

WENDWG Report to the 28th BSHC Conference

by Jarmo Mäkinen, BSHC WENDWG representative

1. Status of the work of WENDWG

Chair: John Nyberg (USA). From 1 July 2023 Jens Schröder-Fürstenberg (Germany).

Vice-Chair: Annika Axne (Sweden). From 1 July 2023 Jason Scholey (UK).

Secretary: Yves Guillam, IHO Secretariat.

Members: Representatives of Regional Hydrographic Commissions, representatives of IHO Member States, RENCs. [Link to WENDWG membership List](#)

[Link to updated WENDWG Terms of Reference](#) (IRCC15- June 2023)

2. Meetings since last BSHC (BSHC27 Sept 2022)

WENDWG13, Aalborg, Denmark, 21 - 23 February 2023

3. WENDWG13

The following main topics were discussed during the WENDWG13 meeting:

- S-100 Implementation and coordination
- WEND-100 Product Matrix IGIF
- WEND-100 Principles and S-1xx Implementation Guidelines
- S-101 ENC Scheming Guidelines
- INTToGIS III and S-128

S-100 Implementation and coordination

- The WENDWG has transitioned its focus from S-57 to the S-100 World.
- All participants were briefed on the urgent need to accelerate the preparation of the S-100 coordination process in their regions, due to the very short time left before 2026, the year when the S-100 ECDIS becomes a reality.
- On the regional S-100 coordinator's role, some RHCs requested more guidance on what the role includes and entails. An amendment to include Section 300 in S-11 Part A to describe the Coordinator responsibilities was considered.
- The S-100 coordination in place at national and regional levels and subsequently the status of the RHCs (*Strategic Performance Indicator (SPI 1.3.1)*) in the light of their preliminary assessment based on the use of version 1.0 of the WEND100-IGIF5 matrix distributed in August 2022, once the principles were approved at IRCC-14.

Draft S-100 Coordinator Responsibilities

- Keep an inventory of S-100 products in the region.
 - Producer
 - Status, in progress, complete, availability
 - Potential additional producers of product
- Work to ensure that Regional MS understand what S-100 products are available
- Update the WEND100-IGIF Matrix on a biannual (every 2 years) basis
- Report regional S-100 status to WENDWG
- Provide input to the WENDWG on RHC preferences regarding WEND-100 Principles
- Help to communicate latest WEND-100 Principles updates to RHC
- Work to coordinate new S-100 products according to WEND-100 Principles (as they are developed), following overlap, distribution and other guidance as it is agreed

WEND-100 Product IGIF Matrix

- This approach is aimed at identifying the key issues and critical paths to be considered for healthy product lifecycle, noting that not all future S-100 based products services can or will be provided by every Hydrographic Office.
- Despite difficulties in understanding the WEND100-IGIF matrix for some RHCs and Member States, this tool was proven to be useful to get an estimate of the readiness level.
- With the lessons learned from the first round since August 2022, additional guidelines to fill the matrix and especially use it at RHC level, need to be developed in 2023.
- WENDWG decided to update matrix every 2 years (update in IRCC15, Rec. 9; to be updated annually)
- Below is a table with compiled responses from the all BSHC Member States.

	S-101									S-102								
	SE	DE	DK	FI	LT	LV	PL	EE	BSHC	SE	DE	DK	FI	LT	LV	PL	EE	BSHC
Governance and Institutions	8,4	11,1	11,1	11,1	3	8,4	8,4	8,4	8,4	5,7	8,4	8,4	11,1	3	5,7	8,4	8,4	8,4
Policy and Legal	8,4	11,1	8,4	11,1	3	8,4	8,4	8,4	8,4	3	8,4	3	11,1	3	3	3	5,7	3
Data	3	11,1	3	3	3	3	3	3	3	3	8,4	3	3	3	3	3	5,7	3
Financial	8,4	11,1	11,1	11,1	3	8,4	3	5,7	11,1	3	8,4	3	5,7	3	3	3	5,7	3
Innovation	5,7	0	3	5,7	3	5,7	5,7	3	5,7	11,1	5,7	3	5,7	3	3	5,7	5,7	5,7
Standards	5,7	0	11,1	8,4	3	8,4	5,7	5,7	5,7	5,7	5,7	11,1	8,4	3	5,7	5,7	5,7	5,7
Partnerships	3	0	3	3	5,7	3	3	5,7	3	3	5,7	3	3	5,7	3	3	5,7	3
Capacity and Education	11,1	0	3	8,4	3	8,4	5,7	3	5,7	5,7	3	3	8,4	3	5,7	5,7	3	5,7
Communication and Engagement	11,1	0	3	8,4	3	8,4	11,1	3	8,4	11,1	8,4	3	8,4	3	3	11,1	3	5,7
	S-122									S-124								
	SE	DE	DK	FI	LT	LV	PL	EE	BSHC	SE	DE	DK	FI	LT	LV	PL	EE	BSHC
Governance and Institutions	3	11,1	3	3	0	3	5,7	3	3	11,1	11,1	5,7	11,1	0	3	5,7	3	11,1
Policy and Legal	0	8,4	3	3	0	3	5,7	3	3	3	11,1	3	11,1	3	3	3	3	3
Data	0	8,4	3	3	0	3	5,7	3	3	3	0	3	3	0	3	3	3	3
Financial	0	3	3	3	0	3	0	3	3	3	0	3	3	0	3	3	3	3
Innovation	3	11,1	3	3	0	3	0	3	3	3	0	3	3	0	3	3	3	3
Standards	3	11,1	3	3	0	3	0	3	3	5,7	0	3	5,7	0	3	5,7	3	5,7
Partnerships	3	8,4	3	3	0	3	0	3	3	5,7	0	3	5,7	0	3	3	3	3
Capacity and Education	0	8,4	3	3	0	3	0	3	3	3	0	3	3	0	3	3	3	3
Communication and Engagement	3	11,1	3	3	0	3	8,4	3	3	11,1	0	3	8,4	0	3	11,1	3	3
	S-104									S-111								
	SE	DE	DK	FI	LT	LV	PL	EE	BSHC	SE	DE	DK	FI	LT	LV	PL	EE	BSHC
Governance and Institutions	3	8,4	5,7	8,4	0	3	5,7	3	5,7	0	8,4	5,7	8,4	0	3	5,7	3	5,7
Policy and Legal	3	8,4	3	8,4	0	3	5,7	3	3	0	8,4	3	8,4	0	3	5,7	3	3
Data	3	3	3	5,7	0	3	0	3	3	0	3	3	3	0	3	0	3	3
Financial	3	3	3	3	0	3	0	3	3	0	3	3	3	0	3	0	3	3
Innovation	11,1	5,7	3	3	0	3	0	3	3	3	5,7	3	3	0	3	0	3	3
Standards	3	5,7	3	3	0	3	0	3	3	0	5,7	3	3	0	3	0	3	3
Partnerships	3	3	3	3	0	3	0	3	3	0	3	3	3	0	3	0	3	3
Capacity and Education	3	3	3	5,7	0	3	0	3	3	0	5,7	3	5,7	0	3	0	3	3
Communication and Engagement	8,4	11,1	3	8,4	0	3	8,4	3	8,4	8,4	11,1	3	8,4	0	3	8,4	3	8,4
	S-128									MSDI								
	SE	DE	DK	FI	LT	LV	PL	EE	BSHC	SE	DE	DK	FI	LT	LV	PL	EE	BSHC
Governance and Institutions	8,4	11,1	5,7	5,7	0	8,4	8,4	3	8,4	8,4	11,1	8,4	8,4	0	3	8,4	8,4	8,4
Policy and Legal	5,7	11,1	3	5,7	0	5,7	5,7	3	5,7	11,1	11,1	8,4	11,1	0	3	8,4	8,4	8,4
Data	0	3	3	3	0	3	0	3	3	5,7	11,1	8,4	5,7	0	3	8,4	5,7	5,7
Financial	5,7	5,7	3	5,7	0	3	5,7	3	5,7	8,4	11,1	3	8,4	0	3	3	5,7	5,7
Innovation	3	11,1	3	5,7	0	5,7	3	3	3	3	11,1	8,4	8,4	0	3	5,7	8,4	8,4
Standards	0	5,7	3	5,7	0	5,7	0	3	3	3	3	8,4	3	0	3	3	5,7	3
Partnerships	0	5,7	3	5,7	0	5,7	0	3	3	5,7	3	5,7	5,7	0	3	3	3	5,7
Capacity and Education	0	3	3	3	0	3	0	3	3	3	11,1	11,1	5,7	0	3	11,1	3	8,4
Communication and Engagement	8,4	5,7	3	5,7	0	5,7	8,4	3	5,7	3	11,1	8,4	8,4	0	3	3	8,4	8,4

S-101 ENC Scheming Guidelines

- Following WENDWG 12, the S-101 Scheming Guidelines Project team was placed on standby, where it remains.
- It has become clear from now on that there will be no global common grid for S-101 ENCs and other S-100 products as such. Fruitful opposite experiences were shared at the meeting on this matter and it is now obvious that Member States will develop their own approach, their own grid, hoping that the end result will be seamless and harmonized for endusers.
- It has decided to task RHC Chart/S-100 Coordinators with reporting their planned S-101 chart schemes for each region, usage bands 1 – 4. The Group requested that submissions use INTOGIS III if and when it is commissioned (Sept 2023?).
- HSSC15 tasked NCWG to work on S-11 Part A, Section 200, to incorporate S-101 Scheming Guidelines.

WEND-100 Principles and S-1xx Implementation Guidelines

- No significant work was done on the WEND-100 Principles or S-1xx Implementation Guidelines during this reporting period. The WG considers both of these documents to be in "maintenance mode" and will include them as part of the regular agenda to consider updates as S-100 products and services mature.

INToGIS III and S-128

- The WENDWG commended KHOA and other contributors on the work done to date on the development of INTOGIS III.
- INTOGIS III (still under development) is to become a one-stop-shop IHO useful tool for Member States and the RHCs for planning and scheming S-100 data services.
- Noting the support offered by the RENCs, the WENDWG agreed on the way forward for a joint NIPWG/S-100WG concept paper on the operational use of S-128, starting with a use case#1, focused on SOLAS Navigation and Route Monitoring, in accordance with the WEND-100 Implementation Guidelines.
- Member states and RENCs are encouraged to supply their S-128 data for testing and development.

4. Next meeting

The next meeting (WENDWG 14) will be held in US (Norfolk, VA), 20 - 22 February 2024.

5. Actions for the 28th BSHC Conference

- Note on this report.
- Discuss and comment on the S-101 Scheming Guidelines and provide follow-up guidance.
- Discuss and provide updates for WEND100-IGIF Matrix.
- Note the recommendation 8 from IRCC15: RHCs, if not done already, establish the S-100 Coordinator role or assign S-100 Coordinator duties as appropriate (see also BSICCWG report to BSHC28, Annex 1, draft BSICCWG TORs)
- Give further guidance to BSHC WENDWG representative.