

19th SOUTHERN AFRICAN AND ISLANDS HYDROGRAPHIC COMMISSION MEETING (SAIHC)

11th INT CHART COORDINATION WORKING GROUP (ICCWG) REPORT

29 - 31 August 2023

Mauritius

Hybrid Meeting

ICCWG Chair

Alfons Van Craeynest

Membership

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

Associate Members

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

Agenda items

1. Opening
2. Approval of Agenda
3. **Matters Arising from Minutes of 10th ICCWG Meeting**
 - 3.1 Review of Action Items
4. **Region H Chart Scheme**
 - 4.1 Status of INT Charting
 - 4.2 Maintenance of INT Charts
 - 4.3 Status of ENC's
5. **ENC Overlaps**
 - 5.1 Status of Overlapping ENC's
6. **SAIHC ENC Scheme**
 - 6.1 Gridded ENC Scheme (UKHO)
7. **S-100 Implementation Roadmap**
8. **Any Other Business**
9. **Closure**

Item 3.1

Actions from the 10th ICCWG Meeting

| Serial No | Subject | Action | Remarks |
|----------------------|--|-----------------|---------|
| ICCWG-10 Action 1 | ICC-WG Coordinator to contact Russia and Australia to resolve ENC overlap. | ICC-Coordinator | Ongoing |

Action 1 update:

The Australian Hydrographic Office acknowledge the overlaps in Region H between AU/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 AHO 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.

| Serial No | Subject | Action | Remarks |
|----------------------|--|-----------------|---------|
| ICCWG-10 Action 2 | To define ENC scheme for SAIHC Region H. | ICC-Coordinator | Ongoing |

Action 2 update:

The UKHO will provide a brief presentation regarding gridded ENC coverage developments in the Region related to agenda item 6.

Actions from the 10th ICCWG Meeting

| Serial No | Subject | Action | Remarks |
|----------------------|---|---------------|----------------|
| ICCWG-10 Action 3 | Member States to provide feedback comments on how CATZOC is to be used to DQWG. | Member States | Ongoing |

Action 3 update:

The DQWG confirmed that HSSC15 has approved the S-68 and the final list of decisions and actions had been uploaded on the HSSC webpage.

Action HSSC15/56: HSSC commended the DQWG supported by the HSWG for the development of Ed. 1.0.0 of Guidelines and Recommendations for Hydrographic Offices for the allocation of CATZOC Values from Survey Data. Decision HSSC15/57: HSSC approved Ed.1.0.0 of S-68 for initial implementation, testing and evaluation. IHO MS were invited to provide their initial feedback to the DQWG.

| Serial No | Subject | Action | Remarks |
|----------------------|--|----------------------------|----------------|
| ICCWG-10 Action 4 | 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 | Ongoing |

Action 4 update:

UK are coordinating with India and resolving overlaps where possible.

Actions from the 10th ICCWG Meeting

| Serial No | Subject | Action | Remarks |
|----------------------|---|--------------|---------|
| ICCWG-10 Action 5 | India and UK to confirm when overlaps with GB ENC's have been removed in Seychelles, Tanzania and Mozambique. | India and UK | Ongoing |

Action 5 update:

UK are coordinating with India and resolving overlaps where possible. Review of ENC overlaps briefly discussed in agenda item 5

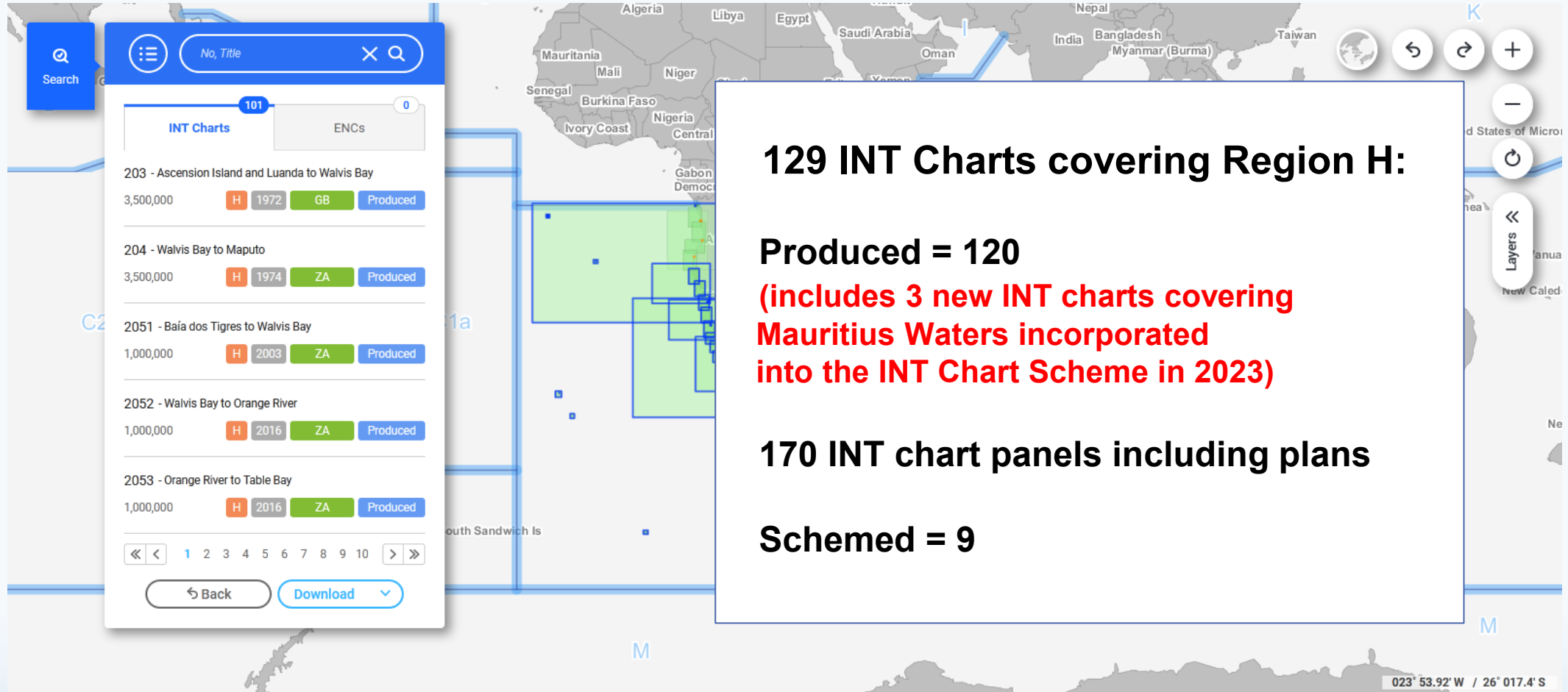
| Serial No | Subject | Action | Remarks |
|----------------------|---|------------------------|---------|
| ICCWG-10 Action 6 | INT 7583 (Maputo) - survey in progress and chart production to start as soon as possible. | Portugal Mozambique | Closed |

Action 6 update:

INT 7583 published in February 2023.

Item 4.1

Region H - INT Chart Scheme



The screenshot displays the IHO INT Chart Scheme interface. On the left, a search bar is visible. Below it, a list of charts is shown, including:

- 203 - Ascension Island and Luanda to Walvis Bay (3,500,000 scale, H 1972, GB, Produced)
- 204 - Walvis Bay to Maputo (3,500,000 scale, H 1974, ZA, Produced)
- 2051 - Baía dos Tigres to Walvis Bay (1,000,000 scale, H 2003, ZA, Produced)
- 2052 - Walvis Bay to Orange River (1,000,000 scale, H 2016, ZA, Produced)
- 2053 - Orange River to Table Bay (1,000,000 scale, H 2016, ZA, Produced)

At the bottom of the list, there are navigation arrows and a 'Download' button. The map on the right shows the region of interest, with a white box highlighting the area covered by the charts. The map includes labels for various countries and islands, such as Mauritania, Mali, Niger, Senegal, Ivory Coast, Nigeria, Central, Gabon, Democ, Oman, Saudi Arabia, Egypt, Libya, Algeria, India, Bangladesh, Myanmar (Burma), Nepal, Taiwan, and South Sandwich Is.

129 INT Charts covering Region H:

Produced = 120
(includes 3 new INT charts covering Mauritius Waters incorporated into the INT Chart Scheme in 2023)

170 INT chart panels including plans

Schemed = 9

Region H – Status of INT Charts – S11, Part B

Summary of changes to S-11 (Part B) since last SAIHC meeting May 2022:

INT 2551 - Porto de Luanda – new chart (1st Ed) produced by PT – published June 2022

INT 2672 - Saldanha Bay Harbour – new edition published by UK in 2022 with chart no. GB4142

INT 2673 - Entrance to Saldanha Bay – new edition published by UK in 2022 with chart no. GB1236

INT 7583 - Aproximações ao Porto de Maputo (includes inset Porto de Maputo) - new chart (1st Ed) , co-production between MZ/PT – published February 2023 (related to action item 6, item closed)

INT 7601 - Northern Islets of Mauritius - new chart based on national chart coverage IN2529 accepted into the INT chart scheme and published August 2023.

INT 7602 - Approaches to Grand Port – new chart based on national chart coverage IN2530 accepted into the INT chart scheme and published August 2023.

INT 7603 - Rodrigues Island - new chart based on national chart coverage IN2531 accepted into the INT chart scheme and published August 2023.

INT 7620 - Cabo de Sao Sebastiao to Beira – new chart under review by PT.

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

INT 7641 - Aproximações ao Quelimane (includes inset Porto de Quelimane) – new edition, co-production between PT and MZ - published 2022 and currently being updated for completion September 2023

INT 7662 - Porto de Nacala – new chart, co-production between PT and MZ – published April 2023

Proposal for New INT Charts - Mauritius

Proposal by IN for new INT charts covering Mauritius based on national chart coverage:

Since 2014, India produced 8 INT charts covering Mauritius Waters in Region H and requested 3 additional national charts to be included into the INT Chart Scheme for the purpose of enhancing coverage for International Mariners.

Proposed INT chart numbers were allocated as per IHO publications S-11 and S-4 (A204.2) in consultation with the IHO Secretariat.

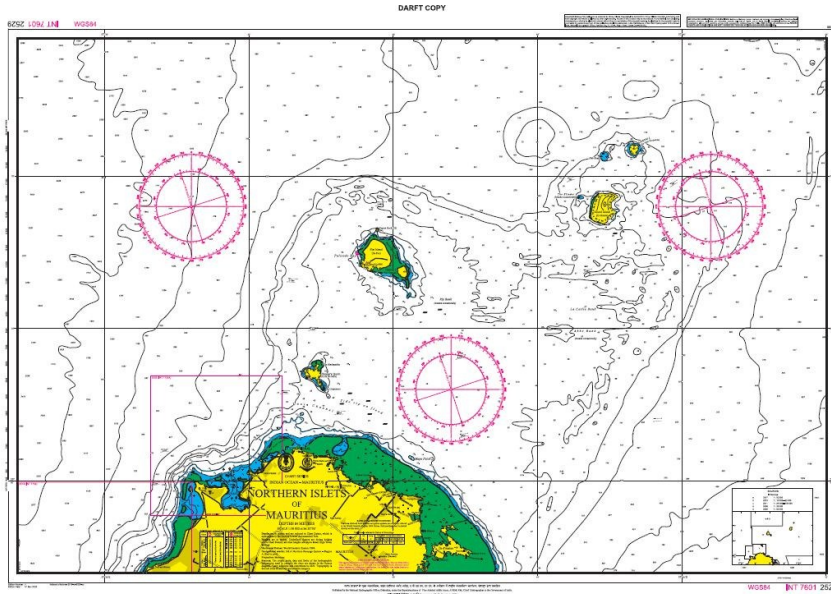
ICCWG CL1/23 was sent to the WG for comment on the proposed allocation of new INT numbers and to provide feedback.

There were no objections or comments raised by the ICCWG with the exception of France who supported the proposal for allocation of the new INT numbers 7601, 7602 and 7603.

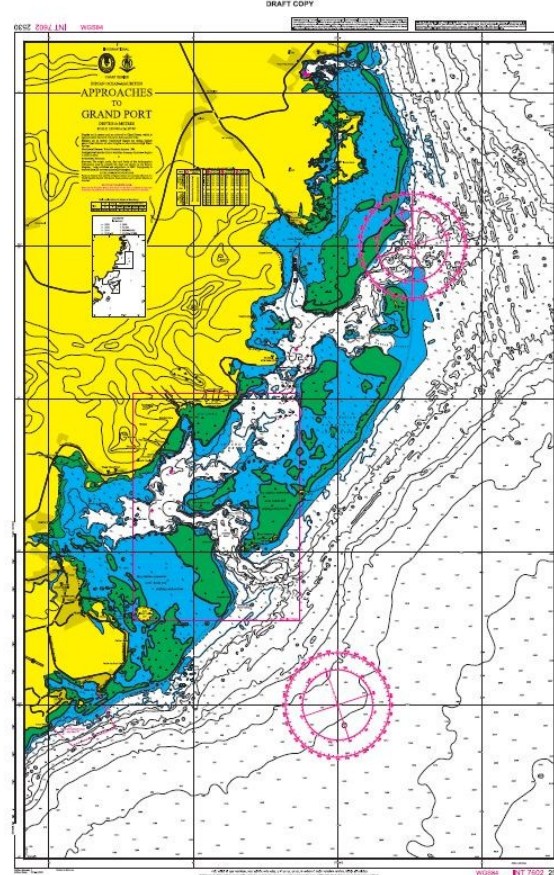
Feedback from the WG was reported to the Chair and Vice Chair of SAIHC by formal correspondence. Upon completion of the formal approval process, the new INT charts are accepted into the INT chart scheme.

The published ENC equivalents do not have any overlap in usage band or compilation scale with existing ENCs.

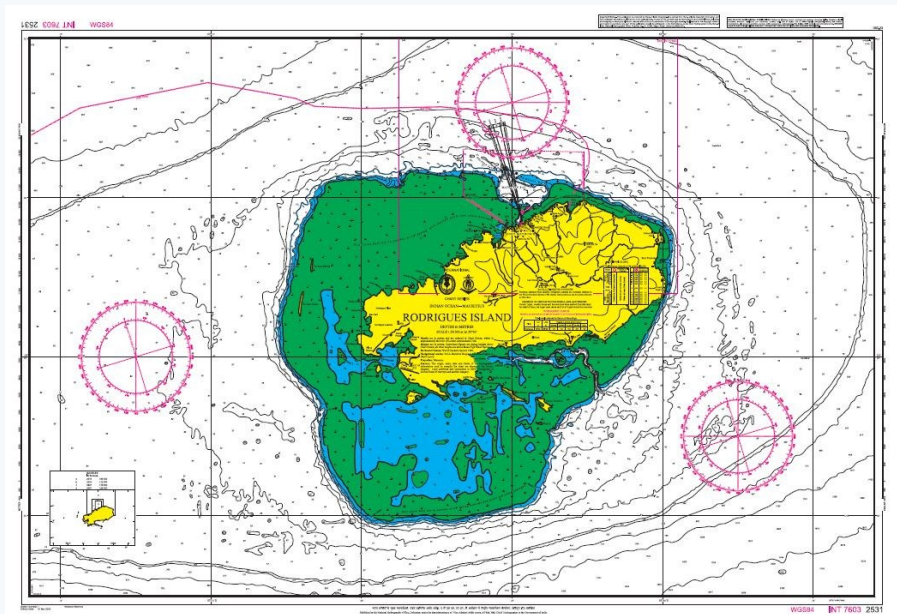
Region H – New INT Charts - Mauritius



INT 7601 (IN 2529) - Northern Islets of Mauritius
1 : 50 000
ENC Coverage IN42529N



INT 7602 (IN 2530) - Approaches to Grand Port, 1 : 30 000
ENC Coverage IN52530A



INT 7603 (IN 2531) - Rodrigues Island, 1 : 50 000
ENC Coverage IN42531R

Review and monitoring of INT charts

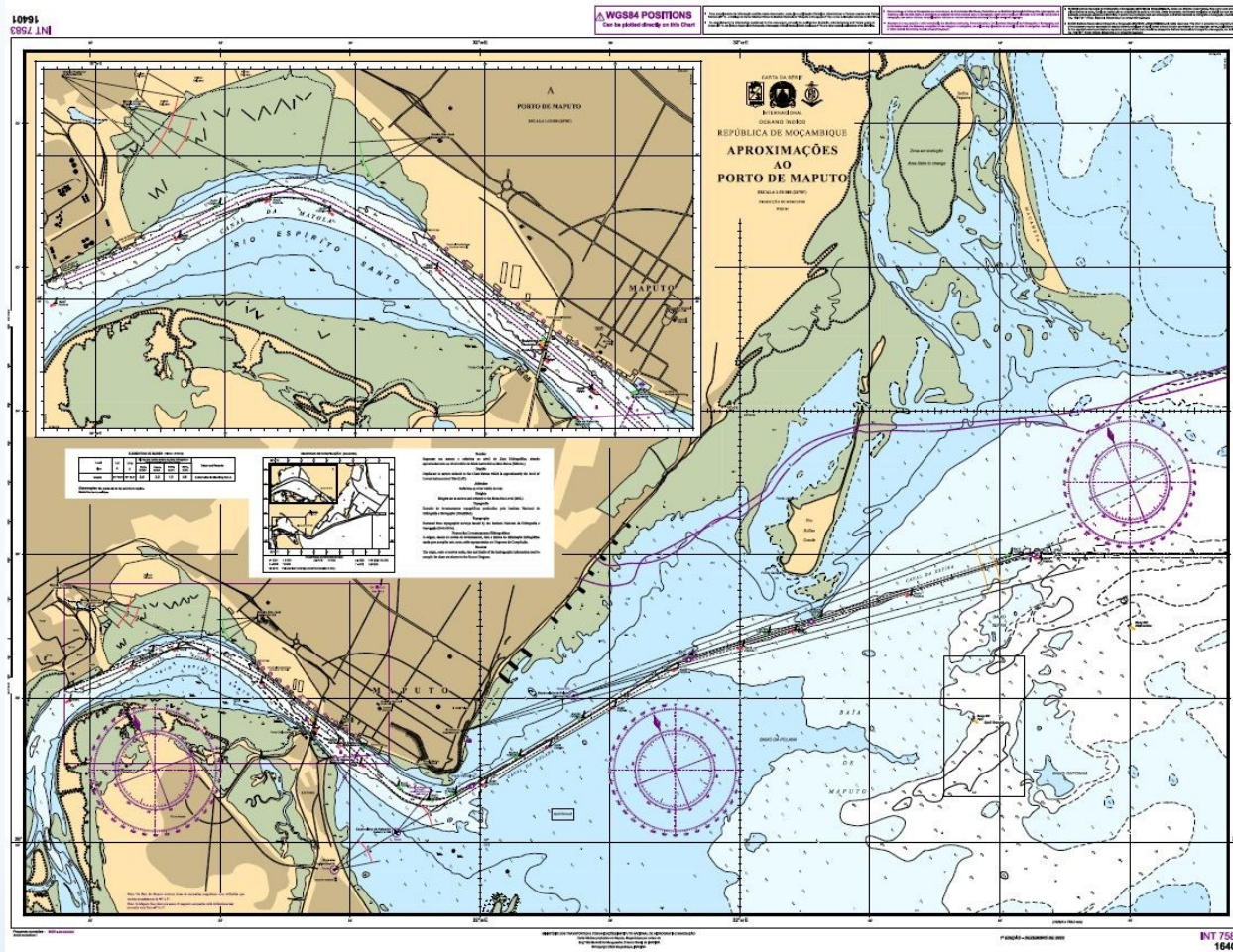
Revised management review and monitoring of INT charts (IHO CL64\15 and 89/15 refer).

In 2015, IHO CLs 64/15 and 89/15 detailed the new procedures for the management review and monitoring of INT charts. The main elements of the process are as follows:

- All new INT Charts to be submitted to Regional INT Chart Coordinator (ICCWG) for review.
- INT Chart Coordinator (ICCWG) to verify chart's compliance with IHO standards and to provide feedback to the Producer Nation.

These procedures have been implemented accordingly for review of the new INT charts produced in 2022/2023.

Region H – New INT Chart - Mozambique



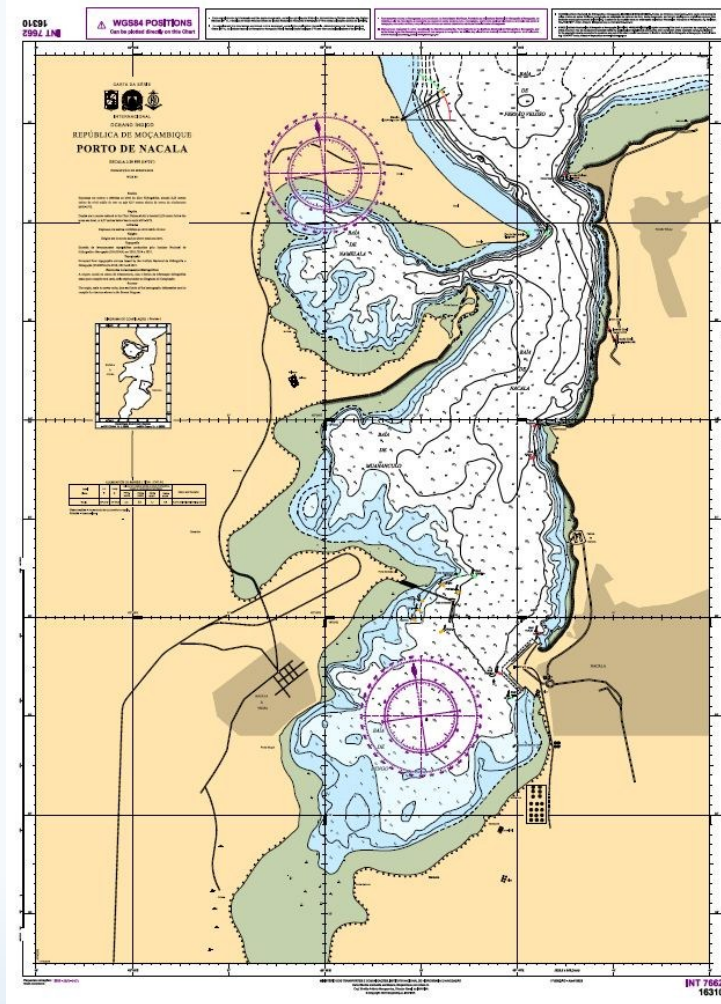
Aproximações ao Porto de Maputo

New chart **INT 7583** (MZ16401) covers Approaches to the Port of Maputo at 1:30 000. This chart is a 1st Edition and a co-production between MZ and PT. The chart includes a large scale plan at 1:10 000 and has previously been incorporated into the INT Chart Scheme and published in 2023.

The new INT chart replaces BA646.

Approach ENC coverage GB400646 at 1:22 000.

Region H – New INT Chart - Mozambique

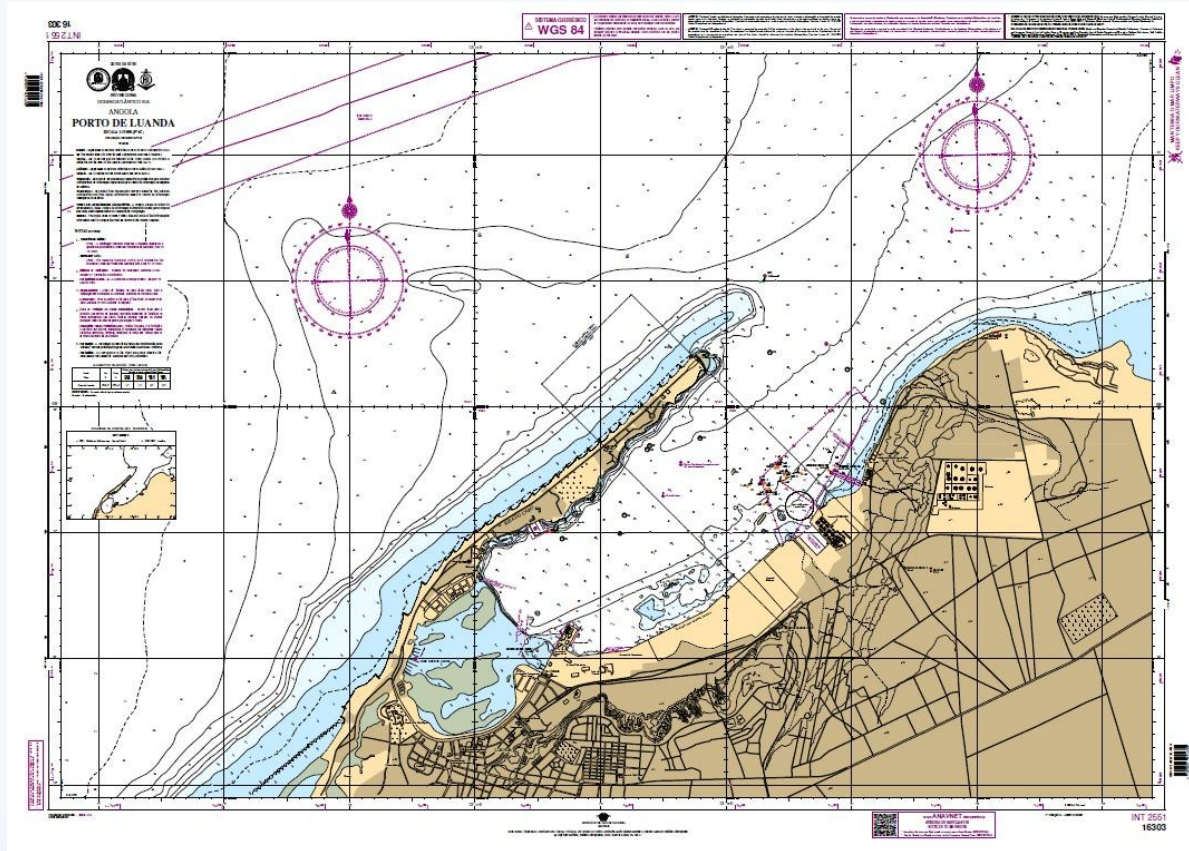


Porto de Nacala

New chart **INT 7662** (MZ16310) covers the Port of Nacala at a scale of 1:20 000. This chart is a 1st edition and a co-production between MZ and PT. The chart has previously been incorporated into the INT Chart Scheme and published in 2023.

Approach ENC coverage GB400649 replaced by GB40649A at 1:45 000.

Region H – New INT Chart - Angola



Angola - Porto de Luanda

New chart **INT 2551** (MZ16303), previously excepted into the INT Chart Scheme produced by Portugal covering the Port of Luanda at 1:15 000. The chart is a 1st Edition published in June 2022.

1st Edition Harbour ENC coverage PT516303 published in 2022 at scale 1:12 000.

Item 4.2

Maintenance of INT Charts

Extract from S-4:

B-630 THE NOTICE TO MARINERS SYSTEM

B-630.1 SOLAS Chapter V regulation 9 requires contracting governments to:

‘promulgate notices to mariners in order that nautical charts and publications are kept, as far as possible, up to date’

SOLAS Chapter V regulation 27 states that:

‘Nautical charts and nautical publications, such as sailing directions, lists of lights, notices to mariners, tide tables and all other nautical publications necessary for the intended voyage, shall be adequate and up to date’.

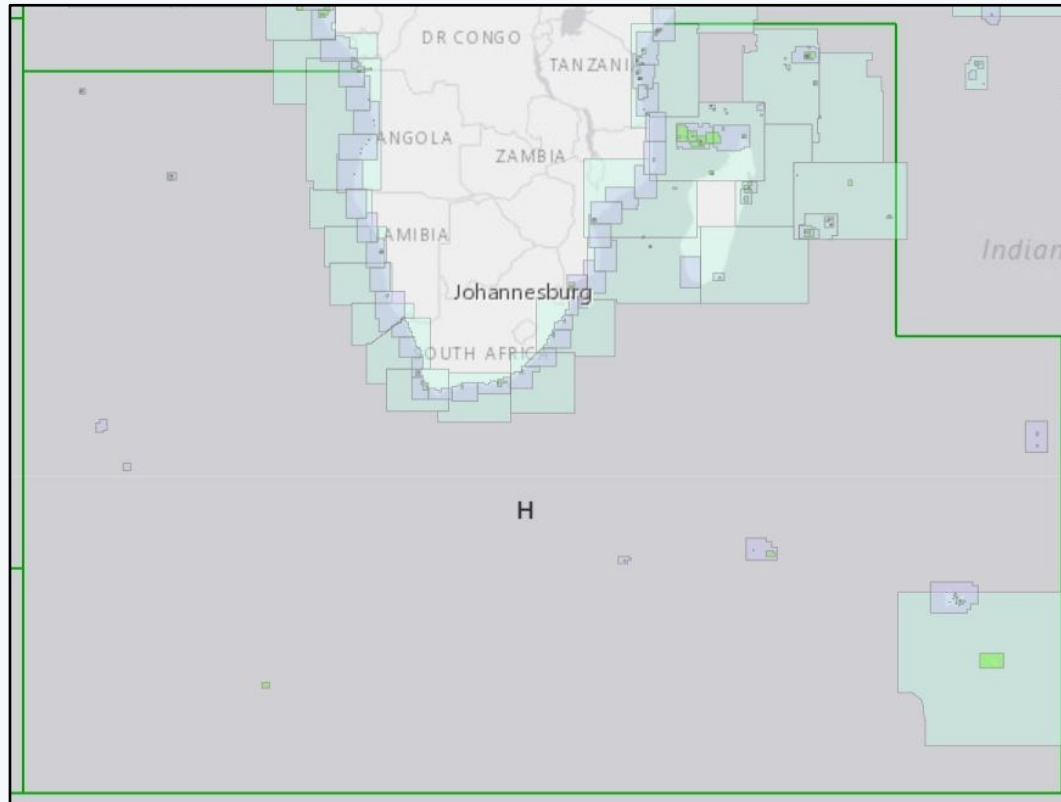
Mozambique currently only promulgate Navigational Warnings and do not have a process in place to maintain INT charts.

Portugal are currently assisting Mozambique to implement a process for Notices to Mariners in order to comply with SOLAS Chapter V, regulation 9, as well as providing support to the MS related to production of INT charts and ENC's.

The ICCWG takes cognisance of Capacity Building efforts by Portugal.

Item 4.3

Region H – ENC coverage

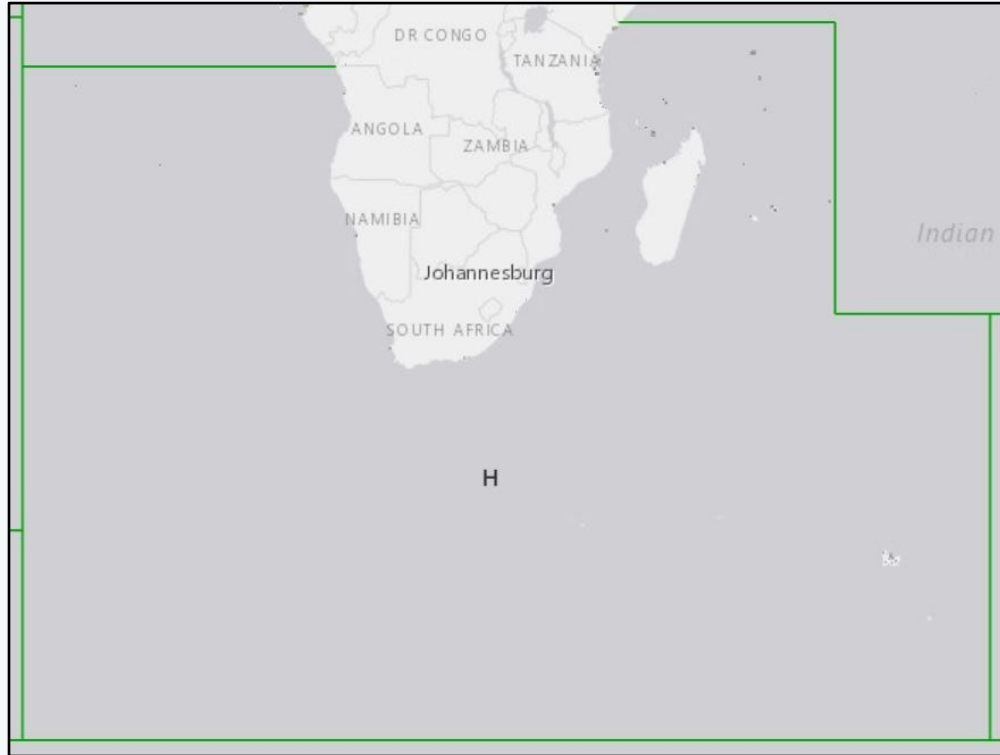


Total ENCs by Producer Nation:

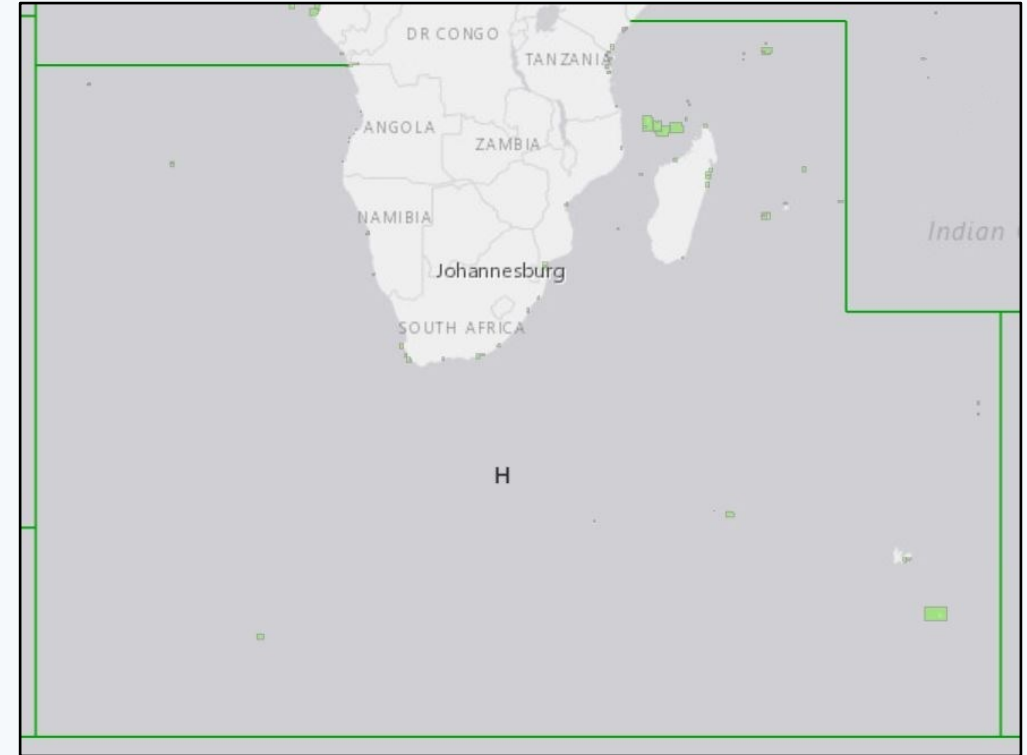
AU (3 cells)
FR (87 cells)
GB (106 cells)
IN (38 cells)
NO (1 cell)
PT (2 cells)
ZA (56 cells)

Increase of 27 ENCs from 266 to 293 since last SAIHC meeting in 2022

Region H – ENC coverage



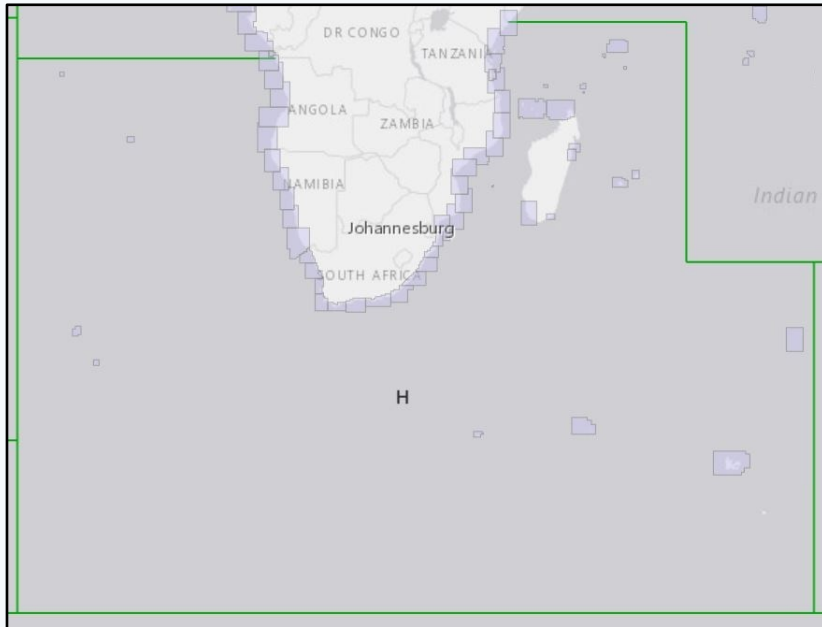
Berthing (25 cells)



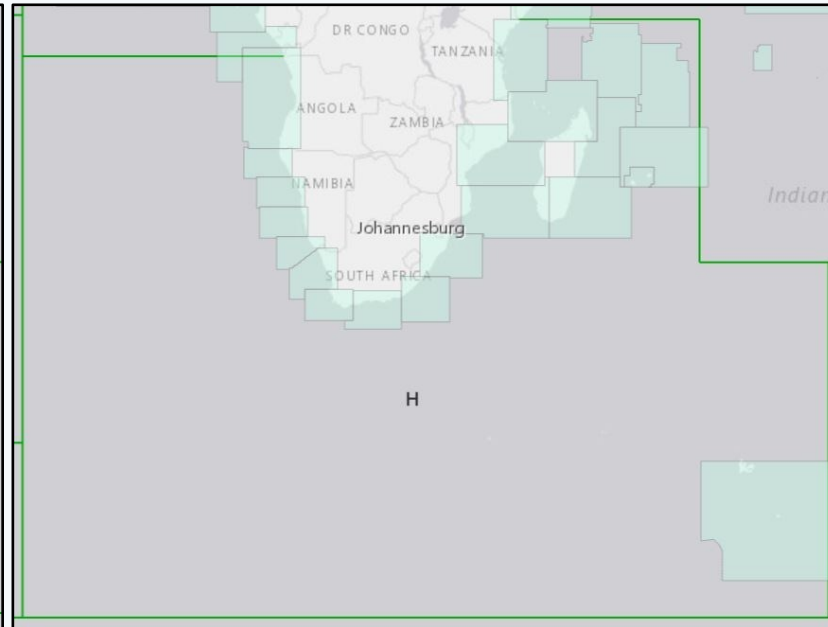
Approach (81 cells)

Harbour (81 cells)

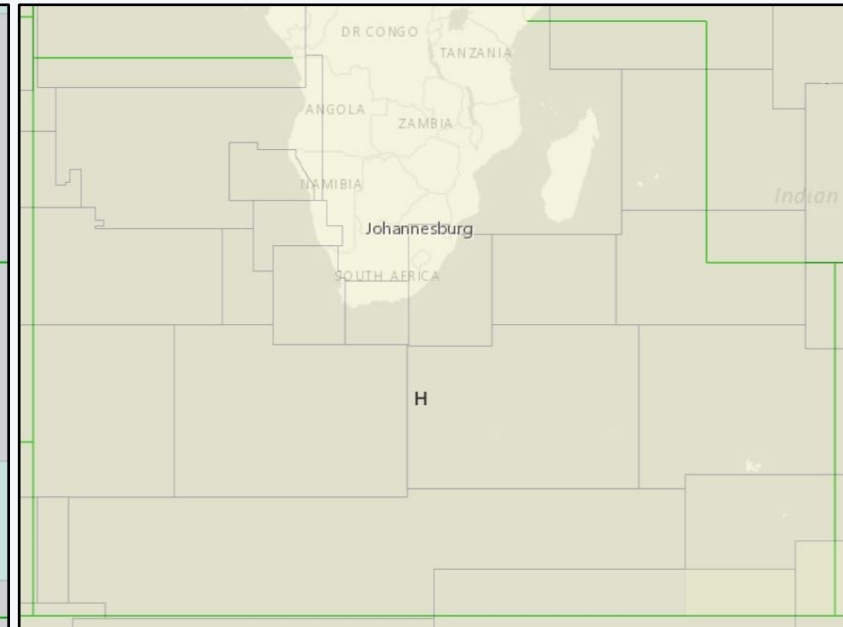
Region H – ENC coverage



Coastal (59 cells)



General (23 cells)



Overview (24 cells)

Proposal for new ENC coverage in Region H - UB2

Reference: SAIHC ICCWG Letter No. 02/2023

France produced INT charts 7062, 7063 and 7064 and equivalent UB2 ENCs to provide coverage for the area in the North of the Island of La Reunion and between Madagascar and La Reunion. 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 WG were invited to comment on the proposal by France and provide feedback.

There were no objections or comments by the WG with the exception of the UK who supported the proposal on condition that no new overlaps were created and agreed that the proposed ENC would provide improved coverage at usage band 2. A formal letter was sent to the SAIHC Chair and Vice Chair reporting that the new proposed ENC coverage had been supported by the WG and no objections were raised.

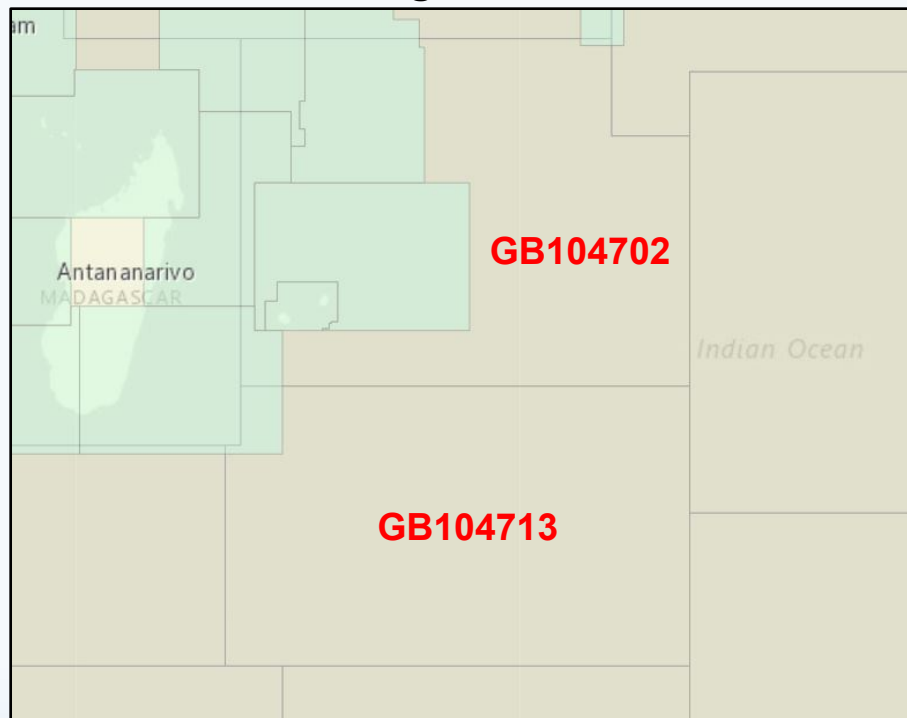
Based on assessment, production of the new ENC would not have any impact on the existing ENC coverage with respect to overlaps, either in usage band or compilation scale.

Production of the new ENC, FR276900, is planned for 2024 (graphic in following slide refers).

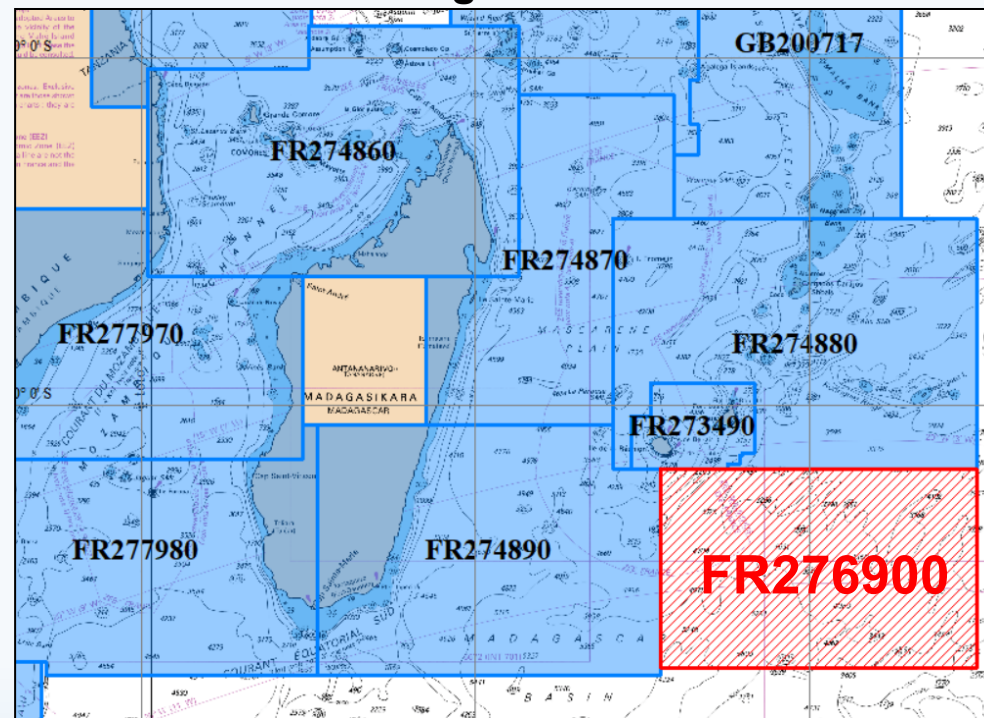
Proposal for new ENC coverage in Region H - UB2

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.

Usage Band 1



Usage Band 2



Item 5.1

Region H: ENC Overlaps

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.

Monitoring of ENC Overlaps:

Monitoring and analysis of ENC coverage in the region is a permanent, continuous process and IC-ENC overlap reports and Primar overlap checker are used to identify overlaps.

There appears to be slight differences between the reports where many reported overlaps are technical in nature. Overall severity of risk of existing overlaps has been classified low to medium, accepted or unassessed where HOs are to discuss and resolve.

Region H: ENC Overlaps

Standing ENC overlaps in Region H reported at last meeting in May 2022

| STATUS | RENC Membership | RHC | ENC 1 | ENC 2 | Usage Band | Overall Severity of Risk |
|--------|-----------------------|-----------|----------|----------|------------|--------------------------|
| LIVE | IC-ENC | SAIHC/HCA | RU1A2K00 | AU160060 | 1 | LOW |
| LIVE | IC-ENC - NON RENC (P) | SAIHC | GB54232A | IN52520A | 5 | LOW |
| LIVE | IC-ENC - NON RENC (P) | SAIHC | GB500722 | IN52551A | 5 | MEDIUM |
| LIVE | IC-ENC - NON RENC (P) | SAIHC | GB500722 | IN52552W | 5 | MEDIUM |
| LIVE | IC-ENC - NON RENC (P) | SAIHC | GB502758 | IN52510B | 5 | MEDIUM |
| LIVE | IC-ENC - NON RENC (P) | SAIHC | GB502758 | IN52511A | 5 | MEDIUM |
| LIVE | IC-ENC - NON RENC (P) | SAIHC | GB54232A | IN62516D | 5/6 | MEDIUM |
| LIVE | IC-ENC | SAIHC | ZA2N0010 | ZA2N0020 | 2 | - |

Region H: ENC Overlaps

New ENC overlaps in Region H since last meeting

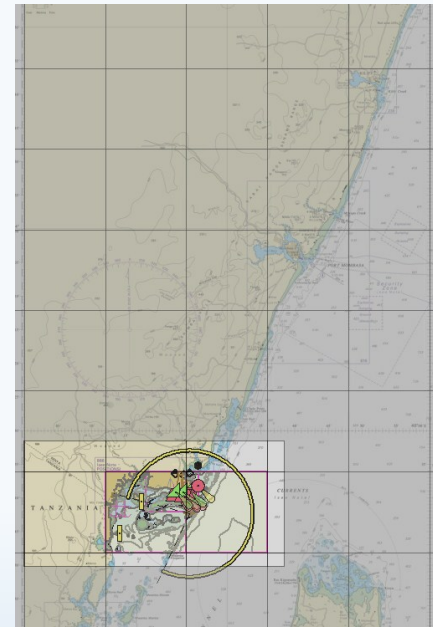
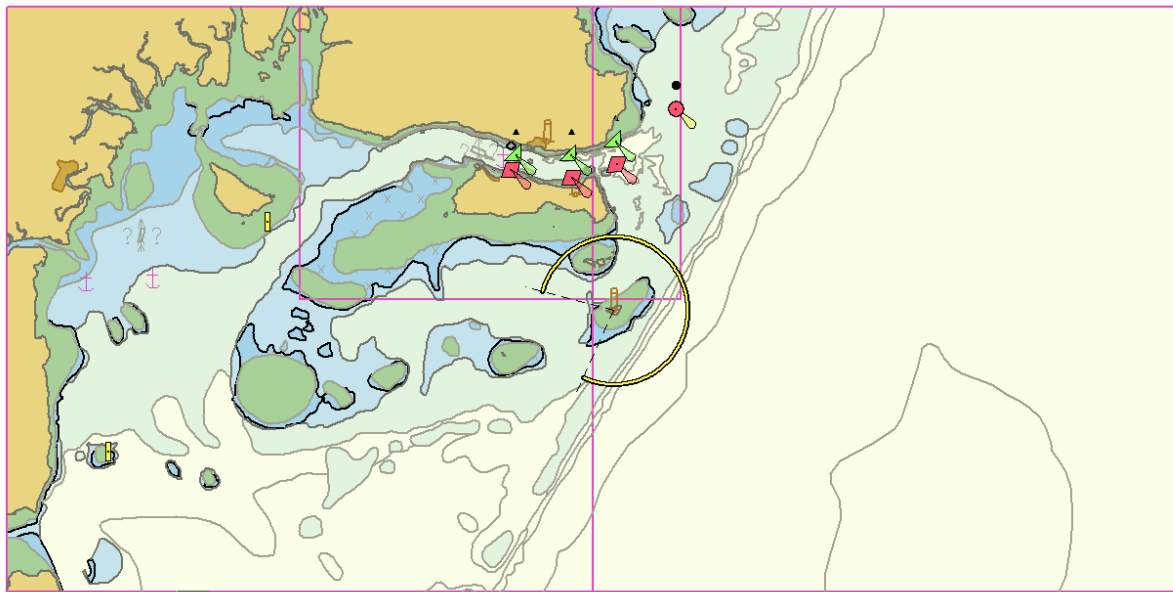
| STATUS | RENC Membership | RHC | ENC 1 | ENC 2 | Usage Band | Overall Severity of Risk |
|--------|-----------------|-----------------|----------|----------|------------|--------------------------|
| LIVE | IC-ENC | SWPHC/ SAIHC | RU1B0PF0 | AU160060 | 1 | LOW |
| LIVE | IC-ENC | SAIHC | GB400668 | IN42643 | 4 | UNASSESSED |
| LIVE | IC-ENC | SAIHC | GB40668A | IN52642M | 4 | UNASSESSED |
| LIVE | IC-ENC | SAIHC | GB400669 | IN42643A | 4 | UNASSESSED |
| LIVE | IC-ENC | SAIHC | GB400669 | IN52642M | 4 | UNASSESSED |
| LIVE | IC-ENC | SAIHC | GB500669 | IN52642M | 5 | UNASSESSED |
| LIVE | IC-ENC | SAIHC | GB500722 | IN52556A | 5 | UNASSESSED |
| LIVE | IC-ENC | SAIHC | ZA300010 | ZA3N0050 | 3 | LOW |

Item 6.1

SAIHC ENC Scheme

Shimoni – Kenya – New gridded ENC GB4DUWWC and GB4DUWWG

- In support of the development of a new international fishing terminal.
- Includes latest survey provided by Kenya Ports Authority.
- The new coverage follows the UKHOs Gridded scheme and will include 2 usage band 4 cells with a band 5 M_SCSL area providing larger scale coverage of the terminal

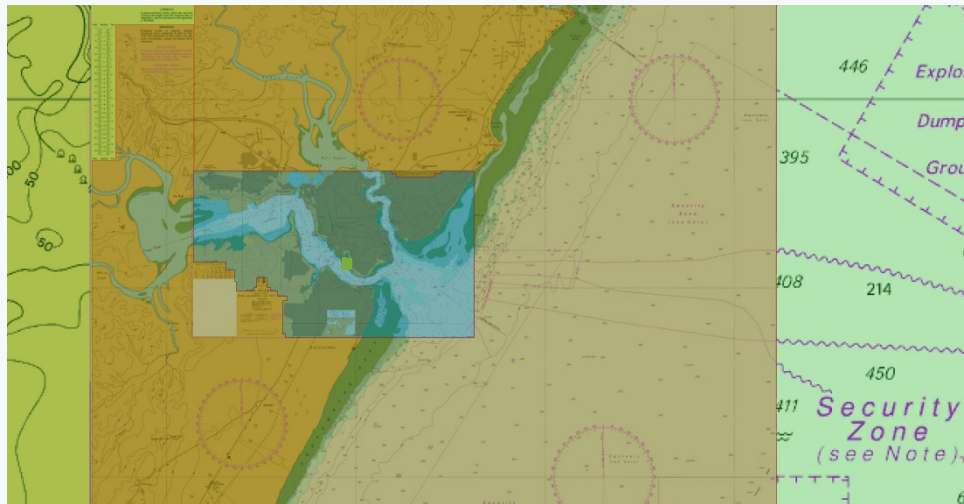


SAIHC ENC Scheme

Mombasa – Kenya – Potential gridded ENC Scheme

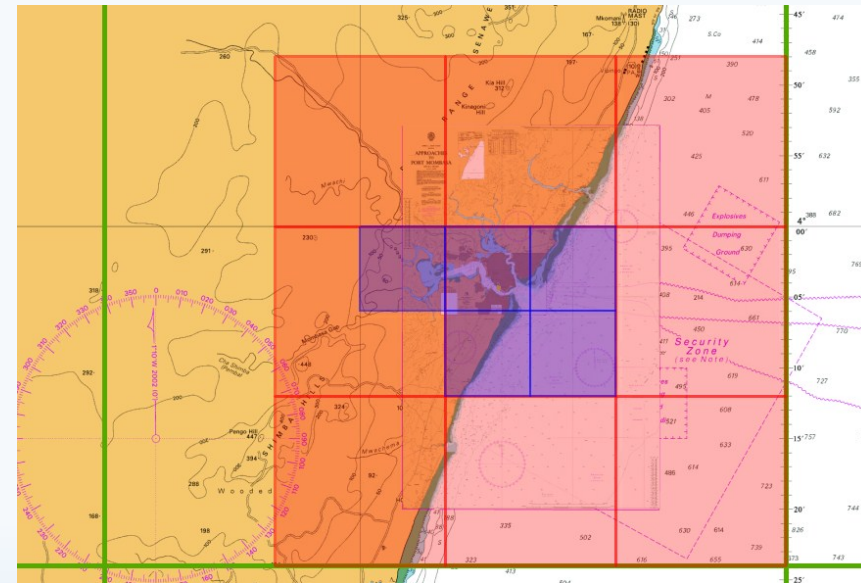
Existing chart based ENC scheme

1 x Band 3, 1 x Band 4, 1 x Band 5 and 1x Band 6. Total = 4 ENC cells



Model Gridded ENC Scheme

1 x Band 3, 8 x Band 4, 5 x Band 5 and 1 Band 6. Total = 15 ENC cells

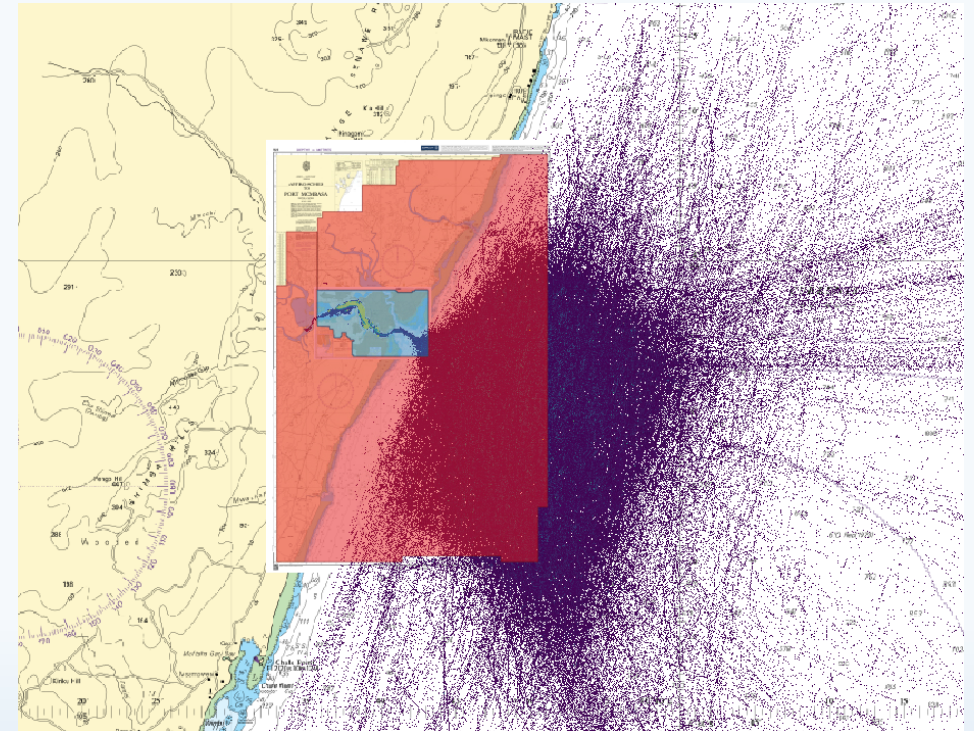
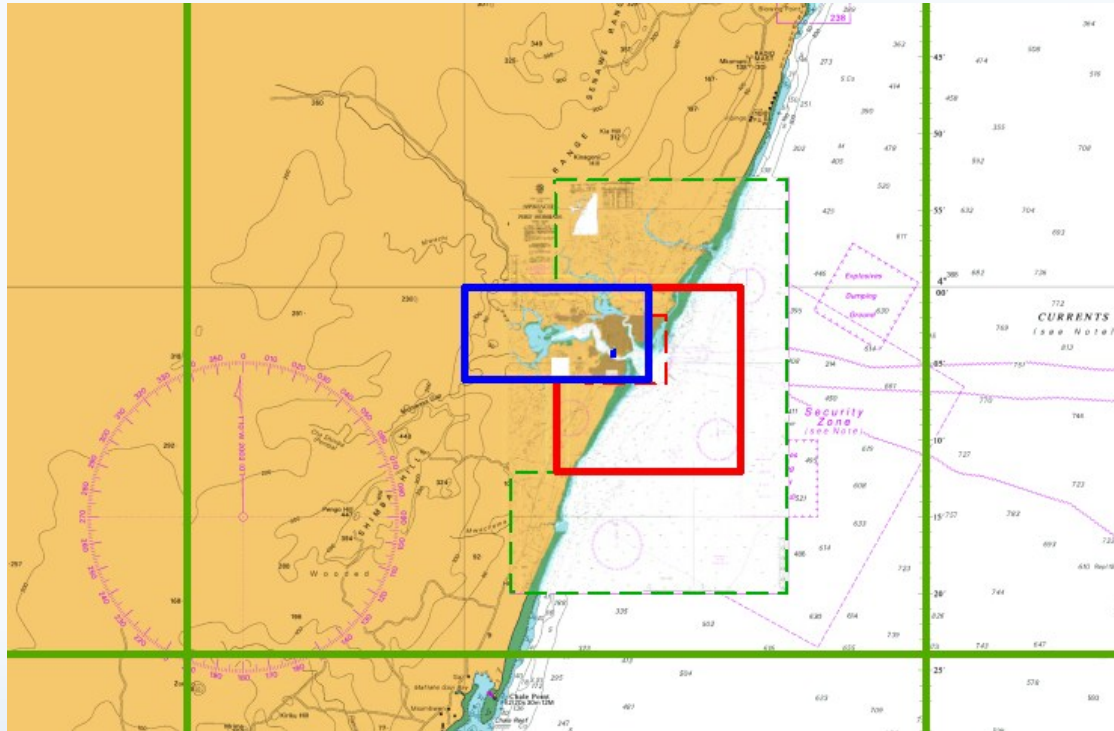


SAIHC ENC Scheme

Mombasa – Kenya – Potential gridded ENC Scheme

Potential Gridded Scheme Option.

1 x Band 3 (composite), 1 x Band 4 (composite) and 1 x Band 6 composite. Total = 3 cells



Item 7

S-100 Implementation Roadmap

WEND-100 IGIF Product and Service Matrix

The WENDWG Chair prepared a version 1.0 of the WEND100-IGIF Matrix to assist RHCs with conducting an S-100 readiness assessment at regional level in support of the IHO Roadmap for the S-100 Implementation Decade. WENDWG Representatives of RHCs in the WENDWG were invited to complete the Matrix on an annual basis starting with version 1.0. The matrix includes 7 S-1xx product specifications for evaluation of the Readiness Level to indicate the various levels of maturity where each level is assigned a score and colour code for the following:

S-101 (ENC)

S-102 (Bathy Surface)

S-104 (Water Levels)

S-111 (Surface Current)

S-122 (Marine Protected Areas)

S-124 (Navigational Warnings)

S-128 (Catalogue of Products)

MSDI

The WENDWG evaluated the results of the Matrix during WENDWG13 and noted several challenges including response rate, complexity, and question clarification. The WENDWG received Matrix responses from 8 of the RHCs and realized an average total score of 45.85. If the HCA input is removed, the average score was 41.89 (out of 100).

S-100 Implementation Roadmap

Reports from IRCC15 Subordinate Bodies related to S-100 Roadmap (extract)

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 INTToGIS III when commissioned.

Report of the IRCC to the 7th Meeting of the IHO Council (extract)

The main concerns were related to the need of collaboration and coordination in the implementation of the S-100 Roadmap, the need to increase the Capacity Building activities at regional levels, as well as the lack of participation in the RHCs' activities and meetings and data collection in remote locations. Good progress in the inter-regional cooperation and successful partnership with industry and international stakeholders, especially in the field of Capacity Building and the implementation of new technology, were noted and discussed.

Any Other Business

Actions requested from SAIHC19

To take note of this report and take any action as appropriate.

Thank you for your attention!