



WENDWG Report to the BSHC 22nd Conference

by Jarmo Mäkinen, BSHC WENDWG representative

WENDWG is a working group under the IRCC Committee. The purpose of the WEND Working Group is to advise IRCC and to assist in facilitating a world-wide consistent level of high-quality, updated official ENC's through integrated services that support chart carriage requirements of SOLAS Chapter V, and the requirements of the IMO Performance Standards for ECDIS.

WENDWG objectives:

- Monitor the development of adequate ENC coverage to meet any carriage requirements for ECDIS
- Develop proposals for speeding up ENC production and ensuring uniform ENC quality and consistency, and for making data available worldwide, including SENC distribution, taking advantage of any offers for production assistance, or other ways of mutual assistance and co-operation
- Advise MS, where appropriate, on the need, as well as on the methods and tools for validating the data, and on any assistance which could be offered by the RENCs
- Monitor the implementation of the WEND, in response to Decision 21 of the XVIIth IHC, and advise IRCC about appropriate measures for speeding up the implementation process
- Assist in harmonizing the policies of regional ENC Coordinating Centres (RENC) with respect to matters related to administration, legality, finances, technical processes, et cetera.

1. Status of the work of WENDWG

The WENDWG is chaired by *Capt. Jamie McMichael-Phillips* (UK). Vice chair is Mr John Nyberg (US) and *Mr Yves Guillam* (IHB) is acting as a role of secretary.

Each Regional Hydrographic Commission should have a representative in the WENDWG. The BSHC has nominated Mr Jarmo Mäkinen (FI) as its representative for the WENDWG.

2. Outcome of the WENDWG7 31 Jan- 2 Feb 2017, Washington D.C, USA

The seventh meeting of the Worldwide ENC Database Working Group took place in Washington, District of Columbia, USA, hosted by the Office of Coast Survey of the National Oceanic and Atmospheric Administration (NOAA), in conjunction with the 2nd joint meeting of the Regional ENC Coordinating Centres (RENC), IC-ENC and PRIMAR. Twenty-one delegates from 12 Member States (Argentina, Brazil, Canada, China, Finland, France, Italy, Japan, Norway, Turkey, United Kingdom, United States) were representing eleven Regional Hydrographic Commissions (ARHC, BSHC, EAHC, EAthC, MACHC, MBSHC, NHC, NSHC, SAIHC, SWAtHC, USCHC).

Key issues dealt with in the meeting:

- ❖ IHO Performance Indicators
- ❖ IHO ENC Catalogue
- ❖ RENC Harmonisation and Distribution
- ❖ The Full Implementation of the WEND Principles
- ❖ IRCC8 Decisions and Actions that impact WENDWG
- ❖ AIO (Admiral Information Overlay)
- ❖ Draft IHO resolution for eliminating overlapping ENC's
- ❖ Review and Update of the WENDWG Work Programme

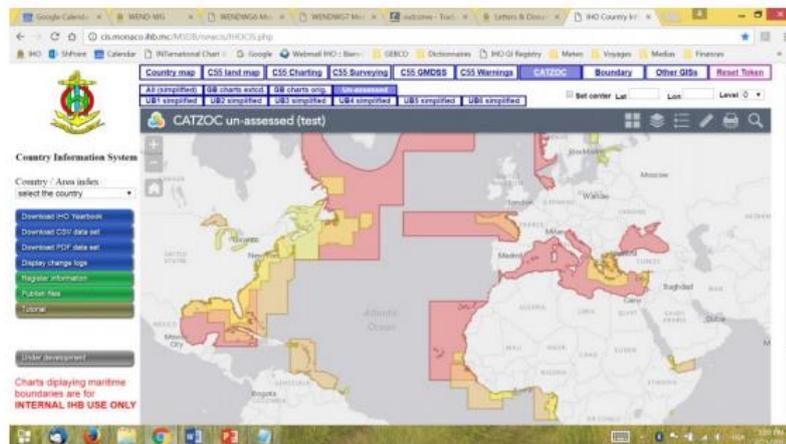


❖ **IHO Performance Indicators, IHO ENC Catalogue**

Simplification of number of indicators. Focus on Usage bands 1, 2 and 3. Bands 4 and 5 are usually limited national rather than regional ENC coverage. Report to IRCC9. (IRCC9/ Decision 15: WENDWG to await the progress in the review of the IHO Strategic Plan as agreed by A-1 before developing Performance Indicators).

❖ **IHO ENC Catalogue**

Since 2016 many improvements have been made to the IHO ENC Catalogue, including provision of CATZOC data by the RENCs, following approval of ENC producers. Experimentation is still in progress.



Experimentation at the IHO Secretariat for displaying “un-assessed” CATZOC values

❖ **RENC Harmonisation and Distribution**

RENCs provided a short summary of the outcome of the Joint RENC meeting that was held in Washington DC, during a morning session, prior to the WENDWG-7 meeting. After five years of fruitful co-operation and harmonization, it is considered that the two RENCs have now entered a period of maturity and stability.

Lot of support to HOs in data quality control and in capacity building is provided. RENCs are the main component of IHO toolbox, in particular for WEND activities.

The RENCs suggested that a 6-month cycle for updating the diagram of ENC data flow producers RENCs-distributors would be more suitable than the one-year periodicity.

[Link to ENC data flow diagram](#)

The WENDWG raised some concerns for the ENCs that are not distributed through a RENC yet (black box). Following actions were agreed;

AGENDA ITEM/WORK IEM	SUBJECT	ACTION No.	ACTIONS&DECISIONS (in bold, action by)	TARGET DATE/EVENT
	ENCs not distributed through a RENC yet	WENDWG7/12	In order to make “exclusive” ENCs accessible through the RENC system for distribution, UKHO invited to give a timeline on when that will happen. WENDWG to monitor the progress made on an annual basis (ENC Data Flow diagram).	1 March 2017 WENDWG-8
	Quality control, risk assessment	WENDWG7/13	WENDWG Chair to report to IRCC that all Produced ENC data (incl. “exclusive”) must be made available to every RENC for them to ensure quality control (overlapping checks, risk assessment, etc).	IRCC-9



❖ **The Full Implementation of the WEND Principles**

IRCC8 put an action on RHC chairs to work to reduce overlaps by applying the WEND Principles, when defining approved ENC schemes. IHO Member States have been requested in IHO Circular Letter 19/2017, to approve a new Edition of S-11 Part A - *Guidance for the Preparation and the Maintenance of International (INT) Charts and ENC Schemes*. The inclusion of ENC schemes in the guidance is intended to reinforce the need to implement ENC scheming at the regional level.

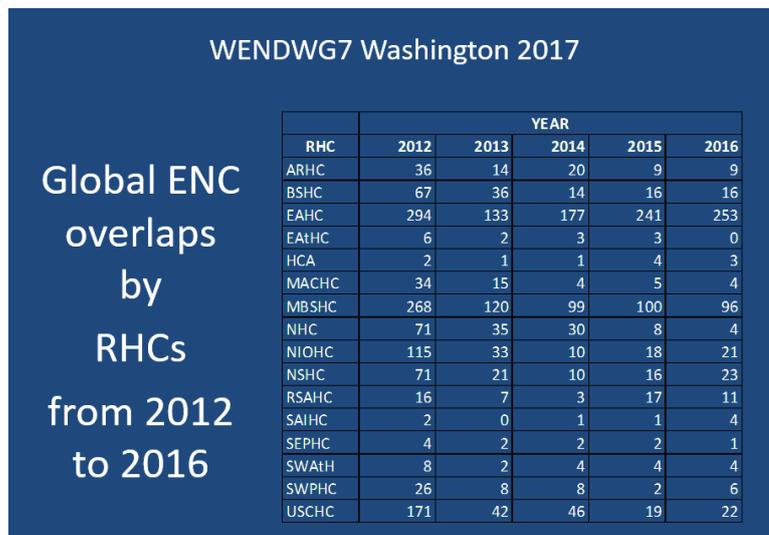
Based on the existing coverage for ENC at usage bands 1 to 3, the status of the indicator (WPI 21) for the percentage of agreed/available ENC schemes at the end of Dec. 2016 is 82% for all the charting regions

❖ **IRCC8 Decisions and Actions that impact WENDWG. AIO (Admiral Information Overlay)**

Some ENC producer countries, who already include Temporary & Preliminary Notices to Mariners (T&P NtMs) in their ENC updates, argued that decisions made at IRCC-8 relating to the Admiralty Information Overlay service provided by the UKHO as part of its AVCS service, had not been implemented yet. It was agreed, that UKHO will report to France, Norway, Sweden and Finland on why AIO still exist on their ENCs.

❖ **ENC overlapping**

Overlapping issues was the main topic of the WENDWG7 meeting.



Status in the Baltic Sea 2015-2016

Overlaps 2015			Overlaps 2016			Ports Not Covered (from IHO Ports Gazetteer)		
Cellname	Cellname 1	Usage Band	Cellname	Cellname 1	Usage Band	Port Name	Country	Port Size
PL3MP153	DK3BORNH	3	PL2MP500	DE216000	2	BOLSHAYA PIRYU GUBA	RU	S
RU3NCJP9	LT382001	3	PL3MP153	DK3BORNH	3			
RU3NCJP9	PL3K0030	3	RU3NCJP9	LT382001	3			
RU3NCJP9	PL3MP151	3	RU3NCJP9	PL3K0030	3			
RU3NSKI9	EE3D0201	3	RU3NCJP9	PL3MP151	3			
RU3NSKI9	EE3D0403	3	DK4LGLGS	DE416050	4			
DK4LGLGS	DE416050	4	DK4LILBS	DE416012	4			
DK4LILBS	DE416012	4	RU4NDJS8	PL4MAP41	4			
PL4MAP37	DE416090	4	RU400KM9	FI4EUV2	4			
RU4NDJS8	PL4MAP41	4	SE4DHWHE	DK4GSMON	4			
SE4DHWHE	DK4GSMON	4	SE4DHWHE	DK4SUNDT	4			
SE4DHWHE	DK4SUNDT	4	SE4DHWHG	DK4GSMON	4			
SE4DHWHG	DK4GSMON	4	SE4DHYPE	DK4SUNDT	4			
SE4DI0XC	DK4KATGS	4	SE4DI0XC	DK4KATGS	4			
SE4DI0XE	DK4SUNDT	4	SE4DI0XE	DK4SUNDT	4			
SE5IHZTE	DK5HLSNS	5	SE5IHZTE	DK5HLSNS	5			



IC-ENC reported on the improvements of its overlapping data policy as approved in December 2016 by its Steering Committee. The new set of actions developed by IC-ENC, such as including the RHC ENC Coordinators in the distribution list of IC-ENC's risk assessment reports for instance, was welcome.

RHC	"Live Overlaps" - Overall Severity of Risk				TOTAL
	LOW	MEDIUM	HIGH	UNASSESSED	
ARHC	2			1	3
BSHC	3	1			4
EAHC	20	1		24	45
EAHC /USCHC	2				2
HCA	2				2
MACHC	1				1
MBSHC	72	20		16	108
NHC	6				6
NIOHC	1	1			2
NSHC	2				2
ROPME			1	2	3
ROPME/NIOHC	2				2
SAIHC	1			1	2
SEPHC			1		1
SWPHC	3				3
USCHC			1		1
Grand Total	117	26	0	44	187

RENCs Overlapping Policy	WENDWG7/04	WENDWG endorsed the IC-ENC overlapping policy as a first step to identify navigationally significant overlaps and IHO Sec to make this policy available on the WENDWG Repository to be considered by RHCs	WENDWG-8
--------------------------	------------	---	----------

The report from IC-ENC to BSICCWG coordinator (15.8.2017)

IC-ENC REGIONAL HYDROGRAPHIC COMMISSION OVERLAP REPORT - BALTIC SEA R																			
ID	STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	ENC 1 Scale	ENC 2 Scale	ENC 1 EN (ER)	ENC 2 EN (ER)	Overlap extent (Km x km) (m/square NM)	Content difference	Geog. Location	Shipping density	Size	Scale	Route patterns	ECDIS	Overall Severity of Risk
3	LIVE	IC-ENC	BSHC	DK4LGLGS	DE416030	4	22 000	22 000	47 (0)	9 (10)	5m x 73km	LOW	MEDIUM	MEDIUM	LOW	HIGH	HIGH	MEDIUM	LOW
4	LIVE	IC-ENC	BSHC	DK4LGLGS	DE416050	4	22 000	22 000	40 (0)	9 (30)	5m x 20km	LOW	MEDIUM	HIGH	LOW	HIGH	HIGH	MEDIUM	LOW
5	LIVE	IC-ENC	BSHC	DK4LILBS	DE416012	4	22 000	22 000	52 (1)	2 (9)	8.8m x 23Km	LOW	HIGH	LOW	LOW	MEDIUM	HIGH	MEDIUM	MEDIUM
6	LIVE	IC-ENC - PRIMAR	BSHC	DK4GSMON	SE4DHWHE	4	22 000	22 000	39 (7)	47 (2)	9m	LOW	MEDIUM	HIGH	LOW	HIGH	HIGH	MEDIUM	LOW
7	LIVE	IC-ENC - PRIMAR	BSHC	DK4GSMON	SE4DHWHG	4	22 000	22 000	39 (7)	20 (0)	10m	LOW	MEDIUM	HIGH	LOW	HIGH	HIGH	MEDIUM	LOW
8	LIVE	IC-ENC - PRIMAR	BSHC	DK3BORNH	PL3MP153	3	90 000	90 000	34 (0)	7 (16)	9m	LOW	MEDIUM	HIGH	LOW	MEDIUM	MEDIUM	MEDIUM	LOW

ID	STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	Justification	Action requested
3	LIVE	IC-ENC	BSHC	DK4LGLGS	DE416030	4	Thin overlap between different producers, mainly within the permitted 5m wide tolerance not exceeding 10m wide. Overlap is middle of the channel.	HOs to discuss and resolve overlaps
4	LIVE	IC-ENC	BSHC	DK4LGLGS	DE416050	4	Thin overlap between different producers, mainly within the permitted 5m wide tolerance not exceeding 10m wide. Overlap is middle of the channel.	HOs to discuss and resolve overlaps
5	LIVE	IC-ENC	BSHC	DK4LILBS	DE416012	4	A thin overlap between different producers, just over permitted 5m tolerance. Overlap is in middle of channel. There is buoy which sits on the external edge which appears and disappears.	HOs to discuss and resolve overlaps
6	LIVE	IC-ENC - PRIMAR	BSHC	DK4GSMON	SE4DHWHE	4	Thin overlap between different producers, mainly within the permitted 5m wide tolerance not exceeding 10m wide. Overlap is middle of the channel.	HOs to discuss and resolve overlaps
7	LIVE	IC-ENC - PRIMAR	BSHC	DK4GSMON	SE4DHWHG	4	Thin overlap between different producers, mainly within the permitted 5m wide tolerance not exceeding 10m wide. Overlap is middle of the channel.	HOs to discuss and resolve overlaps
8	LIVE	IC-ENC - PRIMAR	BSHC	DK3BORNH	PL3MP153	3	Thin overlap between different producers, mainly within the permitted 5m wide tolerance not exceeding 10m wide. Overlap is middle of the channel.	HOs to discuss and resolve overlaps



Draft IHO resolution for eliminating overlapping ENCs.

An ad hoc group was established to prepare a draft of a new IHO Resolution seeking to limit overlapping ENC coverage issues when safety of navigation is at risk. This new proposed IHO Resolution aims to clarify and consolidate the procedure which already exists in the Guidelines for the Implementation of the WEND Principles. It was submitted to IRCC9 (IRCC9_07D3).

[Link to draft resolution for eliminating overlapping ENCs](#)

❖ **Review and Update of the WENDWG Work Programme**

Work programme for 2017-2018 submitted for IRCC9 approval

Link [WENDWG7 Work Programme 2016-17](#)

3. Next meeting

The WENDWG welcomed the offer made by Argentina to host the next meeting (WENDWG-8) back-to-back with the 3rd Joint RENC-IHO Sec. meeting, from 20 to 22 March 2018

4. Actions for the BSHC 22nd Conference

- note on this report
- give further guidance to BSHC WENDWG representative.