



Status report of the Arctic Regional Marine Spatial Data Infrastructures Working Group (ARMSDIWG)

14th Arctic Regional Hydrographic Commission meeting,
3-5 September 2024, Tromsø, Norway



ARMSDIWG workshops 23/24

- 23 October 2023
- 18 January 2024
- 4 April 2024
- 13 June 2024

Attendees: Hydrographic Offices of Canada, Denmark, Finland, Norway, and the USA





Key proposals and engagements

Proposal to discontinue MSDI Checklist

Background

- **Action Point ARHC-A16 2023:** Revision and utilization of the MSDI Aggregated Data Service Checklist
- **Alignment with IHO Strategic Plan Target 2.1:** "Build a portal to support and promote regional and international cooperation in marine spatial data."

Purpose of the Checklist

- The checklist aimed to "identify and assess the statuses of individual MS MSDI implementation and operationalization."
- It was intended to allow ARMSDIWG to track the status of fulfilling Arctic MSDI-related data web service requests identified by ARHC and enable a federated approach to MSDI in the Arctic.

ARHC
ARCTIC REGIONAL HYDROGRAPHIC COMMISSION
ARCTIC REGIONAL MARINE SPATIAL DATA INFRASTRUCTURES WORKING GROUP (ARMSDIWG)

VERSION: LUGUST 2022

MSDI Aggregated Data Web Service Checklist for the ARHC

In keeping with ARMSDIWG's Terms of Reference task to "identify and assess the statuses of individual MS MSDI implementation and operationalization", the ARMSDIWG has asked the hydrographic offices of ARHC to complete this checklist annually. Doing so will allow ARMSDIWG, on behalf of ARHC, to track the status of fulfilling Arctic MSDI-related data web service requests identified by ARHC, and to enable a federated approach to MSDI in the Arctic with data directly from each national hydrographic authority or partner agency/organization.

Hydrographic Office: [Click here](#) to enter the name(s) of your responding Hydrographic Office(s).
Date: [Click](#) to enter a date.

General Arctic Hydrographic Office Data
Please indicate in the checkboxes if the dataset is AVAILABLE or NOT AVAILABLE via geospatial web service, and if AVAILABLE, please indicate if it is FREE to access and provide the URL to the web service. If an international/multi-national dataset is recommended instead, please check AVAILABLE and provide the web service URL.

DATASET	NOT AVAILABLE	AVAILABLE	FREE
Navigational Charts (R-ET) URL: Click here to enter URL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Navigational Charts (Analog/Raster) URL: Click here to enter URL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bathymetry Data/Depth Data URL: Click here to enter URL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coastline URL: Click here to enter URL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Maritime Limits and Boundaries URL: Click here to enter URL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nautical Information (Sailing Directions) URL: Click here to enter URL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nautical Information (Harbor Plans) URL: Click here to enter URL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Arctic Voyage Planning Guide (AVPG)
Please indicate in the checkboxes if the dataset is AVAILABLE or NOT AVAILABLE via geospatial web service, and if AVAILABLE, please indicate if it is FREE to access and provide the URL to the web service. If an international/multi-national dataset is recommended instead, please check AVAILABLE and provide the web service URL. Datasets below are ordered by AVPG Theme:

DATASET	NOT AVAILABLE	AVAILABLE	FREE
Theme 1: Carriage Requirements Navigation Warning Services URL: Click here to enter URL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radio Aids to Navigation URL: Click here to enter URL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
List of Lights and Buoys and Aids to Navigation URL: Click here to enter URL.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rationale for discontinuation

Unclear purpose

- The checklist's stated goal of assessing data availability has proven to be irrelevant because there have been no specific requests from member countries for Arctic MSDI-related data web services
- The datasets listed are in general already managed and shared through other initiatives or is not freely available, making the checklist redundant or irrelevant.

More valuable alternatives

- The IGIF framework offers a more comprehensive and effective methodology for assessing the current status of MSDI.
- IGIF enables a broader analysis, identifying gaps and strengths, and providing actionable insights for improvement.

Resource allocation

- Maintaining the checklist diverts valuable resources from more impactful projects.
- By reallocating these resources, ARMSDIWG can focus on higher priority initiatives that offer greater benefits, such as enhanced collaboration with Arctic SDI and integration of marine data into the Arctic SDI Geoportal.

Decision: Group consensus to discontinue the checklist and reallocate resources to more impactful projects.

Engagement with Arctic SDI

Collaboration with Arctic SDI

- Invited to contribute to developing Arctic Council Data Policy
- Providing marine datasets to Arctic SDI Geoportal

Future actions

- Continued collaboration and data integration
- Participation in policy development meetings

Arctic Spatial Data Infrastructure (Arctic SDI)

- **Collaborative Initiative:** Part of the Arctic Council, involving National Mapping Agencies from Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the USA.
 - **Mission:** Share and integrate geospatial data to support Arctic sustainable development and environmental protection.
 - **Key Objectives:** Standardize data, improve accessibility, promote collaboration, advance technology, and support sustainability.
 - **Support for Arctic Council Working Groups:** Enhances the efforts of working groups such as ACAP, AMAP, CAFF, EPPR, PAME, and SDWG.
 - **Benefits:** Enhances decision-making, fosters international cooperation, supports sustainable development, and environmental protection.
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New Proposal for MSDI Evaluation

Objective

- Conduct a comprehensive cross-national analysis of MSDI status among ARMSDIWG member states using IGIF-Hydro

Key benefits

- **Identify gaps and strengths:** Provides a clear picture of current MSDI capabilities and areas needing improvement
- **Align with best practices:** Ensures Arctic MSDI adheres to global standards, promoting sustainable development and environmental protection
- **Enhance interoperability:** Facilitates better data sharing and decision-making across member states

Implementation

- Led by Canada with support from ARMSDIWG members
 - Utilizes the IGIF-Hydro framework to guide evaluation and improvement efforts
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Future Work and Initiatives

Key initiatives

- Enhanced collaboration with Arctic SDI
- Evaluation of MSDI using IGIF framework
- Development of communication strategies
- Continuing adoption of relevant technical standards in the member states
- Regular workshops and meetings with focus on specific knowledge sharing



Invited Actions from ARHC

ARHC Members are Invited to

- Take note of the report
- Approve the proposal to discontinue MSDI Checklist
- Support collaboration with Arctic SDI
- Endorse IGIF Framework evaluation
- Take appropriate action as necessary

