



**MINUTES OF THE 14<sup>TH</sup> SOUTHERN AFRICAN AND ISLANDS  
HYDROGRAPHIC COMMISSION (SAIHC) CONFERENCE  
La Réunion  
6-8 September 2017**

## **1. OPENING AND ADMINISTRATIVE ARRANGEMENTS**

Rear Admiral Tim Lowe, the Vice-Chair of SAIHC, started proceedings and welcomed all participants to the 14<sup>th</sup> SAIHC Conference. In his opening remarks, he mentioned the Chair, Captain Theo Stokes, who has just taken over as Hydrographer of South Africa. Regrettably, Captain Stokes was unable to attend and chair the meeting, and had asked Rear Admiral Tim Lowe to chair in his absence.

The Chair outlined the significant changes to the Governance of the IHO since the last SAIHC meeting, including the new Convention which has just come into force, the 1<sup>st</sup> Assembly, and the election of the new Secretary-General and Directors. He congratulated the previous SAIHC Chair, Abri Kampfer, on his selection as the new IHO Director, and thanked him for all his hard work as SAIHC Chair, bringing this commission forward over the last 10 years, and welcomed him to his first SAIHC meeting as IHO Director.

He referred to the Chair's comments at SAIHC 13, to encourage MS in the region to attend, he said it was fantastic to see Namibia and Seychelles, and was still hoping that Comoros and Kenya, both registered, may turn up later, however three nations had been unable to attend and had cancelled their participation at short notice. He highlighted the importance of maintaining a strong communication link outside of the meeting in order to support our region and taking it forward from a hydrographic perspective.

He thanked France, Laurent Kerléguer and Patricia Morgand, as the hosts, and passed on thanks to Bruno Frachon, for all the hard work in organizing the administration of bringing together and allowing us to gather in La Réunion, and for a very welcome and enjoyable Ice Breaker.

The Chair invited France, the host, to say a few words.

Laurent Kerléguer stated that France was pleased to host the meeting, having last hosted in 2009 at La Réunion, however he was disappointed with the attendance considering the level of registration, and stated that it was essential for co-operation. He hoped for a productive meeting and a good exchange of views.

The Chair encouraged engagement, particularly with the 1<sup>st</sup> Council meeting taking place in October, and welcomed any thoughts for the closed session on Friday morning on what we want as a region for the Council to consider, based on the Council Agenda, this would be fed back to Captain Theo Stokes who will attend Council as the nominated member for our region.

The Chair then asked for a quick introduction from everyone present (see Annex C for List of Participants). Evert Flier, Norway, shared the concern from the Chair and France on the lack of attendance and suggested a discussion on how to secure better participation, the Chair agreed to add this to the Agenda.

The Chair invited Abri Kampfer, IHO Director, to conduct the official opening of the 14<sup>th</sup> SAIHC.

## **Welcome from the IHO Director**

IHO Director, Abri Kampfer shared the concerns already raised with the lack of participation. He stated that it was important to take note of the IHO Aim, Mission and Vision, which tied in well with SAIHC, and read them out, along with the five aims of the Commission.

He invited the participants to follow the agenda with discussions, in support of the commission aims and the new developments in the IHO. He invited participants to consider how we can address the shortcomings of the five aims of the commission within this region. He stated that a strategy was needed to encourage better participation, attendance at conferences and meaningful contributions throughout the year. He acknowledged that progress was needed as we have been treading water for many years with very little to show for our efforts. He mentioned that more of the countries in the region need to join IHO. The CB Coordinator has also voiced his concerns, as other regions have shown real progress, but also made the point that the IHO website did not make it easy to understand the joining process and perhaps a better link and guidance was required.

He wished all participants fruitful discussions over the next couple of days, and finally expressed his sincerest appreciation to France.

The Chair thanked the IHO Director, endorsed his words and acknowledged him for reminding us of why we are here as a regional commission. He then welcomed the Mozambique delegation and invited them to introduce themselves.

The Mozambique delegation introduced themselves, and apologized for arriving late.

With exactly two thirds (2/3) of the Members of the Commission present (France, Mozambique, Norway and UK) the Conference was declared quorum.

Action items appear in red throughout the relevant Agenda Items, and are consolidated in table form in Annex A - SAIHC Actions and Annex B - ICCWG Actions. Decisions appear in blue throughout the document. Italicised actions refer to actions from previous meetings.

## **2. APPROVAL OF THE AGENDA**

*Doc: SAIHC14-2A - Agenda*

The Chair noted the following amends to the Agenda:

- Cancellation of the two Technical Visits due to transport issues and lack of attendance,
- Addition of a new Agenda item to include a discussion on how to improve attendance, and look at a strategy for better participation to move forward on regional engagement.

Norway asked if the Statutes would need to be re-signed for Agenda item 3.3, if agreed. The Chair confirmed that there was no requirement to re-sign the Statutes.

The Chair invited any other comments for the agenda or approval of the Agenda with amends. He interpreted silence to mean consent and the Agenda was adopted as amended.

## **3. MATTERS ARISING FROM MINUTES OF 13<sup>th</sup> SAIHC MEETING**

### **3.1. Approval of 13<sup>th</sup> SAIHC Minutes**

*Doc: SAIHC14-3.1 - Minutes of the 13<sup>th</sup> SAIHC meeting*

The Chair asked if there were any comments on the draft minutes, and if the contents were a true reflection of the previous meeting.

UK stated that under AOB (Agenda item 14), UK offered to print the two lake charts for Malawi. UK has printed and delivered 100 copies of the Likoma chart; the second print file was still awaited.

As there were no other comments, the Minutes of the 13<sup>th</sup> SAIHC were approved.

### 3.2. Proposed amendment to Statutes

*Doc: SAIHC14-3.2 - Revised SAIHC Statutes (Rev 6)*

The Chair provided some background, that India attended the last SAIHC meeting given their close involvement with activity in Mauritius and as a result of that meeting requested Associate Membership to SAIHC. Regrettably, the Statutes do not currently cover Members outside of the region becoming Associate Members, therefore an amendment to Article 1c has been proposed to enable wider membership, as Associate Membership, for those nations that contribute by their activities to hydrography in the region and also have special interest within the region.

He welcomed comments and thoughts on the proposal, and mentioned that an alternative way to do it would be to leave 1c as it stands and create a new paragraph which specifically addresses India's application, however the aim of the Chair and Captain Stokes was to enable future membership for those who have greater interest in the region.

A discussion followed, covering clarification on the difference between Observer and Associate Member, IHO Members being Associate Members, as in Finland and Iceland in the ARHC; Portugal raised an initial concern however this was allayed, with confirmation that the proposed amendment does not affect Portugal's status, and IALA recommended that there should be a difference in Statutes between the different RHCs.

The Chair stated that in accordance with our Statutes, an amendment to the Statutes must be approved by a two-thirds (2/3) majority of the Members of the Commission, by his calculation France, Mozambique, Norway, South Africa (as discussed with Captain Stokes), and UK supported the proposed amendment, with Mauritius not present, 5 out of 6 Members approved the amendment to the Statutes.

**Action SAIHC 14 - 1: SAIHC Secretariat to amend Statutes and forward revised Statutes to the IHO Secretariat. Deadline: 31<sup>st</sup> October 2017.**

### 3.3. India application for Associate Membership

The Chair stated that the previous Chair, had received an email from India requesting Associate Membership to SAIHC, given that we have now approved an amendment to the Statutes in the previous Agenda item, he invited the Commission to endorse India's application. He stated that regrettably India could not make this meeting, and added that the India National Hydrographer was very keen to engage and support SAIHC and therefore he fully endorsed this request.

He interpreted silence to mean consent and thanked the Commission.

**Action SAIHC 14 - 2: SAIHC Chair to write a letter to India formally welcoming them as an Associate Member of SAIHC. Deadline: 31<sup>st</sup> October 2017.**

### 3.4. Status/Review of Action Items

*Doc: SAIHC14-3.4 - Actions from the 13<sup>th</sup> SAIHC meeting*

The Chair reviewed the Actions from the 13<sup>th</sup> SAIHC meeting, Standing Items which were still relevant were either carried forward as an Action, or closed and incorporated into a new Action, and included in Annex A.

No	Subject	Action	Remarks
SAIHC 13 - 1	<i>Countries in the SAIHC region to provide capacity building inputs by end of February each year in accordance with capacity building procedures. (Note: Urgent requirements can be forwarded at any time or brought to SAIHC meetings).</i>	SAIHC Member States	Standing Item - see 3 in Annex A

The Chair stated that responses had been received and fed into the 3-year plan, he then requested that inputs are provided regularly and not to wait for the February deadline, and stated that funding will only come out of the CBSC work and endorsements.

The SAIHC CB Coordinator expressed the benefits of events, such as workshops, to increase submissions.

The Chair then encouraged all to put their bids in to improve hydrography and cartography, and increase technical understanding, and consider what we can do to support nations as they develop their capacity.

**Decision 1:** Retain as a Standing Item and include as New Action 3, in Annex A.

**Action SAIHC 14 - 3:** Countries in the SAIHC region to provide capacity building inputs by end of February each year in accordance with capacity building procedures. (Note: Urgent requirements can be forwarded at any time or brought to SAIHC meetings). Deadline: Standing Item.

No	Subject	Action	Remarks
SAIHC 13 - 2	<i>IHO Response to Marine Disasters. All are to ensure that emergency contact details are provided and kept up to date. Contact list needs to be compiled and displayed on SAIHC website.</i>	SAIHC Member States	Closed - see 27 in Annex A

The Chair mentioned the survey activity currently in the Caribbean with Hurricane IRMA on its way, and stated that Marine Disasters are something as a Commission we need to be alert to. He expressed the importance of knowing who to contact and keeping the emergency contact details up-to-date.

IHO Director recommended that alternative details are also provided, the Chair agreed to include in Agenda Item 6.6, and referred to the cyclone that hit one nation, where the nominated points of contact were deployed in the field.

**Decision 2:** Action Closed with New Action 27, in Annex A.

No	Subject	Action	Remarks
SAIHC 13 - 3	<i>Member States to provide updates to IHO for C-55 and P-5, as appropriate, at least once a year.</i>	SAIHC Member States	Closed - see 25 in Annex A

The Chair encouraged all to do an annual review and to check that details in C-55 and P-5 are correct.

**Decision 3:** Action Closed with New Action 25, in Annex A.

No	Subject	Action	Remarks
SAIHC 13 - 4	<i>Charting Member States requested to provide coastal bathymetric data to the IHO DCDB.</i>	SAIHC Member States	Combined with 13 - 5 - see 4 in Annex A

IHO Secretariat stated that Shallow Water Bathymetry has also been requested, which now has good coverage; this will be covered in Agenda Item 9.2.

The Chair stated that this covers 4 and 5 off.

**Decision 4: Retain as an Ongoing Action, and combine with 5.**

No	Subject	Action	Remarks
SAIHC 13 - 5	All shallow/ deep ocean bathymetric data collected to be forwarded by HOs to the IHO Data Centre for Digital Bathymetry (IHO-DCDB). Feedback to be provided on progress at next SAIHC Conference.	SAIHC Member States	Combined with 13 - 4 - see 4 in Annex A

Covered in Agenda Item 9.2, as shown above for Action 4.

**Decision 5: Retain as a Standing Item, combine with 4, and include as New Action 4, in Annex A.**

**Action SAIHC 14 - 4: Charting Member States requested to provide coastal bathymetric data and shallow/ deep ocean bathymetric data collected to be forwarded by HOs to the IHO Data Centre for Digital Bathymetry (IHO-DCDB). Feedback to be provided on progress at next SAIHC Conference. Deadline: Standing Item.**

No	Subject	Action	Remarks
SAIHC 13 - 6	SAIHC Member States to provide survey data and report changes that may affect safety of navigation in their national waters in ample time to INT Chart producer nations.	SAIHC Member States	Combined with 13 - 14 - see 12 in Annex A

The Chair stated that this was a very pertinent issue for the region, and questioned whether the INT Chart producers have received this information; this is to be discussed in detail at the ICCWG.

UK confirmed that this would be covered in ICCWG, as well as talking through data gathering to ensure that Coastal States (CS) are getting the data and the PCA are made aware of any updates.

The IHO Director confirmed that this is at the regional level and is to be enforced at all times.

**Decision 6: Retain as a Standing Item, and combine with 14.**

No	Subject	Action	Remarks
SAIHC 13 - 7	SAIHC Chair to invite representation by IALA at all SAIHC Conferences.	SAIHC Chair	Closed - see 13 in Annex A

The Chair noted the presence of Jacques Manchard, IALA, and thanked him for joining us for his first SAIHC. He reported the action as complete.

**Decision 7: Action Closed and replaced with New Action 13, in Annex A.**

No	Subject	Action	Remarks
SAIHC 13 - 8	SAIHC Chair to invite representation by GEBCO at all SAIHC Conferences.	SAIHC Chair.	Closed - see 13 in Annex A

The Chair confirmed that GEBCO had been invited, however they were unable to attend this year. Their input would be covered by IHO Secretariat in Agenda Item 9.2. Given the increased activity with GEBCO 2030 the Chair confirmed that there would be a standing invitation for GEBCO to attend.

**Decision 8:** Action Closed and replaced with New Action 13, in Annex A.

No	Subject	Action	Remarks
SAIHC 13 - 9	<i>Member States who want technical/ capacity building assistance based on findings in their national IMO reports must inform the IHB of their needs.</i>	SAIHC Member States	Closed - see 5, 6, and 7 in Annex A

The Chair noted one amend to change IHB to read IHO Secretariat (Secretariat actioned).

He then stated that the UK had observed that, the IMO audit process has been a catalyst for some nations which have not had the opportunity to focus on hydrographic issues, he welcomed any support we can give as a Commission to nations through the IMO audit process to provide a great opportunity to raise the level of awareness nationally for the importance of hydrography and MSI.

He asked the IHO Secretariat for any feedback on the audit process for the SAIHC region.

The IHO Director stated that no information had been received, he confirmed that interaction was between IMO and MS only and therefore confidential, if available and followed through it would be a very good motivator for CB efforts.

The Chair recommended that those with more developed Hydrographic capability should continue to reach out to those developing in the region as part of the preparation of the audit, to help raise the profile of HO's within specific countries.

**Action SAIHC 14 - 5:** Countries with PCA responsibility to offer assistance to nations preparing for the IMO audit process. Deadline: Ongoing.

IALA suggested a seminar, in association with IHO and IMO, for African Countries to explain the problems they are facing in preparation for an IMO audit, he thought it would be a very good tool for countries to explain what they want to do, what the problems are, and what the IMO obligations of CS are.

Seychelles raised the question for MS which had already been audited, the Chair agreed that it was important to raise the technical level of capability in hydrography and cartography from a PCA and RHC perspective, which created a second Action item:

**Action SAIHC 14 - 6:** Invite Members which are preparing for or have undertaken the IMO audit process to share and request support to meet items that have been raised within the audit, and also to share best practice. Deadline: Ongoing.

**Action SAIHC 14 - 7:** CB Coordinator to incorporate the topic of the IMO audit process for Members within the 1-day Hydrographic Awareness Seminar, preceding SAIHC 15. Deadline: 1<sup>st</sup> August 2018.

**Decision 9:** Action Closed and replaced with New Actions 5, 6, and 7, in Annex A.

No	Subject	Action	Remarks
SAIHC 13 - 10	<i>Member States are encouraged to note the information in M-2 and C-17.</i>	SAIHC Member States	Closed

The Chair asked all to note the information in M-2 The Need for National Hydrographic Services, a very useful and informative document when looking to build and develop your hydrographic services. He encouraged MS not familiar with it to read the guidance as part of their preparation for the IMO audit, and generally to raise the level of hydrography and its purpose within the region.

He also stated that as we move into a more data focused arena, C-17 Spatial Data Infrastructures: "The Marine Dimension" - Guidance for Hydrographic Offices, identifying and understanding the role of the HO within national SDI activity is key. He encouraged all to look at C-17 to develop national capabilities.

**Decision 10:** Action Closed as covered sufficiently.

No	Subject	Action	Remarks
SAIHC 13 - 11	<i>MZ and Angola to liaise with IALA for a technical visit.</i>	<i>Mozambique Angola IALA South Africa</i>	Closed - see 8 in Annex A

IALA requested that "technical visit" was amended to "technical mission", he then stated that IALA were still available for Angola and Mozambique. He stated that the mission is a tool available for CS, to find out what is needed for the country in order to meet their SOLAS obligations. The mission is free of charge; however, the ToRs must be approved and transportation supported. Contact with all stakeholders is encouraged and if convenient a short seminar could be organized at the end of the mission to deliver information about the obligations. A review follows the technical mission to help the country with an action plan based on the recommendations in the report. IALA will be providing a review for Comoros next week.

Mozambique commented that they were available for a technical mission, and suggested discussing out of committee with IALA.

The Chair commented that this action was now closed for Mozambique, however would remain open for Angola, as there was no update available.

IALA confirmed that they were very keen to work with Portugal to contact Portuguese speaking countries in Africa, to help with their obligations.

**Decision 11:** Action Closed and replaced with New Action 8 for Angola, in Annex A.

**Action SAIHC 14 - 8:** SAIHC Chair to contact Angola to establish what stage they are with regards to supporting a technical mission from IALA. Deadline: 31st December 2017.

No	Subject	Action	Remarks
SAIHC 13 - 12	<i>Member States are invited to nominate representatives to participate in the CSBWG.</i>	<i>France Portugal Mozambique UK</i>	Closed

The Chair stated that as a Commission we were well represented however not from a regional perspective, as participation at the WG is from outside the region with Norway, France, UK, Portugal and India. Mozambique to provide an update if able to support.

**Decision 12:** Action Closed.

No	Subject	Action	Remarks
SAIHC 13 - 13	<i>The members of SAIHC were requested to consider submitting paper for publication in the Review.</i>	<i>SAIHC Member States</i>	Standing Item - see 9 in Annex A

The Chair stated that due to the change in Chair from Captain Kampfer to Captain Stokes another action was required, as the new IHO Director could no longer continue as our regional representative. He requested volunteers and then asked Abri to explain the task.

In explaining the task, Abri mentioned a complaint from IHO Secretariat, that there were very few articles from MS, the majority being submitted from academia, he then asked that we consider whether this publication needs to continue. He added that in the meantime there is still the action on finding a SAIHC representative.

Norway asked if we had ever done a stakeholder review to find out who was reading it, and whether there was other media that we should be focusing on.

The IHO Director agreed that it would be a worthwhile exercise.

**Decision 13:** Retain Action as Ongoing (Standing Item), and include as New Action 9, in Annex A.

**Action SAIHC 14 - 9:** The members of SAIHC were requested to consider submitting papers for publication in the Review. Deadline: Standing Item.

**Action SAIHC 14 - 10:** SAIHC Chair to write to IHO Secretariat to commission a review of the relevance and purpose of the IH Review. Deadline 30<sup>th</sup> November 2017.

The Chair stated that the Action to submit papers remains open until we determine a new way ahead, and to put on hold the regional representative Action and task the Chair to take on that role until the review has taken place.

**Action SAIHC 14 - 11:** SAIHC Chair to be the representative on the IHR Editorial Board. Deadline: Ongoing.

No	Subject	Action	Remarks
SAIHC 13 - 14	<i>New information and available survey data should be made available to ensure that coastal states discharge their responsibilities as required by SOLAS.</i>	SAIHC Member States.	Combined with 13 - 6 - see 12 in Annex A

The Chair stated that Action Item 14 was a repeat of 6, as there were no objections Action Item 14 was closed and included in New Action Item 12.

**Decision 14:** Action Closed, combined with 6, and included as New Action 12, in Annex A

**Action SAIHC 14 - 12:** SAIHC Member States to provide new information and available survey data, and report changes that may affect safety of navigation in their national waters in ample time to INT Chart producer nations, to ensure that their responsibilities as required by SOLAS are met. Deadline: Standing Item.

No	Subject	Action	Remarks
SAIHC 13 - 15	<i>SAIHC Chair to invite representation by both RENCs at all SAIHC Conferences.</i>	SAIHC Chair.	Closed - see 13 in Annex A

The Chair confirmed that PRIMAR would be represented by Evert Flier, Norway, and sent apologies from the General Manager of IC-ENC, James Harper; he confirmed that Portugal as Member of IC-ENC and part of the Steering Committee would represent IC-ENC.

The IHO Director proposed to include IALA, GEBCO and the RENCs in the Statutes as Observers to close Actions 7, 8 and 15.

The Chair agreed and this was noted for discussion in Agenda Item 11.

**Decision 15:** Action Closed and replaced with New Action 13, in Annex A.

**Action SAIHC 14 - 13:** Include GEBCO, IALA, and RENCs as Observers to SAIHC in the Statutes. Deadline: SAIHC 15.

No	Subject	Action	Remarks
SAIHC 13 -16	France to provide CB Coordinator dates for training while underway.	France	Closed

France confirmed that it is planned to have a survey ship in the Indian Ocean for several months every two years. For each operation, a proposition for training underway is made and France are keen to invite people on board.

The Chair requested that noting the 2-year cycle, France provides an overview at SAIHC 15 for the opportunities that exist to target individual MS to take up the opportunity of training while underway, he then stated that there is a need to approach from both an official and unofficial level.

The IHO Director stated that there had been very successful CB in the region and that for 2019, the CB Coordinator could prepare the submission for funding.

The CB Coordinator responded with an example of sea riding opportunities for Comoros and Madagascar in 2014 arranged intersessionally, which proved a low-cost activity for 4 people for 2 week periods, he stated that he was happy to work with colleagues at SHOM to do an intersessional request.

France stated that a “couple of people” is a maximum of 2, as units are full to capacity when operating in the Indian Ocean.

The Chair invited all who have a survey asset operating in the region to consider offering sea riding opportunities, and to provide the details before SAIHC 15 to identify suitable opportunities.

The CB Coordinator confirmed that he would do an intersessional submission for approval of funding.

The Action Item was expanded to include any nation with a survey asset in the region.

**Decision 16:** Action Closed, sea riding opportunities to be included in National Report.

No	Subject	Action	Remarks
SAIHC 13 - 17	Mauritius is to submit a paper on their progress to the IHB for the IH Review and a shorter review for the Hydro International Conference	Mauritius India	Ongoing - see 14 in Annex A

The Chair stated that Mauritius were not present, and as no submission had been received, he proposed rolling the action over to the next meeting. The Chair made it clear that a report from Mauritius is still very much valued, given the great work that they and India have done, including improving the charting around their waters.

**Decision 17:** Retain Action, amend IHB to read “IHO Secretariat” and include as New Action 14, in Annex A.

**Action SAIHC 14 - 14:** Mauritius is to submit a paper on their progress to the IHO Secretariat for the IHO Review and a shorter review for the Hydro International Conference. Deadline: SAIHC 15.

No	Subject	Action	Remarks
SAIHC 13 - 18	<i>Namibia is to forward all co-ordinates and detailed information regarding the changes/upgrade of Walvis Bay Harbour to South Africa for charting action and archiving</i>	Namibia South Africa	Closed

The Chair understood that this is being addressed, and that the action could be closed, as this is taking place as normal business.

**Decision 18: Action Closed.**

No	Subject	Action	Remarks
SAIHC 13 - 19	<i>Further investigation into the use of AIS transponder transmissions, in the use of disseminating information on Aids to Navigation, need to be undertaken</i>	South Africa	Closed

The Chair stated that in the absence of South Africa there was no update. In discussion, it was agreed to close the action as it appeared the issue was no longer relevant.

**Decision 19: Action Closed, and if the issue is re-raised then it can be opened again.**

No	Subject	Action	Remarks
SAIHC 13 - 20	<i>Nominations for the Council of Assembly are to reach the IHB before end Oct 2016</i>	SAIHC Member States	Closed

The Chair confirmed this Action item closed as South Africa were nominated as the Council rep for the SAIHC region until the next IHO Assembly, and therefore Captain Theo Stokes would be on the IHO Council for this region.

**Decision 20: Action Closed.**

No	Subject	Action	Remarks
SAIHC 13 - 21	<i>Statutes of SAIHC require editorial changes to be made and circulated to all members for comment. Feedback to be received before end Sept 2016.</i>	South Africa SAIHC Member States	Closed

The Chair confirmed that the Statutes had been revised for the election of the Council rep, and considered closing this Action Item following discussion in Agenda Item 11.

**Decision 21: Action Closed.**

No	Subject	Action	Remarks
SAIHC 13 - 22	<i>Suggestions for venue for SAIHC 14 to be forwarded to the chairman. The chairman to promulgate a reminder letter.</i>	South Africa	Closed

The Chair thanked France and SHOM and also La Réunion for allowing us to visit, he then put out a plea for suggestions for the venue for our next meeting, and stated that there had already been discussions in the margins.

**Decision 22: Action Closed.**

**Group photo.** The Chair invited all to gather outside for the group photo.

#### **4. FEEDBACK FROM OTHER IHO BODIES AFFECTING SAIHC**

*Docs: SAIHC14-4.1 - IHO Secretariat Report, and IHB Report Presentation*

##### **4.1. IHO Secretariat Report**

The IHO Director, Captain Abri Kampfer, delivered a presentation entitled “IHB Report”.

He discussed the changes from the revised IHO Convention which entered into force on 8<sup>th</sup> November 2016, including the new terms “IHO Secretariat” and “Assembly”, and described the Secretariat structure, and added that the Assembly will be held every three years

He noted the additional level of decision making either by the Assembly or MS through correspondence and the annual IHO budget will now be part of the Council meetings.

He stated that the planning cycle for the IHO work programme and budget changes from a five-year to a three-year cycle. The next cycle will run from 2018 to 2020.

Important changes to be noted:

- for States wishing to join the IHO that are already MS of the UN there is no requirement to seek the approval of existing MS of the IHO.
- Where voting is required, decisions will be taken based on a majority of the MS that cast a vote, rather than the existing arrangements where a majority of all the MS entitled to vote is required. A minimum number of at least one-third of all MS eligible to vote must vote positively for a vote to stand.

He then stated that eight SAIHC States were not MS of the IHO, he encouraged these States to consider becoming MS of the IHO, to realise the importance and benefits as a MS of the IHO, especially with CB, including surveying and cartography training, currently not available to non-IHO Members. With Namibia and Seychelles both present, he suggested brainstorming on a future strategy, because although the process for becoming a MS of the IHO is now easier, the process to submit an application is different for each country and can be a time consuming and onerous task.

He noted lots of mistakes in the C-55 entries, and emphasized the importance of checking the data before submission to IHO Secretariat and then checking the status once updated in the database.

He stated that the INToGIS database is a powerful tool, and delivers huge improvement and benefits, and provides the inputs to P-5.

He then touched on World Hydrography Day, and the importance of hydrographic data, and mentioned that Crowd-Sourced Bathymetry (CSB) is becoming more important, as well as the use of Satellite Derived Bathymetry (SDB), as a precursor to identify further survey requirements.

He briefly mentioned the International Hydrographic Review, which has very limited input from MS authors.

He then presented the Actions requested of SAIHC from IHO Secretariat, Action 2 - “States that are not yet MS of the IHO are invited to inform the IHO Secretariat of their intentions to join the IHO and to indicate what impediments exist”. As the majority of States that are not yet MS of the IHO were absent, he requested that this become an Action Item on the Associate Members, so that the IHO Secretariat could provide assistance with any impediments to them joining the IHO.

Norway suggested that this become a standing agenda item where Associate Members report on the status of becoming an IHO Member, or include the status in their National Report. The Chair noted that this was an opportunity to exploit the IMO Audit process as a means of supporting an increase in the IHO Membership and recommended that the way ahead with this Action was discussed in the Strategy meeting.

**Action SAIHC 14 - 15: SAIHC Chair to include the standing Agenda item for States that are not yet MS of the IHO to provide an update on intentions to join IHO in their National Report, to include any impediments or issues preventing membership. Deadline: SAIHC 15.**

IHO Director then discussed a number of topics in more detail, starting with INT Chart and ENC Production Coordination. He made mention of the database at the Secretariat, and the web-based version of S-11, Region H, edition 3.0.4, June 2017. This new edition reports that 99 INT Charts are available for the region out of 125 charts in the scheme, adding that this was good progress. He stated that there were no significant ENC overlap issues in Region H, and raised the possibility of an ENC scheme similar to the paper chart scheme for INT Charts to tackle any potential overlaps. The creation of an ENC scheme for the SAIHC region was then discussed and passed to the ICCWG for necessary action. He also provided feedback from the 7<sup>th</sup> WENDWG meeting.

The Chair commented that this was an opportunity for our region to set the standard and take the lead, and proposed tasking the Chair of the ICCWG to consider how to do this. Please refer to Actions ICCWG 6 - 6 and ICCWG 6 - 7, in Annex B.

IHO Director, invited the SAIHC ICCWG to take note of Decision 10 from the 1<sup>st</sup> Session of the IHO Assembly that “*urged Member States to ensure consistency between their paper and digital charts and publications through the provision of the appropriate updates*”, and requested that any inconsistencies in Region H are reported to the next SAIHC meeting.

The next topic covered was IHO GIS and databases, IHO Director commented that development continues on the IHO GIS, which is composed of two main parts:

- 1) Country information database
- 2) Regional information database

He highlighted the benefit of all publications being automatically updated.

He then mentioned the IHO Yearbook, and the standing agenda item for Countries in the SAIHC region to check their entry in the Yearbook and provide the IHO Secretariat with any updates or report no change.

Work has continued on developing a GIS database application to support C-55, and also to include CATZOC information; PRIMAR has already provided some CATZOC data. Useful options for visualizing the data in the IHO C-55 GIS continue to be investigated. IHO Director then reiterated that MS are invited to provide the IHO Secretariat with regular updates to C-55 on at least an annual basis. The intention is to allow MS to do online C-55 updates.

He added that the online registration for IHO meetings is working well.

IHO Director briefly discussed the topic of CSB, with the newly established CSBWG which will enable an IHO led CSB infrastructure to be established and promoted in the IMO and across the wider maritime community.

IHO Director drew the attention of the Commission to the 1<sup>st</sup> session of the IHO Council to take place on 24<sup>th</sup> - 28<sup>th</sup> October 2017 in Monaco, all documents are available for consideration. SAIHC MS, France, Norway, South Africa and UK occupy seats on the Council.

In closing, IHO Director asked the Commission to note his report and take any necessary actions. The report was duly noted and relevant actions were checked for inclusion in the Actions, Annex A.

## 4.2. IRCC

*Docs: SAIHC14-4.2 - IHO Assembly-1 Decisions related to IRCC, and IRCC9 Presentation*

The Chair delivered a presentation on IRCC9. He stated that IRCC9 was well attended with 34 participants representing 22 countries and the IHO Secretariat. UK represented SAIHC on behalf of the Chair (South Africa) who was unable to attend. He added that there were very productive discussions on the following topics:

- **Capacity Building:** Proving successful following the implementation of the CB strategy providing a clear structure and process; MS are able to see reasoning behind decisions. Lack of funding to meet all but the basic of RHC submissions to CBSC.
- **Regional ENC Schemes:** Encouraged RHCs to ensure a ENC scheme for the region has been established to highlight gaps and overlaps; MS can then act accordingly to resolve.
- **Crowd Sourced Bathymetry:** Debate on if data collected during “normal ship operations” is seen as innocent passage under Law of the Sea; variances in coastal states legislation and as such MS are requested to review their national legislation.
- **Satellite Derived Bathymetry:** The use of satellite derived bathymetry for risk assessment and to acknowledge the benefits of using satellite derived bathymetry for risk assessment including seeking funds from donor agencies.  
Member States encouraged to participate in the workshop on satellite derived bathymetry sponsored by Canada in February 2018.
- **Marine Spatial Data Infrastructures:** Acknowledged the work done by the MSDIWG on the draft New Edition 2.0.0 of the IHO Publication C-17 *Spatial Data Infrastructures: “The Marine Dimension” - Guidance for Hydrographic Offices*; endorse the draft and submit to Council for approval.
- **Input to the 1<sup>st</sup> IHO Council meeting:**
  - Proposal to increase CB support at IHO Secretariat
  - Maintenance of INT chart schemes and improvements of availability of the INT chart series
  - Consideration to reduce overlaps in ENC schemes - draft IHO Resolution
  - Project Seabed 2030
  - IHO Publication B-7 GEBCO Guidelines - considered redundant, B-11 published

The Chair encouraged SAIHC MS to consider attendance as Observer at IRCC meetings.

**Actions of IRCC9** - The Chair then reviewed the IRCC9 Actions with RHC Chair responsibility.

<b>N.</b>	<b>Action (Agenda item)</b>	<b>Responsible</b>	<b>Deadline</b>	<b>SAIHC Decision</b>
2	<i>to engage with Member States in their regions to identify potential instructors to accompany MSI trainings in order to become MSI trainers and report back to IRCC</i>	<i>RHC Chairs</i>	<i>IRCC10</i>	Action noted.

This action was noted; there are challenges with the number of MSI trainers retiring, so there is a requirement to increase the number of trainers available and the number of languages to train in. The Chair issued a plea to MS to identify any potential instructors to support MSI training, avenue through CB Coordinator. CB Coordinator confirmed experimentation with MSI e-learning, in French and English, which is another avenue.

<b>N.</b>	<b>Action (Agenda item)</b>	<b>Responsible</b>	<b>Deadline</b>	<b>SAIHC Decision</b>
3	<i>to consider using Trainer for Trainers (TFT) and e-learning methods to support the development of CB Phase 1 for developing coastal States and report back to IRCC</i>	RHC Chairs	IRCC10	Action for CB Coordinator to take forward. See 15 in Annex A

**Action SAIHC 14 - 16: SAIHC CB coordinator to identify e-learning topics for SAIHC and report back to IRCC10. Deadline: IRCC10.**

<b>N.</b>	<b>Action (Agenda item)</b>	<b>Responsible</b>	<b>Deadline</b>	<b>SAIHC Decision</b>
4	<i>to encourage the attendance of Member States and Observers at WWNWS-SC meetings, to highlight the use of the Joint Manual on MSI to ensure correct terminology and formats are used in MSI messages, to encourage closer engagement of the National MSI Coordinators of Member States with the relevant NAVAREA Coordinator(s) and report back to IRCC</i>	RHC Chairs	IRCC10	Action. MS and Associate Members to consider attendance at WWNWS-SC meetings.
5	<i>to encourage closer coordination between NAVAREA Coordinators and Regional CB Coordinators in planning and student selection for the CB MSI training courses</i>	RHC Chairs	IRCC10	Action for CB Coordinator.
10	<i>to invite Member States to investigate the possibilities of fund raising and engagement in CB via national organizations and report back to the IRCC</i>	RHC Chairs	IRCC10	MS requested to provide feedback to SAIHC Chair by 31 <sup>st</sup> March 2018
14	<i>to encourage the Member States in the region to consider making all ENC data available through the RENCs (7)</i>	RHC Chairs	December 2017	Complete.
15	<i>to encourage the work of the IHO community to increase existence of ENC schemes at regional level (7)</i>	RHC Chairs	December 2017	See Actions from ICCWG 6 and 7.
18	<i>to encourage Member States in the region to nominate RHC MSDI Ambassadors to promote MSDI and to help Member States to prepare the national reports with respect to the status of MSDI (7)</i>	RHC Chairs	IRCC10	Complete. Volunteers to inform Chair by IRCC10.
21	<i>to encourage IHO Member States to release datasets or subsets into the public domain via the IHO DCDB (7)</i>	RHC Chairs	September 2017	Complete.
22	<i>to request IHO Member States to consider reviewing data gathering restrictions within their maritime areas of jurisdiction to enable CSB activities to be undertaken (7)</i>	RHC Chairs	September 2017	If requested, MS requested to inform Chair of progress in advance of IRCC10.
23	<i>to encourage IHO Member States to support the CSB initiative with positive actions, such as requiring all research vessels collect bathymetric data for late uploading, when on passage or when it does not interfere with other research activities (7)</i>	RHC Chairs	September 2017	Complete.
29	<i>to encourage Member States to organize contribution of bathymetric data in shallower coastal areas to GEBCO in order to support the production of higher resolution gridded data products and report back to IRCC (7)</i>	RHC Chairs	IRCC10	Complete.

32	<i>to encourage Member States in the region to consider using satellite derived bathymetry and risk assessment methodologies in uncharted or poorly charted areas in their respective regions as a way of developing survey priority areas as part of attracting donor funding and report back to IRCC (8)</i>	<i>RHC Chairs</i>	<i>IRCC10</i>	<i>Complete.</i>
33	<i>to encourage the use of satellite derived bathymetry and risk assessment methodologies for developing survey priority areas as part of attracting donor funding using the project rationale as presented in doc. IRCC9-08C (8)</i>	<i>RHC Chairs</i>	<i>IRCC10</i>	<i>Complete.</i>
34	<i>to encourage Member States to participate in the workshop on satellite derived bathymetry sponsored by Canada in March 2018 (8)</i>	<i>RHC Chairs</i>	<i>December 2017</i>	<i>Complete. Workshop 20th - 22nd February 2018.</i>
35	<i>to invite Member States to provide technical resources to the DQWG and report back to IRCC (9)</i>	<i>RHC Chairs</i>	<i>IRCC10</i>	<i>Complete.</i>
36	<i>to note the list of events organized by other intergovernmental and stakeholders indicated in doc. IRCC9-09B, consider how the IHO might be represented in those events that are considered relevant and liaise with the IHO Secretariat for the appropriate and report back to IRCC (9)</i>	<i>RHC Chairs</i>	<i>IRCC10</i>	<i>Complete.</i>
37	<i>to encourage Member States to support the establishment of the UN-GGIM Working Group on Marine Geospatial Information (WG-MGI) by working with their national representatives to the UN-GGIM to offer interventions in favor of the WG-MGI during the next UN-GGIM meeting (10)</i>	<i>RHC Chairs</i>	<i>June 2017</i>	<i>Complete. WG established.</i>
38	<i>to encourage Member States to attend the next UN-GGIM meeting and the UN-GGIM-MGI Side Event (10)</i>	<i>RHC Chairs</i>	<i>July 2017</i>	<i>Complete.</i>
39	<i>to promote the UN-GGIM in their regions (10)</i>	<i>RHC Chairs</i>	<i>Permanent</i>	<i>Ongoing.</i>
43	<i>to consider using the IHO Online Registration System for their meetings and report back to IRCC (11)</i>	<i>RHCs</i>	<i>IRCC10</i>	<i>Complete.</i>
44	<i>to invite Member States to review entries related to their region in IHO C-55 and P-5 (Yearbook) at least annually (11)</i>	<i>RHC Chairs</i>	<i>Permanent</i>	<i>Ongoing.</i>

### 4.3. CBSC

*Doc: SAIHC14-4.3 - CBSC meeting report*

The Chair introduced the CB Coordinator to deliver the CBSC Meeting Report for SAIHC.

The SAIHC CB Coordinator highlighted the following key points from the CBSC15 meeting which were raised at IRCC9:

- the immediate need for increased CB support for the IHO Secretariat,
- the 2018 CB Work Programme, which is only partially funded,

- the need for permanent CB Coordinators in the regions; with mention of UK as a dedicated CB Coordinator for three regions,
- the lack of MSDI trainers in Hydrographic Services despite training provided, and
- growth in investment from IHO funds and the success of the IHO CB programme.

The CB Coordinator then discussed the following topics:

- Main developments, which included, donor agency involvement, different types of learning, and the limitation of support from the CB fund, as the number of submissions outweigh the funding, procedure 4 is now used to prioritise and determine which submissions are funded.
- Major challenges, which included the assessment of CB phases in coastal states by CB Coordinators, workload of the Capacity Builders which has increased due to the interaction with other regions, and coordination of the growing number and complexity of regional projects.
- CB Management, which has introduced more procedures, including one for Technical Visits; which provide the understanding of the CB requirements, and deemed the most important aspect of Phase 1 development. All of the procedures are available from the IHO website.
- Contribution to CB, indebted to ROK, Nippon Foundation, direct contribution from MS to CB activities, and contribution via bilateral arrangements.

The Chair challenged the definition and measure of success for the CB programme, and questioned whether any work had been done since 2003 to identify how many nations had progressed from Phase 1 to Phase 2, or Phase 2 to Phase 3; he suggested that the number of people trained and money spent was a measure of activity only. The CB Coordinator agreed and confirmed that this had been discussed at CBSC for many years with regard to using performance indicators as a measure of success, however he thought the assessment of where coastal states are within the three phases would be a more accurate measure. The Chair suggested changing the focus from the CB capability which is now firmly established, to the assessment of needs and moving the CB plans forward.

## 5. 6<sup>th</sup> ICCWG MEETING

*Docs: ICCWG6-1 - Agenda  
 ICCWG6-2 - Minutes of ICCWG5  
 ICCWG6-3 - Actions of ICCWG5  
 SAIHC14-5.1.1 - S-11 Part B for Region H Update*

The SAIHC Chair introduced UK, to chair the 6<sup>th</sup> ICCWG Meeting, and in discussion with the IHO Director, agreed to change this to an Open Session, therefore all were invited to attend.

**Members:** France, Mozambique, Norway, and UK.

**Associate Members:** Portugal, Namibia, and Seychelles

### 1. Opening and Administrative Arrangements

The SAIHC ICCWG Chair, UK, welcomed all to the 6<sup>th</sup> ICCWG Meeting, and thanked the current ICC-Coordinator for the success from previous meetings.

### 2. Approval of Agenda

The SAIHC ICCWG Chair described the ICCWG Draft Agenda, he asked if there were any additional items required; there was no response, and the Agenda was approved.

### 3. Matters Arising from Minutes of 5<sup>th</sup> ICCWG

The SAIHC ICCWG Chair then discussed matters arising from the Minutes of the 5<sup>th</sup> ICCWG Meeting, which included a review of the actions, as follows:

Serial No	Subject	Action	Remarks
ICCWG 5 - 1	<i>In the case where another organisation conducts a survey on behalf of the coastal state, it is important to make the survey data available to the Primary Charting Authority in order to update charts for the area. The modalities of data sharing to be resolved bilaterally.</i>	SAIHC Member States	Ongoing - see 9 in Annex B

The SAIHC ICCWG Chair stated that this is an ongoing Action and asked for any updates, challenges or successes.

Mozambique, experienced problems with some companies in Mozambique, surveying but not providing the data; this is a big challenge, as it is difficult to get any information from the private companies, and asked what could be done to resolve this. Portugal stated that they have the same issues.

IHO Director, stated that this is a Standing Agenda Item, and mentioned bathymetry obtained for Continental shelf off Namibia, as this data has not been released.

The SAIHC ICCWG Chair commented on one of UK's PCA areas, where a National Oceanographic and Hydrographic Committee, is well established. This is the leading authority, looking at data governance, helping to expose data duplication and gaps in data, and help with the risk assessment and prioritisation.

**Decision:** Retain as an Ongoing Action, and append after the eight New Actions from ICCWG 6 as Action 9, in Annex B.

**Action ICCWG 6 - 9:** *In the case where another organisation conducts a survey on behalf of the coastal state, it is important to make the survey data available to the Primary Charting Authority in order to update charts for the area. The modalities of data sharing to be resolved bilaterally.*  
Deadline: Ongoing.

Serial No	Subject	Action	Remarks
ICCWG 5 - 2	<i>MZ as a co-producer of INT 7052 to submit relevant topographic information to ZA so the chart can be completed.</i>	Mozambique.	Complete

Mozambique confirmed that they had been working together with South Africa, and the last update had been sent.

**Decision:** IHO Director confirmed that this Action is complete.

Serial No	Subject	Action	Remarks
ICCWG 5 - 3	<i>UK co-producing chart of Approaches to Beira INT 7631 with MZ. New Chart limits are being discussed awaiting finalisation.</i>	UK. Mozambique	Closed

UK confirmed that Mozambique are awaiting new surveys of the buoyage in this area, the limits have been agreed, and no agreed publication date as yet. The new limits have been put to S-11.

**Decision:** Item to be closed and included in the S-11 updates Action ICCWG 6 - 2.

Serial No	Subject	Action	Remarks
ICCWG 5 - 4	UK and MZ to discuss production of INT 7632.	UK. Mozambique.	Closed

**Decision:** Same as ICCWG 5 - 3, awaiting surveys of the buoyage. Item to be closed and included in the S-11 updates Action ICCWG 6 - 2.

Serial No	Subject	Action	Remarks
ICCWG 5 - 5	Production of INT 7581 Bay of Maputo. UK and MZ to agree on new limits, predict a completion date and establish if a new INT number will be required. This is to be forwarded to the chairman for inclusion in S11.	UK. Mozambique	Closed

The SAIHC Chair asked for clarification on whether the actions closed for Actions 3 - 5, were complete or part of normal business. The SAIHC ICCWG Chair confirmed that they were part of normal business awaiting the necessary data, and were stored and held correctly in S-11, as the limits had been agreed.

**Decision:** Same as ICCWG 5 - 3. Item to be closed and included in the S-11 updates Action ICCWG 6 - 2.

Serial No	Subject	Action	Remarks
ICCWG 5 - 6	Copies of all new INT products must be made available to the ICCWG.	India	Ongoing - see 10 in Annex B

IHO Director stated that India had supplied copies which had been passed to UKHO for comment.

**Decision:** Retain as an Ongoing Action, and append after the eight New Actions from ICCWG 6 as Action 10, in Annex B.

**Action ICCWG 6 - 10:** Copies of all new INT products must be made available to the ICCWG.  
Deadline: Ongoing.

Serial No	Subject	Action	Remarks
ICCWG 5 - 7	INT 7582 – is to be removed from S11 and the chart is to become INT 7583 (new INT number). A copy of this chart needs to be circulated to the members for comment and will be pending until this is done.	SAIHC Member States	Ongoing - see 11 in Annex B

Mozambique indicated that this was due for completion in early 2018.

**Decision:** Retain as an Ongoing Action, and append after the eight New Actions from ICCWG 6 as Action 11, in Annex B.

**Action ICCWG 6 - 11:** INT 7582 – is to be removed from S11 and the chart is to become INT 7583 (new INT number). A copy of this chart needs to be circulated to the members for comment and will be pending until this is done. Deadline: Ongoing.

Serial No	Subject	Action	Remarks
ICCWG 5 - 8	INT 7631 – this is related to Action Items 3 and 6 with ongoing discussions between UK, MZ and PT. New survey data is awaited and this will affect buoyage's and chart limits (which still need to be confirmed). Proposed completion dates is end 2017.	UK  Portugal  Mozambique	Ongoing - see 12 in Annex B

The SAIHC ICCWG Chair confirmed that this was awaiting new survey data, Mozambique indicated that this was due for completion by the end of 2017.

**Decision:** Retain as an Ongoing Action, and append after the eight New Actions from ICCWG 6 as Action 12, in Annex B.

**Action ICCWG 6 - 12:** INT 7631 – this is related to Action Items 3 and 6 with ongoing discussions between UK, MZ and PT. New survey data is awaited and this will affect buoyage's and chart limits (which still need to be confirmed). Proposed completion date is end of 2017. Deadline: Ongoing.

Serial No	Subject	Action	Remarks
ICCWG 5 - 9	INT 7632 - ongoing discussions between UK, MZ and PT regarding new charting limits.	UK  Portugal  Mozambique	Ongoing - see 13 in Annex B

**Decision:** Same as ICCWG 5 - 8. Retain as an Ongoing Action, and append after the eight New Actions from ICCWG 6 as Action 13, in Annex B.

**Action ICCWG 6 - 13:** INT 7632 - ongoing discussions between UK, MZ and PT regarding new charting limits. Deadline: Ongoing.

Serial No	Subject	Action	Remarks
ICCWG 5 - 10	INT 7645 – the Scheme has been proposed and is in process. As soon as the limits have been established they are to be forwarded to the chairman for inclusion in S11.	PT/MZ  South Africa	Ongoing - see 14 in Annex B

**Decision:** Change UK to MZ/PT action. Retain as an Ongoing Action, and append after the eight New Actions from ICCWG 6 as Action 14, in Annex B.

**Action ICCWG 6 - 14:** INT 7645 – the Scheme has been proposed and is in progress. As soon as the limits have been established they are to be forwarded to the chairman for inclusion in S11. Deadline: Ongoing.

Serial No	Subject	Action	Remarks
ICCWG 5 - 11	INT 7671 - The UK request a new chart for the Port of Mtwara, Tanzania-Harbour chart and Approaches Chart. UK is to supply limits to the chair for inclusion in S11.	UK  South Africa	Ongoing - see 15 in Annex B

UK confirmed that this is scheduled for publication this financial year, and has been included in INTogIS.

IHO Director stated that the chart limits had not been included in INTToGIS. UK confirmed that INTToGIS would be updated with the new chart limits.

**Decision:** Retain as an Ongoing Action, and append after the eight New Actions from ICCWG 6 as Action 15, in Annex B.

**Action ICCWG 6 - 15:** INT 7671 - The UK request a new chart for the Port of Mtwara, Tanzania-Harbour chart and Approaches Chart. UK is to supply limits to the chair for inclusion in S11. Deadline: Ongoing.

Serial No	Subject	Action	Remarks
ICCWG 5 - 12	INT 7661 and INT 7662 – these are new charts which are a co-production between MZ and PT. These charts are the Approaches to Nacala and the Port of Nacala respectively. The limits and scales for these charts, as well as any other relevant data is to be forwarded to the chairman for inclusion in the S11.	Portugal  Mozambique	Closed

**Decision:** Action Closed. New limits to be added to S-11.

Serial No	Subject	Action	Remarks
ICCWG 5 - 13	The chairman is to allocate INT numbers to the 6 charts submitted by Mauritius and forward these numbers to Mauritius.	Chair	Closed

**Decision:** Action Closed, as INT numbers provided.

Serial No	Subject	Action	Remarks
ICCWG 5 - 14	Chairman to update S11 and forward the updated/completed document to the IHB.	Chair	Closed

**Decision:** Action Closed, as superseded by online S-11 portal.

Serial No	Subject	Action	Remarks
ICCWG 5 - 15	SAIHC ENC Scheme needs to contain not only current ENC's but planned ones as well.	UK	Closed

**Decision:** Action Closed.

Serial No	Subject	Action	Remarks
ICCWG 5 - 16	The UK and IHB to collaborate on finalising the SAIHC ENC Scheme and to include producing nations in the content.	UK  IHB	Completed

**Decision:** Action Completed.

Serial No	Subject	Action	Remarks
ICCWG 5 - 17	IC-ENC volunteered to collaborate with the UK on the SAIHC ENC scheme by sharing available metadata, from the IC-ENC database, to be included in the catalogue.	UK  IC-ENC	Closed

**Decision:** Action Closed.

#### 4. WEND-WG Actions

The SAIHC ICCWG Chair provided an update to the two WENDWG actions affecting SAIHC.

No.	Action	Target date	Status
WENDWG7/06	<b>RHCs</b> to consider the report made by the UK representative to the WENDWG-7 on ENC coverage	When RHCs meet	

Regarding ENC overlaps, there is one overlap with Russia and Australia. Further to WEND Chair raising this issue, the ICCWG Coordinator took an action to contact the countries involved.

**Action ICCWG 6 - 4:** ICC-WG Coordinator to contact Russia and Australia to resolve ENC overlap. Deadline: Standing Item.

No.	Action	Target date	Status
WENDWG7/08 (former WENDWG6/06)	<b>RHCs</b> to define and adopt ENC Schemes (as it is done for INT Charts Schemes) and provide basic metadata to the IHB and <b>IHO Sec.</b> to consider including a layer of "Approved" ENC Schemes to the IHO ENC Catalogue or as an extension of the INT Web Chart Catalogue.	IRCC-9	

An ENC portal has been developed by IHO Secretariat, assisted by UKHO, this will be demonstrated by the IHO Secretariat later in the agenda.

#### 5. S-11 - Region H Chart Scheme

The SAIHC ICCWG Chair presented the Region H scheme, and described the INTtoGIS portal, containing both completed and planned work. 99 out of the 125 INT Charts in the SAIHC region have been produced so far.

The CB Coordinator presented the UKHO report for SAIHC ICCWG, which included the 2016 Action item progress, UKHO support to Mozambique charting, Tanzania charting update, Kenya charting update, Seychelles charting update, and the SAIHC ENC planning catalogue.

The ICC Coordinator highlighted the S-11 table for updates from the MS. Following discussion, it was decided that this would be circulated to all MS for review and update.

**Action ICCWG 6 - 1:** Resend S-11 region H table for all MS to update. Deadline: 30<sup>th</sup> November 2017.

**Action ICCWG 6 - 2:** MS to update S-11 Region H table. Deadline: 31<sup>st</sup> December 2017.

#### 6. ENC Portal

The SAIHC ICCWG Chair thanked the IHO Secretariat for working on the ENC Portal.

The IHO Secretariat provided a demonstration of the ENC Portal, showing schemed INT charts and

produced INT Charts, switching between layers of data, produced and planned ENCs, and comparing data in different usage bands.

SAIHC Chair commented that if we had an agreed ENC scheme for the region this is where it would be held.

Discussions took place to determine the minimum meta-data requirements and the prioritization of an area within the SAIHC region.

The SAIHC Chair noted the requirement for a mandatory field in the metadata for the actual coverage limits, and suggested that the ICCWG and Chair ICCWG work out of committee to develop an ENC scheme and make a proposal to deliver before the next IRCC meeting.

**Decision:** Send out link to ENC portal, for MS to report back any omissions or errors.

**Action ICCWG 6 - 5:** Provide link to ENC portal demonstrator to MS. Deadline: Ongoing.

**Action ICCWG 6 - 6:** Define minimum meta data required to support trial ENC scheme. Deadline: Ongoing.

**Action ICCWG 6 - 7:** Define scheme (building on portal demonstrator) from Mozambique to northern limit of SAIHC. Deadline: 31<sup>st</sup> December 2017.

## 7. Updating of the ICCWG Terms of Reference

The SAIHC ICCWG Chair proposed a minor amend to the TOR, in order to reflect the current IHO references following the acceptance of the protocol of amendments.

**Decision:** Minor amends to TOR to reflect the new IHO Secretariat construct throughout.

## 8. Date and Venue of next meeting

The SAIHC ICCWG Chair commented that the date and venue were determined by the Plenary meeting, (last week in August 2018 tbc).

The SAIHC ICCWG Chair highlighted the value in convening teleconference ahead of the main meeting, where there is an appropriate requirement.

## 9. Closure

The SAIHC ICCWG Chair closed the 6<sup>th</sup> ICCWG meeting.

### Session on how to improve attendance

The Chair asked how we could attract greater attendance, he stated that we were expecting five additional Associate Members, however due to different reasons none were able to attend. The IHO Director confirmed from the 7<sup>th</sup> SAIHC Meeting photograph from 2009, in La Réunion, that Angola, Comoros, Madagascar, Malawi, Mauritius, Mozambique, Portugal, Seychelles, Tanzania, UK and USA, all attended. This generated much discussion from all present:

There were excellent contributions from IALA, Norway, SHOM, Mozambique and Seychelles who provided some highly valuable feedback.

Finance is probably the greatest single issue preventing attendance at SAIHC meetings and this will be resolved (albeit temporarily) next year by the IHO CB fund supporting attendance of non-members at an inaugural 1-day Hydrographic Awareness Seminar which will precede SAIHC15.

The Chair summarised the discussion with the following points:

- Finance, a balance between funding and success to support own country
- Making attendance attractive, make it interesting - unique selling point
- Is documentation adequate - role, purpose, etc.
- What are the benefits?
- Educational awareness for nations Government
- Perhaps combine with another activity, back to back events
- Simplify the approval process to attend
- Visas
- Timing of the invitation
- Use the IMO audit feedback/preparation as an attraction?
- Frequency of meetings
- Number of meetings required to attend - IMO and IHO
- High level engagement with government from IHO Director

Norway highlighted the sponsorship from Norad (Norwegian Agency for Development Cooperation) which funded attendance of some of the Associate Members to the SAIHC meetings up to 2014.

Norway suggested following up on the nations that have not turned up (cancelled), raise as an issue in Minutes, not eligible for CB, and ascertain what can be done to improve attendance.

**Action SAIHC 14 - 17:** SAIHC Chair to contact MS that pulled out of SAIHC 14 at the last minute, to ascertain if there were any common reasons. Deadline: 31<sup>st</sup> October 2017.

The Chair discussed the Bilateral/PCA relationship role in region to ascertain from non-attending Associate Members to find out why they are not attending and what can be done to help (finance element, etc.) and promoting the advantages of taking part in SAIHC.

**Action SAIHC 14 - 18:** PCA nations to encourage Associate Members to attend SAIHC meetings. Deadline: Ongoing.

## 6. SAIHC ACTIVITIES IN THE LIGHT OF THE IHO WORK PROGRAM

### 6.1. Actions arising from 6<sup>th</sup> ICCWG

The ICCWG Chair provided a brief overview, thanked the IHO Secretariat for the ENC Portal demonstration, and then presented a summary of the eight actions emanating from the 6<sup>th</sup> ICCWG Meeting, included in Annex B.

#	Action	Action owner	Deadline
1	Resend S-11 region H table for all MS to update.	ICC-Coordinator	31 October 2017

The ICCWG Chair confirmed that the ICC-Coordinator would send out the S-11 Region H table for all MS to update by the end of November 2017.

#	Action	Action owner	Deadline
2	MS to update S-11 Region H table	All MS	30 November 2017

The ICCWG Chair emphasised that MS were to update the S-11 Region H table within a month, end of November 2017.

#	Action	Action owner	Deadline
3	Allocate new INT number 77397 to India for IN 2527 (replaces existing INT 7737 (Mauritius))	ICC-Coordinator	31 October 2017

The ICCWG Chair noted India's absence, and referred to a letter received by the ICC-Coordinator in South Africa to allocate a new INT number for an INT chart that UK had produced in Mauritius. Following a brief discussion, in which the IHO Director had advised on a new INT Chart number, an action was captured for the ICC-Coordinator to forward the new INT number to India, by the end of October 2017.

#	Action	Action owner	Deadline
4	ICC-WG Coordinator to contact Russia and Australia to resolve ENC overlap	ICC-Coordinator	30 November 2017

The ICCWG Chair confirmed that this related to a WENDWG Action with the overlap between Russia and Australia to resolve, the ICC-Coordinator would contact the two countries on behalf of SAIHC, by the end of November 2017, to resolve the ENC overlap, in conjunction with the WEND Chair with the same action.

#	Action	Action owner	Deadline
5	Provide link to ENC portal demonstrator to MS	IHO Secretariat	30 November 2017

The ICCWG Chair confirmed the action for the IHO Secretariat to provide a link to the ENC Portal demonstrator to MS by the end of November 2017.

#	Action	Action owner	Deadline
6	Define minimum meta data required to support trial ENC scheme	ICC-Coordinator	Jan 2018

The ICCWG Chair referred to the discussion on the minimum metadata needed to support the trial ENC scheme, and suggested using the ENC Portal to identify any missing metadata.

#	Action	Action owner	Deadline
7	Noting actions from IRCC concerning the creation of ENC Schemes, ICCWG Chair to define an ENC scheme initially from Mozambique to northern limit of SAIHC	ICC-Coordinator	Feb 2018

The ICCWG Chair mentioned the suggestion of selecting an area with overlapping countries, PCA responsibility and CS action, so initial thoughts covered the area from Mozambique East to the northern limit of SAIHC.

The IHO Director, referred back to Action 7, and stated that we should not limit the scheme to the area of multiple producers it should be for the whole SAIHC region; to start with initial scheme by Feb 2018 with the aim to complete the whole scheme by the next SAIHC meeting.

#	Action	Action owner	Deadline
8	Suggested trial teleconference	ICC-Coordinator	Mar 2018

The ICCWG Chair suggested a mid-year teleconference, to improve attendance and involvement.

The SAIHC Chair stated that the teleconference was a great idea but must have a purpose and meaning.

The ICCWG Chair invited SAIHC to endorse and approve the actions, and stated that they would be documented within the SAIHC Minutes.

**Decision:** The SAIHC Chair confirmed that the actions were endorsed.

## 6.2. MSI (NAVAREA VII Report)

*Docs: SAIHC14-6.2 - MSI (NAVAREA VII Report), and MSI Self-Assessment Presentation*

The Chair introduced the CB Coordinator, to present the NAVAREA VII report, as regrettably South Africa were unable to attend.

The SAIHC CB Coordinator delivered the NAVAREA VII report on behalf of South Africa, NAVAREA VII Coordinator, through the executive summary provided, which covered background information, current status, the NAVAREA VII National Coordinators, contingency planning and significant events, identified deliverables and outputs, CB, challenges and concerns, contact details, and the following recommendations:

- Angola, Madagascar and Iles Comoros should be encouraged to communicate with the NAVAREA VII Coordinator and to adapt to the GMDSS and to implement MSI measures accordingly so that, where the degrees of hazard are known, that this information may be disseminated to warn mariners operating in the relevant area. For the safety of life, MSI awareness must be improved and the installation of radio communication equipment and the associated operator training is imperative.
- The lack of NAVTEX Stations north of South African borders, including Namibia, is a persistent challenge. The installation of radio communication network equipment, and operator training, are the two most important components that need to be addressed. This requirement is constantly communicated to the delegates of these countries at SAIHC Conferences.
- Plans to bring a dedicated Namibian NAVTEX service back into operation needs to be expedited. The slow progress and the lack of adequate MSI implementation by States in the Great Rift Valley in the SAIHC region remains a persistent matter of concern.
- In light of the 9<sup>th</sup> meeting of the WWNWS-SC in Aug 17, South Africa has dedicated itself to join a dedicated S-124 co-operability document review working group within the WWNWS-SC, and encourages other states to join this group in the spirit of co-operability, especially within SAIHC.

Namibia highlighted the need to have their NAVTEX service running, and asked if anyone had written to their Government to raise the issue.

The IHO Director commented that the Namibian Government should be aware of this as this

shortcoming is also reported at IMO, however Namibia were concerned as a previous inspection and visit to Walvis Bay had not realized an official report.\*

**\*Post meeting note:** The IHO Director commented that this was reported in the Technical Visit Report in 2011 and also in a number of NAVAREA VII reports.

**Action SAIHC 14 - 19: NAVAREA VII coordinator, to draw the attention of Associate Members not present at SAIHC 14 to the MSI Self-Assessment presentation. Deadline: 30<sup>th</sup> November 2017.**

The Chair noted that Namibia were not represented at the 9<sup>th</sup> WWNWS-SC Meeting, so suggested contacting the WWNWS-SC Chair, Peter Doherty, to see how the NAVTEX issue could be addressed, and provide support to raise it in Namibia; Captain Stokes and William Van-Den-Bergh would also have a part to play.

The IHO Director suggested writing a formal letter to the Maritime Safety Authority in Namibia, however he advised contacting Walvis Bay Radio first to establish the current situation and progress with resolving the NAVTEX issue.

Seychelles queried which NAVAREA the Seychelles falls in, the Chair confirmed NAVAREA VIII.

IALA confirmed that he would be in Comoros the week after SAIHC 14, for a Review Mission, and stated that MSI was the most important preparation in the report. To note: IALA to have the relevant MSI information in preparation for the report.

### 6.3. Capacity Building

*Docs: SAIHC14-6.3 - CB Update Presentation*

*SAIHC14-6.3.1 - SAIHC Letter 1/2017 - Capacity Building Projects*

*SAIHC14-6.3.2 - SAIHC Letter 3/2017 - Capacity Building - MSI Training Course*

The Chair introduced the CB Coordinator, to deliver the Capacity Building presentation.

The SAIHC CB Coordinator began with some opening remarks, he stated that the IHO CB programme follows the cycle of the IHO work programme, this year is the last of the current 5 year programme which started in 2013. Following the approval of the protocol of amendments IHO now follows a 3-year work programme cycle. Consequently, he had developed the SAIHC CB plan for 2018-2020, which was circulated in CL1/2017.

The CB Coordinator congratulated SAIHC on its achievements over the last four years, set against some big challenges, including Finance, more RHC competition, and the changes to the IHO CB Strategy, the biggest impact of which was that only IHO MS would qualify for funding for Phase 2 and 3 training. He stated that all 6 MS and 9 Associate Members of SAIHC need to have completed Phase 1 training in order to meet the aims of the IHO CB Strategy.

Full IHO Membership does not necessarily mean that the Phase level has been achieved which is why there is a mixture Phase 1 and other activities. He highlighted the value in inviting participation from other RHCs, which has worked well, to make some training viable.

The CB Coordinator then delivered the presentation on CB, discussing the activities completed since the last SAIHC Meeting, the last year of the current SAIHC CB Plan, endorsed activities for 2017, and proposed and endorsed activities for 2018.

The CB Coordinator highlighted the importance of Annex A to the CB Plan, which contains information on the following:

- NHC or NHCC

- CB Phase 1, 2 or 3
- Last TV

**Action SAIHC 14 - 20:** CB Plan, plan how we move Annex A forward, the assessment of capability. Deadline: SAIHC 15.

Namibia requested a high-level visit to promote IHO membership.

**Action SAIHC 14 - 21:** Namibia to consider requesting an IHO high level Technical Visit. Deadline: Ongoing.

The CB Coordinator raised the difficulty in finding out how to join the IHO, as the information is embedded within IHO Publication M-2, and suggested that it should be on the front page of the IHO website. The IHO Director agreed and recommended placing the information on how to join the IHO on the IHO Membership page.

The Chair suggested changing our approach to CB to focus on supporting new members to the IHO and helping them build capacity to stand on their own as HOs. He added that this would not only be a measurable activity with real effect but could also attract membership. He then highlighted the usefulness of IHO Publication M-2.

**Action SAIHC 14 - 22:** IHO Secretariat to consider improving awareness of how to join IHO on the IHO website. Deadline: Ongoing.

**Action SAIHC 14 - 23:** SAIHC MS and CB Coordinator to consider how SAIHC could best support new members to IHO and help them build capacity to stand on their own as Hos; to produce a membership pack. Deadline: Ongoing.

#### 6.4. Presentation of National reports

*Docs: SAIHC14-6.4C - National Report: France  
SAIHC14-6.4F - National Report: Malawi  
SAIHC14-6.4H - National Report: Mozambique  
SAIHC14-6.4J - National Report: Norway, and Presentation  
SAIHC14-6.4K - National Report: Portugal, and Presentation  
SAIHC14-6.4M - National Report: South Africa, and Presentation  
SAIHC14-6.4O - National Report: United Kingdom, and Presentation  
SAIHC14-6.4P - Naval Meteorology and Oceanography Presentation*

The National Reports for France, Malawi, Mozambique, Norway, Portugal, South Africa, UK, and a presentation from USA can be found on the SAIHC 14 page of the IHO website. The MS present delivered a short presentation on their National Report.

National Reports were not received from Angola, Comoros, Kenya, Madagascar, Mauritius, Namibia, Seychelles, nor Tanzania, however both Namibia and Seychelles provided a verbal presentation, summarized below:

##### Namibia

- NAMPORT took an action to check if the Namibian NCC exists.
- New container and tanker berths at Walvis Bay are 70% complete.
- VTS tower to be added as part of the project
- MFMR is inactive because of financial difficulties.
- Mark Eiman is the only qualified hydrographic surveyor (CAT B).
- Walvis Bay suffers from fog 70% of the time which makes for dangerous navigational conditions for mariners in the port and approaches. NAMPORT has developed traffic

management schemes to address this issue.

### Seychelles

- No report submitted but promised to have a comprehensive report next year. Moving from being an administration to an authority will improve national visibility. Cruise traffic will increase. Working towards IHO membership and very pleased to be at the meeting.

**Action SAIHC 14 - 24:** MS and Associate Members unable to attend the SAIHC meeting to render a National Report. Deadline: Ongoing.

### 6.5. Hydrographic Survey Status (C-55)

*Docs: SAIHC14-6.5 - C-55 Hydrographic Survey Status: Areas < 200m and Areas > 200m*

*SAIHC14-6.4A - C-55: Angola*

*SAIHC14-6.4B - C-55: Comoros*

*SAIHC14-6.4C - C-55: France*

*SAIHC14-6.4D - C-55: Kenya*

*SAIHC14-6.4E - C-55: Madagascar*

*SAIHC14-6.4F - C-55: Malawi*

*SAIHC14-6.4G - C-55: Mauritius*

*SAIHC14-6.4H - C-55: Mozambique*

*SAIHC14-6.4I - C-55: Namibia*

*SAIHC14-6.4J - C-55: Norway*

*SAIHC14-6.4K - C-55: Portugal*

*SAIHC14-6.4L - C-55: Seychelles*

*SAIHC14-6.4M - C-55: South Africa*

*SAIHC14-6.4N - C-55: Tanzania*

*SAIHC14-6.4O - C-55: United Kingdom, Ascension, Tristan da Cunha, and St Helena*

The IHO Secretariat delivered a live demonstration of the C-55 database, which is not publicly available yet. This works in conjunction with ESRI ArcMap, and not only covers C-55 but the complete Country Information System; from this database the P-5 IHO Yearbook is automatically generated for upload on the IHO website and the C-55 information for each MS.

C-55 data is divided into two categories; shallow water (shoaler than 200m) and deep water (deeper than 200m), for charting and survey information. There are various layers available, including CATZOC data from MS, and each nation is bounded by the 200NM continental shelf.

The intention is to make this database available online, with the long-term plan to allow MS and RHCs to update the database, which will mean a move to an external server. The Japanese seconded officer, Kentaro Kaneda, has been the driving force behind the development of this system.

IHO Director then presented the C-55 information for a number of nations, available from the SAIHC Documents page of the IHO website, and highlighted a number of discrepancies in the data, including no published ENCs for INT chart coverage. He emphasized how important it is that the C-55 information reflects the true picture.

A discussion followed on who was best placed to provide the inputs for C-55. UK highlighted areas where PCA can update “elements” of C-55 but require Coastal State (CS) to also input from a surveying perspective.

The Chair stressed that it is incumbent on all, PCA and CS, to ensure that the C-55 information is up-to-date and accurate, and check that the information has been correctly portrayed.

**Action SAIHC 14 - 25:** All MS and associated PCA to check relevant C-55 data and update as

required, informing IHO Secretariat when complete. All MS to check relevant P-5 entries, informing IHO Secretariat when either/or are complete. Deadline: 31<sup>st</sup> October 2017.

The Chair then invited the IHO Secretariat to look at the process to ensure that the C-55 information is correctly portrayed, as errors also occur in the graphics of the submitted data.

**Action SAIHC 14 - 26:** IHO Secretariat to look at process for online updates for C-55 inputs by Members. Deadline: Ongoing.

CB Coordinator suggested that PCAs are best placed for nautical charting and the initial check on the graphics, and then it is incumbent on the CS of the PCA to check the graphics.

## 6.6. Procedures in response to Marine Disasters

### 6.6.1. Update from IHO 1<sup>st</sup> Assembly

*Doc: IRCC9-08B - IHO Response to Disasters*

IHO Secretariat discussed Japan's Proposal 3, to amend IHO Resolution 1/2005 - *IHO Response to Disasters*, which was discussed at Assembly with no conclusion. The Assembly tasked the IRCC to review and redraft, taking into consideration PRO-3 and related comments and submit a draft revision to the Council.

The Chair commented that each RHC has a unique element towards disaster mitigation and disaster relief activity, and therefore a more generic document is required.

### 6.6.2. Marine Disaster Contact Details

*Doc: SAIHC14-6.6 Marine Disaster Contact Details*

IHO Secretariat presented the Marine Disaster Contact Details spreadsheet for SAIHC and requested that MS check their contact details and forward any updates to him.

IHO Director then provided some background to the spreadsheet; he was concerned that the last update was 1 January 2016, and requested that the details are checked, and an alternative point of contact added.

The entries for a number of nations were examined and found to be deficient in some of the details, Namibia and Seychelles confirmed that their details were correct; UK to send an update for St Helena, and provide an alternative point of contact.

The Chair suggested that the primary focus is on ensuring the data is correct, with portrayal and access to the data as the secondary focus.

**Action SAIHC 14 - 27:** Marine Disaster details, action on MS to review and if necessary update the contact details on the Marine Disaster spreadsheet, and to provide an alternative point of contact (if applicable) informing SAIHC Chair when complete. Deadline: 30<sup>th</sup> November 2017.

## Industry Presentations

*Docs: Chartwise Presentation  
Fugro Presentation  
Kongsberg Presentation*

The Chair introduced the Industry presentations from Chartwise Training Ltd, Fugro South Africa and Kongsberg Maritime, which were informative and thought provoking.

## **Chartwise Training Ltd**

Keith Swan delivered a presentation on his new company, Chartwise Training Ltd, which offers:

- Training, including advanced training to the same level as Cat B accredited courses (Chartwise Training Ltd is not Cat B accredited)
- Consultancy services, aimed to improve production efficiency, such as Quality Management System (QMS) - aligned with the ISO standard 9001, and ENC capture and encoding policy guidance.
- Consultation in the form of questionnaires, for Training Needs Analysis and/or Consultancy Package Analysis.

Norway asked if Chartwise Training Ltd was aligned with ISO9001 or accredited; Keith confirmed that any QMS developed would be in line with ISO9001 to provide the basis for an organisation to apply for accreditation.

The IHO Director enquired about the spectrum of production software; Keith acknowledged that trainers would need to be current practitioners in the software they are training.

The Chair thanked Keith and wished him good luck in his new venture.

## **Fugro South Africa**

Marco Filippone delivered a presentation entitled 'Passive and Active: Remote Survey Solutions for Hydrography' on behalf of Fugro, with the emphasis on the nearshore and coastal hinterland. He provided an overview of Fugro's Hydrographic Services which operate worldwide, and include LIDAR surveys, data for nautical charts (SOLAS), and charting solutions with new partner SevenC's.

Marco covered the following approaches to nearshore mapping:

- Remote sensing from wide-area satellite imagery

He detailed an integrated approach for Satellite Derived Bathymetry, which can provide very effective cost-effective and initial coverage of suitable water in the nearshore area.

- Airborne active sensor techniques

He discussed the overall benefit of Airborne Lidar Bathymetry (ALB), particularly for the 2m - 10m depth area, which when combined with multibeam data provides a seamless dataset. Marco stated that ALB ENC direct integration has been developed with Seven C's.

- Traditional acoustic hydrographic survey techniques

He discussed Multi Beam Echo Sounder (MBES) survey technique, and described a recent example of MBES survey work in the Red Sea, combined with ALB, which covered the 0m - 100m depth area, covering 100,000km<sup>2</sup>, and to IHO Order 1a, resulting in 300TB of data excluding the water column data; taking 1.5 years to survey, and 1 year to process.

Marco provided a summary, which included the different solutions to mapping the nearshore areas, and highlighted the importance of quantifying the data and applying appropriate risk to the data usage.

Marco then presented the Case Study: The search for MH370; Fugro provided the equipment, technology and methodology, for a pre-determined area, using a two-phase approach, firstly with reconnaissance bathymetry, followed by a wide area search. The total area covered over 200,000km<sup>2</sup>. Data, which is some of the first high-resolution data of this area of the Southern Indian Ocean, is available from the Geoscience Australia website; processing is still ongoing.

The Chair thanked Marco and referenced the enormity of the GEBCO Seabed 2030 task, and asked if the Red Sea data collected required full processing, or processing for navigational use. Marco confirmed that IHO Order 1a was required but also high-density data; overlapping and merging surveys in shallow waters was particularly challenging.

## Kongsberg Maritime

Øystein Aasbø delivered a presentation entitled 'Bring Clarity to the World Below' on behalf of Kongsberg Maritime - Subsea Division, and provided an overview of the following:

- Kongsberg

Kongsberg provide international high-tech solutions, from deep sea to outer space, with four distinct business areas - Maritime, Digital, Defence Systems, Protech Systems. The global business system ensures that "there's always a Kongsberg man awake".

- Kongsberg Maritime

This includes offshore oil and gas, various equipment installed on over 18,000 vessels, 58 offices in 20 countries, including an office in South Africa; customer support is extremely important, with three hubs for worldwide coverage, one in the Americas, Norway and Singapore.

- Subsea Division

Office includes the factory, with a research vessel to test out the equipment; the main product line includes hydrography systems and sonars.

- Kongsberg Maritime Hydrographic Portfolio

Øystein described the complete MBES range, to cover the shallowest waters to full ocean depth, and commented on their unique backscatter processing.

Øystein then discussed a new feature which ensures the shallowest point is detected; extra detections utilize phase and amplitude information to generate seven extra soundings per beam. With extra detections, you get the complete seafloor and structure, without the amount of data associated with water column data.

Norway asked if extra detections were designed to replace the requirement for water column data, it was concluded that both types of data were required, the extra detections would meet the requirements from a charting (SOLAS) perspective, whereas a true MSDI function would require the water column data.

Øystein mentioned that new hydrographic survey vessels for Angola and Morocco will be fitted with Kongsberg equipment.

The Chair thanked Øystein for his presentation.

## 7. IHO Council Regional Input (Closed Session)

*Doc: C1-1.2 - 1<sup>st</sup> meeting of the IHO Council Revised Provisional Agenda*

The Chair reviewed the revised provisional Agenda for the 1<sup>st</sup> meeting of the IHO Council (C1-1.2), to identify anything from a regional perspective for Captain Stokes, as the SAIHC representative, to take forward to the IHO Council Meeting in October.

1.3 The Chair stated that Rear Admiral Shepard Smith (USA) had been elected as Chair, and explained that the Vice-Chair would be elected at Council, as there had been a tie between the Brazilian and Italian candidates.\*

**\*Post meeting note:** CCL09/2017:

- Captain Luigi SINAPI (Italy) has informed the IHO Secretary-General that he has decided, after careful consideration, to withdraw his application to be elected as Vice-Chair of the IHO Council.
- As a result, and considering that Admiral (Retired) Luiz Fernando PALMER Fonseca (Brazil) remains the candidate who received the majority of votes, he is therefore declared Vice-Chair of the IHO Council, with immediate effect.

The Chair stated that from SAIHC membership, South Africa, France, UK, Norway and USA, have seats on the IHO Council.

The Chair suggested that for future SAIHC meetings this should be a standing agenda item with the aim of the Representative for the Region delivering a back brief from the previous IHO Council Meeting, and then conducting a review of the next IHO Council Meeting Agenda for regional input.

Matters arising to feed back to Captain Stokes addressed the following areas:

- Theme for World Hydrography Day
- Hydrographic Interest
- Canada proposal
- CB support

## 8. MSDI

*Docs: SAIHC14-8 - MSDI Presentation*  
*SAIHC14-8.1 - SDG14 Presentation*

The Chair introduced the following two presentations on MSDI and SDG14.

### **MSDI Presentation**

IHO Secretariat, Tony Pharaoh, delivered a presentation from the MSDIWG report to IRCC9, which focused on the four pillars of MSDI:

- Technical Standards (Standards) including S-57 and S-100.
- Information Systems (ICT) with the implementation of standards including ECDIS manufacturers.
- Geographic Content (Data) with special mention to our rich coverage of products, particularly ENCs, no other International organization has worldwide coverage of a suite of products conforming to one standard produced by so many Member countries, no other equivalent in the world.
- Policy & Governance (People) including working with stakeholders.

Tony then highlighted the benefits to an HO in supporting an SDI, with the wider use of hydrographic data and information in the development of new products and services, improved decision making and increased efficiencies.

He informed us of the draft New Edition 2.0.0 of IHO Publication, C-17 Guidance for Hydrographic Offices, submitted to IRCC9 for endorsement.

The MSDIWG will hold a day-long Open Forum to precede the 9<sup>th</sup> MSDIWG meeting in early 2018, in Brazil.

UK thanked Tony for his presentation and stated that C-17 is a good overview, he then stated that the MSDIWG is now co-located with OGC, to bring greater International standards and expertise together.

The Chair highlighted the importance of the standards piece.

### **SDG14 Presentation**

CB Coordinator, Jeff Bryant, delivered a presentation on SDG14 on behalf of Sam Harper, UKHO International Hydrographic Projects Manager, to show how UN Sustainable Development Goals 9 and 14 fit with hydrography.

Of the 17 UN SDGs, Jeff focused on SDG9 - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation, and SDG14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development; and discussed the key targets. He emphasized that navigational charts are a part of national infrastructure.

He showed how hydrography fits into the two SDGs, with hydrography as the keystone, and then discussed the challenges for incorporating hydrography, emphasizing that the seabed is invisible to the public and therefore not politically attractive; the solution to educate your audience.

Jeff stressed the importance of hydrography as the pivot that helps find the balance between successful implementation of SDGs 9 and 14.

Norway expressed compliments to the UK for an excellent presentation, and was keen to use it to educate their audience.

IHO Director thanked the UK for an excellent presentation and suggested that the keystone slide from the presentation was a perfect fit for World Hydrography Day, as it provides the audience with a very clear message.

The Chair stated that with SDG14 there is a strong link to the purpose of hydrography and how to support blue economy development, and to promote hydrography within your country; he was therefore keen to make this information available either with the offer of UK to present, or by provision of the presentation.

## **9. International Bodies**

### **9.1. IALA**

*Doc: SAIHC14-9.1 - IALA and the IALA World-Wide Academy Presentation*

The Chair introduced the IALA presentation, stating the importance of the coordination between the IHO, IMO and IALA, a powerful tool to help nations develop from a maritime perspective.

IALA, Jacques Manchard, presented a very comprehensive brief covering four distinct areas:

- About IALA
- World-Wide Academy (WWA)
- The Future, from Non-Government Organisation (NGO) to Intergovernmental Organisation (IGO)
- CB and training in Africa

#### **About IALA**

Jacques touched on the IALA Buoyage System, and provided a brief history of IALA, and then stated the Aids to Navigation (AtoN) definition, the IALA motto - "Successful voyages, sustainable planet" and the three principal aims. He described the different types of IALA Membership, which includes 84 National Members with voting rights.

He then described the IALA governance structure, comprising General Assembly, Council, and Council Working Groups, and defined the four IALA Committees - ARM, ENG, VTS and ENAV.

Jacques described the different types of IALA publication - Standards, Recommendations, Guidelines, Manuals and Model courses, and stated that the documentation should be incorporated in the national legislation of the Coastal States in case of accident, grounding or other event; he also advised that all the publications are free of charge from the IALA website.

He then discussed the IALA Core Activities, to bring together AtoN experts from around the world and emphasized that IALA members benefit from the experience of hundreds of AtoN experts; best practice in the Recommendations and Guidelines, support in the establishment of AtoN networks,

and contribution to the reduction of marine accidents.

Jacques then listed the three pillars of the IALA Organisation - Policy and Technical Operations, Administration and Finance, and the WWA. He then mentioned the IALA Toolbox, detailing the Workshops and Seminars, and then stated the IALA Strategic Vision and the two Goals for 2026.

### **WWA**

Jacques stated the three functions of WWA, CB, education and training, and research and development, and specified that the focus is on the second Goal in IALA's strategic vision, he then listed the five main strategic objectives of WWA.

- Focus on those with greatest need
- Review of progress within Target States
- At least one training hub in each region
- Delivering as one (IHO, IMO, and IALA)
- Connecting people

Jacques stated that IALA have performed an assessment of need for 154 Coastal States, the results show that 15 of the 28 countries identified as requiring the greatest need are in Africa. To identify how to help countries meet their obligations, IALA conducted 'Need Assessment' missions, nearly all of which are complete, and plan to conduct four 'Review' missions in 2017, beginning with Comoros. He stated that IALA are lobbying for the states in need, and thanked the IHO for allowing IALA to attend the Regional Hydrographic Commissions; with interest, also in the SAGNEP initiative, and attending IMO Committees.

Jacques discussed the planned AtoN courses for 2017, research into Distance Learning, Academy Training Activities, and the IALA Accreditation Scheme to ensure consistent quality.

In summary, the IALA WWA is embarking on an ambitious programme to improve the safety of navigation in the African region. The support of MOWCA and SAGNEP members to assist this programme is considered key to its success.

### **The Future, from NGO to IGO**

Jacques confirmed that IALA is currently working to become an IGO, a major step in the evolution of IALA. He commented on IALA's current cooperation, with consultative status at IMO and MOUs with other international organisations, such as IHO, CIRM, and IHMA. He discussed the advantages of IGO status, including enhanced liaison with IHO and IMO as an equal partner, and reflected on the Project status, mentioning that IMO and IHO Secretary-Generals expressed the wish for IALA-IHO-IMO 'trinity of excellence' to continue into the future.

### **CB and Training in Africa**

Jacques stated that Africa is one of the five key maritime regions which receives both training and CB from the IALA WWA. This activity is delivered in partnership with members of the Joint CB Group (principally the IHO and IMO) as part of the UN "Delivering as one" CB strategy.

IALA signed an MOU in 2015 with the Maritime Organisation for West and Centre Africa (MOWCA) covering training and CB.

Jacques discussed the Coastal States obligations with regards to the principal SOLAS V regulations, he then described the aims of the IALA WWA to assist both developing nations and the IALA Target States to recognize their international obligations related to SOLAS Regulations before assisting them to implement the necessary measures to provide MSI, VTS and AtoN services that meet international standards.

He introduced the IALA WWA CB Strategy, to harmonise international capacity building, stating that IALA had adopted the four-stage capacity building process developed by the IHO. He discussed the

CB Awareness Seminars organised in Africa since 2012, and then provided details of the IALA WWA 2013 and 2014 CB Activities in Africa, and Target States 2015 – 2016, followed by the IALA WWA Capacity to implement the Strategy, mentioning the kind support offered from IALA Member States such as France and the UK.

Jacques discussed the list of Target States for 2017, highlighting the SAIHC countries, this showed Tanzania, Comoros and Angola as Priority 1, Madagascar and Mozambique as Priority 2, and Namibia and Seychelles as Priority 3.

He confirmed that AtoN Technical Needs Assessment Missions had been conducted for Mauritius in 2013, Comoros in 2014, Namibia in 2017 and were planned for Mozambique and Seychelles in 2018. A Review was planned for Comoros in September 2017.

Jacques then discussed the way forward with CB, stating that 16 potential Missions are to be completed in the African region before the end of IALA's Strategic Goal target of 2026. He hoped that the MOWCA and SAGNEP membership would work with IALA to encourage the SAIHC states to invite the IALA WWA to conduct such missions.

He defined CB and training as being inextricably combined and then provided further detail. He reiterated that only Competent Authorities of IALA National Members can accredit Training Organizations to deliver approved IALA Model Courses. He then discussed the Status of the Accredited Training Organisations (ATO).

Jacques discussed the future Training Hubs, of which Africa is one, as the Strategy is to have at least one ATO in each Target Region; he then elaborated on the way forward. Jacques stated that it was estimated that there was a requirement for more than 150 people accredited with AtoN Management, adding that there is a lot of work to be done.

The Chair thanked Jacques for a very comprehensive presentation, stating that there were no issues with endorsing IALA's recommendations.

UK questioned whether IALA and IHO have looked at their respective Technical Missions for any synergy, and whether this can be improved, particularly with IALA changing to an IGO. IALA have talked with UKHO and IHO, and met with SHOM, and fully support the most efficient way possible, he stated that more preparatory work between IALA, IHO, UK and France, for more considered proposals of action, would benefit all. Further recommendations included:

1. Jacques suggested that IALA work with IHO, UKHO and SHOM, for IMO Audits, and MSI actions, for further actions.
2. Jacques raised the following questions, how can we be more efficient in the preparation of Missions? Is it possible to have a common Mission, perhaps a statement to be proposed that each of us can use for our own direction?

The IHO Director fully supported the IALA comments and suggested combined Technical Visits linked with IALA to deliver an improved Technical Visit, report and recommendations.

CB Coordinator mentioned an action on CBSC to co-ordinate IALA and CB activities for joint Missions, as part of the annual plan.

Jacques highlighted an issue with the level of status for reports, as IHO reports are published on the IHO website and therefore freely available, however IALA reports are Confidential. A solution is required, as this is problematic when preparing submissions with help from UKHO and SHOM, as the information is not able to be disseminated, in answering queries.

The chair suggested either a redacted report, or for the nation to allow the report to be shared with another international body.

IALA suggested a discussion on risk analysis, and how it could be improved, adding that this could

be a common topic of work between IALA and hydrographic services.

## 9.2. GEBCO

*Doc: SAIHC14-9.2 - GEBCO Presentation*

The Chair introduced IHO Secretariat, to deliver the GEBCO presentation, as regrettably GEBCO were unable to attend.

IHO Secretariat delivered a presentation on behalf of GEBCO, providing a brief overview of the longest running ocean mapping programme, showing how as the World Bathymetry has improved our knowledge of the seabed has improved. He then illustrated the evolution of the charting of Réunion, with the first edition published in 1903 through to the fifth edition in 1982.

Tony discussed the GEBCO gridded dataset, available at two grid resolutions, and the IHO Data Centre for Digital Bathymetry (DCDB) containing the worldwide collection of bathymetric data. He mentioned that Shallow Water Bathymetry had been sourced from Coastal ENC's to update the global model, and improve the coverage of Shallow Water data.

Tony then moved on to Crowd Source Bathymetry (CSB), he recommended that all looked at B-12 - IHO Guidance Document on CSB, which was currently out to MS for comments.

He discussed the Seabed 2030 project, a collaborative project between GEBCO and the Nippon Foundation, which aims to map the World Oceans floor at a 100 metre grid resolution by 2030, thus ensuring that all features of the accessible parts of the World Ocean floor, larger than 100m are portrayed. He stated that using current technology, it is estimated that it will require nearly 1000 ship years to map the Worlds Oceans; this is the main driver for the Seabed 2030 project. He described the project structure which included the Global Data Assembly and Coordination Centre, based in the UK, and four Regional Data Assembly and Coordination Centres (RDACC).

The Chair thanked IHO Secretariat for the presentation, commenting that it was an extremely ambitious project.

Norway mentioned the potential contribution from the RENCs to Seabed 2030, which PRIMAR will add to the PRIMAR Advisory Committee, he requested that IC-ENC add this to the Steering Committee meeting agenda.

**Decision:** Portugal agreed to provide feedback to IC-ENC.

## 10. RENC Updates

### 10.1. IC-ENC

*Doc: SAIHC14-10.1- IC-ENC Presentation*

The Chair introduced Portugal, to deliver the IC-ENC presentation, as regrettably the IC-ENC Manager, was unable to attend.

Portugal, delivered a presentation on behalf of IC-ENC, relayed the IC-ENC Mission, and provided a brief overview of the following topics:

- Membership and Offices, currently serving 42 Member HOs, and supporting approximately half of the world's ENC's.
- The four Core Services:
  - Production Support, which includes the IC-ENC Errors Database, and the Technical Conference, last held in May 2017, with 41 attendees representing 32 of the 42 Member

- HOs, was reported as a great success with some excellent discussions.
- Validation, which includes a Feedback Report for each cell; the volume of validations per month is increasing, with approximately 50 safety critical issues identified each month.
- Distribution - Value Added Resellers (VAR) are appointed,
- Revenue Management, it was highlighted that IC-ENC Members set the sales terms and conditions, and each quarter, IC-ENC provides an itemised sales report and financial settlement to each Member.
- Finances - IC-ENC is a not for profit organisation, and \$1 per annual subscription of each ENC is retained to cover operating costs.

The Chair thanked Portugal, and introduced Norway, to deliver the PRIMAR presentation.

## 10.2. PRIMAR

*Doc: SAIHC14-10.2 - PRIMAR Presentation*

Norway, delivered a presentation on behalf of PRIMAR, relayed the PRIMAR vision, and provided the following overview:

- PRIMAR is operated on a non-profit basis by the Norwegian Hydrographic Service (NHS) in close cooperation with Electronic Chart Centre (ECC).
- Main function - to provide a consistent and reliable ENC service worldwide.
- Membership - currently 17 Member Nations.
- PRIMAR ENC Service - ENCs from more than 60 different nations available.
- Distribution - PRIMAR VAR within PRIMAR RENC value chain, including Navy/Government Supplier Services.
- Validation - online validation tools available to HOs which have been developed in-house, including a Validation Report Checker and an Errors database; the ENC QC process has resulted in over 73 million recorded ENC quality issues since 1999.
- PRIMAR Web Chart Service - for MSDI needs, which combines data from several sources.
- Finances - new RENC financial model, which charges members a fixed fee of \$1 for Commercial transactions and \$1.4 for National transactions.
- Future Standards:
  - PRIMAR are working on an S-102 project as part of their National Report, and described the S-102 value chain, which involved PRIMAR S-102 validation and distribution. PRIMAR highlighted the possibilities of S-102 mainly with Under Keel Clearance (UKC).
  - PRIMAR are starting S-101 development.

The Chair thanked Norway, and asked if there were any questions on either of the two RENC presentations.

Namibia raised the question of when S-102 would come in, as it would be very useful for Pilotage, Norway confirmed that S-102 is an accepted standard, open for modification, and stated that several countries including Norway and Sweden, are already producing limited datasets as a test environment. PRIMAR plan to finalise their business project at the end of 2017/early 2018.

The Chair confirmed that UKC is a key issue, and highlighted the financial implications involved.

## 11. Statutes of SAIHC

*Doc: SAIHC14-11 - SAIHC Statutes (Rev 6)*

The Chair introduced the Secretariat, to present the two Agenda Items for the SAIHC Statutes.

### 11.1. Approval of amendments since last meeting

The SAIHC Secretariat presented the track-changed version of Revision 6 of the SAIHC Statutes, which contained the amendment to Article 1c, from Agenda Item 3.2.

Changes included in Revision 6 of the Statutes are as follows:

- The text was amended to reflect the change of status of the IHO, and to include a section on how the SAIHC nominates its Council representative (Annex A - Proposed Procedure for the Designation of SAIHC Representatives to the IHO Council).

There had been no feedback from Members last year on the final draft of Revision 6 of the Statutes. The Record of Amendments were out of date for Revision 5, so would need to be updated, and there are inconsistencies with the use of the term 'Associate Members' and 'Associated Members'. It was proposed that the track-changed version of the SAIHC Statutes as shown at SAIHC 14, were approved as Revision 6 of the Statutes.

The Chair suggested the approval of Revision 6 to include amended Article 1c, and recommended that all other proposals are included in Revision 7, together with any required housekeeping, including the inconsistencies identified.

**Decision:** The Chair confirmed Revision 6 of the Statutes of SAIHC, endorsed and approved in Saint-Gilles, La Réunion, on the 8th September 2017.

### 11.2. Any further proposed amendments

The Chair requested any further amendments to Revision 7 of the Statutes, noting that Norway had raised formally inviting GEBCO, IALA and RENCs to the SAIHC meetings as Observers, and the Secretariat had outlined some housekeeping with 'Meeting' and 'Conference', and 'Associate Members' and 'Associated Members'

UK requested that "Proposed" is removed from the title of Annex A, this was accepted.

The Chair confirmed that these amendments would be passed back to the Chair with the aim of endorsing Revision 7 at the next SAIHC meeting.

## 12. Election of Chairman and Vice-Chairman

The Chair reiterated that he was standing in for the current SAIHC Chair, Captain Theo Stokes, as he was unable to attend having only just taken up the position of National Hydrographer for South Africa. Although, Captain Stokes was willing to stand as Chair, he was happy for someone else to step in, to enable him to become established in his new role.

The Chair asked for any volunteers to stand for Chair, there was no response. He then stated that the UK would be willing to chair, and noted that if this was agreed that there would be a vacancy for Vice-Chair.

Norway supported UK as Chair, and proposed South Africa as Vice-Chair.

The Chair agreed, and would ask Captain Stokes if he was willing to be Vice Chair, and continue to work together as they had done in the past.

**Decision:** UK elected as Chair and South Africa elected as Vice-Chair.

### 13. Review of SAIHC Actions

The Secretariat presented the Actions carried forward from SAIHC 13 and the new Actions from SAIHC 14, which were reviewed and amended by consensus, and are included in Annex A.

### 14. Any Other Business

IHO Secretariat discussed CL50/2017, which resulted in the following action:

**Action SAIHC 14 - 28:** To reflect the requested actions of CL50/2017 (CATZOC) in SAIHC and ICCWG agendas. Deadline: SAIHC 15.

### 15. Date and Venue of next Conference

The Chair thanked Seychelles for indicating the possibility of hosting the next meeting, stating that he would write a letter to Captain Valmont; he asked if any other MS were interested in hosting, there was no response.

The Chair then looked at the date for the next meeting, stating that it must be before the 2nd IHO Council meeting at the end of September 2018, and suggested the last week of August or the first week in September 2018. As the IHO Calendar showed back to back meetings in September, the last week of August 2018 was provisionally agreed. Norway recommended that the IHO Secretariat preliminary reserve the last week in August 2018 in the IHO Calendar, annotated "to be confirmed".

**To note:** 1 day Hydrographic Awareness Seminar will precede the 3 day SAIHC meeting.

**Decision:** IHO Secretariat to preliminary reserve the last week of August 2018 in the IHO Calendar, annotated "tbc".

**Action SAIHC 14 - 29:** SAIHC Chair to write formally to request Seychelles to host next meeting. Deadline: 31<sup>st</sup> October 2017.

### 16. Meeting Closure

The Chair gave sincere thanks to SHOM for an excellent Conference meal, and for providing such a splendid venue and for the great hospitality. He asked for his thanks to be extended to Bruno Frachon for letting Laurent and Patricia attend. Lastly, he thanked Su Marks for her work as Secretary.

He emphasised that SAIHC has come a long way under the Chairmanship of Abri notwithstanding the late withdrawals but he thought this was a particularly vibrant meeting. He paid particular thanks to Seychelles, Mozambique and Namibia for their contributions.

In his opinion, the prospect of an ENC scheme, and CB will drive the Commission forward, with C-55 as another key element.

With Hurricane Irma ravaging the Caribbean, it highlighted that the RHC response to Maritime Disasters is an ongoing challenge

Director Kampfer had the last word opining that this was a very successful meeting despite the disappointing turnout from the Associate Members. Working in Africa presents unique challenges and in his opinion we had made progress.

## ANNEX A

**14<sup>th</sup> SAIHC CONFERENCE ACTION ITEMS**

No.	Agenda Item	Action	Action By	Deadline
1	3.2	Forward Revision 6 to the SAIHC Statutes to IHO Secretariat.	SAIHC Secretariat	31 <sup>st</sup> October 2017
2	3.3	SAIHC Chair to write a letter to India formally welcoming them as an Associate Member of SAIHC.	SAIHC Chair	31 <sup>st</sup> October 2017
3	3.4.1	Countries in the SAIHC region to provide capacity building inputs by end of February each year in accordance with capacity building procedures. (Note: Urgent requirements can be forwarded at any time or brought to SAIHC meetings).	SAIHC Member States	Standing Item
4	3.4.4 and 3.4.5	Charting Member States requested to provide coastal bathymetric data and shallow/deep ocean bathymetric data collected to be forwarded by HOs to the IHO Data Centre for Digital Bathymetry (IHO-DCDB). Feedback to be provided on progress at next SAIHC Conference.	SAIHC Member States	Standing Item
5	3.4.9	Countries with PCA responsibility to offer assistance to nations preparing for the IMO audit process.	PCA	Ongoing
6	3.4.9	Invite Members which are preparing for or have undertaken the IMO audit process to consider requesting support to meet items that have been raised within the audit, and also to share best practice.	SAIHC Member States	Ongoing
7	3.4.9	CB Coordinator to incorporate the topic of the IMO audit process for Members within the 1-day Hydrographic Awareness Seminar, preceding SAIHC 15.	CB Coordinator	1 <sup>st</sup> August 2018
8	3.4.11	SAIHC Chair to contact Angola to see what stage they are at with regard to supporting a technical mission from IALA.	SAIHC Chair	31 <sup>st</sup> December 2017
9	3.4.13	The members of SAIHC were requested to consider submitting papers for publication in the Review.	SAIHC Member States	Standing Item
10	3.4.13	SAIHC Chair to write to IHO Secretariat to commission a review of the relevance and purpose of the IH Review.	SAIHC Chair	30 <sup>th</sup> November 2017
11	3.4.13	SAIHC Chair to be the representative on the IHR Editorial Board.	SAIHC Chair and IHO Secretariat	Ongoing
12	3.4.6 and 3.4.14	SAIHC Member States to provide new information and available survey data, and report changes that may affect safety of navigation in their national waters in ample time to INT Chart producer nations, to ensure that their responsibilities as required by SOLAS are met.	SAIHC Member States.	Standing Item
13	3.4.7, 3.4.8 and 3.4.15	Include GEBCO, IALA, and RENCs as Observers to SAIHC in the Statutes.	SAIHC Chair	SAIHC 15
14	3.4.17	Mauritius is to submit a paper on their progress to the IHO Secretariat for the IHO Review and a shorter review for the Hydro International Conference.	Mauritius India	SAIHC 15
15	4.1	SAIHC Chair to include the Standing Agenda Item for States that are not yet MS of the IHO to provide an update on intentions to join IHO in their National Report, to include any impediments or issues preventing membership.	SAIHC Chair	SAIHC 15

16	4.2	SAIHC CB Coordinator to identify e-learning topics for SAIHC and report back to IRCC10.	CB Coordinator	IRCC10
17	Attendance session	SAIHC Chair to write to MS that pulled out of SAIHC 14 at the last minute, to ascertain if there were any common reasons.	SAIHC Chair	31 <sup>st</sup> October 2017
18	Attendance session	PCA nations to encourage Associate Members to attend SAIHC meetings.	PCA	Ongoing
19	6.2	NAVAREA VII Coordinator, to draw the attention of Associate Members not present at SAIHC 14 to the MSI Self-Assessment presentation.	NAVAREA VII Coordinator	30 <sup>th</sup> November 2017
20	6.3	CB plan, plan how we move Annex A forward, the assessment of capability.	CB Coordinator	SAIHC 15
21	6.3	Namibia to consider requesting an IHO high level Technical Visit.	Namibia	Ongoing
22	6.3	IHO Secretariat to consider improving awareness of how to join IHO on the IHO website.	IHO Secretariat	Ongoing
23	6.3	SAIHC MS and CB Coordinator to consider how SAIHC could best support new members to IHO and help them build capacity to stand on their own as Hos; to produce a membership pack.	SAIHC Member States and CB Coordinator	Ongoing
24	6.4	MS and Associate Members unable to attend the SAIHC meeting to render a National Report.	All	Ongoing
25	6.5	All MS and associated PCA to check relevant C-55 data and update as required. All MS to check relevant P-5 entries, informing IHO Secretariat when either/or are complete.	SAIHC Member States and PCA	31 <sup>st</sup> October 2017
26	6.5	IHO Secretariat to look at process for online updates for C-55 inputs by Members.	IHO Secretariat	Ongoing
27	6.6	Marine Disaster details, action on MS to review and if necessary update the contact details on the Marine Disaster spreadsheet, and to provide an alternative point of contact (if applicable) informing SAIHC Chair when complete.	SAIHC Member States and SAIHC Chair	30 <sup>th</sup> November 2017
28	AOB	To reflect the requested actions of CL50/2017 (CATZOC) in SAIHC and ICCWG agendas.	SAIHC Chair and ICCWG Chair	SAIHC 15
29	15	SAIHC Chair to write formally to request Seychelles to host next meeting.	SAIHC Chair	31 <sup>st</sup> October 2017

## ANNEX B

**6<sup>th</sup> ICCWG ACTION ITEMS**

No.	Agenda Item	Action	Action By	Deadline
1	5.5	Resend S-11 region H table for all MS to update.	ICC-Coordinator	30 <sup>th</sup> November 2017
2	5.5	MS to update S-11 Region H table	All MS	31 <sup>st</sup> December 2017
3	6.1	Allocate new INT number 77397 to India for IN 2527 (replaces existing INT 7737 (Mauritius))	ICC-Coordinator	Standing Item
4	5.4	ICC-WG Coordinator to contact Russia and Australia to resolve ENC overlap	ICC-Coordinator	Standing Item
5	5.6	Provide link to ENC portal demonstrator to MS	IHO Secretariat	Ongoing
6	5.6	Define minimum meta data required to support trial ENC scheme	ICC-Coordinator	Ongoing
7	5.6	Define scheme (building on portal demonstrator) from Mozambique to northern limit of SAIHC	ICC-Coordinator	31 <sup>st</sup> December 2017
8	6.1	Suggested trial teleconference	ICC-Coordinator	Standing Item
9	5.3	In the case where another organisation conducts a survey on behalf of the coastal state, it is important to make the survey data available to the Primary Charting Authority in order to update charts for the area. The modalities of data sharing to be resolved bilaterally.	SAIHC Member States	Ongoing
10	5.3.6	<i>Copies of all new INT products must be made available to the ICCWG.</i>	<i>India</i>	Ongoing
11	5.3.7	<i>INT 7582 – is to be removed from S11 and the chart is to become INT 7583 (new INT number). A copy of this chart needs to be circulated to the members for comment and will be pending until this is done.</i>	<i>SAIHC Member States</i>	Ongoing
12	5.3.8	<i>INT 7631 – this is related to Action Items 3 and 6 with ongoing discussions between UK, MZ and PT. New survey data is awaited and this will affect buoyage's and chart limits (which still need to be confirmed). Proposed completion dates is end 2017.</i>	<i>UK Portugal Mozambique</i>	Ongoing
13	5.3.9	<i>INT 7632 - ongoing discussions between UK, MZ and PT regarding new charting limits.</i>	<i>UK Portugal Mozambique</i>	Ongoing
14	5.3.10	<i>INT 7645 – the Scheme has been proposed and is in process. As soon as the limits have been established they are to be forwarded to the chairman for inclusion in S11.</i>	<i>PT/MZ South Africa</i>	Ongoing
15	5.3.11	<i>INT 7671 - The UK request a new chart for the Port of Mtwara, Tanzania- Harbour chart and Approaches Chart. UK is to supply limits to the chair for inclusion in S11.</i>	<i>UK South Africa</i>	Ongoing

## ANNEX C

**14<sup>TH</sup> IHO-SAIHC Conference**  
**Saint-Gilles, French Department of la Réunion:**  
**6 to 8 September 2017**

**LIST OF PARTICIPANTS PRESENT**  
*(8/9/2017)*

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