

ARMSDIWG Report

Current status and planned actions of the ARMSDIWG in its third full year of operation.

MSDIWG-11
24 FEB 2020



ARCTIC REGIONAL
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COMMISSION

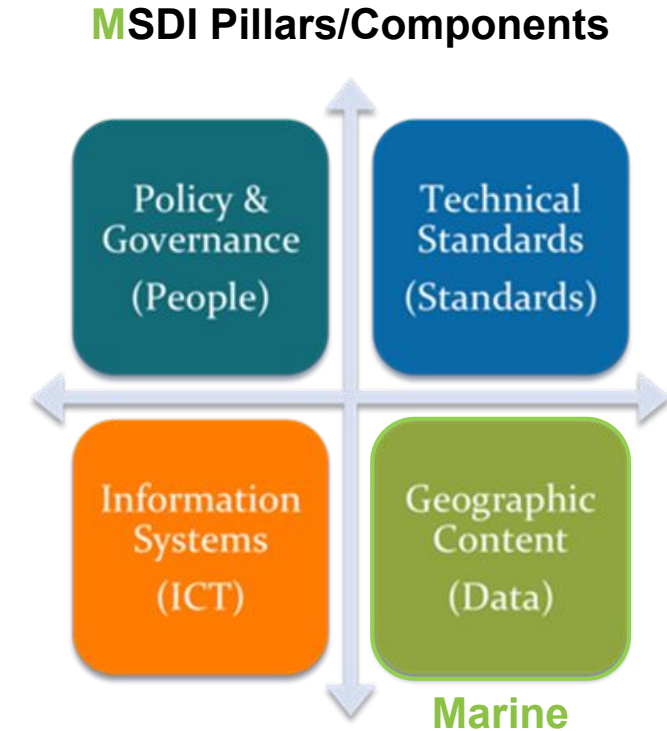
ARMSDIWG: Year 3

(armz - dē - wig)

Marine Spatial Data Infrastructures

▪ MSDI

- Element of SDI focused on the marine input.
- A MSDI is not a collection of hydrographic products, but an infrastructure that promotes interoperability of data at all levels (e.g., national, regional, international).
 - Discoverability
 - Accessibility
 - Interoperability
 - Data-centricity (Hydrographic Offices)
- Supports wider, non-traditional user-base of marine data typically used for navigation.
- MSDI Working Group (MSDIWG)
 - International Hydrographic Organization (IHO) working group to deliver IHO MSDI-related policy objectives.¹



ARMSDIWG3 - Reykjavík, Iceland

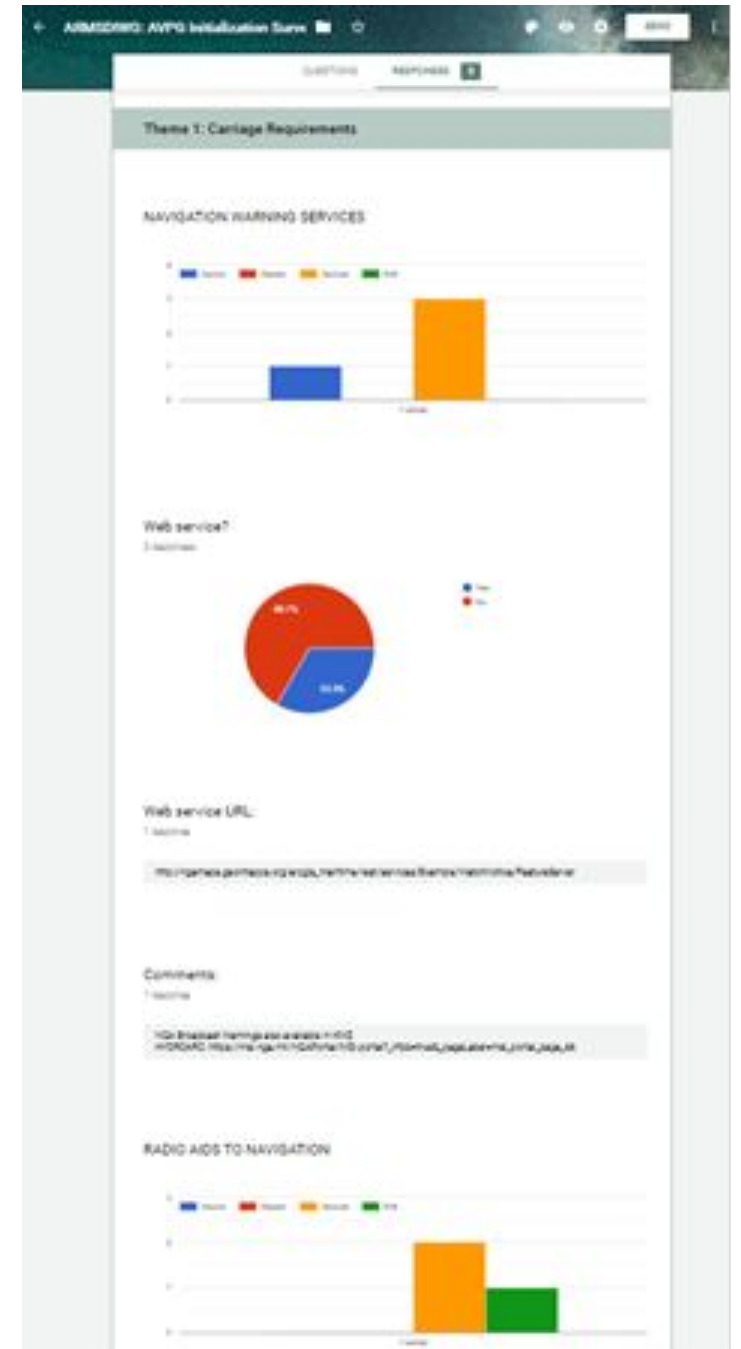
- National MSDI Reports
- Work Plan Update
- Review of 2018 MSDI Questionnaire
 - Current: Arctic Voyage Planning Guide
 - Upcoming: Norwegian User Survey Report
- Discussion of Arctic SDI technology usage or exploration of portal prototypes
- Discussion of OGC-IHO MSDI-CDS Follow-on Pilot Arctic Use Cases
- Arctic SDI Collaboration structure
- Joint Meeting with Arctic SDI
 - Executive Secretary of the Arctic Council's Conservation of Arctic Flora and Fauna (CAFF) working group
- Modern approach to Organization of Work



ARMSDIWG 3rd meeting in Reykjavík, Iceland - April 2019

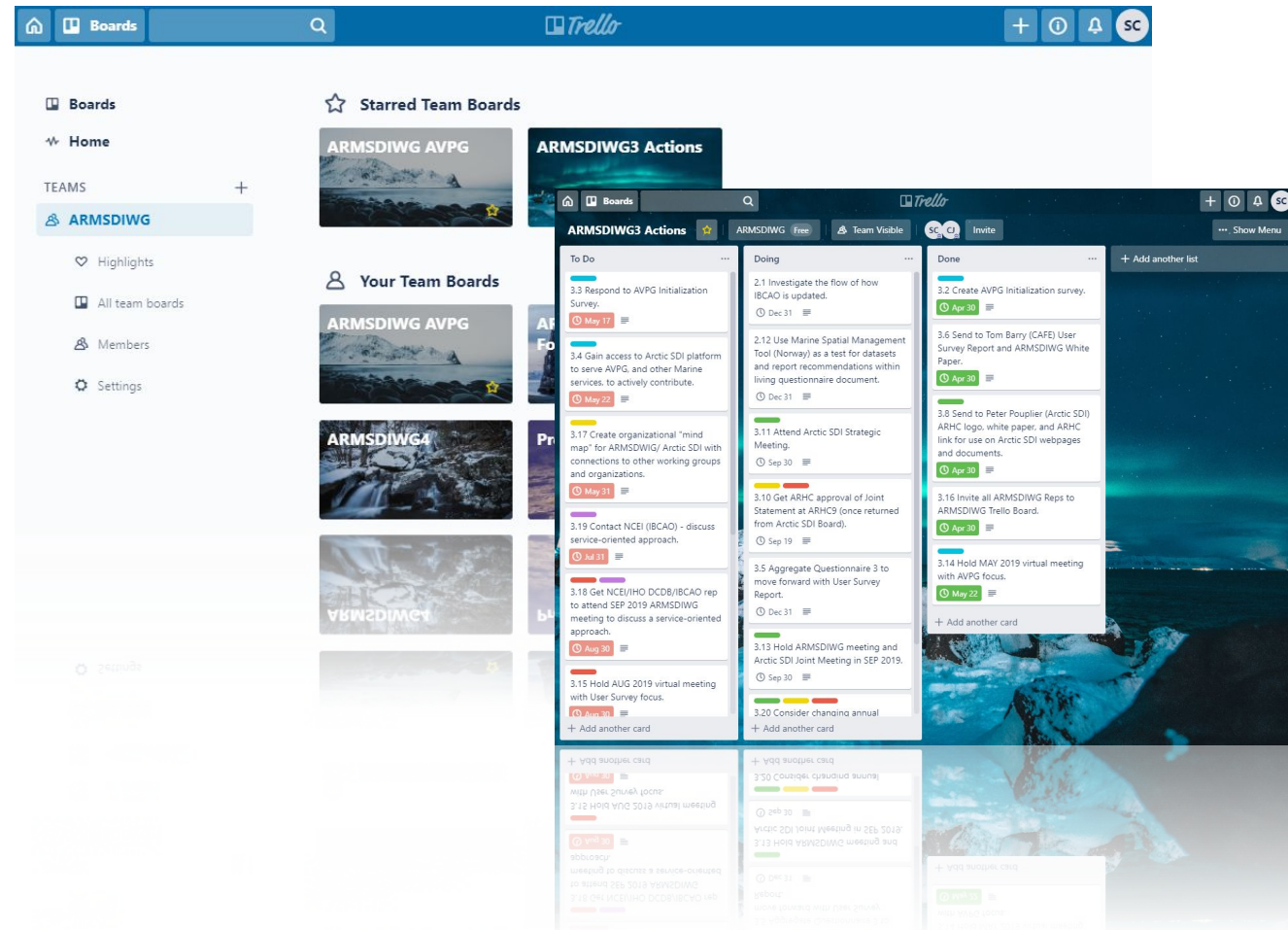
AVPG Initialization Survey

- Discussed during ARMSDIWG 3.1
- Immediate identification common web services, already available.
- Identify web service/data gaps in the themes of the AVPG, upon response from each ARMSDIWG representative
- Encourage completion of survey **by 25 OCT 2019**

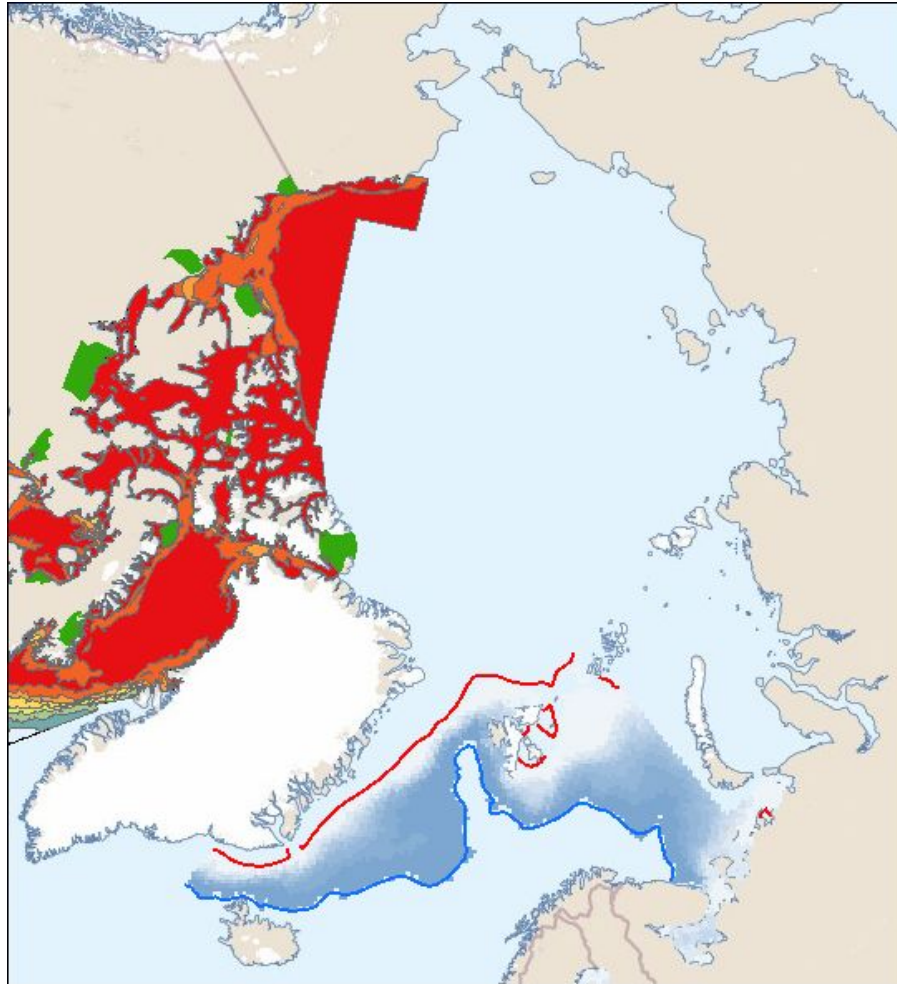


Organization of Work

- Use of Trello boards as online platform to organize work.
- Tracking ARMSDIWG progress on Meeting and Work Plan actions
- Shared hub for communication and documents by ARMSDIWG participants.



Hydrographic Office Data Reuse



Canadian Arctic Voyage Planning Guide (AVPG) web service displaying in Norway Marine Spatial Management Tool made possible by OGC WMX standards.

Arctic SDI & ARMSDIWG: Marine Networks Data Reuse

Arctic SDI
Arctic Spatial Data Infrastructure

SEARCH

MAP LAYERS

SELECTED LAYERS 1

MY DATA

MAP PUBLISHING

MAP LEGENDS

USER GUIDE

Register

Login

Change language

Search

Location Search Metadata Search

Search locations by typing a name of a place.

Northwind Ridge Search

Your search returned 2 results.
You can sort search results by clicking the headers of the table below.

Place name	Region	Type
Northwind Ridge	Canada	Other hydrographic and underwater features
Northwind Ridge	GEBCO	Other hydrographic and underwater features

Search Results

Northwind Ridge

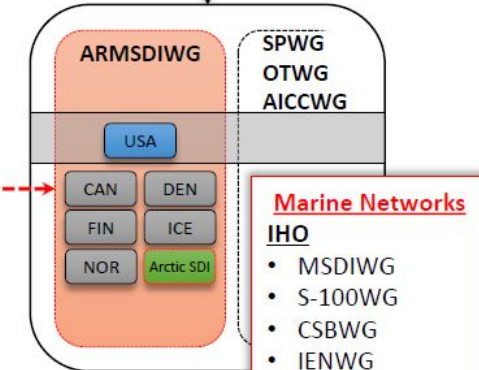
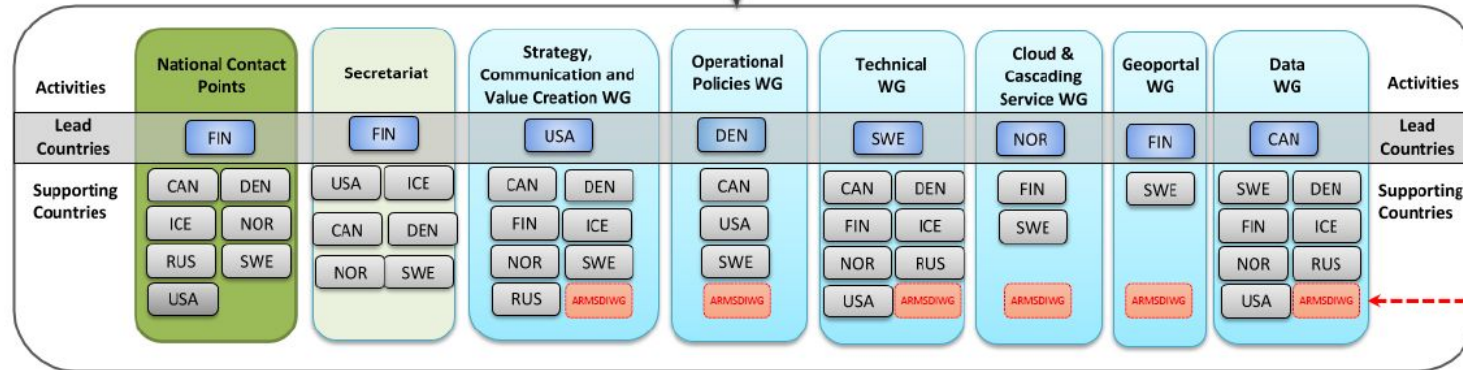
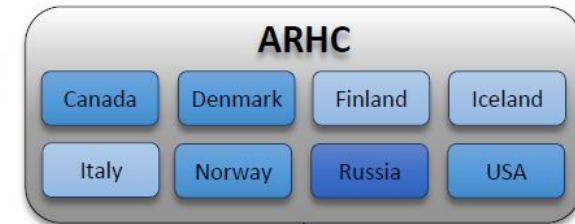
GEBCO
Other hydrographic and underwater features
[Close](#)

200 km

Terms of Use Data Sources

Arctic SDI Geoportal displaying Arctic SDI Basemap, utilizing International Bathymetric Chart of the Arctic Ocean (IBCAO), and the GEBCO Sub-Committee on Undersea Feature Names (SCUFN) digital gazetteer service of the names, generic feature type and geographic position of features on the seafloor.

Proposed Arctic SDI & ARHC ARMSDIWG Cooperation Structure



- Marine Networks**
- IHO**
- MSDIWG
 - S-100WG
 - CSBWG
 - IENWG
- OGC**
- MDWG
- GEBCO**
- EMODNET**



DRAFT Arctic SDI and ARHC Joint Statement of Intent

The Arctic Spatial Data Infrastructure cooperation (Arctic SDI), based on a Memorandum of Understanding between the National Mapping Agencies of the 8 Arctic countries, and the members of the Arctic Regional Hydrographic Commission (ARHC), maintain a collaborative partnership to provide both the terrestrial and marine foundations in a regional SDI. **Together, Arctic SDI and the ARHC's Arctic Regional Marine SDI Working Group (ARMSDIWG) will facilitate an infrastructure that connects users, across domains, to the spatial data valued to support research, planning and decision making in the Arctic.**



Joint Professional Outreach: ARMSDIWG and Arctic SDI

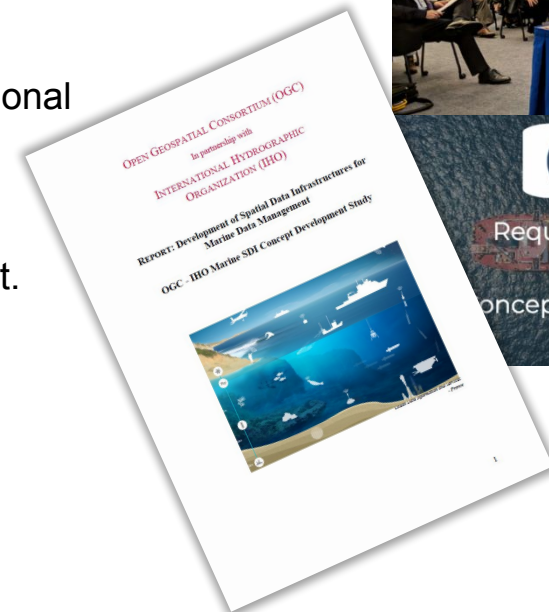
- United Nations Headquarters, New York
- 9th Session UN-GGIM (AUG 2019)
 - Working Group on Marine Geospatial Information - Side Event
 - Panel: *Readily available and accessible marine geospatial information – Regional Practices in the Arctic*
 - Presentation: *Cooperation between Arctic SDI and ARMSDIWG - access to land and marine data to face challenges in the Arctic*
 - Working Group on Legal and Policy Frameworks for Geospatial Information Management - Side Event
 - Roundtable: *Availability, accessibility, application, provenance, privacy and protection of geospatial information*
 - Panel: *Enabling regional collaboration and applications. Both Chairs of Arctic SDI and ARMSDIWG*



Chair ARMSDIWG presenting during the panel “Readily available and accessible marine geospatial information – Regional Practices in the Arctic” at the UN-GGIM Working Group on Marine Geospatial Information Side Event – United Nations Headquarters, New York

OGC-IHO Marine Spatial Data Infrastructure Concept Development Study (MSDI-CDS)

- MSDI-CDS
 - Organized by OGC and is supported by the United States on behalf of the International Hydrographic Organization (IHO) and its MSDI focused work programs.
 - <http://www.opengeospatial.org/projects/initiatives/msdi-cds-2018/>
- MSDI-CDS Workshop (23 OCT 2018)
 - Panels: Marine Uses of Spatial Data Infrastructures, Meeting U.S. Government Needs for Marine Spatial Data, MSDI Geospatial Technology, Standards and Services
- Request For Information (RFI) (07 FEB 2018)
 - RFI posted on OGC's website and distributed broadly throughout the international marine community.
- MSDI-CDS Roundtable (27 MAR 2019)
 - Group of OGC members to review study findings and a draft of the final report.
- **Final Engineering Report is posted.**
 - *Development of Spatial Data Infrastructures for Marine Data Management*
 - Direct download: https://portal.opengeospatial.org/files/?artifact_id=88037
- **ARHC/ARMSDIWG and Arctic SDI contributed to this report.**





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