Arctic Regional Marine Spatial Data Infrastructures Working Group (ARMSDIWG)

Coordinating multi-national marine geospatial data sharing in the Arctic

Sebastian Carisio

Chair, ARHC ARMSDIWG

UN-GGIM 9th Session

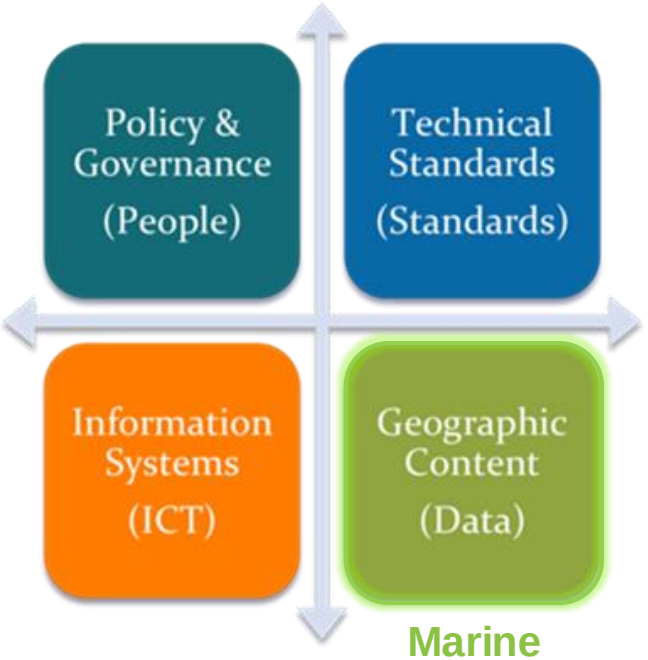
Working Group on Legal and Policy Frameworks Side Event

6 AUG 2019

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
    - Reusablity
  - 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



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

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 Terms of Reference

(ɑrmz - dē - wɪg)

The Working Group Should:

- 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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ARMSDIWG Terms of Reference (cont'd)

(ɑrmz - dē - wɪg)

Rules of Procedures:

- **All ARHC Members and Associate Members are encouraged to participate to the ARMSDIWG and to contribute to the work of the ARMSDIWG.**
- The ARMSDIWG should be chaired by one of the ARHC MS elected or reconfirmed by the ARHC MS present at he first ARHC meeting following the IHO Assembly.
- The ARMSDIWG should work as far as possible **in accordance with existing guidelines and recommendations issued by the IHO and IMO.**
- The ARMSDIWG should consult Task Groups, Committees and Working Groups or other relevant bodies, as deemed necessary.
- The ARMSDIWG should **inform relevant Regional Hydrographic Commissions (RHCs)** with the aim to coordinate within the other regions as far as possible.
- The work of the ARMSDIWG will be carried out primarily by correspondence (via e- mails). The members are encouraged to reply without unnecessary delay.
- The ARMSDIWG Chair can on request coordinate ARHC MS views on MSDI topics and present them at the IHO MSDIWG.

ARMSDIWG 3rd meeting in Reykjavík, Iceland - April 2019

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Pace of MSDI Data Contributions

- ARMSDIWG should accept that spatial data contributions from its members **will occur in different amounts and at different rates**, for example, **just as they do in the Arctic SDI cooperation**.

- While gaps in data may exist, ARMSDIWG, in its early stages, **should attempt to demonstrate capabilities with the data that currently exists**.

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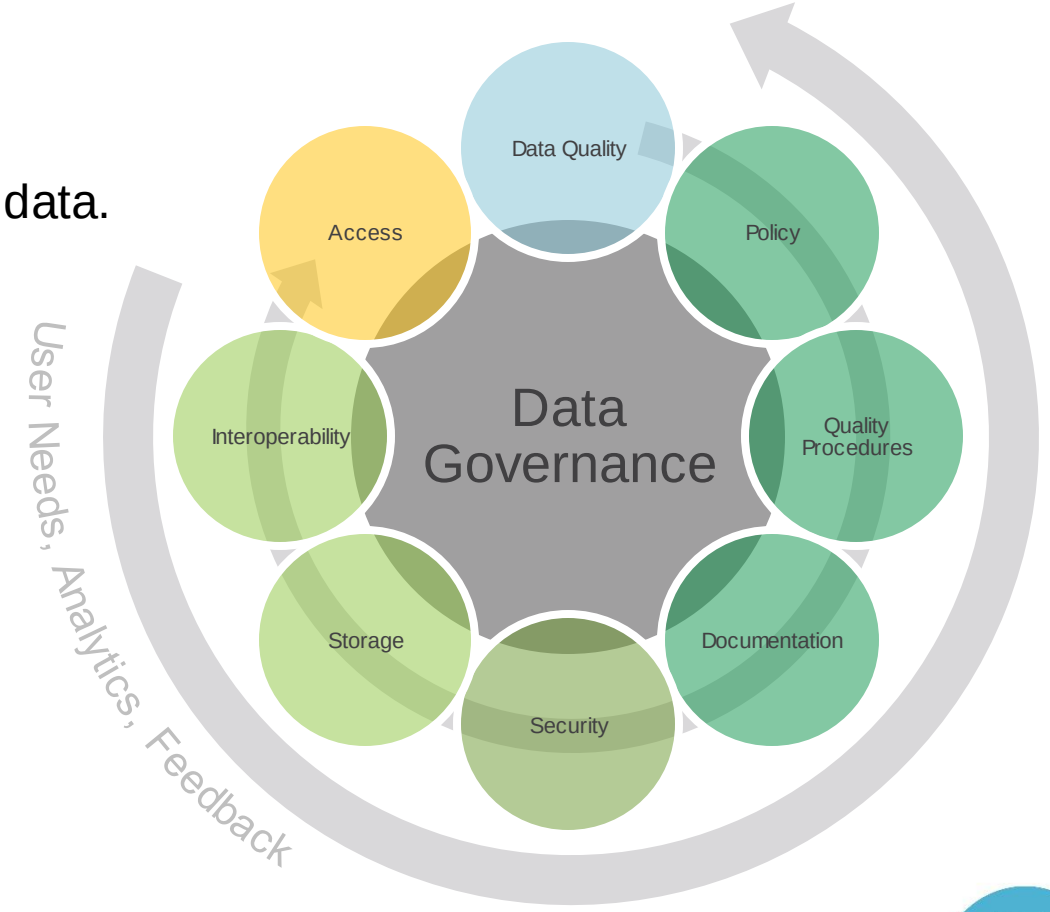
Data Governance Overview

- Objective
  - Facilitate the handling, accessibility, and quality of data.

- General Data Governance Components
  - Data Quality
  - Policy
  - Quality Procedures
  - Documentation
  - Security
  - Storage
  - Interoperability
  - Access



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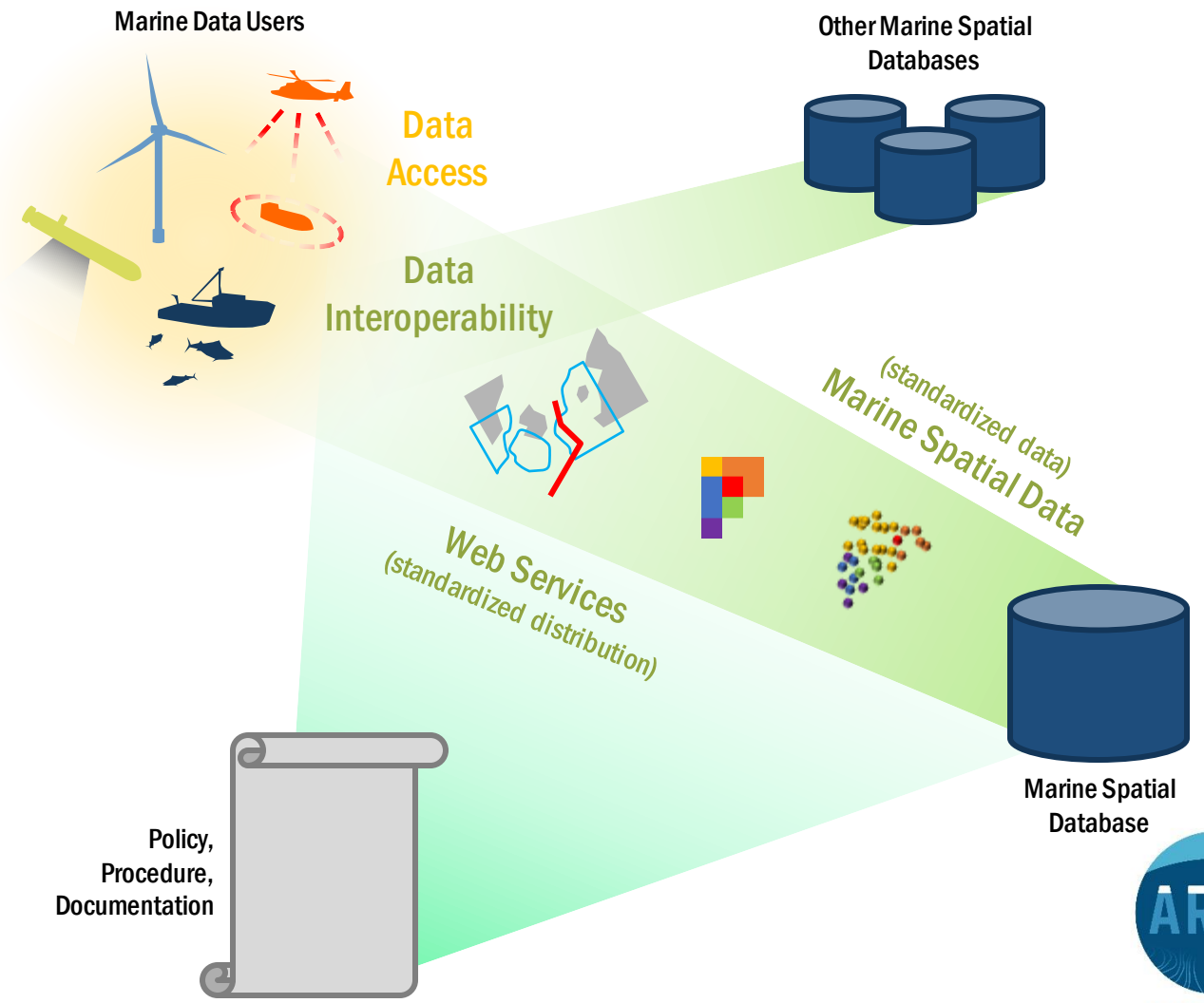
Policies in a Data Governance Model

- Policies drive the data governance model.
- Policies can be executive in nature or embedded within each component of the model.
- Sound policies and handling procedures lead to high quality and highly accessible data.
- National policies need to be clear and understood by the hydrographic data provider to allow and know which data can be released more broadly.



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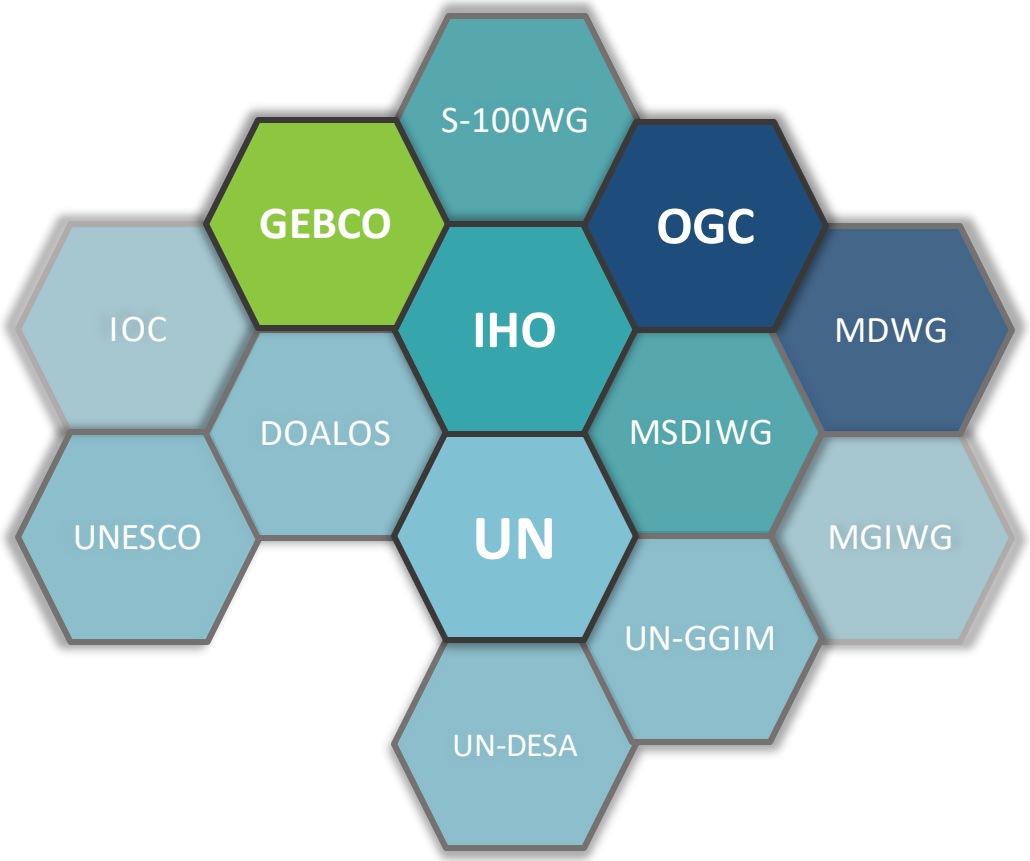
International Marine Data Governance



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