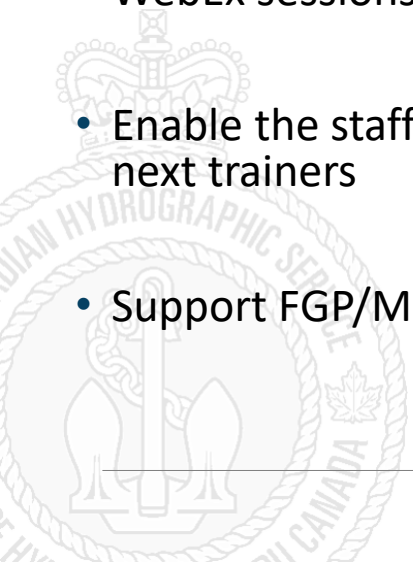
- Brings in :

- Thematic approach
- Value added products
- Metadata processes



Metadata

- Metadata training material is available on DFO intranet website
- Intranet web site provide materials, forms, software, presentations and recorded WebEx sessions.
- Enable the staff we train to become the next trainers
- Support FGP/MSDI work



The screenshot shows the DFO intranet website. At the top, there are logos for the Government of Canada and the Canadian Hydrographic Service. The main navigation bar includes links for Coast Guard, DFO Regions, DFO Sectors, In the Loop, DM Corner, Internet, and Contact us. The current page is titled 'Intranet – DFO and Coast Guard employees proudly serving Canadians'. Below the navigation, there is a breadcrumb trail: Home → Ecosystems & Oceans Science Intranet → MSDI. The main content area is titled 'Additional resources' and lists several resources for the MSDI project, including recorded WebEx presentations, PowerPoint presentations, and other documentation. A download link for Cisco WebEx Player is provided. Below the resources, there are tabs for Metadata, MSDI, FGP, and Frequently asked questions. The Metadata tab is selected, showing a section for 'Metadata Training' with 'Metadata 2018' and 'Day 1 (recorded WebEx) 26-03-2018' and 'Day 2 (recorded WebEx) 27-03-2018'. Each day has links for Part 1, Part 2, Part 3, and Part 4. There is also a 'Group photo' link. Under 'Reference material', there is a link for 'Metadata Forms and Examples (PDF, 1.79 MB)'.



Web Presence

- Fully bilingual, WCAG & plain language compatible
- Completed in coordination with communications and IMTS
- Authoritative one stop shop for geospatial data at DFO

Government of Canada / Gouvernement du Canada

Français

Canada

Intranet – DFO and Coast Guard employees proudly serving Canadians

Coast Guard | DFO Regions | DFO Sectors | In the Loop | DM Corner | Internet | Contact us

Home → [Ecosystems & Oceans Science Intranet](#)

Marine Spatial Data Infrastructure (MSDI)

Submit your geospatial data, learn about MSDI and data management, browse the applications and story map gallery.

Services and information

About MSDI
Purpose of MSDI and its goals, benefits and data providers.

Submit your geospatial data
Process overview, questionnaire, metadata submission, uploading, approval and publication.

Applications
Published applications related to MSDI.

Data and Services
Explore data and mapping services currently available through the MSDI.

Data management
Data management, data and metadata workflows and metadata standardization tools.

Additional resources
Training, reference material, tools, forms and reports.

Contact us
For more information or assistance on MSDI.

Most requested

- [Aquatic species at risk map](#)
- [Canadian Hydrographic Services NONNA-10Q](#)
- [Canada reaches 5% marine conservation target](#)
- [Protecting Southern Resident Killer Whales](#)
- [Canada's Marine Conservation Targets](#)
- [Interactive undersea feature map](#)

Contributors

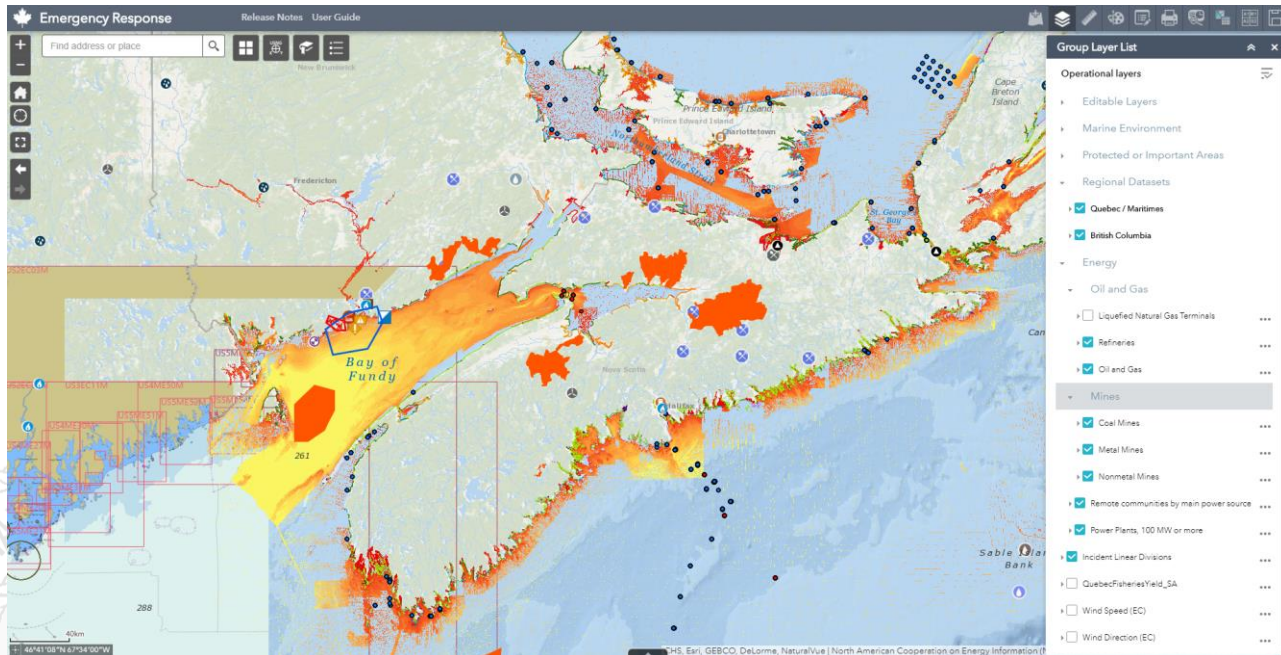
- [Canadian Hydrographic Service](#)
- [Ocean and Climate Change Science](#)
- [Marine Biology](#)

More information for

- [The Federal Geospatial Platform](#)



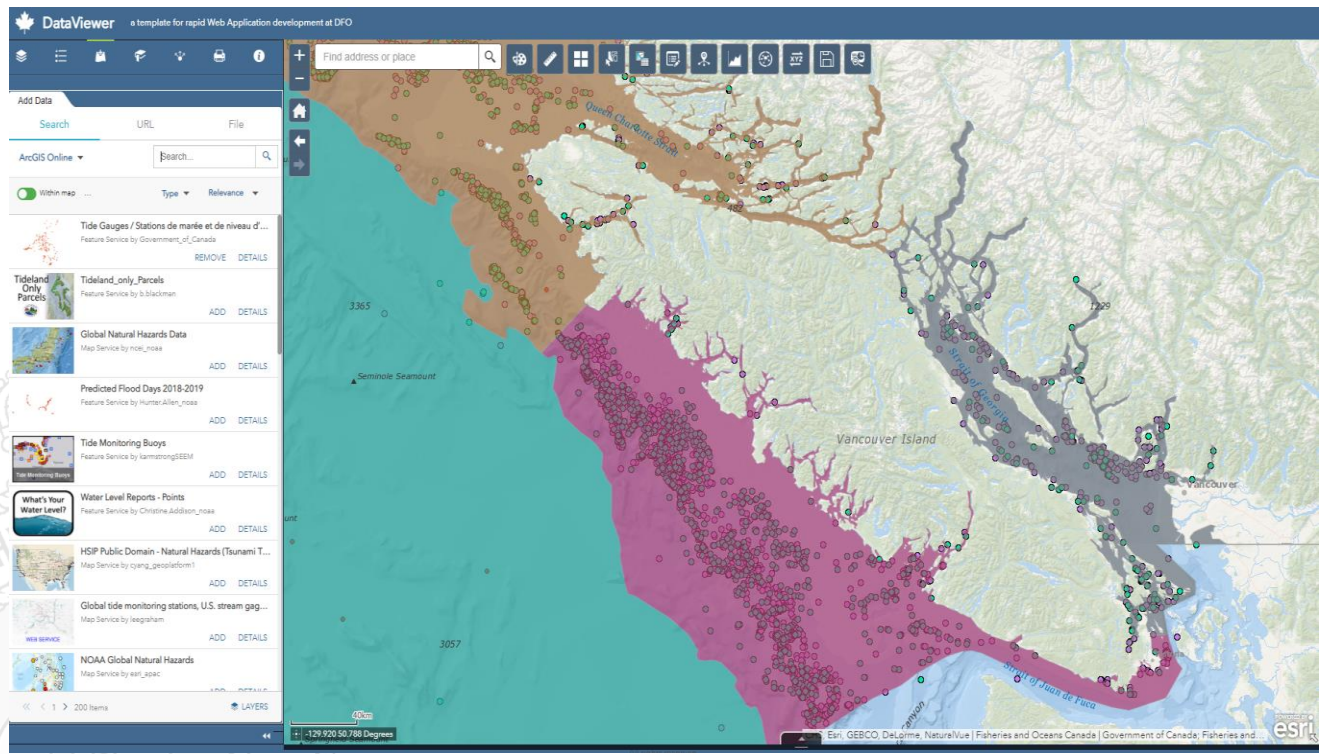
Emergency Response



- An emergency response application to be used by our DFO Environmental Incident Coordinators.
- Key reporting widget for data dissemination
- Final approval confirmed



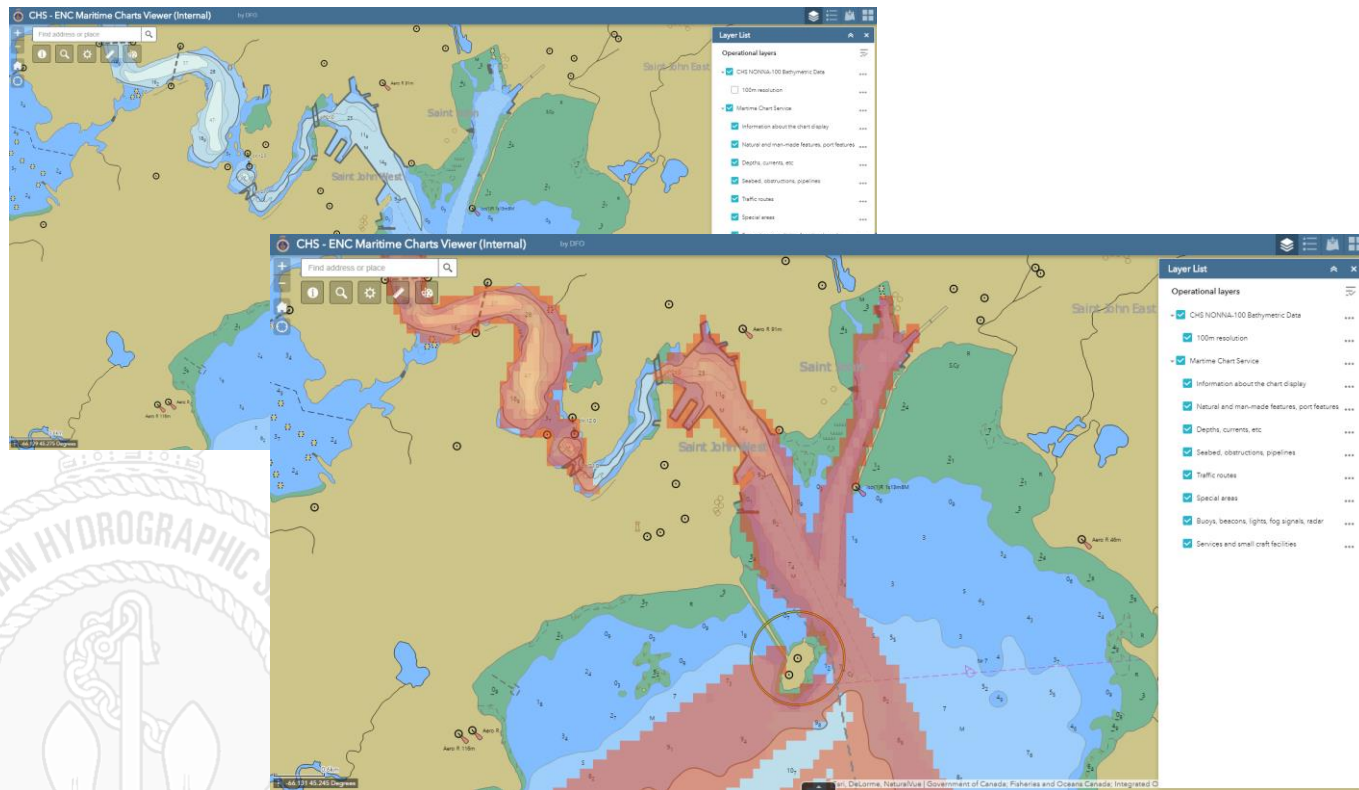
DFO Marine Data Viewer



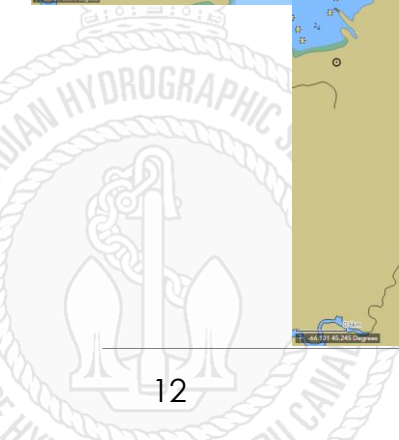
- A data viewer application for discovery & visualization of all DFO data.
- Currently being developed for internal DFO use.



CHS – ENC Maritime Charts Viewer



- A basemap layer accessible to the public (lower resolution) and within DFO (higher resolution).
- NONNA-100 implementation
- Final approval confirmed

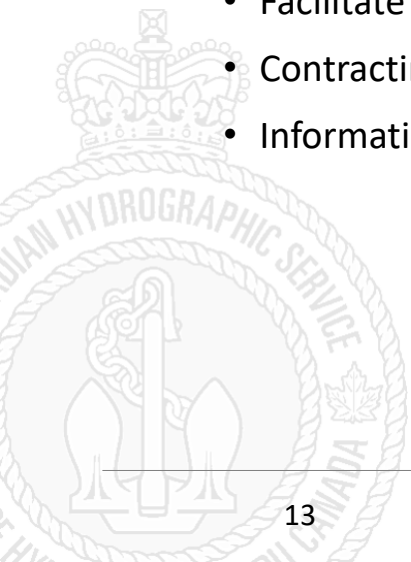




MSDI continues under MSP

Opportunities:

- Publication of interactive bioregional marine atlases leveraging ArcGIS Online
- Storage of bioregional marine atlas data products (no storage solution for source data)
- Facilitate publication of atlas data (e.g. FGP, Open Maps & Open Data)
- Contracting for atlas development
- Information on how to publish data is offered through DFO geospatial intranet webpage

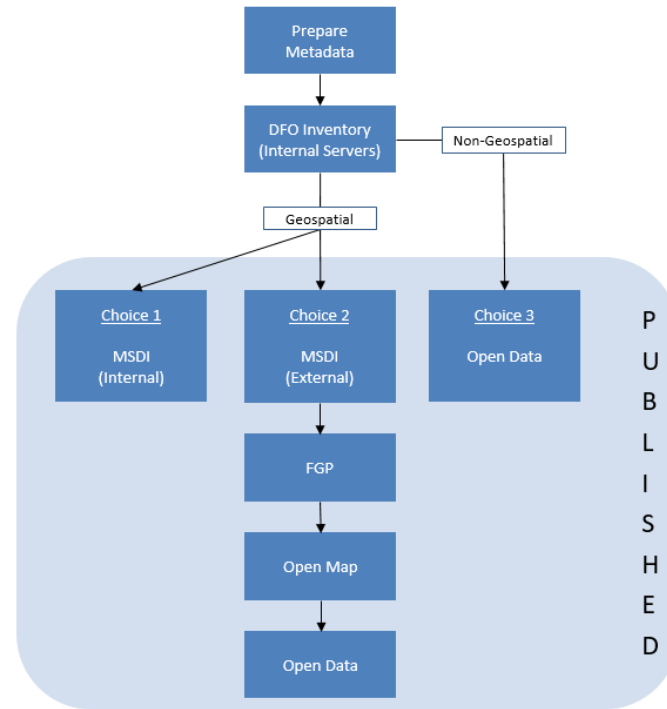




MSDI Data workflow

- Product data can be served on external platforms via MSDI servers
- Users must provide adequate metadata prior to submission (ISO 19115:2003 HNAP)
- MSDI can provide space for product data should the data owner not have room
- MSDI is **not** a solution for source data storage, regional network implementation
- MSDI is a **national** enterprise GIS approach; there are no regional streams within MSDI

Metadata Submission Streams



Data owners can choose how far down each stream they want to go & this can be modified in the future



Questions ?



For any questions please contact the MSDI team:

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