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ARHC Ambition Plan towards Effective Cooperation with Arctic SDI

- Submitted by: Denmark and United States of America (Chair ARMSDIWG)
- Executive Summary: This decision paper asks ARHC to discuss the current and future state of cooperation with Arctic SDI and to consider the resources and level of support required to continue effective collaboration towards an overall Spatial Data Infrastructure (SDI) for the Arctic Region.
- Related Documents: ARHC9-D1a Status Report of the Arctic Regional Marine Spatial Data Infrastructures Working Group (ARMSDIWG)
ARMSDIWG Consolidated Work Plan 2017-2020, Version 04 September 2017-2020
ARMSDIWG Terms of Reference (ToR)
- Related Projects: Arctic Spatial Data Infrastructure (Arctic SDI)
<http://arctic-sdi.org/>

Background

The Arctic Regional Hydrographic Commission (ARHC), through Arctic Regional Marine Spatial Data Infrastructures Working Group (ARMSDIWG) has been working with Arctic SDI since 2017 towards facilitating an infrastructure, as the respective marine and terrestrial data providing authorities in the region, to connect users, across domains, to the spatial data valued to support research, planning and decision making in the Arctic.

As conceptualized in the figure below, ARMSDIWG has proposed to Arctic SDI a possible approach to remain engaged, aligned and providing an equal level of Spatial Data Infrastructure (SDI) facilitation. ARMSDIWG seeks to have associate or observer -type status with various Arctic SDI working groups to both understand and contribute best practices/approaches in developing a stronger foundational SDI.

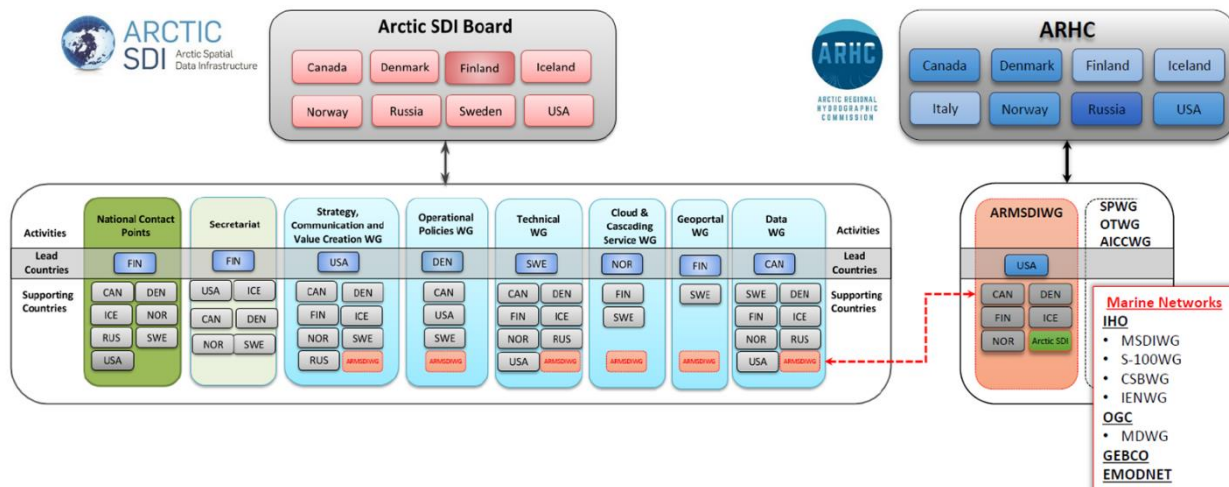


Figure 1 Draft Proposal for Future Cooperation/Organization between ARHC and Arctic SDI discussed at the Joint Meeting of the Arctic SDI and the ARMSDIWG – Akranes, Iceland APR 2019

Analysis

Currently, the ARMSDIWG is the key coordinating body for MSDI in the Arctic, as a subsidiary working group to the ARHC. The ARHC is led by the duly authorized representatives of hydrographic offices comprising membership of the commission. The Arctic SDI is led by an executive-level board (i.e. Arctic SDI Board representing each National Mapping Agency) with subsidiary secretariat, national contact points, and working groups. The Arctic SDI, as a whole, “is a collaborative partner-based effort of the National Mapping Agencies” devoted to completely to (1) “lead and guide the development of an Arctic Spatial Data Infrastructure” and (2) “provide open access to a coherent and authoritative Arctic reference map and thematic Arctic data through the publication of selected data from their respective holdings and from other sources.”

Referencing again, the figure above, both Arctic SDI and ARHC have executive-level leadership bodies, with subsidiary working groups; however, with Arctic SDI’s structure focusing solely on SDI development activities, the level of effort between Arctic SDI and ARHC to SDI development is disproportionate. Beyond the one or two representatives from each hydrographic office for the six, currently participating countries in ARMSDIWG (i.e., Canada, Denmark, Finland, Iceland, Norway, United States), there is no more resources devoted to SDI development for the Arctic.

ARHC and Arctic SDI are similarly structured as separate bodies (Executive-level coordinate board, and subsidiary working group levels); however, Arctic SDI is completely devoted to SDI for the Arctic whereas ARHC has several working groups devoted to very defined, and separate objectives.

Decision Point

If Arctic SDI agrees to such a cooperative model as described in the *Background* of this paper, ARMSDIWG would seek from ARHC a dedication of more technical, data, and web service –experts from the marine domain, as well as honing current technology resources (e.g. web service enablement of identified data, generation of web service catalogs for Arctic SDI use, possible updating and maintenance of marine information using Arctic SDI web resources) in order to more effectively coordinate and contribute to the development of a regional SDI with the Arctic SDI cooperation. Mirroring a similar level of activity and resources would bolster the current SDI and allow both the marine and terrestrial domains to develop in tandem for the participating Arctic nations.

The most recently approved Terms of Reference for ARMSDIWG state the working group should “cooperate specifically with the Arctic SDI cooperation” and “contribute to the development of a common Arctic SDI”. ARMSDIWG sees a potential increased allocation of personnel and technical resources from ARHC as mutually beneficial impact to both ARHC and Arctic SDI in creating a robust SDI for the Arctic.

Heading in to 2020, with the majority of *ARMSDIWG Consolidated Work Plan 2017-2020* items in an “Ongoing” status, ARMSDIWG seeks to understand an ambition plan from ARHC with regards to collaborating with Arctic SDI and promoting the development of MSDI in the overall Arctic SDI.

Possible Topics to Guide Discussion

- *Should a formal ARHC strategic direction be created regarding SDI (and aligned with Arctic SDI strategic documents)?*
- *Should ARHC and Arctic SDI Board more formally adopt a Joint Statement of Intent?*
- *Does ARHC collectively have, and is willing to allocate the personnel resources to support greater engagement and participation in other working groups of Arctic SDI?*
- *Do virtual options (e.g., web meetings, electronic voting, etc.) need to be more utilized to expedite approvals between ARMSDIWG and ARHC, on a more-than-annual basis, for updating of marine documents and resources posted to Arctic SDI website and geoportal under the “ARHC” moniker?*

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- *Areas in need of support:*
 - *Technical Expertise*
 - *Cloud & Cascading Service Expertise*
 - *Standards Expertise*
 - *Geoportal Expertise*
 - *Data Expertise*
 - *Catalogue Service Development*
 - *Prototyping and Testing*
 - *Web Development*

Invited Actions of ARHC

The ARHC members are invited to:

- Take note of the *ARMSDIWG Consolidated Work Plan 2017-2020* provided under separate cover.
- Take note of the Possible Topics to Guide Discussion (below).
- Discuss an ambition plan for ARHC/ARMSDIWG, its collaboration with Arctic SDI, and facilitating the MSDI as a component of the overall SDI for the Arctic Region.
- Discuss level of contribution (people and resources), if mutual agreement exists, to provide greater support within ARHC towards MSDI development to the overall SDI for the Arctic Region.
- Take action as seen appropriate.