

SAIHC19 Plenary Report - Held in Mauritius/Hybrid 29-31 August 2023

Note - this document does not act as full meeting minutes, however it provides an overview of presentations, reports and a summary of action items. A summary of actions can be found at Annex A. Most but not all reports and presentations were uploaded on the IHO SAIHC webpage. The numbering in the report coincides with the agenda items of the SAIHC19 meeting and not in running order due to last minute agenda changes.

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SAIHC19 Plenary Day 1 Tuesday 29 August 2023

Opening remarks and welcome

SAIHC19 conference was opened by Commander Ankush Sachdeva, Officer-in-Charge, Mauritius Hydrographic Service, Ministry of Housing and Land Use Planning of the Republic of Mauritius. Commander Sachdeva warmly welcomed all delegates to Mauritius and to the 19th meeting of SAIHC. He emphasized that this meeting will undoubtedly promote technical co-operation in the domain of hydrographic surveying, marine cartography, and nautical information within the Region.

Chair, RAdm (Retd.) Peter Sparkes (UK) welcomed the delegation and congratulated the hosts for all their excellent work on bringing all delegates together in such a beautiful location. Chair encouraged all Member States to participate with energy, ensuring maximum participation over the next few days. Chair shared that this would be his last SAIHC before standing down.

IHO Assistant Director Yong Baek welcomed all to the conference. He highlighted the paramount importance that capacity building has in ensuring we achieve our goals. He gave thanks to our hosts for the excellent work on bringing all Member States together.

The Keynote address was delivered by Mr. Mohammad Salim Ferhat Joomun, Senior Chief Executive of Ministry of Housing and Land Use Planning, Ministry of Tourism, Republic of Mauritius who was honoured to deliver the keynote address on behalf of the Republic of Mauritius. Mr. Joomun extended a warm welcome to the distinguished delegates and industry partners from across the globe. Mr. Joomun wished the delegates fruitful deliberations during the meeting and declared the SAIHC19 open. The Chair then invited all participants to introduce themselves, first those attending in person and then those attending virtually.

This was followed by the 19th SAIHC Group photos and high tea.





In-person delegates

Online delegates - not all delegates online captured.





1.1 Approval of the Agenda

The Chair commented that the draft agenda had been circulated prior to plenary, and there were no requests for amendments. The Chair invited any additional comments, inputs, questions for the agenda, with no comments or amendments the agenda was approved.

Decision 1: Approval of the SAIHC19 agenda

1.2 Matters arising from Minutes of SAIHC18

The Chair shared that all feedback was considered and incorporated into the amended draft SAIHC18 minutes. He thanked everybody who provided feedback. The Secretary confirmed no correspondence had been received and there were no comments from the floor, so the Chair confirmed the SAIHC18 minutes as the definitive version.

Decision 2: Approval of SAIHC18 Minutes as final

1.3 Review of SAIHC18 Actions list

The Secretary gave a brief overview of the actions that were circulated to MS on the 21 June 2023, CL7 in Annex A. As there were no comments by the 7 August deadline, the closed actions from previous SAIHC have now been removed.

The following previous SAIHC18 actions were proposed as closed, secretary to remove:

| No. | Ref | Action | Action By | Due date | Status |
|-----|-----------------|--|-------------|---------------------------|----------------------------|
| 3 | SAIHC18- 2.3 | Complete a Gap Analysis for each goal in the IHO Strategic Plan 2021-2026 (or report on progress) | | C-6 18-20 October 2022 | OPEN – PROPOSE CLOSE |
| 13 | AGL&RSWG | SAIHC Chair to write letter to Government bodies of members to encourage sharing of data to support safety of navigation | SAIHC Chair | July 2022 | OPEN - PROPOSE CLOSE |

Action 1: SAIHC Secretary to remove closed actions from the SAIHC18 Actions List

1.4 SAIHC Statutes review

The 2022 version of the statutes were circulated via email on 21 June 2023 to allow Members to respond with any comments or amendments. By the 7 August deadline, there had been no comments or suggestions from Members.

Decision 3: Version May 2022 of Statutes is approved.

Action 2: Secretary to circulate definitive version of the Statutes and submit to IHO for uploading.

2.1 IHO Secretariat Report including Assembly 3 Report

IHO Assistant Director, Yong Baek gave an overview of the IHO secretariat report which included Assembly3 report which took place in Monaco from the 2 to the 5 May 2023. Yong Baek directed members to the website for the full reports.



The following key points were raised in the IHO Secretariat report:

- Since SAIHC18 there have been no new Members currently 98
- IHO Work Programme and Budget for 2023 approved and the three-year Work Programme and Budget 2024–2026 endorsed
- Council6 main outcomes:
 - MSC.1/Circ.1503/Rev.2 on ECDIS Guidance for good practice and new ECDIS performance standards (resolution MSC. 530(106)) introducing S-100 approved by IMO at MSC106, on 11 Nov 2022
 - Amendments to the IHO Roadmap for the S-100 Implementation Decade (2020-2030)
 - A new IHO Resolution on S-100 to be approved at A-3 in May 2023
 - Dual Fuel Concept for S-100 ECDIS version 1.0 endorsed at C-6, submitted for approval at A-3
 - Future of the Nautical Paper Chart (automated production of paper charts derived from ENC content databases)
 - Hydrography: Underpinning the Digital Twin of the Ocean

The following key points were raised in the Assembly3 report:

- Decisions of Assembly3 can be found in link below
- In principle, the Assembly agreed to host its fourth session from 21 to 24 April 2026 in Monaco, subject to confirmation in due course by the Secretary-General, in liaison with the Government of the Principality of Monaco.

The following points were raised regarding IHO GIS and Databases:

- Yearbook (P-5) and Status of Hydrographic Surveying and Charting Worldwide (C-55) are regularly updated
- The IHO Online Form system has been used since March 2019
- An Esri-based GIS solution has been implemented for the efficient visualization of geospatial data stored in the Country Information System

IHO Outreach:

- Twice a year, the IHR provides an opportunity for Member States to publicise technical and other achievements in their region.
- An editorial board comprising a representative from each region has been established. As it was announced through IHO CL 03/2022, since 5 January 2022 the IHR has a new editor Dr Patrick Westfield from Germany.

Link: IHO Secretariat report incl Assembly3

Link: DECISIONS_3rd_SESSION_OF_ASSEMBLY_Proceedings.pdf (iho.int)

Actions requested of SAIHC:

• Note report and consider recommendations



- SAIHC is invited to encourage and propose to the IHO Secretariat High Level Visits to those States not yet IHO Member States.
 - Review entries related to IHO C-55 and P-5 Yearbook (annually)
- Consider submitting papers for publication in the IHR

2.2 Council 6 Report

The Council 6 report presentation was delivered by South Africa. Commander Theunissen directed delegates to the detailed C6 Report on the IHO website:

Link: https://iho.int/en/6th-council-meeting-2022

Council 6 took place on the 18 – 20 October 2022 in Monaco with 26 Council Member States present. The following key points included:

- Council6 main task was to formulate clear and decisive recommendations for the 3rd Session of the IHO Assembly, scheduled in May 2023. The following key items requested by the 2nd IHO Assembly were to:
 - Monitor progress and consider proposals of the Joint IHO-Singapore Innovation and Technology Laboratory
 - Report on the application of the ISO 9001 Principles experimentation for the Product Specification of ENC S-101
 - Update on best way forward for definition of hydrographic interest
 - Appropriateness and applicability of the new Strategic Performance Indicators (SPIs)
 - Roadmap (v.2) for the S-100 Implementation Decade
 - Update on Dual Fuel Concept (transition S-57 to S-101)
- Prominent issues of Council6 included the recommendations to be transmitted to the 3rd Session of the IHO Assembly, progress in implementing the IHO Strategic Plan and proposed revisions to the S-100 Roadmap
- The Council considered the proposed IHO Work Programme and Budget for 2023, and the three-year Work Programme and Budget for the period 2024–2026. It also identified priorities for the Council over the next three years

Action requested of SAIHC: Note the Report.

2.3 IRCC14/IRCC15 Report

Lucy Fieldhouse, IHO Capacity Building Co-ordinator gave a brief overview of the IRCC14 meeting, which was held from the 6 - 8 June 2022 in Bali. The full report can be found in the following:

Link: IRCC14 Report to C6

Key highlights of the Report include:

- Maritime Safety Information
- Capacity Building Management



- Achievements/outputs/conclusions
- Regional Hydrographic Commissions
- WENDWG / MSDI
- IRCC14 Actions/Recommendations
- IHO-EU Network WG.
- FIG/IHO/ICA
- CSB
- Ocean Mapping Programme and GEBCO Activities

The IRCC15 Meeting took place in Tokyo, Japan on the 12 – 14 June 2023. Lucy Fieldhouse, CBC briefly updated:

- SAIHC representation from UK, France, and Norway
- SAIHC Report for IRCC15 was sent for comment on 28 April 2023 and was submitted to the IRCC15 by the deadline. The next IRCC is due to take place on the 10-12 June 2024 in Galapagos, Ecuador.

Recommendations from the IRCC15 Report submitted to C7 can be found in the following:

Link: IRCC15 List of Recommendations Actions Decisions

Action requested of SAIHC: Note the Reports take any necessary actions.

Action 3: Definitive version of IRCC15 Actions and Recommendations to be sent by Secretary to MS following C7.

2.4 HSSC15 Report

IHO Assistant Director, Yong Baek summarised the HSSC15, which took place in in Helsinki (5 – 9 June 2023), for SAIHC delegates:

- An Industry Stakeholders' Session was arranged for two half day sessions, themed "S-100 Industry Perspective"
- The HSSC meeting was characterised by two main levels of discussion, Operational and Technical
- S-100 implementation roadmap and the S-100 timeline for the development of products specification and the S-100 implementation decade (2020 – 2030) Phase 1 and 2 were shared with delegates which showed the Route Monitoring and Route Planning mode
- It was decided at HSSC15 to establish a ECS PT (Electronic Chart System Project Team)
- BS PT (Baseline Portrayal Project Team), progressing the digital paper chart symbol library – however Member States will need to support by delivering resources to this project team
- Yong Baek talked through the progress in the development of S-1xx product specifications and work plans outside of S-100



Further information on the above points can be found on the IHO, HSSC15 and SAIHC web page:

Link: https://iho.int/en/hssc15-2023

Link: https://iho.int/en/saihc19-2023

HSSC16 will take place in Tokyo, Japan 27 - 31 May 2024.

Action requested of SAIHC: Note the Report.

Conversation: between UK and France around S-1xx. UK commented that they are aiming to generate full S100 capability by 2026, however realise this will be a challenge. France stressed that they are including the S124 as a priority to enable the full picture.

Action 4: UK and France to work together to produce a table on what data sets Member States are producing.

3.1 Summary of IHO Strategic Plan and RHC-owned SPIs

Yong Baek summarised in a presentation the Goals, Targets and SPI for 2026

- Goal 1: evolving the hydrographic support for safety for safety and efficiency of maritime navigation, undergoing profound transformation.
 Target: 1.1 Deliver standards for hydrographic data and specifications of hydrographic products, support regular production; coordinate regional and global services for their provision
 Target: 1.2 Develop standards, specifications, and guidelines in the areas of data assurance, including cyber security, data quality assessment
 Target: 1.3 Use capacity building and training to develop and increase the ability of MSs to support safety and efficiency of maritime navigation
- Goal 2: increasing the use of hydrographic data for the benefit of society Target: 2.1 Build a portal to support and promote regional and international cooperation in marine spatial data infrastructure (MSDI) Target: 2.2 Promote new tools and methods to accelerate and increase coverage, consistency, quality of surveys in poorly surveyed areas Target: 2.3 Apply UN shared guiding principles for geospatial information management to ensure interoperability and extended use of hydrographic data in combination with other marine-related data
- Goal 3: participating actively in international initiatives related to the knowledge and the sustainable use of the ocean
 Target: 3.1 Collaborate with other bodies who deliver capacity building and training to improve effectiveness of capacity building activities and programmes
 Target: 3.2 Improve knowledge of the world's seafloors
 Target: 3.3 Implement a comprehensive IHO digital communication strategy to enhance its visibility and accessibility to its work.



Full details of all SPIs are in the link below:

Link: IHO Strategic Plan summary

Capacity Building Co-ordinator Lucy Fieldhouse shared the IHO's 3 goals addressing the challenges identified in the Strategic Plan.

As MS have found reporting and measuring SPIs frustrating and difficult, Lucy commented that from the previous IRCC14 meeting, IRCC Chair Thomas Dehling proposed that figures could be calculated by the IHO secretariat with minimal effort by using information from the C55 documents.

3 SPIs relevant to the RHCs listed below:

- SPI 1.2.2: to authorize RENCs to provide CATZOC data of their respective ENC's distributed to IHO Secretariat
- SPI 2.2.1: to update regularly and at least annually the IHO Publication C-55
- SPI 2.3.1: to complete Questionnaire from the CL23/2022 CL23/2022



Link:

Lucy Fieldhouse reported that the CBSC established C-55 project team to consider improvements to support SPI reporting.

Action requested of SAIHC: Note the Report and take any necessary actions.

4.1 International Chart Co-ordination Working Group (ICCWG)

ICCWG Chair Alfons Van Craeynest (South Africa) shared his regret that South Africa were not able to be present in person at the Plenary, Alfons gave an overview of the updates from the 11th ICCWG, and summarised these main points:

- Actions outstanding update: please see link in report for more detail:
 - Action 3 Alfons proposed that action remains **ongoing**
 - $\circ~$ Action 4 UK are co-ordinating with India in this regard
- INT Charts Scheme (Region H) and the status of INT Charts
 - o 129 INT Charts produced, incl. 3 INT Charts covering Mauritius waters
 - 170 INT Chart panels incl. plans
 - 9 Schemed INT Charts
- Update to changes on S11, Part B: since last SAIHC in May 2022
 - o 6 new INT charts produced and 2 new editions
 - Approval of new INT numbers 7601, 7602 and 7603 to national series charts of Mauritius (produced by India as PCA) and published in August 2023



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

Revised process for the review and monitoring of INT charts:

New INT chart 7583 covers Approaches to the Port of Maputo at 1:30 000 replacing INT chart BA646. Approach ENC coverage GB400646 at 1:22 000 New INT chart 7662 covers the Port of Nacala at a scale of 1:20 000. Approach ENC coverage GB400649 replaced by GB40649A at 1:45 000 New INT chart 2551, previously accepted into the INT Chart Scheme produced by Portugal covering the Port of Luanda at 1:15 000

The following information can be found in more detail in the link below:

- 1. Maintenance of INT charts
- 2. Region H ENC coverage
- 3. Region H ENC overlaps
- 4. SAIHC ENC Scheme (Shimoni, Kenya), (Mombasa, Kenya)

Nicholas Swadling, UK, gave a brief overview on further ENC coverage developments in the Shimoni, Kenya region as well as potential gridded ENC scheme for Mombasa.

See slides 24 – 26 of the ICCWG Report for further details.

Comments: ICCWG Chair stated that the ICCWG commended the progress of the UK in ENC Rescheming which is part of the data improving programme. South Africa are focussing on implementation of S-100 and S-101 ENCs and will not be able to consider gridded ENC scheme in South African and Namibian waters for some time, due to capacity constraints.

Chair commented that the gridded ENC scheme is a significant undertaking, and the UK would be happy to share their experiences and template with other MS if they wish to adopt the grid scheme. Point of contact for this would be Nicholas Swadling, UK.

5. S-100 Implementation Roadmap:

At the WENDWG13 representatives of RHCs were invited to complete a S-100 readiness matrix. Several challenges were noted: response rate; complexity and question clarification.

Alfons highlighted the need for RHCs to establish S-100 Co-ordinator role if not done so already or assign the S-100 co-ordinator duties as appropriate.

Report from IRCC15 refers to recommendation 7,8,9,10 and Decision 24 relating to S-100 roadmap for the WENDWG (**see page 28** of the ICCWG report below)

Link: ICCWG Report

Action requested of SAIHC: To take note of report and see ONGOING actions 1 - 6 in the report.



5.1 Industry presentation – IALA

Gerardine Deloyne gave an overview presentation on International Association of Marine Aids to Navigation and Lighthouse Authorities, see link below:



5.2 Industry presentation – Kongsberg Discovery

Øystein Aasbø gave an overview presentation on Kongsberg Discovery, see link below:



5.3 Industry presentation – AML Oceanographic

David Wilson gave an overview presentation on AML Oceanographic, please see link below:



5.4 Industry presentation – Exail

David Vincentelli gave an overview presentation on Exail, please see link below



SAIHC19 Plenary Day 2 Wednesday 30 August 2023

6.1 MSDIWG update

The MSDIWG Chair Tim Lewis (UK) presented an update on MSDIWG and the activity during and since SAIHC18 and to SAIHC19 MSDIWG in August 2023.

Key actions from MSDIWG Annual report – January 2023:

- Note the annual MSDI report,
- Consider and update the WG on any MSDI activity in the SAIHC region,
- Provide requirements for data portal through the African Great Lakes & Rivers Sub-Working Group.

SAIHC MSDIWG have identified the following MSDI and Marine Spatial Plan (MSP) initiatives across the regions:

1. The Seychelles Marine Spatial Plan (MSP) Initiative



Link: Seychelles Marine Spatial Initiative

- 2. Marine Spatial Atlas for the Western Indian Ocean (MASPAWIO)
- Link: http://maspawio.net/
 - 3. African Coastal and Marine Atlas (ICAN)

Link: http://www.africanmarineatlas.org/

- 4. The BIOPAMA project
- 5. Nairobi Convention Marine Spatial Planning Workshop Held at Kenya marine and fisheries research Institute (KMFRI)

Link: Marine Spatial Planning Report

• IHO MSDI activities:

Following a joint presentation with the World Bank Group (facilitated by the UK Geospatial Commission), and being sponsored by the IHO, OGC, and ISO at the Twelfth Session of the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM12) in New York during August 2022, UKHO contributed the Lead Author of the IGIF-MSDI Maturity Roadmap (Dr Gerald J Wong) to a World Bank Group geospatial maturity assessment mission to the Republic of the Philippines in October 2022.

Recently released image pack and diagnostic spreadsheet via the OGC's FMSDI initiative:

Link: Press release - MSDI Maturity Roadmap

Link: https://www.ogc.org/igif-msdi-maturity-roadmap/

- Training and Capacity Building requirements/opportunities: A collaborative four-day MSI course in conjunction with NIOHC and RSAHC has been developed which will be a fantastic opportunity for SAIHC members
- Related MSDI activities and successes:
 - 1. SAIHC MSDI chair together with the AGL&RWG recently held a successful two-day meeting hosted by Malawi
 - 2. MSDIWG letter 2-2021 regarding data portal requirements
- Future initiatives
 - 1. Focus on supporting priority requirements discussed at AGL&RWG
 - 2. Focus on assisting Hydrographic Offices on S-100 implementation



SAIHC19 MSDIWG next steps:

- Consider prioritising support to the S-100 roadmap in conjunction with wider IHO support network
- Update and endorse TOR changes to reflect S-100 support and review for gender inclusive language
- Continue to work with the African Great Lakes & Rivers Sub-Working Group and the Regional Centre for Mapping of Resources for Development
- Review TORs/ROPS for gender inclusive language and S100

Link: MSDI WG Report



Attachment: WG presentation 202

Comments: Norway supports the prioritisation of the S-100 roadmap and, MSDI Chair shared that the IHO have recently endorsed an updated version of C-17 MSDI Framework which will be a valuable resource for all to refer to.

Action 5: MSDIWG to develop TORs to consider S-100 development

Action 6: Provide input to TORs/ROPS for gender inclusive language and S100 support

Action 7: Provide any further updates to report provided in January 2023 to MSDIWG Chair, UK <u>tim.lewis@ukho.gov.uk</u>

Action 8: Provide any feedback to the MSDI IGIF Maturity Roadmap quick start guide to MSDIWG chair <u>tim.lewis@ukho.gov.uk</u>

Actions requested of SAIHC:

- Note MSDI report link above
- Register interest in the MSI course taking place from 23 25 October 2023 to SAIHC Capacity Building Coordinator <u>lucy.fieldhouse@ukho.gov.uk</u> or direct to SAIHC MSDIWG Chair <u>Tim.lewis@ukho.gov.uk</u> - SAIHC CL8 refers

6.2 Capacity Building Report

Capacity Building Coordinator Lucy Fieldhouse (UK) updated on CB matters:

- CBSC21 Intersessional: VTC 13 March/ Meeting: 7-9 June 2023, Tokyo: Agreed funded activities not completed to be carried over into 2023 Workplan Key items discussed: updates by the project teams and the outcomes from A-3 See pages 3 – 6 of report below for information on projects
- Assembly 3 outcomes relevant to CBSC: CB budget set at 60 000Euros (CB demand: 578 000Euros) Establish taskforce to explore alternative fund generation for CB and IHO initiatives



- Current IHO Opportunities please see **pg.8** in report link below
- SAIHC CB funding update: Technical visits to Tanzania, Comoros, and Madagascar in 2022/23 with various other activities which can be viewed in the report **on pages 9-10**
- SAIHC CB Workplan and proposals 2023 2025 on pages 11-13

Comments: Chair requested endorsement from the MS for the CB funding 2025 proposal made to the IHO, there were no objections from MS online and in the room and, so the Chair endorsed the proposal. Chair requested that MS think seriously about what Capacity Building funds they need as the CB funds, as it stands, are inadequate for the purpose for which we need to use them. Malawi would like to see funding for 'Train the Trainers' in their region, due to financial constraints. This would allow English speakers to train non-speaking individuals in their own region.

Link: Capacity Building Report

Capacity Building Workplan

Actions requested of SAIHC:

- Note the report
- Consider contributing to the Empowering Women in Hydrography Project
- Consider contributing eLearning Training Material the IHO eLearning Centre
- Consider and endorse the proposals for IHO CB funding for 2025

6.3 African Great Lakes & Rivers Sub-Working Group Report

Interim AGL&RSWG Chair Nick Swadling (UK) gave an update on activities from the 5th and 6th Meeting. Key points included:

- 5th meeting hosted in Lilongwe, Malawi 5-6 December 2022 Highlights from this meeting included:
 - MSI development of an App to enhance MSI in region
 - MSDI discussions on how regional MSDI WG can better incorporate needs of inland waterways
 - Hydrographic surveys and understanding water levels
 - User requirements, charting now and in the future
 - Data sharing improving the flow of data
 - Data collection demonstration in Monkey Bay sponsored by Kongsberg Discovery, demo by GeoSystems Nuno Gomez and team
- 6th meeting hosted in Mauritius 28 August 2023
 - Highlights from this meeting included:
 - Update on regional data collection activities
 - Prioritisation of new coverage navigational routes and ports
 - Survey metadata dataset
 - Data portal development



Comments: Interim Chair, Nick Swadling shared that the IHR note will be published in the November 2023 edition of the IHR, produced by the UKHO with contributions from Malawi, Kongsberg, and Geosystems.

Finally, Nick Swadling highlighted that the permanent position of Chair has yet to be filled and encouraged MS to come forward to fill this position.



Attachment:

Action requested of SAIHC: Note the Report and take any necessary actions (see page 7 of the report for open actions)

6.4 IHO-EU Network Working Group Report

SAIHC Representative to the IENWG, Laurent Kerleguer, France presented an overview of the updates and activities of the WG. See overview below:

- IHO and EU value the ongoing collaboration which is now celebrating 10 years since the signing of the MOU.
- IENWG13 met in France, May 2023 covering EU policies of interest for the IHO, projects and strategy
- European Maritime Day (EMD) was attended by IENWG members in May 2023 discussing global issues
- IENWG way forward:
 - o Maritime policies- continue monitoring and influencing EU policies
 - Development of S-100 products and services
 - Capacity building promote development of programs, for safe sea lines with East Asia and Africa
 - Data collection- develop0 common acquisition campaigns of bathy data in EU basins
- Information sharing about EU projects (please see pages 7–9) for more information

Action requested of SAIHC:

- Note the Report
- The review of the strategy and the way forward for the IENWG
- The new development of the IENWG in support to Capacity Building in connection with IRCC developments on extending CB fund

Link: IENWG Report



The Chair invited members to present a summary of their national report to the SAIHC delegation. All national reports and accompanying presentations (where created) can be found on the IHO website <u>https://iho.int/en/saihc19-2023</u>. Additional comments, actions and decisions are summarised below (please note the below is not in presenting order).

7.1 Angola National Report

Captain Jose Santana, presenting online shared the Angola National Report with delegates. Please see attached for more information.



Attachment:

Actions requested from SAIHC:

- Support the training of technicians in multibeam and single beam surveys
- Support national efforts to hold seminars and workshops on the importance of hydrography
- Support the existing cooperation initiative between AMN and IHP

Comments: Portugal asked for slide 9 to be shown. Paula shared that the first two out of the 5 charts were INT charts, the remaining charts were from the old portfolio. These are proposed schemes for new INT charts in this area. Paula confirmed that when there are new surveys in this area, Portugal will be able to make the new INT charts for Angola. Angola responded with gratitude.

7.2 France National Report

Laurent Kerleguer, presenting online shared the France National Report with delegates.

Please see links for more information.

FRANCE NR

FRANCE PRESENTATION

Comments: Madagascar commented that the Institute in charge of hydrography FTM was not provided with any information about the two survey missions in Madagascar. They would be keen to receive the data that was collected in Madagascan waters. France responded that the surveys were conducted under Madagascan authorisation and with Madagascan observers on the ships. There seems to be inter-agency issue as the team Nary works for were not sighted of this. France confirmed they will be in touch with Nary and the team to share this data.

Actions of SAIHC: To take note of the report



Agenda Item 7.2: National Report of France

Written Statement by the Republic of Mauritius

The Republic of Mauritius wishes to place on record its strong objection to France's claim in its National Report that the Island of Tromelin is a French territory.

The Island of Tromelin forms an integral part of the territory of the Republic of Mauritius and is not a French territory. The Republic of Mauritius has full and complete sovereignty over the Island of Tromelin, including its maritime zones.

The Republic of Mauritius rejects France's sovereignty claim over the Island of Tromelin and does not recognize the validity of the inclusion of the Island of Tromelin in the French Southern and Antarctic Lands (TAAF) or the Scattered Islands.

The Republic of Mauritius requests that this statement be recorded in the minutes of the 19th meeting of SAIHC.

French written statement in response to the Mauritian written statement related to the French national report for the SAIHC19 meeting 28 August 2023

The French authorities do not recognise any legal value in the Mauritian declaration, which fails to consider that the Island of Tromelin is a French territory over which France has constantly exercised full and total sovereignty.

Thus, France enjoys sovereignty, sovereign rights or jurisdiction under international law in the maritime zones adjacent to the Island of Tromelin.

SAIHC meetings are not the appropriate place to discuss territorial sovereignty issues, and French authorities will continue to hold constructive dialogue with the Republic of Mauritius on this matter.

France requests that this statement be recorded in the minutes of the 19th SAIHC Conference.



7.3 Kenya National Report

Lucy Mburu, presenting in the room shared the Kenya National Report with delegates.

Please see link below for presentation.

KENYA PRESENTATION

Comments: UK as PCA to Kenya, offered the use of the UK Risk Matrix which would help to highlight to the Kenya Government Department where the priorities and highest risks are. This will then allow Kenya to obtain more funding for allocated resources. Kenya would be grateful for the UKs support and the opportunity to gain experience from the UK.

7.4 Mauritius National Report

Devendra Madhow, presenting in the room shared the Mauritius National Report with delegates. Please see links below for more information.

MAURITIUS NR

MAURITIUS PRESENTATION

Comments: Chair applauded the Marine Spatial Plan and that other countries should be considering how they integrate the marine environments with the land environments. Especially as we shift to a generation of offshore renewable energy. Assistant Director, Yong Baek made an observation about Mauritius CATZOC data, which has not been received by the IHO. Yong suggested that a discussion between India and Mauritius should take place to discuss the sharing of data with the IHO. Mauritius commented that this is well noted and will discuss with India.

Actions for SAIHC: Note the report and presentation

7.5 Mozambique National Report

Humberto Mutevuie, presenting in the room shared the Mozambique National Report which can be found in the attached below.



7.5_MOZAMBIQUE National Report_SAIH

7.6 Norway National Report

Evert Flier, presenting in the room shared the Norway National Report, please see links below.

Link: NORWAY NR

Attachment:

Link: NORWAY PRESENTATION



7.7 Republic of South Africa National Report

Commander Christoff Theunissen presented the South Africa National Report online. More information in links below.

Link: <u>RSA NR</u>

Link: RSA PRESENTATION

Comments: Norway commended South Africa on taking the lead in integrating crowdsourced data into their databases. Chair considered how CSB could be used in conjunction with existing surveys and data science to increase coverage, such as satellite bathymetry.

Action requested of SAIHC: MS are encouraged to participate and contribute towards CSB projects in aid of the GEBCO Seabed 2030 project, report CSB activities to SAIHC CSB co-ordinator.

7.8 Seychelles National Report

N/A

7.9 United Kingdom National Report

Tim Lewis, presenting in the room shared the UK National Report. See links below for further information.

<u>UK NR</u>

UK PRESENTATION

Actions requested of SAIHC: Note the National Report and presentation

7.10 Comoros National Report

Mohamed Arcene presented the Comoros National Report in person, see attached below.



Comments: Lucy Fieldhouse, Capacity Building Co-ordinator acknowledged the excellent work in progress that Comoros is making following the technical visit and to reach out if there is anything else they could help with.

7.11 India National Report

Commodore HA Hardas presented the India National Report in person. Link to report below.

Link: INDIA NR





Comments: Chair observed the ability to maintain competence within the surveying community and how UK is thinking about working with industrial and commercial partners to ensure a continuous flow of surveyors which can operate in the new era of autonomous ships.

7.12 Madagascar National Report

Nary Iarivo, presented in person the Madagascar National Report. See links below.

MADAGASCAR NR

MADAGASCAR PRESENTATION

Comments: Lucy Fieldhouse congratulated Madagascar on the progress thus far since the technical visit by France. David Vincentelli, Afhy, commented that the Afhy (Froncophone Hydroghraphic Association) can propose training some accessible for free, in French language which they can make available to francophone members which would not conflict with other training received.

7.13 Malawi National Report

Mike Humza presented the Malawi National Report in person. Links below.

MALAWI NR

MALAWI PRESENTATION

Comments: Chair asked Malawi if the agency is concerned that there has been no hydrographic training since 2002, and about the maintenance of that skill and competence? Chair shared that as our surveyors get increasingly older, we need to make sure there is a succession plan in place. Mike responded that the Government are aware of the funding issue and are doing all they can to support, however they are relying on stakeholders to provide their expertise and support.

7.14 Namibia National Report

Lukas Kufuna presented the Nambia National Report in person. See links below.

NAMIBIA NR

NAMIBIA PRESENTATION

Actions requested of SAIHC:

- Assist with training of the IHO recognised Hydrographic Surveyor
- Namibia to become IHO Member State

7.15 Portugal National Report

Paula Sanches, presented the Portugal National Report online, see links below.

PORTUGAL NR

PORTUGAL PRESENTATION



Action requested of SAIHC: To note National Report and presentation

7.16 Tanzania National Report

Apologies received – report would still be welcomed to share with Member States.

7.17 Uganda National Report

Brian Musinguzi presented in person the Uganda National Report. Please see below.

UGANDA NR

Actions requested of SAIHC:

- Note report
- Consider Uganda in capacity building programs of IHO and SAIHC

Comments: UK, Nick Swadling thanked Uganda for the update this year. Nick asked if the Ministry would be able to release data so that it could be used not just for charting but other purposes. Brian responded that this should be possible as Safety of Navigation would be enhanced, and that it is a discussion that can take place.

7.18 Zambia National Report

Dunstan Kangwa presented the Zambia National Report in person. See below for further information.

ZAMBIA PRESENTATION

Chair commended the construction of the new canal, noting the exceptionally low carbon way of moving large volumes of trade internally. Noting that in Europe we are starting to see greater use of sea lanes.

The Chair thanked all Members and Associate Members for delivering informative and interesting National Report updates.

8.1 SAIHC Disaster Response Plan

Commander Theunissen, South Africa introduced the SAIHC Disaster Response Framework and asked Members to read it in slower time. He commented that the Framework had not changed since the last meeting. However, there is an outstanding action from SAIHC18, and requested all MS to send their contact details in the Annex A of the response plan below, as so far only UK and France have submitted information.

Link: Disaster Response Plan

Comments: UK, Tim Lewis suggested using a WhatsApp group for communicating emergencies instead of filling out a spreadsheet during an emergency. Chair asked the room if they would like to see a WhatsApp group created for Disaster Response, there was a large consensus from the room. Tim Lewis suggested that the SAIHC Secretary set up the group with those that are interested in joining.



David Vincentelli suggested that the IFHS (International Federation of Hydrographic Society) directly or through the Regional Hydrographic Society, should be included in this group, so that they could provide an update to which commercial assets are available in the area or supply possible available assets in case of emergency. In general suggested that the industry and academic, by the mean of the IFHS, become part of disaster response (asset provider, support, personnel, expertise).

Chair mentioned, MAP Action. UK, Tim Lewis shared that MAP Action have valuable experience and credentials of supporting in this region. Tim shared that he would reengage with the organisation as well as SEAGNEP who have a rich database.

Action 12: SAIHC Secretary to send link to Disaster Response Framework. Completed – emailed and in Annex A in the link above.

Action 13: SAIHC participants, including the Hydrographic Society, to provide contact details for SAIHC Disaster Response Plan to South African NAVAREA Coordinator by 15 September 2023.

Action 14: SAIHC Secretary to establish a SAIHC WhatsApp group to enable easier communication and sharing of information. In progress

8.2 Maritime Safety, World-Wide Navigational Warnings Service and NAVAREA Coordination (MS WWNWS & NC)

NAVAREA VII Coordinator Commander Christoff Theunissen (South Africa) provided an update on NAVAREA VII activities in the region since the last meeting in the SAIHC region.

Significant events:

- Increased number of SafetyNET/SafetyCAST Messages / Coastal Navigational Warning Messages
- Actions have been taken to improve safety on Lake Victoria
- Thanks to UKHO, AGL&RWG, East African Community LVBC for the work to address gap in navigation
- No signed agreement between SA and Iridium yet
- No issues using Telkom Radio Services to broadcast NAVAREA VII messages
- Contingency plans exist between SA, France, and Australia for dissemination of MSI via SafetyNET
- Ongoing capacity building initiatives identified

Challenges/concerns:

- **Angola:** lack of regular reporting on MSI related matters Regular reports of movements of oil and gas rigs
- **Mozambique Institute of Hydrography and Navigation:** MSI reports consist of Aids to Navigation being out of order and the concern that no other information regarding maritime safety is generated and communicated to SA
- Namibia: NAVTEX broadcasts intermittent, MSI reports consisting mainly of Aids to Nav, port constructions and gunnery exercises
- Madagascar: Few MSI received, mainly consist of Aids to Nav being out of order



- Iles Comoros: Complete lack of communication
- Lack of transmitting stations: north of SA, namely Angola; Mozambique and Madagascar

Recommendations:

- Member States are encouraged to communicate MSI matters to the NAVAREA VII Coordinator to disseminate these potentially hazardous matters to mariners operating in the relevant areas of interest.
- Member States are invited to contact the SANHO for enrolling in the MSI eLearning package.

Link: MSI NAVAREA Assessment

Link: MSI NAVAREA Presentation

Comments: Lucy Fieldhouse, Capacity Building Co-ordinator congratulated SA for the work that they are doing in this area and reminded Member States about the upcoming MSI course in October for their region, encouraging others to use the course to assist in succession planning.

India kindly shared their Warning Information and Navigation Services webpage, which is a single screen solution available to mariners. <u>www.Hydrobharat.gov.in</u>

9.1 Crowd Sourced Bathymetry (CSB)/ SeaBed2030

CSB Coordinator Commander Christoff Theunissen (South Africa) gave an update on the current status of CSB:

- SAHNO (SA Navy HO) agreement to participate in a trial with IHO and Seabed2030 by deploying data loggers in RSA waters
- Monaco explorations conducted an Indian Ocean Expedition in Nov 2022, support by SAHNO in a Seabed2030 co-ordinator capacity

Please see CSB presentation below (pages 8-13) for key CSB activities raised from CSBWG13.

Link: CSB REPORT

Link: CSB PRESENTATION

Action for SAIHC: report the state of regional and national ocean mapping efforts to SAIHC SCB co-ordinator

Action 15: Consider and update the SAIHC CSB Coordinator on any CSB activity in the SAIHC region

Action 16: Note the action items on CSB all MS from CSBWG13

Action 17: Offer a position response to the IHO or IRCC Circular Letters on CSB Action 18: MS not part of the CSBWG to consider joining and/or attending the CSBWG (if only, online)



Comment: Norway, Evert Flier stressed that CSB is moving ahead especially in regions like SAIHC. Evert stressed that more participation from this region is needed. France, Laurent Kergleguer congratulated SA on their excellent presentation, however, noted that there needs to be a clear definition for CSB. In the CSB presentation some of the examples given in his view did not fall under the CSB 'B12' definition, for example the Monaco expedition which is a Scientific Survey not B12. Thought should be given to evolving the definition. Norway agreed that they need to be clear in their definitions however not to the detriment of all the data out that could be captured.

SAIHC19 Plenary Day 3 Thursday 31 August 2023

9.2 International Association of Lighthouse Authorities (IALA) Geraldine Delanoye presentation moved to 5.0.

9.3 Port Management Association of Eastern and Southern Africa (PMAESA)

Col. Andre Ciseau for PMAESA sent in the attached presentation, we could not make contact with PMAESA on the day:



9.4 General Bathymetric Charts of the Oceans (GEBCO) and Seabed 2030

Evert Flier, Chair of GEBCO Guiding Committee gave a presentation on the updates for GEBCO and Seabed 2030, summarised here:

- Seabed2030 is the accelerator of GEBCOs aim, which is to provide authoritative, publicly available bathymetry data sets of the world's oceans
- 15.9% of the SAIHC region has been mapped thus far, request for 1 x depth sounding only, not high resolution
- CSB developments:
 - Work started to get IHO CSB initiative endorsed by UN Decade action
 - West Indian Ocean bathy (WIObathy) project objective: To conduct a regional data mining effort to identify existing bathymetry data, consolidate it to produce the first-ever bathymetry map of the WIO region

Link: GEBCO & SEABED2030 Presentation

Comment: UK, Tim Lewis feels like the mapping of the seabed could be a more challenging task for some RHCs over others and wondered whether Seabed2030 or SPIs had considered any type of prioritisation. Evert responded that there is a special task within the project team looking at each region. Chair encouraged colleagues to share their data.



Action 20: SAIHC requested to embrace and support the project "collation and compilation of multi-scale and multi-resolution bathymetric data in the Western Indian Ocean (WIObathy) by Kenya Marine and Fisheries Research Inst (KMFR) to establish cooperation in the West Indian Ocean to support data mining in the region.

10.1 Industry presentation – TCarta

Kyle Goodrich introduced TCarta followed by his presentation which can be found in the attached below.



Comment: France thanked Kyle for an impressive and interesting presentation, sharing that France strongly believes that satellite derived bathymetry is a real asset for hydrographic knowledge in coastal areas. Laurent, questioned if the algorithm is statistically or physically based? Kyle responded that they use a physical and empirical based model.

Chair applauded TCarta on the impressive and exciting technology, which is demonstrably a more accurate way of charting, particularly when verified. Chair directed a question to IHO Assistant Director Yong Baek, 'could we seek to update all RHC's on the work that is being undertaken to improve new technologies and how we could use these to better effect?'

Yong Baek responded that the IHO HO WGs are investigating whether new technology should be provided to MS and other stakeholders as a guideline for charting or for providing data for other purposes. Yong suggested that he would recommend this to the IHO if the technology is used for charts or providing contribution to the seabed.

Norway, Evert Flier stated that he will be sharing some of these slides with the RH Commissions that he will be attending in the coming months.

10.2 Industry presentation – Teledyne Geospatial

Juan Carballini ran through the Teledyne CARIS perspectives on S-100 presentation which can be found in the attached below.



Comment: Chair thanked Juan for the interesting presentation and the exciting process and rapidity that surveys can move through the system, to provide the user updates in near real time in the future. Norway fed back that since Teledyne took over Caris, they have experienced a downturn in support received. Norway would like to see improvements in the levels of support. Juan responded that he agrees things have changed, as they used to be a family run business which is now operating under a large company with rules that need to be



followed. Juan stressed that the level of support and quality of software they provide is still the same and is happy to discuss further.

10.3 Industry presentation – Oshen

Anahita Laverack shared Oshen's story, see attached below.



Attachment: Presentation_SAIHC1

Comments: Chair thanked Anahita for the progress that they have made in such short time and the profile that they have attracted.

10.4 IGO presentation – Intergovernmental Standing Committee on Shipping (ISCOS) Jonah Mumbya, shared the below presentation:

| | PDF | |
|------|------|-------|
| 10.4 | ISCO | S.pdf |

Attachment:

Comments: UK, Tim Lewis thanked Jonah for the positive update and how great it is to hear from other organisations attending SAIHC, helping to bring SAIHC together as a network. Tim reflected on how ISCOS had helped link the UKHO with stakeholders in Tanzania and would value continuing this partnership. Tim proposed a further discussion as UK would be interested in an MOU with ISCOS. Tim shared how an MOU with PMAESA unlocked partnerships with Somalia ports where they had no contact before. Tim suggested that ISCOS should look at representation at the North Indian Ocean Regional Hydrographic Commission.

Norway feels that with GEBCO/Seabed2030, there is terrific opportunity for ISCOS to embrace the initiative by Kenya, to convince other players in the region to share their data. Chair shared Norway's sentiments on how having organisations like ISCOS attend RHC's would help in unlocking some of the data sharing. Chair thanked Jonah for joining SAIHC19 and is looking forward to working with ISCOS in the future.

11.1 SAIHC Input to IHO Meetings – Report to IRCC16 and 7th IHO Council

considerations

The Chair welcomed MS to use this opportunity to raise any concerns with the IRCC.

- Hydrography is a wider community of interest and RHC's should welcome other organisations and industry to share best practice
- Report on status of Seabed2030 as a Strategic Performance Indicator
- Challenge and the direction SAIHC will take with S-100, noting the diverse set of both coastal and non-coastal states various levels of hydrographic maturity should be highlighted and what SAIHC are aiming to do



- Support from the Capacity Building fund through the Hydrographic Awareness • Seminar has been vital to gain the important level of attendance of countries that would not have the means to attend if it were not for this CB funding
- How will we as a SAIHC region sustain the cartographic and survey skills that are • decaying over time

12.1 **IC-ENC RENC Update**

Jake Sharland, Distribution Manager (IC-ENC) in the UK presented online, see below:

SAIHC19 IC-ENC Presentation.pptx

12.2 S-100

Attachment:

Tim Lewis presented the S-100 update which is attached below:



Primar RENC update 12.3

Evert Flier, Norway presented the RENC presentation, see link:

Link: Primar RENC Update

13.1 Any other Business

1. Attention was brought to the WENDWG letter emailed on 25 August 2023.

Message from WENDWG Chair: I would appreciate it if RHCs (and HOs) could respond on the questions to me by the 30 November 2023 at the latest. See Annex A&B in attached:



Attached to be actioned by SAIHC MS:

- 2. Tim shared that he is the representative for SAIHC on the International Hydrographic Review (IHR) board. Tim encouraged MS to submit articles or notes from the SAIHC region into the IHR as this is a terrific way to highlight the work in the region and would assist in any bids for capacity building funds.
- 3. David Vincentelli commented that after listening to the MS challenges in the region, he wondered if extending an invite to the World Bank or other sponsors would help with regional project sponsorships.



13.2 Election of Chair and Vice Chair

Chair Peter Sparkes requested for nominations of Chair and Vice Chair for the next SAIHC20. Mauritius offered to remain as Vice Chair for another year which was gratefully accepted by Chair and MS. After no MS coming forwards for the Chair position, Norway commented that they would support UK if they wished to remain as Chair and welcomed the continuation of Mauritius as Vice Chair.

Decision:

After no other nominations Chair was content that the UK would Chair and secretariat for the next SAIHC and confirmed Mauritius as Vice Chair.

The Chair and Vice Chair confirmed as:

Chair: Rear Admiral Angus Essenhigh (UK)

Vice Chair: Mr. Mohummad Shamad Ayoob Saab (Mauritius)

Chair introduced NH, Rear Admiral Angus Essenhigh as the incoming Chair for SAIHC. Rear Admiral Essenhigh is hugely thrilled to take on this opportunity.

Chair wished everyone all the best for the future as he hands over to the new Chair, Angus Essenhigh.

13.3 Review of Actions and Decisions

Secretary ran through the actions generated throughout the conference and all actions were agreed. These can be found in **Annex A**. Please note the deadline dates.

13.4 Details of next meeting

Discussions were held to agree the date of the SAIHC20 meeting with 16 - 19 September 2024 initially suggested. The Chair asked for nominations to host SAIHC20 in 2024, with no other Member States coming forwards apart from the UK the Member States accepted the offer for UK to host in Kenya. UK, Tim Lewis noted that there will be a Hydrographic Awareness Seminar preceding the SAIHC20.

There was no discussion regarding an Intersessional meeting date.

Closing Remarks

Chair, Peter Sparkes for the final time closed the SAIHC meeting by thanking everyone for their cooperation in productive discussions, to the speakers for their interesting presentations, the secretariat, representatives of the working groups. An incredibly special thanks to our hosts Mauritius, Commander Sachdeva and his fantastic team who have done themselves proud.





SAIHC Actions 2023 DRAFT 18.9.23.

| Α | nr | nex | A |
|---|----|-----|---|
| | | | |

Legend White: Open

Light grey: Continuous

Orange: Propose close

Light Green: Completed or Closed

| No. | Ref | Action | Action By | Due date | Status |
|-----|-------------|---|--------------------|-------------|---|
| 1. | SAIHC19-1.3 | SAIHC Secretary to remove closed actions from the SAIHC18 Actions List | Secretary | 31/08/2023 | COMPLETED |
| 2. | | SAIHC Secretary to circulate definitive version of the statutes and submit to IHO for uploading | Secretary | 18/09/2023 | |
| 3. | | IRCC15 Actions and Recommendations – to be sent out separately. | SAIHC Secretary | 18/09/2023 | COMPLETED Thomas Dehling, IRCC Chair updated secretary that the IRCC15 report will be finalised after C7 in October, however the following link is the most up to date: IRCC15 List of Actions Decisions Recommendations |
| 4. | | FR and UK to develop survey for SAIHC to understand S-100 priorities | FR/UK | 01/10/2023? | |
| 5. | SAIHC19- | MSDIWG to develop TORs to consider S-100 development | MSDIWG | | |



| No. | Ref | Action | Action By | Due date | Status |
|-----|-------------|---|-------------|------------|------------|
| 6. | | SAIHC WGs to consider TORs and RoPs for Gender Inclusive Language | SAIHC WGs | 30/05/2026 | |
| 7. | | Provide any further updates to report provided in January 2023 to MSDIWG Chair, UK tim.lewis@ukho.gov.uk | All members | | CONTINUOUS |
| 8. | | Provide any feedback to the MSDI IGIF Maturity Roadmap quick start guide to MSDIWG chair | All members | | |
| 9. | SAIHC19-6.2 | Consider contributing to the EWH Project by SAIHC20 | All members | 15/08/2024 | CONTINUOUS |
| 10. | | Consider contributing to the eLearning Training Material - the IHO E-Learning Centre | All members | SAIHC20 | |
| | | Members to contact SAIHC CB Coordinator lucy.fieldhouse@ukho.gov.uk with Capacity Building requests for 2025 CB funding | | 1 December | |
| | | consideration. SAIHC Secretary to send link to Disaster | All members | 2023 | |
| 12. | | Response Framework - Obtain from SA SAIHC participants, including the Hydrographic Society, to provide contact details for SAIHC Disaster Response Plan to South African | Secretary | 31/08/2023 | COMPLETED |
| 13. | | NAVAREA Coordinator by 15 September 2023 | All members | 15/09/2023 | |



| No. | Ref | Action | Action By | Due date | Status |
|-----|-------------|---|------------------------|------------|--|
| 14. | SAIHC19-8.1 | SAIHC Secretary to establish a SAIHC WhatsApp group to enable easier communication and sharing of information | Secretary/Tim Lewis | 25/09/2023 | IN PROGRESS |
| 15. | SAIHC19-9.1 | Consider and update the SAIHC CSB Coordinator on any CSB activity in the SAIHC region | All members | | |
| 16. | SAIHC19-9.1 | Note the action items on CSB all MS from CSBWG13 | All members | | |
| 17. | SAIHC19-9.1 | Offer a position response to the IHO or IRCC Circular Letters on CSB | All members | | |
| 18. | SAIHC19-9.1 | MS not part of the CSBWG to consider joining and/or attending the CSBWG (if only, online) | All members | | |
| 19. | | | All members | | |
| | | SAIHC requested to embrace and support the project "collation and compilation of multi-scale and multi-resolution bathymetric data in the Western Indian Ocean (WIObathy) by Kenya | | | |
| 20. | SAIHC19-9.4 | Marine and Fisheries Research Inst (KMFR) to establish cooperation in the West Indian Ocean to | All members | | CONTINUOUS Agenda item for SAIHC20 or build into GEBCO agenda item |



| Nc | . Ref | Action | Action By | Due date | Status |
|----|---------|---|-----------|------------|-----------|
| 21 | SAIHC19 | Secretary to share the presentations/ pictures which will include the links to all videos | Secretary | 18/09/2023 | COMPLETED |

PREVIOUS ACTIONS

| No. | Ref | Action | Action By | Due date | Status |
|-----|-----------------------|---|--|---------------------------|--|
| 3 | | Complete a Gap Analysis for each goal in the IHO Strategic Plan 2021-2026 (or report on progress) | | C-6 18-20 October 2022 | OPEN – PROPOSE CLOSE |
| | | All Member States to supply any further updates to report provided in April 22 to MSDIWG Chair (UK) | All MS | | CONTINUOUS- taken forward to SAIHC19 actions |
| | | Consider contributing to the Empowering Women in Hydrography Project | All MS | | CONTINUOUS- taken forward to SAIHC19 actions |
| | AGL&RSWG | SAIHC Chair to write letter to Government bodies of members to encourage sharing of data to support safety of navigation - Members comments on closing action pls | | | OPEN - PROPOSE CLOSE successful WG meeting convened |
| | Now: SAIHC19-8.1.1 | complete Annex D of Disaster Response | All MS (except South Africa and India) | | CONTINUOUS- taken forward to SAIHC19 actions |



| No. | Ref | Action | Action By | Due date | Status |
|-----|-----|---|-----------|----------|--|
| | | Consider and update the SAIHC CSB Coordinator on any CSB activity in the SAIHC region. | All MS | | CONTINUOUS - taken forward to SAIHC19 actions |
| | | and/or attending the CSBWG. | All MS | | CONTINUOUS- taken forward to SAIHC19 actions |
| | CSB | SAIHC Members and Associate Members to contact SANHO to obtain data gatherers provided by NOAA to support data collection for seabed2030. | All MS | | CONTINUOUS – taken forward to SAIHC19 actions |