

20th SOUTHERN AFRICAN AND ISLANDS HYDROGRAPHIC COMMISSION MEETING (SAIHC)

12th INT CHART COORDINATION WORKING GROUP (ICCWG) REPORT

16 - 19 September 2024

Kisumu, Kenya

Hybrid Meeting

Presented by South Africa (Chair)

Region H Charting Coordinator

Alfons Van Craeynest

Full Membership (9)

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

Associate Members (7)

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

Presentation Agenda

- 1. Actions for 11th ICCWG**
- 2. Region H - INT Chart Scheme**
- 3. Region H- ENC Scheme**
- 4. ENC Overlaps**
- 5. S-100 Implementation Roadmap**
- 6. Review of ICCWG RoP and ToR**
- 7. INTtoGIS III**
- 8. Any Other Business**

Actions 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

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

Region H - INT Chart Scheme

The screenshot shows the IHO Web Catalogue interface. The top navigation bar includes the IHO logo, the text 'IHO Web Catalogue' and 'Supported by KHOA', and buttons for 'Disclaimer', 'Manual', and 'Manager'. A search bar on the left contains the text 'No, Title'. Below the search bar, there are two tabs: 'INT Charts' (with a count of 172) and 'ENCs' (with a count of 0). A list of chart details is displayed, including:

- 203 - Ascension Island and Luanda to Walvis Bay (Scale: 3,500,000; Status: H, 1972, GB, Produced)
- 204 - Walvis Bay to Maputo (Scale: 3,500,000; Status: H, 1974, ZA, Produced)
- 2050 - Luanda to Baía dos Tigres, Luanda à Baía dos Tigres (Scale: 1,000,000; Status: H, 2010, GB,PT, Produced)
- 2051 - Baía dos Tigres to Walvis Bay

The main map area shows a geographical view of Region H, with various countries and islands labeled, including Angola, Zambia, Namibia, Kenya, and the French Southern & Antarctic Lands. A large blue outline indicates the chart scheme area, and a smaller orange outline highlights a specific area near the French Southern & Antarctic Lands.

129 INT Charts covering Region H

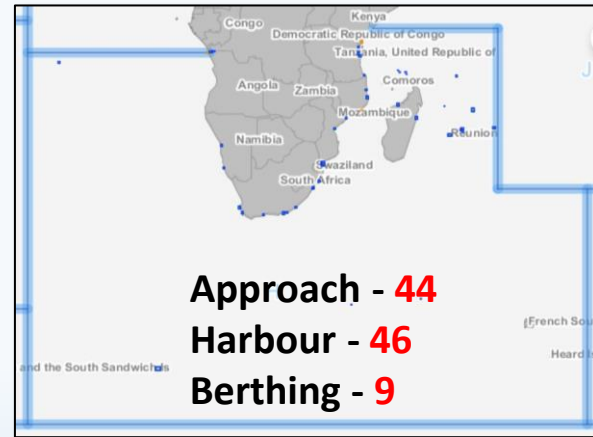
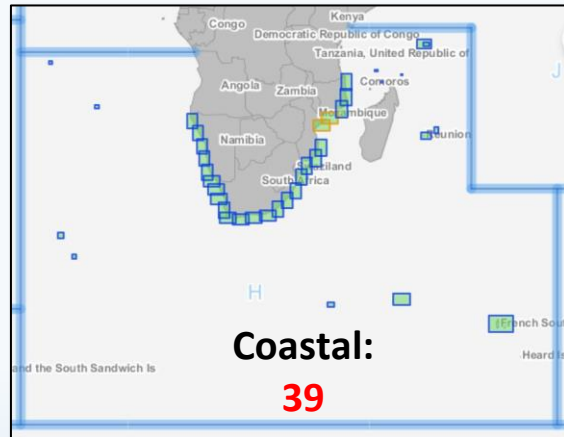
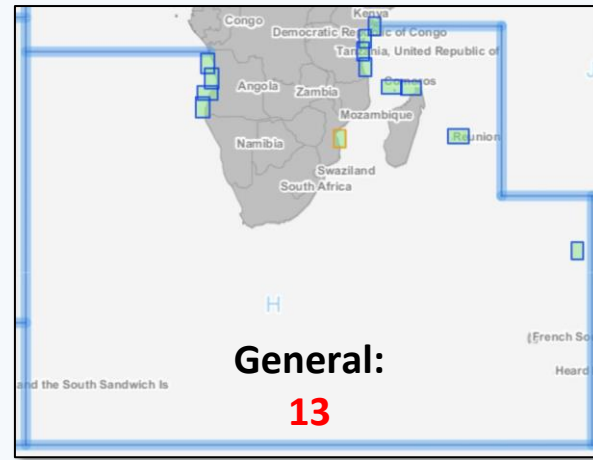
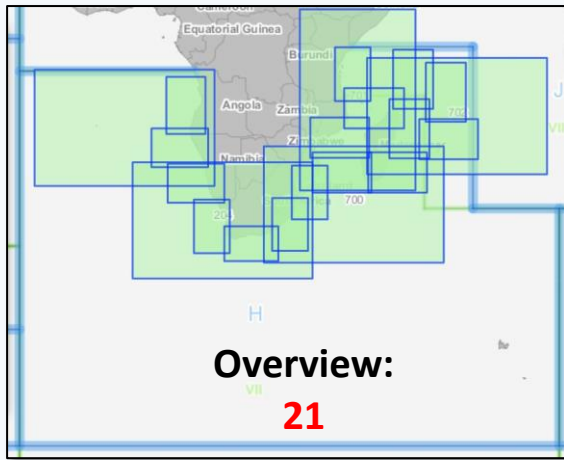
- INT chart panels (including plans) = 172
- Charts Produced = 120
- Charts Schemed = 9

S-11 Part B, Region H updates

- Updates are managed through IHO Web Manager.
- No new INT Charts produced in Region H since last SAIHC meeting.

[IHO Web Catalogue](#)

Region H - INT Chart Scheme



REGION H 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)
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)

[IHO Web Catalogue](#)

Region H - INT Chart Scheme

New Editions published since last conference - 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

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.

Region H - INT Chart Scheme

New Editions published since last conference - updates to S-11, Part B (cont.)

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)

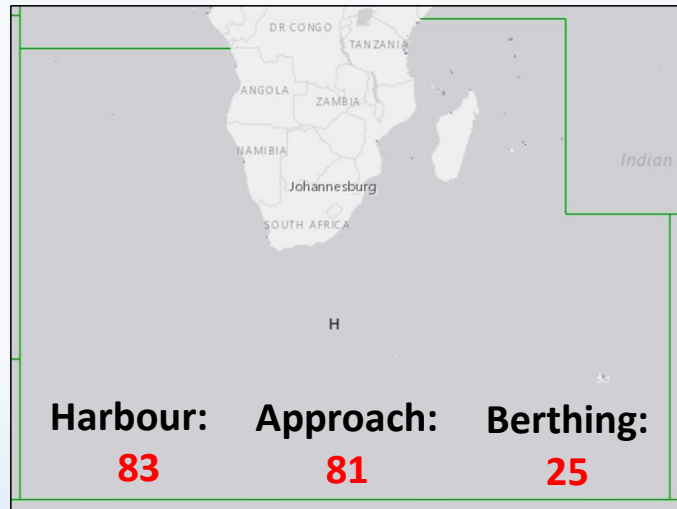
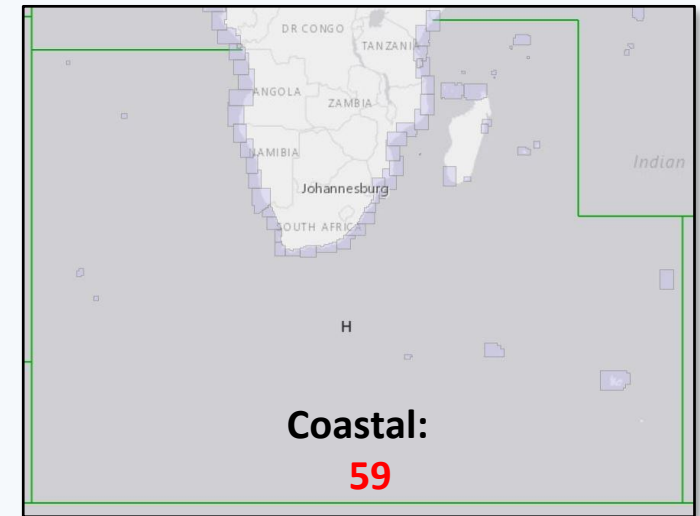
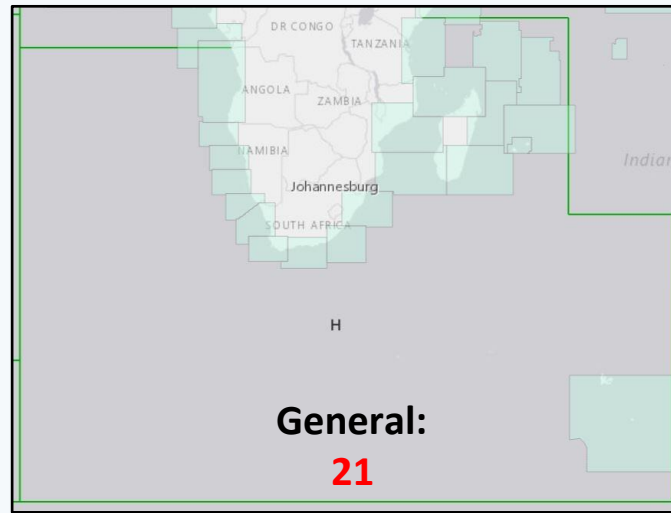
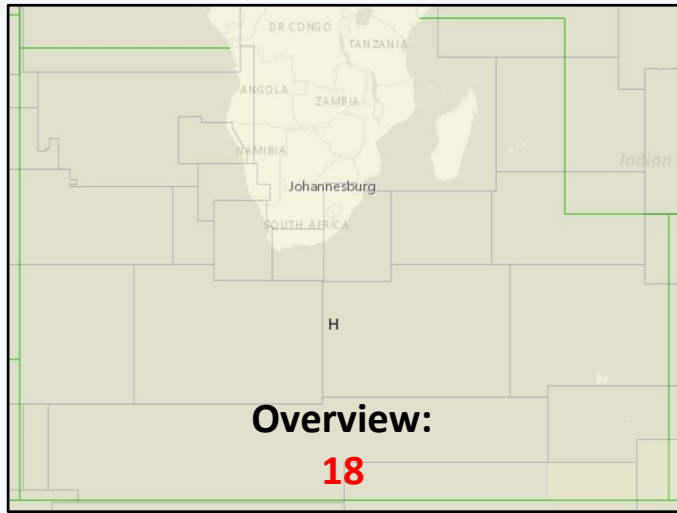
INT charts planned

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 and 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

Region H – ENC Scheme



ENCs by Producer Nation:

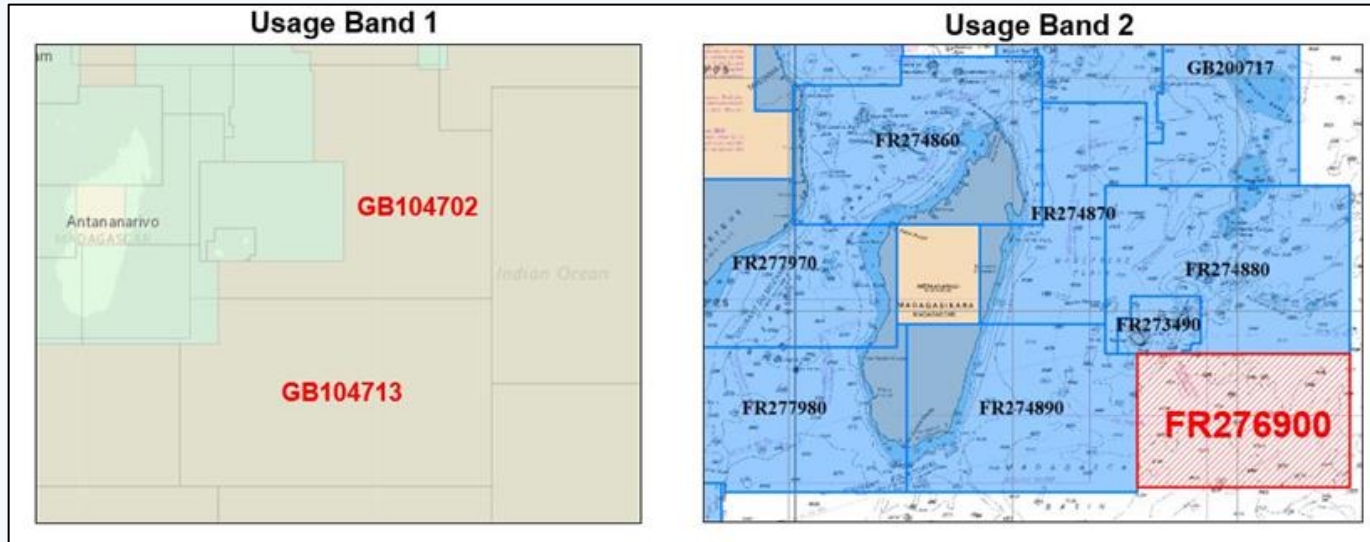
- AU (3 cells)
- FR (87 cells)
- GB (100 cells)
- IN (38 cells)
- NO (1 cell)
- PT (2 cells)
- ZA (56 cells)

Total ENCs in Region H = 287

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)		

[IHO Web Catalogue](#)

France - New ENC coverage in Region H - UB2



Existing UB1 coverage, GB104702 and GB104713 at 1: 3 500 000.

Existing ENC coverage in UB2 (blue) and proposed new ENC FR276900 (red).

- INT charts 7062, 7063 and 7064 and equivalent UB2 ENC provide coverage for the area in the North of the Island of La Reunion and between Madagascar and La Reunion.
- Proposal by France to produce 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.
- New ENC would not impact existing coverage.
- No objections from ICCWG to the proposal (refer to CL 2/2023)

Production of FR276900 planned for 2025

UKHO - Gridded ENC Scheme Proposal – UB 1 & 2

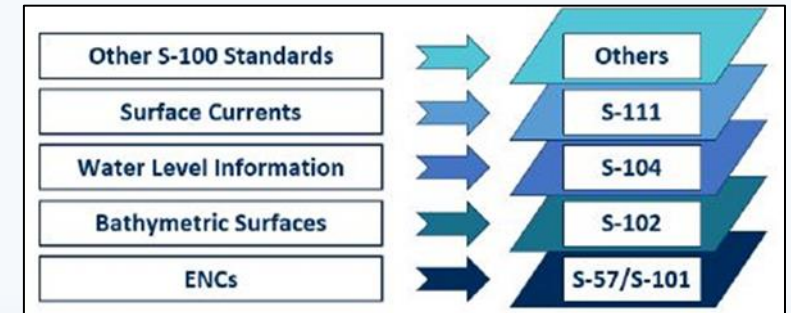
Since the last SAIHC meeting UKHO has submitted proposals to grid its UB1 and UB2 GB ENCs in region H.

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.

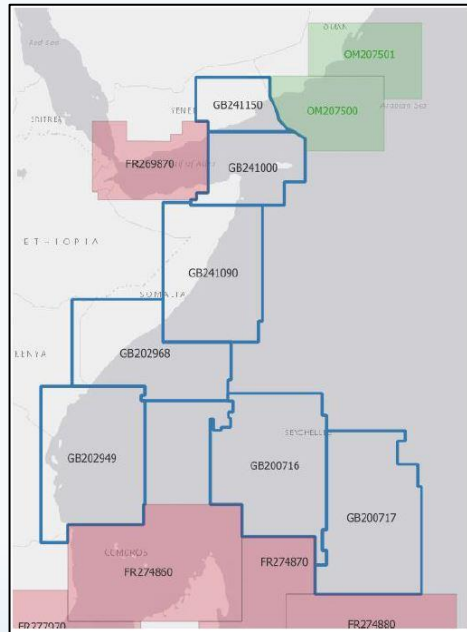
Reasons for Gridding:

- To provide consistent parameters through S-100 related products. For example, S-57 and S-101 ENCs 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 ENCs and supplementary 1m contouring
- ENC improvements providing better consistency of scale, linear and area features between ENCs.

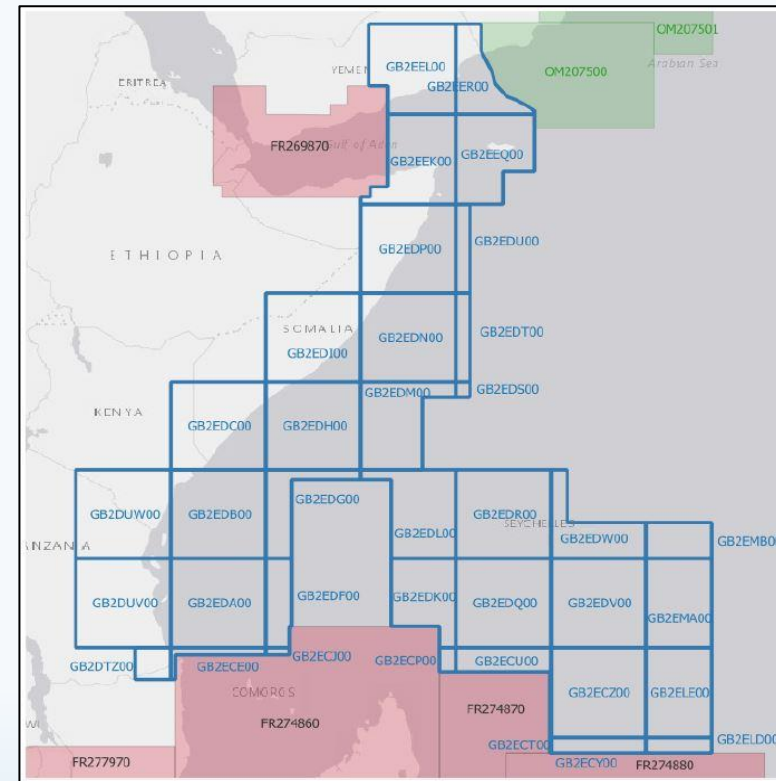


UKHO - UB 2 Gridded ENC Scheme Proposal

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



Existing Band 2 Scheme



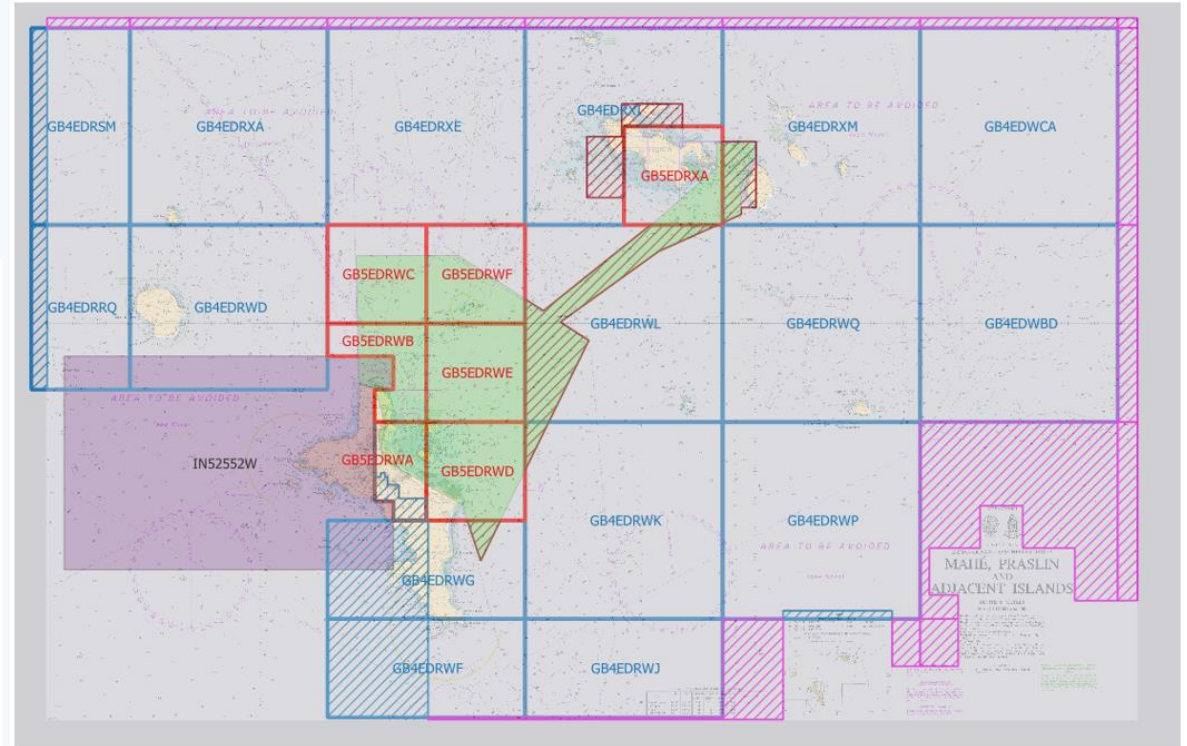
Proposed Band 2 Gridded Scheme

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)



Existing Band 4 and 5 Scheme



Proposed Band 4 and 5 Scheme

ADMIRALTY

-  New coverage
-  Clipped coverage
-  M_CSCL Areas
-  H11839

Region H: ENC Overlaps

Monitoring of ENC Overlaps:

- Monitoring and analysis of ENC coverage in the region is a permanent, continuous process
- Slight differences exist between IC-ENC and PRIMAR overlap reports
- Overall severity of risk of existing overlaps classified low to medium

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*.

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.

Region H: ENC Overlaps

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)	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	RU1B0PF0	AU160060	1	3000000	3500000	1	4	840km x 558km 135600 sq. NM	LOW	Overlap is located in the Antarctic, in charts very deep waters. There is a 115m shoal depth which is captured on AU160000 which is not captured on RU1B0PF0. Little traffic as expected.	HOs to discuss and resolve overlaps
1086	LIVE	IC-ENC - NON RENC	SAIHC	GB400668	IN42643A	4	45000	45000	1	1	20.6kmx19.8KM	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	HO 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	IN52520A	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	IN62516D	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	ZA110010	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	ZA210010	ZA210020	2	350000	350000	3	3	13ms	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

Australia attempted to resolve overlapping issues a few years ago but have not had any success and treat these overlap issues as 'No Further Action' from a South West Pacific HC ICCWG perspective. Australia are of the opinion that the overlaps will not be resolved any time soon as Russia remain unresponsive.

- 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.

S-100 Implementation Roadmap

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.

S-100 Implementation Roadmap

WENDWG CL1/2023 – Survey

Readiness Status of RHCs per Charting Region:

In December 2023, a survey was circulated to determine 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. This information is used to support the SPI 1.3.1 determination.

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), S102, S104, 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 as per link.

Phase 1 / Route Monitoring

Phase 1 Route Monitoring Mode

- S-101 ENC
- S-102 Bathymetry
- S-104 Water Level
- S-111 Surface Currents
- S-124 Navigational Warnings
- S-129 UKC Management

Critical Framework

- IHO Geospatial Information Registry
- S-98 Interoperability Specification
- S-100 Universal Hydrographic Data Model
- S-128 Catalogue of Nautical Products
- S-164 Test Data Set for S-100 and ECDIS
- Type Approval

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

S-100 Implementation Roadmap

S-100 Coordinator Role

S-100 Coordinator role established 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 to take place during SAIHC20.

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

INToGIS III

- Current INToGIS II Service includes INT chart and ENC Web Catalogue Service, INT Chart Maintenance and planning.
- INToGIS III aims to provide a tool for Member States for planning/scheming ENCs, S-100 Products & ENDS (Phase I) from 2025 to 2029, for displaying coverage planning and availability.
- INToGIS III will be ready to provide worldwide coverage of S-100 based products by 2024.

Review of ICCWG ToR & RoP

- 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 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

Any Other Business

Actions requested from SAIHC20

Members of the SAIHC are invited to note the report.

Thank you!