



IHO

International
Hydrographic
Organization

ARHC12



ARHC IHO Strategic Plan Gap Analysis

ARHC-12

St. John's Newfoundland and Labrador, Canada

September 2022

Version 9.8.2022

Gap Analysis

- ARHC has drafted an IHO gap analysis applied to the ARHC
- Conducted Spring 2022
- Team including Doug Brunt/Dave Palmer/Chris Hemmingway/Mina Foroutan (CA), Jens Peter (DK), Mustaniemi Rainer (FI), Evert Flier (NO), Nyberg/Borbash/Brady/Justi (USA), Yves Guillam (IHO Secretariat)
- ARHC gap analysis table summarized in [ARHC12-D1A](#)
- 15 page table-three goals and SPIs with comments on each SPI



ARHC12-D1A

ARHC – IHO Strategic Plan 2021-2026: GAP Analysis

Date of last edit 2022-03-29 (Ref: IHO Strategic Plan 2021-2026)

GOAL 1	Target	Current State	Gap	Actions
Goal 1: Evolving the hydrographic support for safety and efficiency of maritime navigation, undergoing profound transformation	<p>1.1 Deliver standards for hydrographic data and specifications of hydrographic products; support their regular production; and coordinate regional and global services for their provision</p> <p>1.2 Develop standards, specifications and guidelines in the areas of data assurance, including cyber security and data quality assessment</p> <p>1.3 Use capacity building and training to develop and increase the ability of Member States to support safety and efficiency of maritime navigation</p>	n/a	n/a	<p>Highlights/observations:</p> <ul style="list-style-type: none"> -Most ARHC Member States (MS) are active in IHO bodies which <u>are responsible</u> for the development of standards, specifications, and guidelines for products, services, and data quality. -They work with each other, participate in the IHO WENDWG and/or are members of RENCs in an effort to coordinate the production and the secure delivery of quality national, regional and global products and services. -All MS are capable of supporting safe and efficient navigation in most of their waters, however, in many Arctic areas, there still exist shortcomings in the quality and coverage of hydrographic data. -MS are generally well advanced with respect to their capacities for deliver hydrographic services. Several MS are actively support capacity building (CB) efforts both in terms of the IHO 3-phase CB Strategy and other CB-related projects such as e-learning development and the IHO project on <i>Empowering Women in Hydrography</i>. -Training (in-person and on-line) is an ongoing activity in all ARHC MS. -Ultimately, a dashboard indicating the progress of the all SPIs in the Strategic Plan should be developed. -MS are promoting the use of S-xxx to other potential data providers.
Strategic Performance Indicators 1.1.1	Percentage of Member States having operationalized production and distribution of hydrographic data products and services based on IHO Universal Hydrographic Data Model (S-100), under an implementation framework of coordination and agreed timelines (2026: 100%)	40%	60%	<p>Highlights/observations:</p> <ul style="list-style-type: none"> -This SPI requires a better definition (see Questions below). -Most MS have done some preliminary development on products and services for the 'First Step' noted in the <i>Roadmap for the S-100 Implementation Decade, Annex 2</i> plan and most are confident they will achieve this goal. -Not all products/services in the Roadmap fall under the authority of the hydrographic offices. -S-101 ENC's will be the highest priority for all MS HQs. -S-102 (bathymetric surface) production will be targeted for selected waterways and areas.

Takeaways

- Using the gap analysis, for each IHO SP goal, takeaways were divided into “*administrative and reporting*” and “*discussion and decision*”
- Related - U.S. paper submitted to IRCC
- Uncertainty in interpreting coastal state indicators
- Seeks broader discussion, definition and common understanding of six SPIs, which are anchored in Member State reporting
- Seeks clarification of assumptions to build a standardized reporting process
- Overall, in the ARHC gap analysis, many points came up that are worthy of discussion

Discussion I

- Highlighting four key points today for consideration:

1. Suggest action to task the ARHC Secretariat to address the “administrative or organizational”-type takeaways

2. Discuss today:

- Goal One: a common understanding of SPI 1.3.1 (“Ability and capability of Member States to meet the requirements and delivery phases of the S-100 implementation plan”) and/or wait for wait for guidance from the IHO Secretariat, IRCC, or other body.
- Goal Two: Does ARHC need a strategy and communications plan to accelerate and increase coverage to support increasing MSDI and/or improved appreciation of value of hydrographic data in the region?
- Goal Three: Consider whether ARHC wants a UNDecade of Ocean Science engagement strategy and what that would look like. This could be related to the previous point and development of a regional MSDI.

Discussion II

Goal One

Evolving the hydrographic support for safety and efficiency of maritime navigation, undergoing profound transformation

Discuss a common understanding of SPI 1.3.1 (“Ability and capability of Member States to meet the requirements and delivery phases of the S-100 implementation plan”) and/or wait for wait for guidance from the IHO Secretariat, IRCC, or other body?

Discussion III

Goal Two

Increasing the use of hydrographic data for the benefit of society

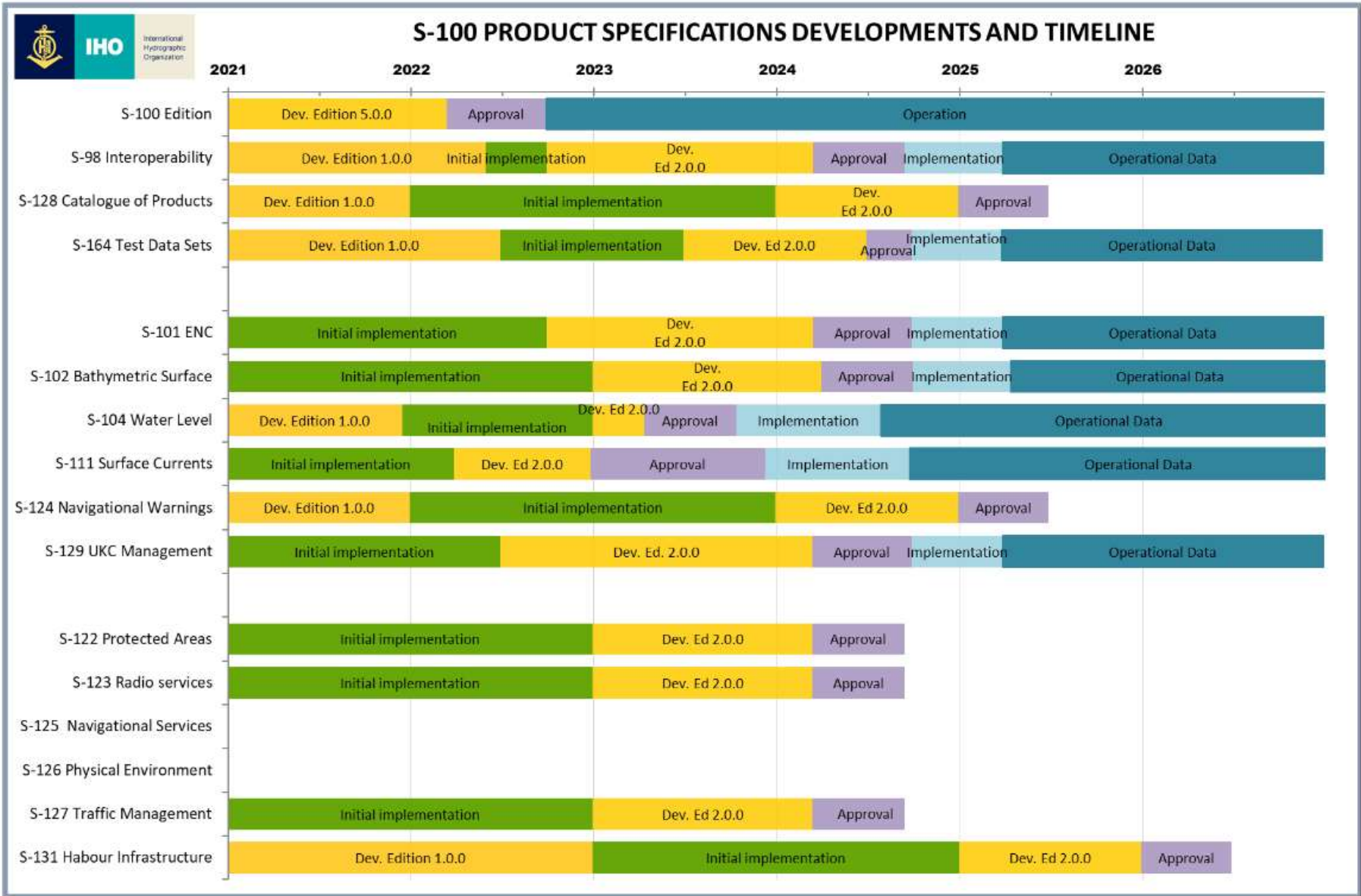
Does ARHC need a strategy and communications plan to accelerate and increase coverage to support increasing MSDI and/or improved appreciation of value of hydrographic data in the region?

Discussion III

Goal Three

Participating actively in international initiatives related to the knowledge and the sustainable use of the Ocean

Consider whether ARHC wants a UNDecade of Ocean Science engagement strategy and what that would look like. This could be related to the previous point and development of a regional MSDI.



Some ideas....

- Discussion of any other selected SPIs
- Develop and maintain a template for the SPIs to share current status, thinking and approaches to the SPI in the ARHC region
- Develop a web-based dashboard maintained near real time

Why?

What to include?

Audience?



SPI Template

Goal	
SPI:	
2026 Target (in words):	<i>"By 2026,..."</i>
Governance:	<i>How the indicator will be measured, by whom, how frequently/when, how often updated, where posted.</i>
Explanatory Note:	<i>Are there any caveats or discretionary aspects in measuring this indicator? Define any ambiguous terms. Acknowledge any important aspects.</i>
Lead/Owner:	

Indicator Reporting Tracking Summary

	Measure	Note
2021		
2022		
2023		

Relevant Links:

Reference/Document Library:

“One point I’d like to raise...”

- “What does a pan-Arctic S-100 Strategy & Implementation Roadmap look like. What level of integration (with INTToGIS and/or other MS) are MS willing to commit to?” (CA)
- (DK)
- “Not all S-100 products fall under the responsibility of the Hydrographic Office. Do we have active coordination with other S-100 product owners? How do we or should we deal with this?” (NO)
- “Do MSs have plans or actions in place to start producing S-101 ENC’s parallel with S-57 ENC’s in Q1 2025 and to work for 100 % S-101 coverage with the current S-57 product area by the end of 2026 ? (FI)
- (IT)
- (IS)...

NOTE: Justi is reaching out to members and observer to offer a point if they would like to raise one in advance on this slide. If received, Justi can put these into a revised ppt. The benefit is that others will have a voice to offer in advance before any discussion and time constraints impact the agenda topic

CLIMATE IN CRISIS

Arctic warming is happening significantly faster than previously thought, study finds

Climate researchers often use the Arctic as a bellwether for the impacts of global warming because the region is particularly sensitive to even small shifts in surface temperatures.



Forbes

September 05, 2022 and December 24, 2021

SCIENCE

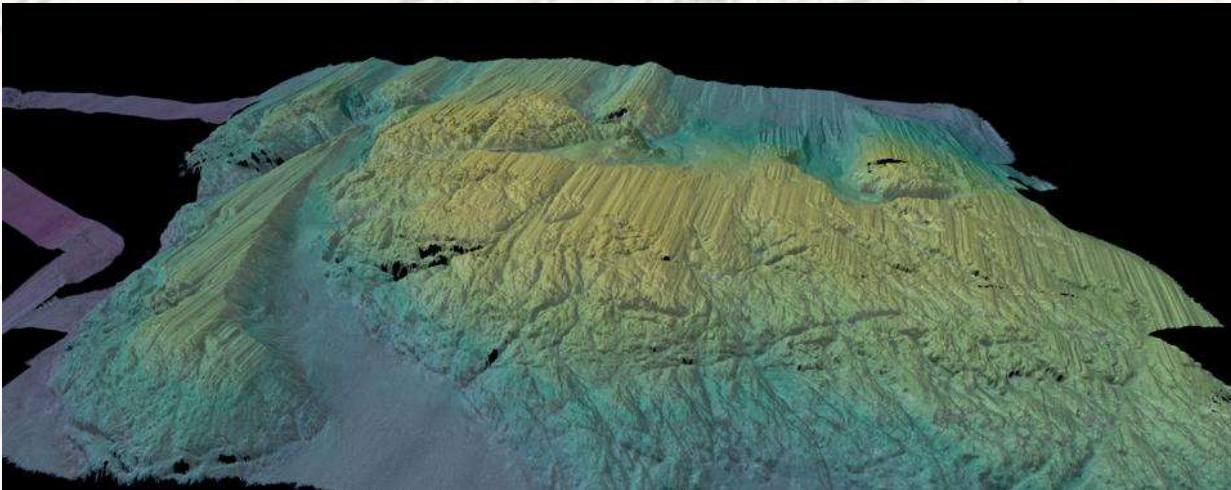
Florida-Sized 'Doomsday Glacier' In Antarctica May Slip Into The Ocean More Quickly

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Sep 5, 2022, 02:42pm EDT 4 



Antarctica beautiful landscape, blue icebergs, nature wilderness . GETTY



A 3D-rendered view of the multibeam bathymetry (seafloor shape) colored by depth, collected across a seabed ridge, just in front of Thwaites Ice Shelf. ALASTAIR GRAHAM/UNIVERSITY OF SOUTH FLORIDA