



SAIHC20 - ICCWG12



12th INT CHART COORDINATION WORKING GROUP (ICCWG) REPORT

Submitted by Alfons Van Craeynest – SAIHC ICCWG Chair: September 2024

Full Membership:

Angola, France, Kenya, Mauritius, Mozambique, Norway, Republic of South Africa, Seychelles, United Kingdom.

Associate Members:

Comoros, India, Madagascar, Malawi, Namibia, Portugal, Tanzania.

Background and ICCWG activities since last SAIHC conference

The SAIHC ICCWG is a subsidiary body of the Commission and its responsibility is to conduct its work in accordance with Terms of Reference and Rules of Procedure as specified.

The purpose of this report is to provide an update on ICCWG activity since SAIHC 19. There have been no meetings in ICCWG since the last SAIHC conference. Communication was carried out by circular letter and email.

1. Ongoing actions from the 11th ICCWG meeting

(No new actions arising from the 11th ICCWG meeting)

Serial No	Subject	Action	Remarks
ICCWG-11 Action 1	ICCWG Coordinator to contact Russia and Australia to resolve ENC overlaps.	ICC-Coordinator	No Further Action' from a SWPHC ICCWG perspective. Overlaps will not be resolved any time soon. Ongoing
ICCWG-11 Action 2	To define ENC scheme for SAIHC Region H.	ICC-Coordinator	UKHO Gridded ENC rescheme to be discussed during meeting. Ongoing
ICCWG-11 Action 3	UK, Tanzania, Kenya, and India to coordinate ENC requirements to provide the latest data in a carriage compliant product for the Mariner and report back to ICCWG coordinator.	UK, Tanzania, Kenya, India	UK are coordinating with India and resolving overlaps where possible. Ongoing
ICCWG-11 Action 4	India and UK to confirm when overlaps with GB ENCs have been removed in Seychelles, Tanzania and Mozambique.	India and UK	UK are coordinating with India and resolving overlaps where possible. Ongoing



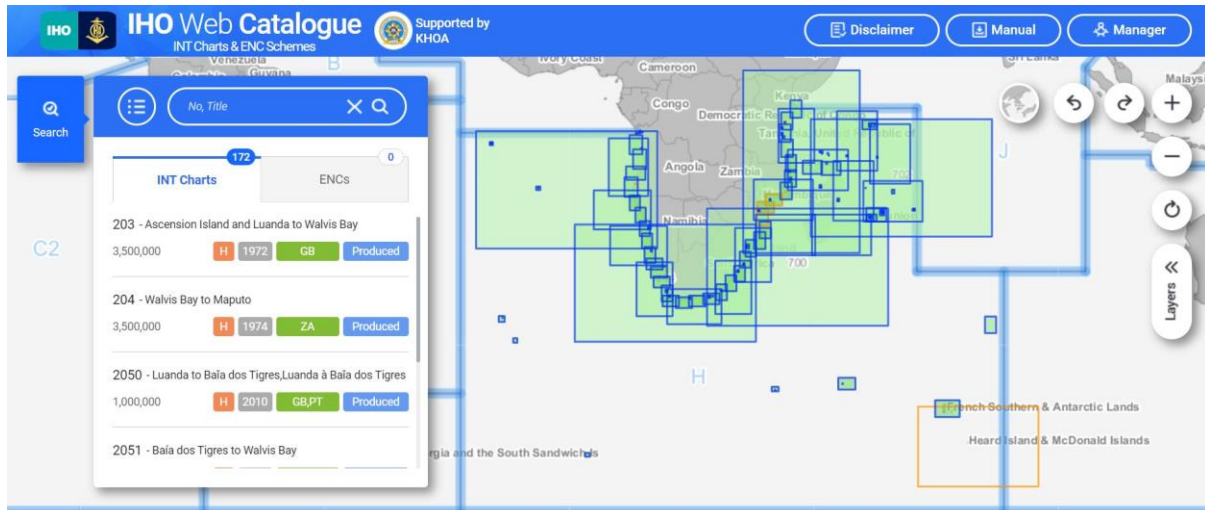
SAIHC20 - ICCWG12



2. SAIHC Region H - INT Scheme

S-11 Part B, Region H updates

Updates are managed through IHO Web Manager.



Total of 129 INT charts cover Region H

- INT chart panels (including plans) = 172
- 120 INT charts Produced
- 9 INT charts Schemed

INT CHART PANELS BY USAGE

Overview	21	General	13
Coastal	39	Approach	44
Harbour	46	Berthing	9

INT CHARTS BY PRODUCER

AU	1 chart	(1 panel)
FR	18 charts	(25 panels)
GB	26 charts	(48 panels)
IN	11 charts	(13 panels)
PT	3 charts	(3 panels)



SAIHC20 - ICCWG12



ZA 44 charts (50 panels)

NO 1 chart (1 panel)

CO-PRODUCED REGION H INT CHARTS

GB & PT 11 charts (14 panels)

GB, MZ & PT 5 charts (5 panels)

MZ, PT & ZA 2 charts (2 panels)

2.1 New edition INT Charts published since last conference:

France

INT 7735 - La Réunion (2023)

India

INT 77396 - Agalega Islands (2023)
INT 77397 - Mauritius (2023)

Mozambique

INT 7641 - Aproximações ao Quelimane (includes inset Porto de Quelimane) - 2nd edition published 2024. PT withdrawn as printer nation.

United Kingdom

INT 2513 - Angola - Approaches to Soyo (2023)
INT 2515 - Ascension (2023)
INT 2516 - Saint Helena with Approaches to Ascension (2023)
INT 7671 - Tanzania - Approaches to Mtwara (2024)
INT 7742 - Seychelles - Port Victoria and Approaches (2024)

Updates to S-11, Part B

INTRegion	INTChart Number	Producers	NatChartNumber	INT TITLE	S_Limit	N_Limit	W_Limit	E_Limit	1st Ed Year	New Ed Year	Producing Status	Scale
H	2513	GB	659	Approaches to Soyo	6°8.00'S	6°2.71'S	12°16.80'E	12°22.40'E	2014	2023	Produced	15,000
H	2515	GB	1691	Ascension Island	8°3.00'S	7°45.60'S	14°30.80'W	14°13.50'W	1994	2023	Produced	50,000
H	2516	GB	1771	St Helena & Approaches to Ascension Island					1994	2023	Produced	Various
H	7641	MZ,PT	.MZ 16402	Plan A - Quelimane					2001	2024	Produced	10,000
H	7641	MZ,PT	MZ 16402	Aproximações a Quelimane	18°10.00'S	17°52.00'S	36°52.00'E	37°4.00'E	2001	2024	Produced	30,000
H	7671	GB	664	Approaches to Mtwara	10°21.50'S	10°8.48'S	40°5.50'E	40°15.87'E	2018	2024	Produced	37,500
H	7735	FR	7035	La Réunion	21°41.80'S	20°30.80'S	54°41.60'E	56°32.60'E	1985	2023	Produced	175,000
H	77396	IN	2512	Agalega Islands	10°33.60'S	10°15.90'S	56°33.35'E	56°45.45'E	2017	2023	Produced	37,500
H	77397	IN	2527	Mauritius	20°41.60'S	19°35.40'S	57°9.00'E	57°55.60'E	2019	2023	Produced	125,000
H	7742	GB	722	Port Victoria and Approaches	4°40.83'S	4°34.03'S	55°26.86'E	55°31.40'E	1994	2024	Produced	12,500



SAIHC20 - ICCWG12



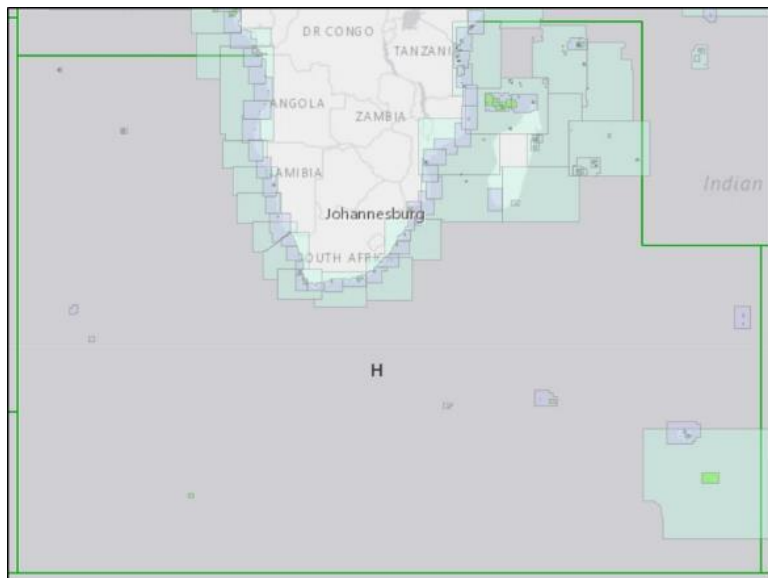
2.2 INT charts planned

INT 7620 - Cabo de Sao Sebastiao to Beira – new chart in progress.

INT 7630 - Beira to Rio Zambeze – new chart planned for production, co-production between PT/UK.

INTRegion	INTChartNumber	Producers	NatChartNumber	INT TITLE	S_Limit	N_Limit	W_Limit	E_Limit	1st Ed Year	New Ed Year	Producing Status	Scale
H	7620	GB,PT	GB 2932,	Cabo de Sao Sebastiao to Beira	22°25.00'S	19°30.00'S	34°30.00'E	36°35.00'E	1995		Schemed	350,000
H	7630	GB,PT	GB 2934,	Beira to Rio Zambeze	20°15.00'S	18°20.00'S	34°35.00'E	37°40.00'E	1998		Schemed	300,000

3. Region H – ENC Scheme



ENCs BY PRODUCER NATION:

- AU - 3
- FR - 87
- GB - 100
- IN - 38
- NO - 1
- PT - 2
- ZA - 56

Total 287

TOTAL ENCs PER USAGE BAND

Overview	18	Approach	81
General	21	Harbour	83
Coastal	59	Berthing	25

ENCs PER USAGE BAND BY PRODUCER NATION

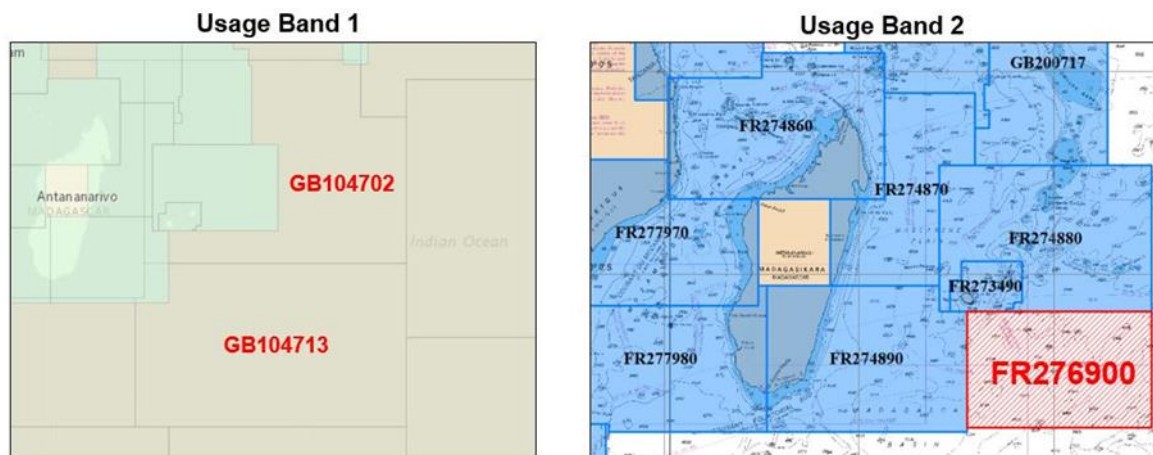
Overview	General	Coastal	Approach	Harbour	Berthing
AU (1)	AU (1)	FR (11)	AU (1)	FR (36)	FR (9)
GB (12)	FR (7)	GB (29)	FR (24)	GB (16)	GB (3)
ZA (5)	GB (3)	IN (1)	GB (37)	IN (19)	IN (13)
	PT (1)	ZA (18)	IN (5)	ZA (11)	
	ZA (9)		NO (1)	PT (1)	
			ZA (13)		



3.1 France

New ENC proposal

In 2023, France proposed the production of a new ENC in UB 2 at CSCL 1: 700 000 to improve coverage for the South East approaches to the Island of La Reunion without publication of a paper chart. The proposal was circulated to ICCWG via *CL 2/2023* and members were invited to comment and provide feedback. No objections were raised and France confirmed production of FR276900 delayed until 2025. Existing ENC coverage in UB2 (blue) and the proposed new ENC FR276900 where there is currently only UB1 coverage, GB104702 and GB104713, at scale 1: 3 500 000.



3.2 United Kingdom

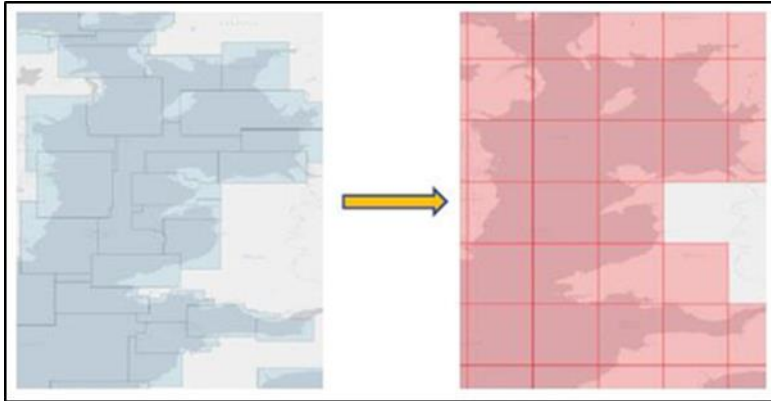
Since the last SAIHC conference UKHO has submitted proposals to grid its UB1 and UB2 GB ENCs in region H as well as improved ENC coverage and gridded rescheme for Seychelles UB 4 and 5.

UKHO - Gridding:

The current GB ENC scheme is based on paper charts resulting in complex coverage areas, large areas of 'no coverage' and data consistency issues. The gridded scheme is uniform in shape and ENC improvements will address data consistency issues and provide data enhancements.



SAIHC20 - ICCWG12



UKHO - Reasons for Gridding:

- To provide consistent parameters through S-100 related products. For example, S-57 and S-101 ENC's from a single common grid system.
- An Interoperable data-stack of S-100 data. The gridded scheme will match the S-102 scheme (at scale band 5).
- Manageable file sizes and scope to create High Density ENC's and supplementary 1m contouring.
- ENC improvements providing better consistency of scale, linear and area features between ENC's.





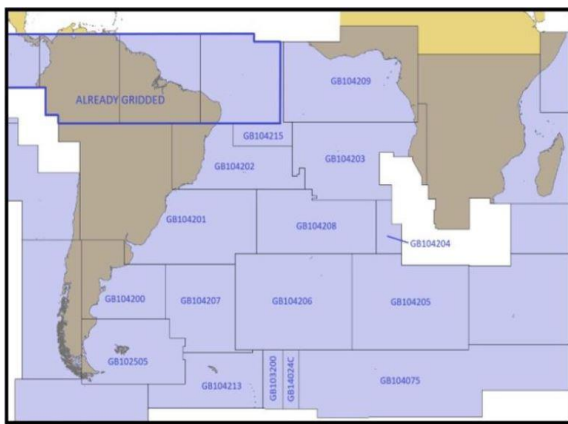
SAIHC20 - ICCWG12



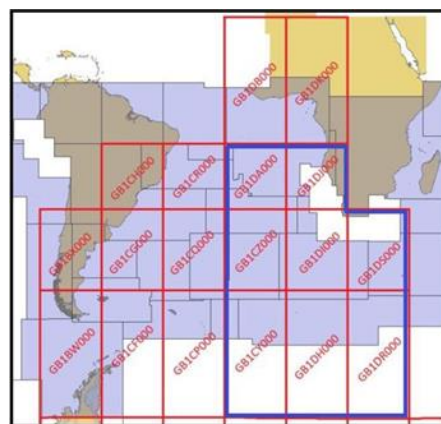
UKHO - Gridded Band 1 ENC Scheme proposal:

The UKHO proposed a gridded Band 1 ENC Coverage within the SAIHC Region which also affects the EAHC region. The proposal was circulated to the EAHC coordinator and ICCWG via *CL 1/2023* for review and comment. Portugal provided feedback and discussions were held between UK and PT who agreed to work through technicalities. The proposed scheme does not impact the overall coverage or introduce any new gaps or overlaps. There were no objections to the proposal.

Existing band 1 Scheme



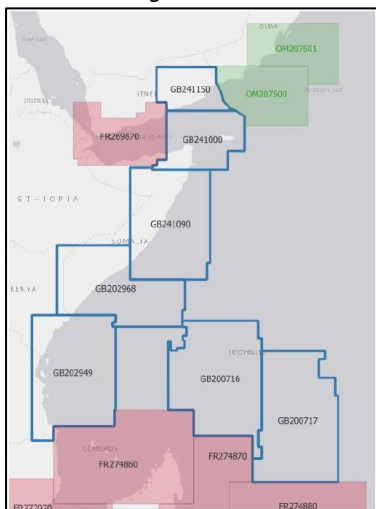
Proposed Band 1 Gridded Scheme (Highlighted blue area)



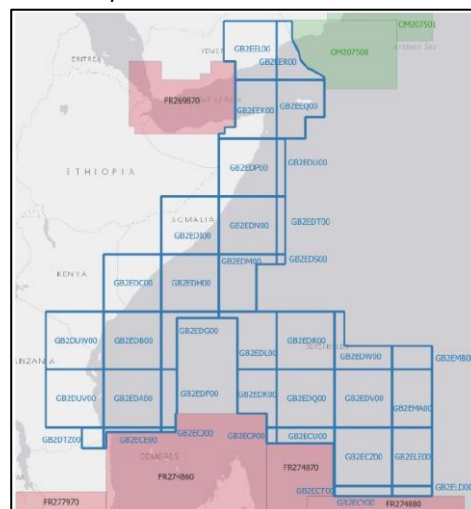
UKHO - Gridded Band 2 ENC Scheme proposal – Africa East Coast:

The UKHO proposed a gridded Band 2 ENC Coverage Africa east Coast within the SAIHC Region. The proposed scheme does not impact ENCs produced by other nations and was circulated to the *ICCWG* via *CL 3/2023* for review. There were no objections to the proposal.

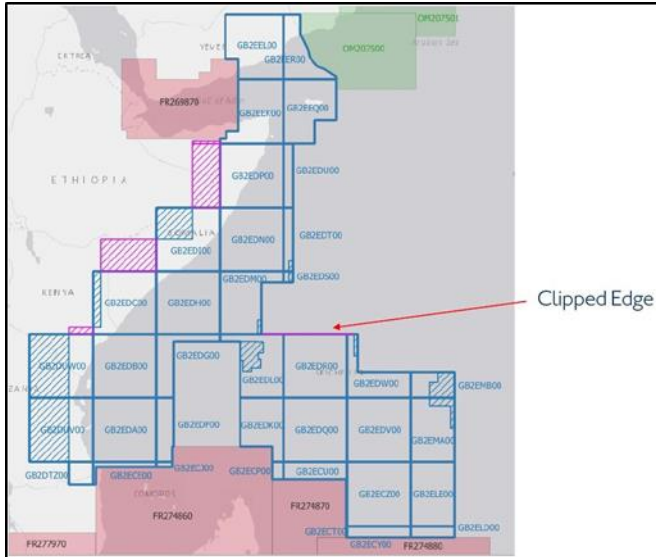
Existing Band 2 Scheme



Proposed Band 2 Gridded Scheme



UK - Proposed New Coverage and Clipped Areas within Gridded Scheme for UB2

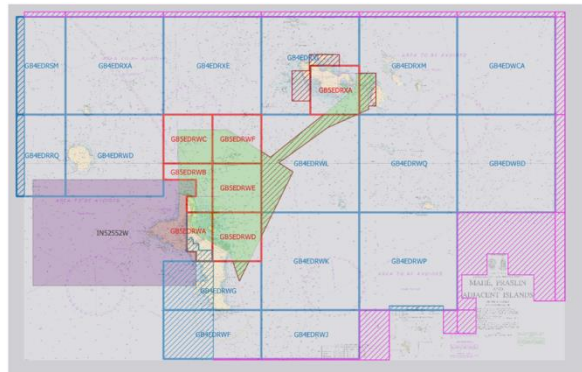


> New coverage – all new coverage is either on the land or involves minimal squaring off existing ENCs where they were cut around paper chart furniture. In these cases the CATCOV2 coverage already exists and there is no impact on ENCs produced by other nations.

> Clipped coverage (thin slither and LNDARE only cells)

UKHO – Seychelles UB 4 and 5 improved ENC coverage and gridded rescheme

- To provide improved large-scale coverage in the Mahé region of the Seychelles.
- To maximise use and benefits of 2024 UKHO survey activity (shown in green)





SAIHC20 - ICCWG12



4. ENC Overlaps - Region H

4.1 Monitoring of ENC Overlaps:

Monitoring and analysis of ENC coverage in the region is a continuous process. Slight differences exist between IC-ENC and PRIMAR overlap reports which are technical in nature. Overall severity of risk of existing overlaps in Region H are classified low to medium.

IC-ENC REGIONAL HYDROGRAPHIC COMMISSION OVERLAP REPORT - SOUTH AFRICA & ISLANDS RHC - September 2024														
ID	STATUS	RENC Membership	RHC	ENC 1	ENC 2	Usage Band	ENC 1 Scale	ENC 2 Scale	ENC 1 Edn	ENC 2 Edn	Overlap extent (Kmxkm) (m/square NM)	Impact Assessment	Justification	Action requested
125	LIVE	IC-ENC	SAIHC	RU1A2K00	AU160060	1	3000000	3500000	1	4	340km x 795km	LOW	Overlap situated just off the coast of Antarctica, very low levels of traffic. Small scale compilation scale.	Clip to common border
126	LIVE	IC-ENC	SWPHC/SAIHC	RU1B0P00	AU160060	1	3000000	3500000	1	4	840km x 558km 135600 sq. NM	LOW	Overlap is located in the Antarctic, it charts very deep waters. There is a 119m shoal depth which is captured on AU160000 which is not captured on RU1B0P00. Little traffic as expected.	HQs to discuss and resolve overlaps
1086	LIVE	IC-ENC - NON RENC	SAIHC	GB400668	IN42643A	4	45000	45000	1	1	20.6km x 9.8km	UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Producers to liaise
1031	LIVE	IC-ENC - NON RENC (P)	SAIHC	GB400669	IN42643A	4	22000	22000	3	1		UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Producers to liaise
1032	LIVE	IC-ENC - NON RENC (P)	SAIHC	GB400669	IN52642M	4	22000	22000	3	1		UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Producers to liaise
1087	LIVE	IC-ENC - NON RENC	SAIHC	GB40668A	IN52642M	4	22000	22000	1	1	0.607km x 7.6km	UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Producers to liaise
1030	LIVE	IC-ENC - NON RENC (P)	SAIHC	GB500669	IN52642M	5	12000	22000	1	1		UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Producers to liaise
410	LIVE	IC-ENC - NON RENC (P)	SAIHC	GB500722	IN52551A	5	12000	22000	7	1	6km x 12km	UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	HQ to discuss and resolve overlap
1062	LIVE	IC-ENC - NON RENC (P)	SAIHC	GB500722	IN52556A	5	12000	12000	7	1		UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Producers to agree scheming
608	LIVE	IC-ENC - NON RENC (P)	SAIHC	GB502758	IN52510B	5	12000	12000	3	1	9.5km x 9.5km	UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Producers to agree ENC scheme
609	LIVE	IC-ENC - NON RENC (P)	SAIHC	GB502758	IN52511A	5	12000	12000	3	1	9.5km x 4km	UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Producers to agree ENC scheme
610	LIVE	IC-ENC - NON RENC (P)	SAIHC	GB54232A	IN62520A	5	4000	22000	9	1	5km x 7.5km	UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Producers to agree ENC scheme
670	LIVE	IC-ENC - NON RENC (P)	SAIHC	GB54232A	IN625160	5/6	4000	4000	9	1	5km x 7.5km	UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Producers to agree responsibility for production of ENC data
784	ACCEPT	IC-ENC	SAIHC	ZA100010	GB104701	1	700000	3500000	5	12	28m	ACCEPT	Over land	Producers to agree common coordinates to remove overlaps and gaps
422	ACCEPT	IC-ENC	SAIHC	ZA110010	GB104203	1	700000	3500000	6	13		ACCEPT	Several individual coordinates which are set away from the standard latitude or longitude	ZA to amend individual coordinates.
1190	ACCEPT	IC-ENC	SAIHC	ZA200010	ZA200020	2	350000	350000	3	3	13mm	ACCEPT	on land	

IC-ENC report on overlaps in the SAIHC Region as at September 2024. Report can be provided on request.

- **2 RU/AU Live Overlaps**

The Australian Hydrographic Office acknowledged the overlaps in Region H between AU and RU ENC cells. The impact in the overlaps is low and there are some shoals within the AU cells not shown in RU cells.

The Australian Hydrographic Office has also confirmed that they have reached out to resolve these issues a few years ago to clip RU cells to the AU cell Southern boundary (60° S) but have not had any success and treat these overlap issues as 'No Further Action' from a SWPHC ICCWG perspective as they are of the opinion that they will not be resolved any time soon.

- **11 GB/IN Live Overlaps**

UK coordinating with India to resolve overlaps. 1 ENC overlap resolved since last conference. Overlaps raised by WENDWG as an issue for escalation to IRCC.



4.2 WENDWG-14 Actions and Decisions:

WENDWG14/18: Some critical overlaps at UB5 were noted by WENDWG in Region H not solved for several years. Existing critical overlaps will not be accepted in the S-101 ENC transition. SAIHC urged to address and resolve these overlaps as a top priority issue in accordance with IHO Resolution 1 of 2018.

4.3 IHO Resolution 1 of 2018 (IHO CL 19/2018):

Hydrographic Offices, ENC Producers, and Regional Hydrographic Commissions should take appropriate measures to eliminate all overlapping ENC data, particularly in areas of demonstrable risk to the safety of navigation.

5. S-100 Roadmap Implementation

5.1 Recommendations/Decisions from IRCC15 related to S-100 Roadmap:

Recommendation 7: RHCs to prioritize their participation in the WENDWG through the RHC Chart Coordinator or S-100 Coordinator.

Decision 24: To note the results of the WEND-100 IGIF Matrix, as of February 2023 and encourage the WENDWG to use it as a tool for monitoring the S-100 implementation, for each S-100-based top priority product, per RHC.

Recommendation 8: RHCs, if not done already, establish the S-100 Coordinator role or assign S-100 Coordinator duties as appropriate.

Recommendation 9: RHC S-100 Coordinators to update their WEND-100 IGIF Matrix submissions annually and share their schedule and roadmap to meeting the 2026 IMO target (S-100 ECDIS) at every WENDWG meeting.

Recommendation 10: RHC Chart Coordinators/S-100 Coordinators report their planned S-101 chart schemes, usage bands 1 – 4, by 30 September. Request that submissions use INTOGIS III when commissioned.

5.2 WENDWG CL1/2023 - Readiness Status of RHCs for the provision of S-1xx datasets by 2026 per Charting Region:

Based on this survey, with the upcoming prototype of INTOGIS III developed by KHOA, it is one of the objectives of the WENDWG to be able to simulate or predict for each Charting Region, the expected coverage of the top priority S-100-based products (Phase I / Route Monitoring) and S-100 Data Services that would be available in 2026 as it was done for INT Paper Charts (Schemed, then Produced). This graphical information, per Region, would be used to keep the various IHO Stakeholders informed, all along the development process, covering the IMO transition phase (2026 – 2029).



SAIHC20 - ICCWG12



The WENDWG survey comprised of the following:

Annex A: Readiness check (Regional and national level)

Annex B: Prioritisation of Products and Services – S-101(priority 1), S-102, S-104, S-111, S-124, other S-100 products, Capacity Building (national level)

Annex C: Sharing Trial data (national level)

Results of the survey indicated the calculated average rate of the readiness status to provide S-1xx services by 2026 is **53%**. The survey results are available on the WENDWG14 website in document WENDWG14-05.3C Rev1.

https://iho.int/uploads/user/InterRegional%20Coordination/WENDWG/WENDWG14/WENDWG14_2024_05.3C_Rev1_Strategic%20Performance%20Indicator%201.3.1%20outcome%20of%20CL1_2023.pdf

5.3 S-100 Coordinator Role

Decision to establish the S-100 Coordinator role as a separate position from the Regional Chart Coordinator responsibility.

SAIHC CL 01/2024 was circulated to SAIHC members in January 2024 to indicate their interest in the S-100 Coordinator role for the region. Mauritius was duly appointed as SAIHC S-100 Coordinator and formal voting and approval will take place during SAIHC20.

5.4 S-100 Questionnaire

S-100 readiness questionnaire was developed by Mauritius Hydrographic Service and circulated to SAIHC members on 7 July 2024 by CL 05/2024. SAIHC MS were requested to respond directly to Mauritius who will discuss the results of the questionnaire at SAIHC 20.

The survey was comprised of the following questions:

- Existing Capability
- Status of Migration to S-100
- Capacity Building Requirements to S-100
- S-100 Roadmap and Prioritisation of Products
- Inputs for effective discussions during SAIHC

5.5 INTToGIS III

Current INTToGIS II Service includes INT chart and ENC Web Catalogue Service, INT Chart Maintenance and planning.

INTToGIS III aims to provide a tool for Member States, through a coordinated process within the RHCs, for planning/scheming ENCs, S-100 Products & ENDS (Phase I) from 2025 to 2029, for displaying coverage planning and availability.

INTToGIS III will be ready to provide worldwide coverage of S-100 based products by 2024.



SAIHC20 - ICCWG12



6. Review of ICCWG RoP and ToR

- Recommendation from IRCC for RHCs to review TORs based on Decision 9b of the Assembly and update gender-inclusive language.
- SAIHC ICCWG ToR RoP amended accordingly in March 2024.

Amendment: Change 'Chairman' to read 'Chair' under para 2.9 & 3.7

- Review ICCWG ToR RoP on role of the S-100 Coordinator and S-100 coordination in the Region

https://portal.iho.int/share/files/L8tU45ujJSIIV57S2uFVEnnYoDzCnBvH/ICCWG%20TOR%20and%20ROP/EN_ICCWG_ToR_RoP_Aug2018.pdf

7. Conclusion

Members of the SAIHC are invited to note the report.