

**43nd Meeting of the
US Canada Hydrographic Commission (USCHC)
Québec, Canada, 24 February 2020**

IHO Secretariat Report

Dr Mathias Jonas
Secretary-General



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Oral report of the IHO Secretariat along the IHO Work Programme

1. Corporate Affairs
2. Hydrographic Standards and Services
3. Inter Regional Cooperation and Support
4. Secretariats operations



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Corporate Affairs / S-100 roadmap

- IMO NCSR7 (January 2020) agreed to propose adoption of incorporation of S-101 into NCSR8 work programme (subject to IMO MSC102 approval (May 2020))
- The Secretariat plans a short submission to MSC102 but needs sponsoring of IHO Member States.
- In case of acceptance, the Secretariat plans another detailed submission to NCSR8 but needs collaboration/support of IHO Member States.
- OEMs (CIRM) and parts of shipping industry (ICS) are sceptical about the proposed time lines for S-101 ENC's introduction and dual fuel concept.



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Corporate Affairs / Strategic Plan Review

Goal 1: Evolving the hydrographic support for safety and efficiency of maritime navigation, undergoing profound transformation

Goal 2: Increasing the use of hydrographic data for the benefit of society

Goal 3: Participating actively in international initiatives related to the knowledge and the sustainable use of the Ocean

Margaret Leinen, Director of the SCRIPPS Institution of Oceanography,
“It is about what can we do together that we cannot do separately.”



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Goal 1: Evolving the hydrographic support for safety and efficiency of maritime navigation, undergoing profound transformation

Targets

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.

1.2 Develop standards, specifications and guidelines in the areas of data assurance, including cyber security and data quality assessment.

1.3 Use capacity building and training to develop and increase the ability of Member States to support safety and efficiency of maritime navigation.

Future of paper charts? Data quality? Capacity building - who pays?



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Goal 2: Increasing the use of hydrographic data for the benefit of society

Targets

2.1 Build a portal to support and promote regional and international cooperation in marine spatial data infrastructures (MSDI).

2.2 Promote new tools and methods to accelerate and increase coverage, consistency, quality of surveys in poorly surveyed areas.

2.3 Apply UN shared guiding principles for geospatial information management in order to ensure interoperability and extended use of hydrographic data in combination with other marine-related data.

Another portal? New sensors / new carriers?



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Goal 3: Participating actively in international initiatives related to the knowledge and the sustainable use of the Ocean

Targets

3.1 Collaborate with other bodies who deliver capacity building and training to improve effectiveness of capacity building activities and programmes

3.2 Improve knowledge of the world's seafloors

3.3 Implement a comprehensive IHO digital communication strategy in order to enhance its visibility and accessibility to its work

Is this enough? UN Decade of Ocean Science?



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Corporate Affairs / UN Decade of Ocean Science

IHO delivers two elements:

- Supports Improved base line information on ocean mapping (well received),
 - *Promotes Satellite derived bathymetry,*
 - *Data quality*
 - *Crowd Sourced Bathymetry*
 - *DCDB /GEBCO Grid and related activities under SEABED2030*
- Cross science domain standardization of datasets under the S-100 framework (low recognitions as engineering work only)
- New hydrographic task: monitoring of plastic pollution (micro/macro plastic) ??????



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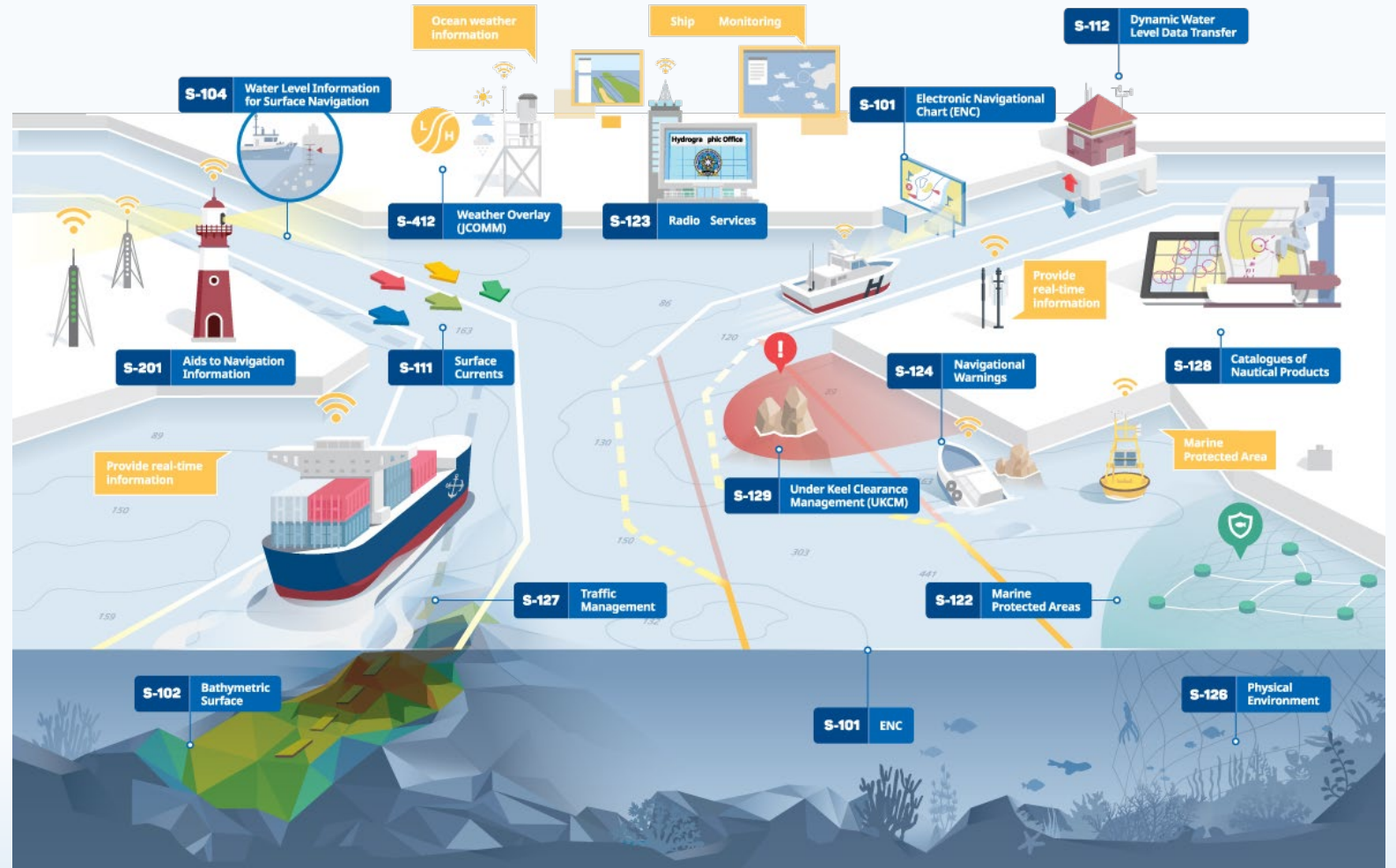
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2. Hydrographic Standards and Services

Progress with the S-100 framework
- Registry clean up

Definition of S-100 based Standards



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HSSC / S-100 Progress

S-100 and dependant Product Specification - Key Milestones

- S-100 Edition 4 released - December 2018;
- S-101 ENC Product Specification Edition 1.0.0 released for testing – December 2018;
- S-102 High Resolution Bathymetry Edition 2.0.0 – Oct 2019
- S-111 Surface Currents Product Specification, Edition 1.0.0 released for testing - December 2018;
- S-122 Marine Protected Areas, Edition 1.0.0 released - January 2019;
- S-123 Marine Radio Services, Edition 1.0.0 released - January 2019;
- S-129 Underkeel Clearance Management System Edition 1.0.0 released for testing – May 2019
- S-211 (IALA) Port Call Message Product Specification Edition 1.0.0 – anticipated release 2019
- S-411 (WMO) Ice Information Product Specification Edition 1.0.0. – published 2017
- S-412 (WMO) Weather Overlay Product Specification Edition 1.0.0 – published 2017
- S-421 (IEC) Route Exchange Product Specification Edition 1.0.0 – anticipated 2020



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3. Inter Regional Cooperation and Support

- ENC coverage and overlap update (newest figures delayed)
- Crowd Sourced Bathymetry update
- Iridium as new Marine Safety Information provider



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IRCC / ENC coverage and overlap update

Status	Definition	WENDWG7	WENDWG8	WENDWG9
Live	Overlap exists	187	231	261
Accept	Overlap exists, but is Acceptable (very insignificant)	13	23	53
Potential	Overlap identified at IC-ENC validation stage, activity is underway to try to prevent issuing an overlap.	15	68	86
Resolved	An overlap, or potential overlap, that has been successfully resolved.	31	114	199
Unassessed	Live Overlap not yet assessed	44	0	0

IC-ENC's Overlapping Data
Reporting and Analysis
(*WENDWG9 WP*)



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IRCC / Crowd Sourced Bathymetry

- B-12 Ed 2.0.0 Guidance on Crowd source bathymetry was approved by MSs (IHO CL28/19 refers).
- IHO CL11 came with a separate template to seek for national acceptance of CSB in national waters of jurisdiction.
- Target date for reply of national position on CSB in waters of national jurisdiction is open ended. Positive response = 15 IHO Member States.
- How to address other coastal states?
- How does CSB fits into Seabed2030 concept?



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IRCC / Iridium as new MSI provider

- *Maritime Mobile Satellite Services provided by Iridium Satellite LLC are now recognized for use in GMDSS.*
- Ongoing discussion at IMO on the development of a technical solution for the reception and dissemination of MSI and SAR-related information over different recognized mobile satellite services and on the monitoring of MSI and SAR broadcasts in a multi-provider environment.
- Where does the remit of IHO ends?



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4. Secretariats operations /Publicity and Outreach

World Hydrography Day 2020:

"Hydrography - enabling autonomous technologies"

International Hydrographic Review (New Editor in Chief)

IHO Centenary Celebrations (IHO-100)



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Secretariats operations / IHO 100 years (1)

IHO Prestige book: “100 years of international cooperation in hydrography”

Illustrate in an educational and entertaining manner the importance and variety of the activities, outputs and developments of the IHO and its effective role in supporting maritime activities: History, Present and Future!

Group of Co-Authors led by Editor in Chief: Gilles Bessero

- Chris Andreasen
- Mike Barritt
- Hans-Werner Schenke
- Peter Ehlers
- Andy Armstrong
- Horst Hecht
- Mathias Jonas
- Alexandros Maratos
- Parry Oei
- Robert Ward
- Shepard Smith



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Secretariats operations / IHO 100 years (2)

Monaco, April 2020 - Second IHO Assembly:

- Special session about the history, the presence and the future hydrography

Monaco, 21 June 2021:

- Peak event back to back with IRCC annual meeting

Consider a submission to the UN General Assembly session of 2021:

- Commitment of IHO to Sustainable Development Goals through improved provision of hydrographic knowledge (?)



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**USCHC is requested to take note of this report
and take action as deemed appropriate.**



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