Cooperation between Arctic SDI & ARMSDIWG

Access to Land and Marine Data to Face Challenges in the Arctic

UN-GGIM 9th Session

Working Group on Marine Geospatial Information Side Event

5 AUG 2019

ARCTIC SDI Arctic Spatial Data Infrastructure

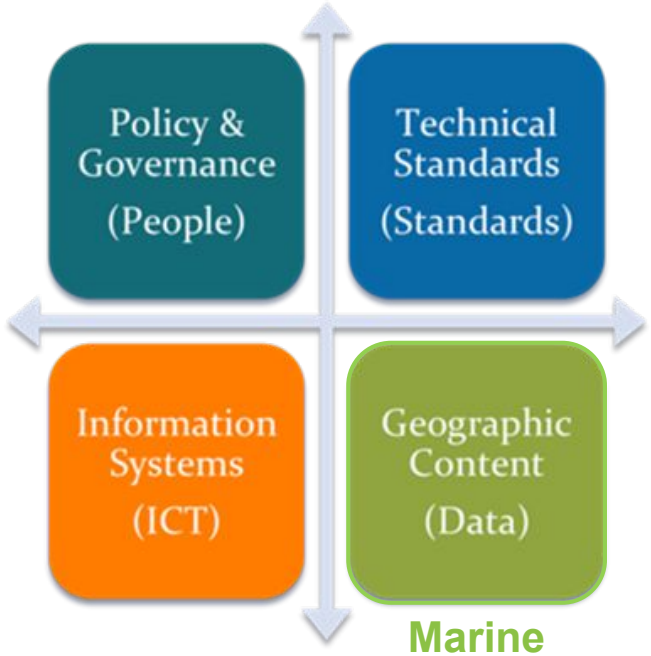
ARHC

ARCTIC REGIONAL HYDROGRAPHIC COMMISSION

Marine Spatial Data Infrastructure (MSDI)

- 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]

MSDI Pillars/Components



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1 - *https://www.iho.int/mtg_docs/com_wg/MSDIWG/MSDIWG8/MSDIWG8-01.4.4b-MSDIWG_white_paper.pdf*
Slide information and Image Credit *- (DRAFT) IHO Publication C-17, Spatial Data Infrastructures: "The Marine Dimension" - Guidance for Hydrographic Offices, Ed 2.0, April 2016*

Arctic Regional Hydrographic Commission (ARHC)

The International Hydrographic Organization (IHO) has encouraged the establishment of **Regional Hydrographic Commissions (RHCs)** to coordinate hydrographic activity and cooperation at the regional level. RHCs are made up of IHO Member States together with other regional States that wish to participate. RHCs work in close harmony with IHO to help further its ideals and program.

ARHC Members

- Canada
- Denmark
- Norway
- Russian Federation
- United States

ARHC Associate Members

- Finland
- Iceland
- Italy

Arctic Regional Marine Spatial Data Infrastructures Working Group (ARMSDIWG) established at 6th ARHC Meeting (2016)

ARMSDIWG

(ɑrmz - dē - wɪg)

- Identify and assess the statuses of individual MS MSDI implementation.
- Consider MSDI policies in related international projects and **cooperate specifically with the Arctic SDI.**
- Analyze how maritime authorities can contribute their spatial information and the necessary updates, so information can easily be collated with other information to a current overall picture for the region.
- Focus on how ARHC in the future can benefit from a regional approach.
- Monitor the development of SDI **(specifically the Arctic SDI)** that could be relevant for the region.
- Monitor the development of relevant and applicable OGC standards and activities through association with the **OGC Marine DWG.**
- To present a yearly report to the ARHC.

ARMSDIWG 3rd meeting in Reykjavík, Iceland - April 2019

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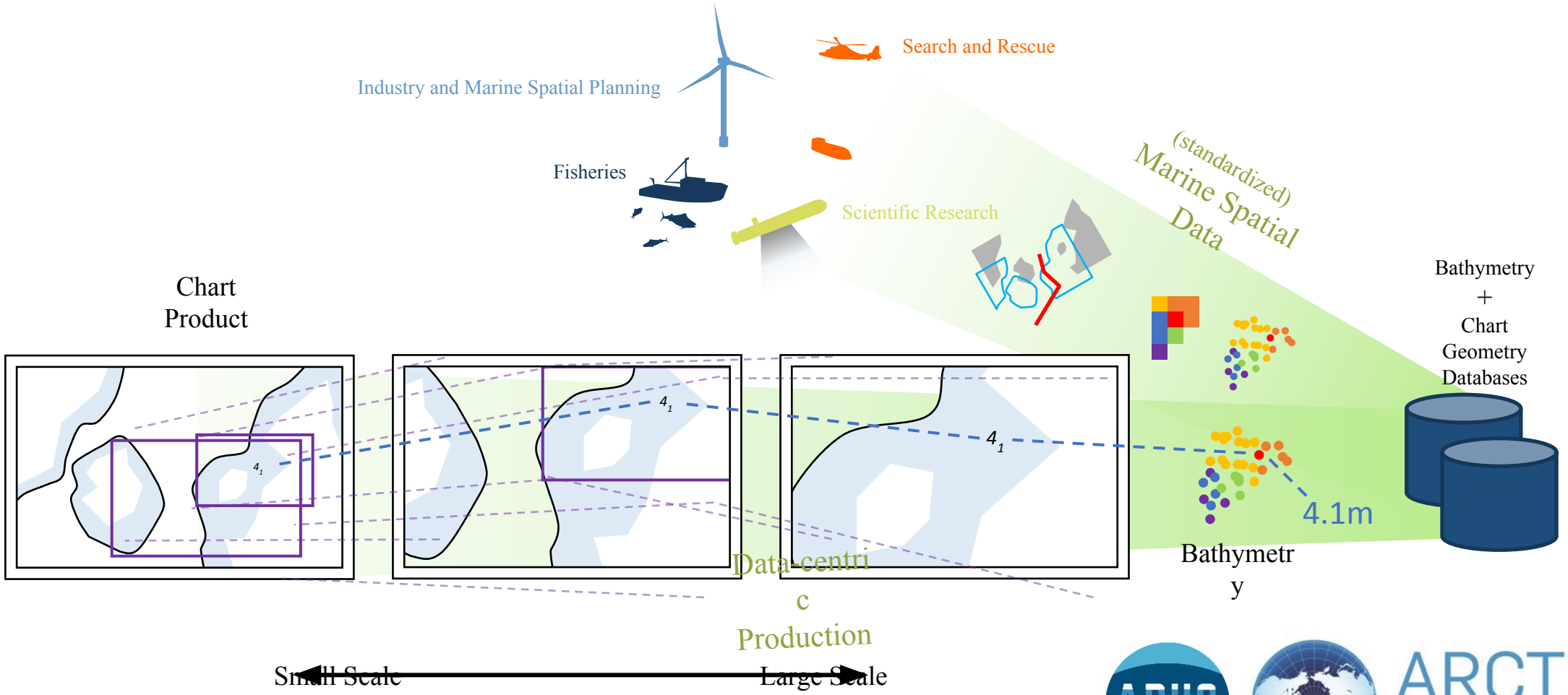
Data-Centric Production and MSDI



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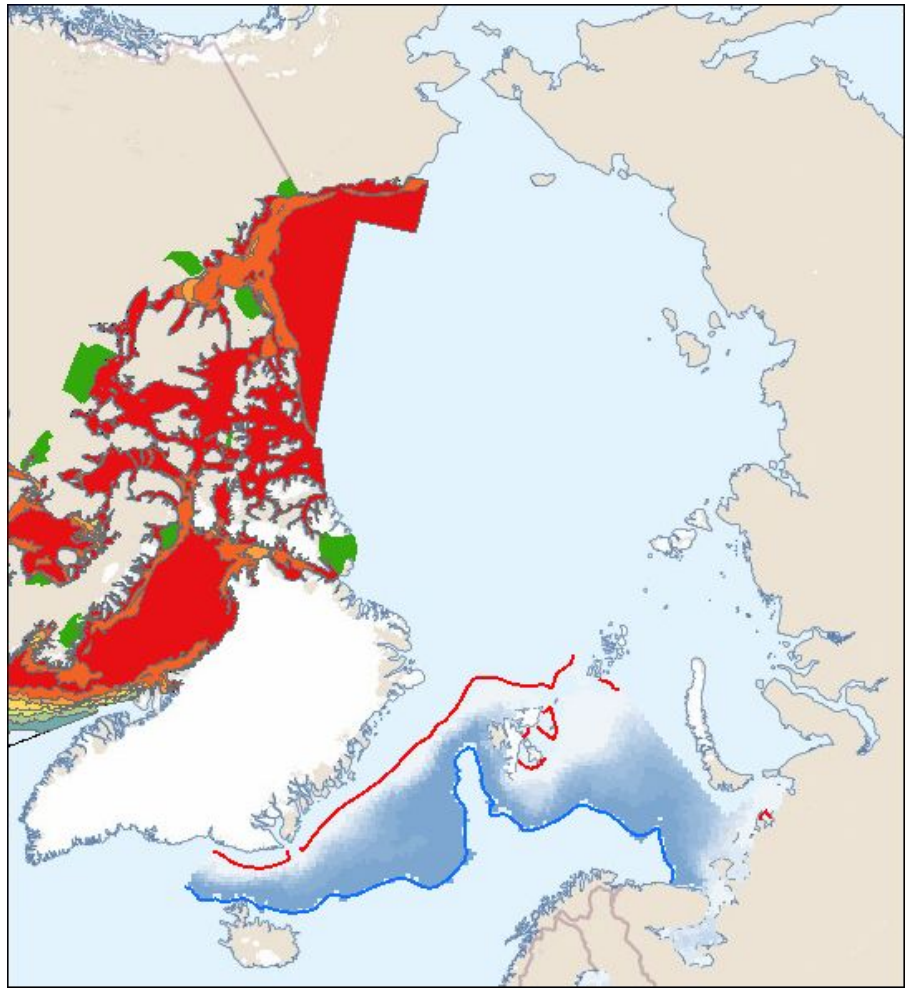
Hydrographic Office Data Reuse



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

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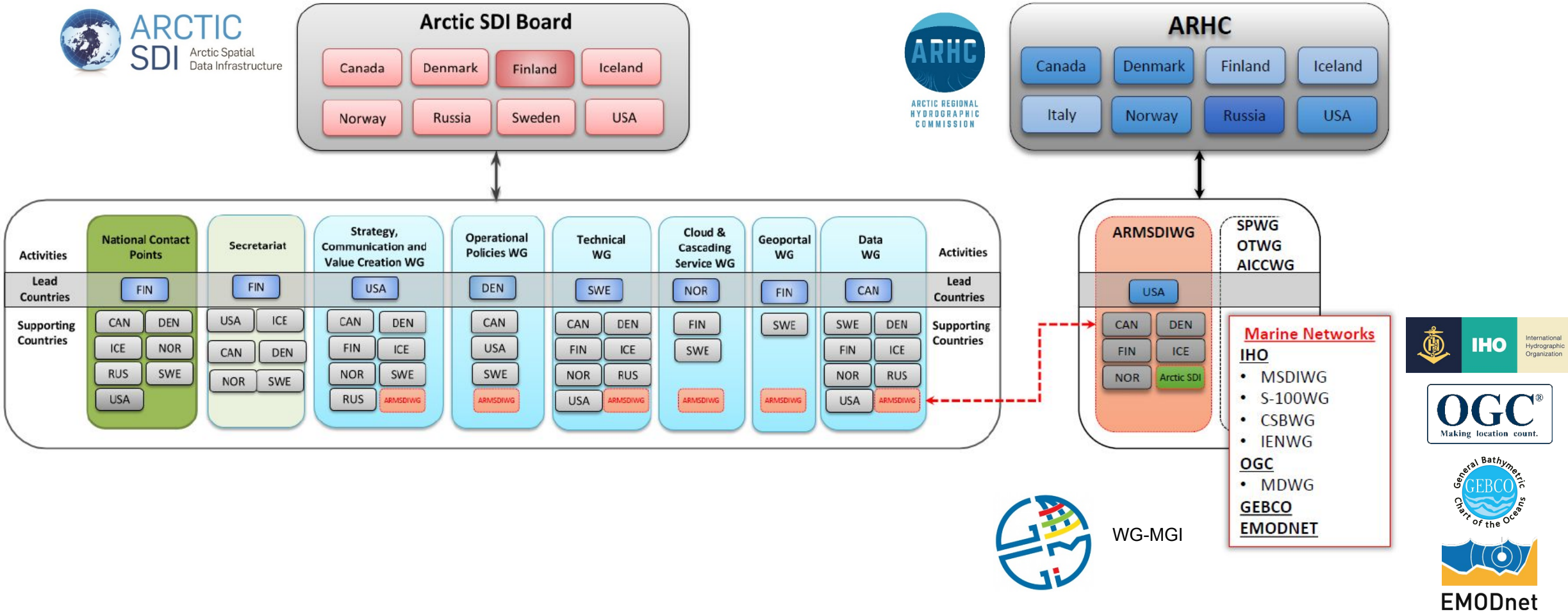
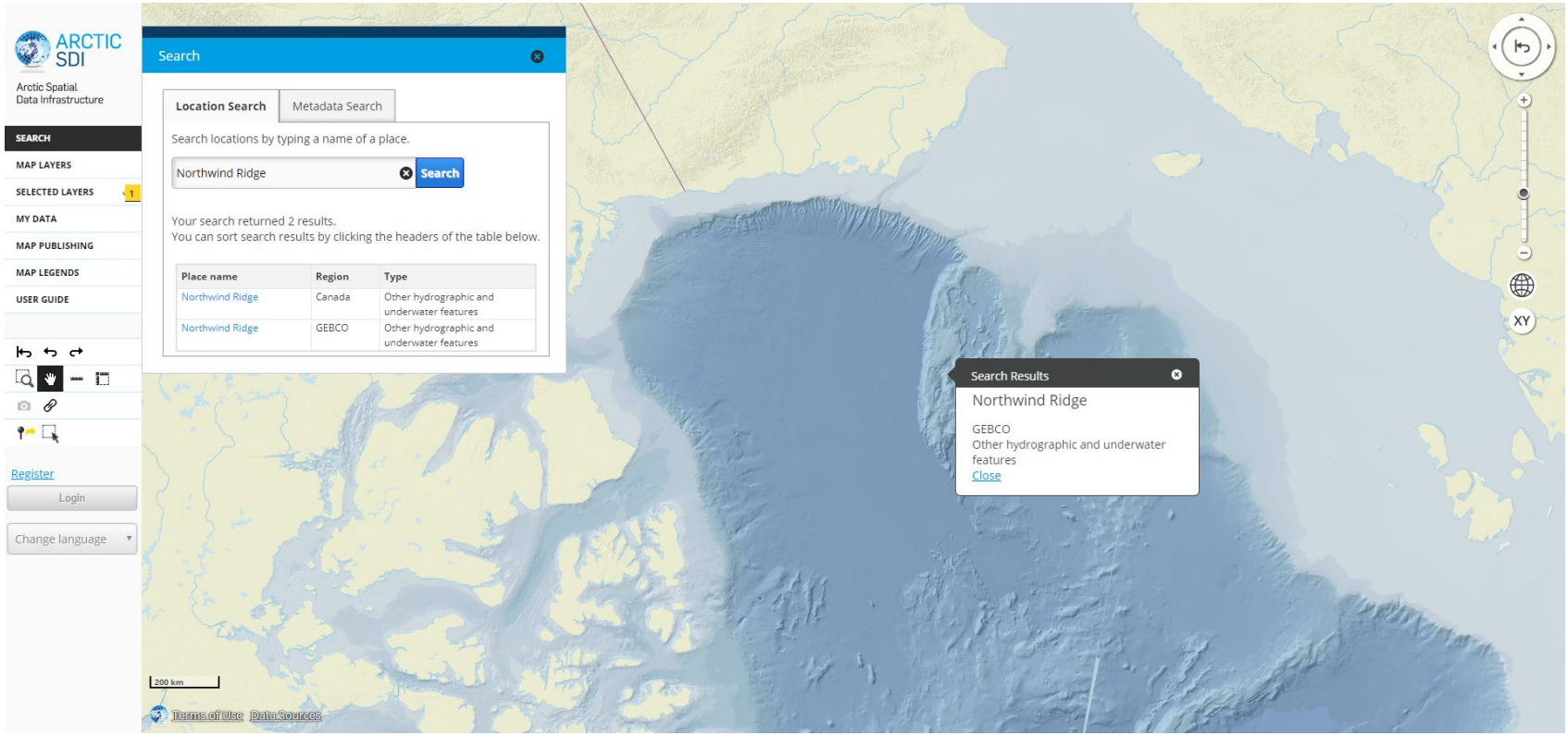
Proposed Arctic SDI & ARHC ARMSDIWG Cooperation Structure



Arctic SDI & ARMSDIWG: Marine Networks Data Reuse



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.

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