

# IHB Report

## Status of Approval of Amendments to the IHO Convention

- As of 1 July, 47 of the required 48 approvals of the Protocol of Amendments to the IHO Convention have been reported to the Government of Monaco. The Parliament of Turkey has approved the Protocol, but the government of that country has yet to formally inform the Government of Monaco of that decision. Mozambique is the only IHO Member State in the SAIHC that has not indicated its approval of the Protocol of Amendments to the Convention on the IHO.
- The amendments to the IHO Convention will enter force three months after the necessary majority of approvals is received by the Government of Monaco. The objective to record an additional two approvals in time to hold the first Assembly in April 2017 now seems within reach (see IHO CL 16/2016 dated 29 March). The Directing Committee is liaising with the Government of Monaco and with the relevant Member States, to achieve this goal, building on the initiatives undertaken since September 2012.

## Status of Membership of the IHO

- Bulgaria, Haiti, Mauritania and Sierra Leone have all received the required number of votes to be accepted as a Member State of the IHO. However, the Government of Monaco has yet to receive the required instruments of accession from these countries which will formalise their membership. The Directing Committee has continued to be in communication with the authorities of these States to encourage them to complete this final formality.
- The Government of Monaco has notified IHO Member States of the application by four coastal States to join the IHO: Congo, Malta, Solomon Islands and Vanuatu. IHO Member States' representatives are asked to expedite the approval process wherever possible. As of 1 July, the status of approvals of the applications was as follows:

States applying for IHO membership	Status of approvals notified to the Government of Monaco	SAIHC Members which have not yet notified their approval
Malta	34 of 53 approvals required	Mozambique
Vanuatu	34 of 54 approvals required	Mozambique
Solomon Islands	37 of 55 approvals required	Mozambique
Congo	37 of 55 approvals required	Mozambique

- The following States in the SAIHC region have yet to apply to become members of the IHO: Angola, Comoros, Kenya, Madagascar, Malawi, Namibia, Seychelles, Tanzania. All are Member States of the IMO.

## INT Chart and ENC Production Coordination - Region H

- The current web-based version of S-11 Part B for Region H is edition 3.0.0 dated January 2016. This new edition reports that 92 INT charts are available to date, out of 118 charts in the scheme. It is expected that a new edition will be released, in liaison with the regional INT Chart Coordinator, before SAIHC-14.
- The Region H Coordinator participated in the 6<sup>th</sup> meeting (March 2016) of the WENDWG. The WENDWG invited:
  - Regional Hydrographic Commissions to define and adopt ENC Schemes (as it is done for INT Charts Schemes) and to provide basic metadata to the IHB, and
  - the IHB to consider including a layer of "Approved" ENC Schemes in the IHO ENC Catalogue or as an extension of the INT Web Chart Catalogue.

8. A few ENC overlap issues in region H were reported to the WENDWG.

9. IHO CL 61/2015 dated 24 August 2015 informed Member States of the promulgation of Circular MSC.1/Circ.1503 of 24 July 2015 on *ECDIS - Guidance for Good Practice* by the Secretariat of the International Maritime Organization (IMO). Noting that the Circular refers to the IHO online ENC Catalogue and that the mention includes a reference to the provision of coastal State information on any requirements for ECDIS backup arrangements using paper charts, the Directing Committee reiterated its earlier request (see IHO CL 41/2014) that Member States ensure that the relevant information which has been posted on the IHO website since 2008 (see IHO CL 10/2008) is kept current and to provide the IHB with updates as appropriate. Member States were invited to consider the provision of pending updates before the end of 2015 and the provision of subsequent updates, or confirmation of no change, at least once a year. Where relevant information has been provided by Member States, it is located at: *Home > ENCs & ECDIS > ENC Availability > Backup Paper Charts*, and *-Home > ENCs & ECDIS > ENC Availability > Online Chart Catalogues*. The latest information received from SAIHC Member States is as follows:

Country	Date of requirements for ECDIS back-up arrangements using paper charts	Link to on-line chart catalogue
France	Sept 2014	Yes
Mauritius	No information provided to IHB	No
Mozambique	No information provided to IHB	No
Norway	June 2016	Yes
South Africa	April 2015	Yes
United Kingdom	2007	Yes
Angola	No information provided to IHB	No
Comores	No information provided to IHB	No
Kenya	No information provided to IHB	No
Madagascar	No information provided to IHB	No
Malawi	No information provided to IHB	No
Namibia	No information provided to IHB	No
Portugal	2007	No
Seychelles	No information provided to IHB	No
Tanzania	No information provided to IHB	No

### Maritime Safety Information Services

10. **MSI Capability and Supportability.** The IHO Capacity Building strategy lays particular emphasis on the fundamental capability for all coastal States to provide a maritime safety information (MSI) service in support of their international obligations. One area of concern is the apparent inability for countries to support the recipients of IHO MSI training. Based on reports to the IHO World-Wide Navigational Warning Service Sub Committee (WWNWS-SC), the following table indicates the MSI training received in the SAIHC region and the resultant assessed level of capability - measured by the number of relevant MSI reports received by the relevant regional MSI coordinator.

Country (NAVAREA)	see note	Date(s) received MSI training	Reports issued 1 August 2015 - 31 July 2016	assessed effective MSI capability
Mauritius (VIII)		Dec 2013	not known	Operational NAVTEX station (C)
Mozambique (VII)	(a)	Dec 2013	9	via INAHINA
South Africa (VII)		Dec 2013	Coastal Nawarnings: 630 NAVAREA VII: 308	Yes, attendance at WWNWS-SC would expand knowledge and provide voice/input of VII to discussions
Angola (VII)		Dec 2013	0	Yes
Comores (VII)			not known	No information/ no contact
Kenya (VIII)		Dec 2013	not known	No information/no contact
Madagascar (VII)	(b)	Dec 2013	3	No information/no contact
Malawi (VII)		Dec 2013	not known	No information/ no contact
Namibia (VII)	(c)	Dec 2013	46	Walvis Bay (B) NAVTEX station non-operational, MSI transmitted by Cape Town (C)
Seychelles (VIII)		Dec 2013	not known	Two operational NAVTEX stations (M) and (T)
Tanzania (VIII)		Dec 2013	not known	No information/no contact
Oil and Gas Industry	(d)		37	
La Reunion	€		28	

11. The following notes should be considered in relation to the above table:

- (a) Mozambique. MSI reports mainly consists of Aids to Navigation being out of order.

- (b) Madagascar. MSI reports mainly consists of the deployment of Aids to Navigation and related equipment being out of order.
- (c) Namibia. MSI reports mainly consists of gunnery exercise nawarnings, port construction operations and the status of Aids to Navigation.
- (d) Oil and Gas Industry. Although no MSI reports are received from Angola, the Oil and Gas Industry regularly reports on the movements of their rigs. This information is published as a NAVAREA VII nawarning in the form of a rig list. The concern remains that Angola does not report on MSI related matters in terms of events taking place on its coastal areas and ports.
- (e) La Reunion. La Reunion does not fall within NAVAREA VII, however, due to the island's location being relatively close to the eastern limit of the NAVAREA VII, regular MSI reports are received. This mainly consists of gunnery exercise nawarnings, as well as reports regarding other objects reported adrift ie small vessels, buoys, etc. This remains an important part of our service as mariners proceeding from NAVAREA VII to NAVAREA VIII are warned of events taking place around the island of La Reunion.

12. It should be noted that none of the countries falling outside the borders of South Africa currently has the ability to transmit its own Coastal Navigational Warnings (CNW) via Navtex. South Africa, as the NAVAREA VII coordinator, transmits all the relevant countries' nawarnings as NAVAREA VII nawarnings via SafetyNET.

13. **NAVTEX Services.** The lack of NAVTEX stations outside South Africa is also a major concern. The slow progress and the lack of adequate MSI implementation by States in the Great Rift Valley in the Southern African region remains a persistent matter of concern to the IHO WWNWS-SC. No information has been provided by NAVAREA VIII Coordinator in their self-assessment reports for relevant coastal states of East Africa (Kenya and Tanzania); Mauritius and Seychelles contribute to Indian Ocean MSI provision via their NAVTEX stations and via SafetyNET via NAVAREA VII Coordinator. The major issue remains the establishment and maintenance of reliable communications by relevant coastal state administrations with their appropriate NAVAREA Coordinator via a suitably qualified individual. This is despite MSI training being provided by the IHO in most cases. Contact with the majority of coastal states within the SAIHC has been reported as dysfunctional by the NAVAREA Coordinators. NAVAREA VII, as a region, is likely to benefit if closer and more regular contact with the WWNWS-SC and interaction with the other NAVAREA Coordinators was possible.

#### STATUS OF SHORE BASED FACILITIES FOR GMDSS

Country	A1 Area	A2 Area	A3/A4 Area	NAVTEX	SafetyNET	Notes
Angola	Planned	Planned	Planned	No	Yes	Coastal warnings broadcast by SafetyNet
Kenya	Planned	Planned		No	NAVAREA VIII	
Madagascar	Planned	Planned		No	Yes	Coastal warnings broadcast by SafetyNet
La Reunion	No	No	Yes	No	Yes	Coastal warnings broadcast by SafetyNet
Malawi	No information provided to IHB	No information provided to IHB	No information provided to IHB			

Country	A1 Area	A2 Area	A3/A4 Area	NAVTEX	SafetyNET	Notes
Mauritius	Yes	Yes	Planned	Yes	NAVAREA VIII	
Mozambique	Planned	Yes	Planned	No	Yes	Coastal warnings broadcast by SafetyNet
Namibia	Planned	Planned	Planned	No	Yes	Coastal warnings broadcast by SafetyNet
Seychelles	Planned	Planned	Planned	No	NAVAREA VIII	
South Africa	P	P	Yes	Yes	Yes	
Tanzania	Planned	Planned	Planned	No	NAVAREA VIII	
Uganda	NI	NI	NI			

### Capacity Building Programme

14. The level of activity of the IHO Capacity Building (CB) Programme continued to increase. Expenditure in the IHO 2015 CB Work Programme (930,907 Euros) was 118% greater than the budget for the previous year. This was a result of the ongoing financial support provided by the Nippon Foundation of Japan and the Republic of Korea, supplemented by a contribution from the IHO budget and in-kind support from Member States and from industry. The Directing Committee is continuing its campaign to find additional donor States and funding organizations. In 2015, 86% of the budgeted work program was executed and paid for.
15. The SAIHC benefited from two activities under the IHO CB Work Programme since the last meeting:
- Technical aspects of Maritime boundaries, baselines, led by UKHO in Fish Hoek, South Africa in November/December 2015; and
  - Phase 1 Skills Training Course, led by UKHO, Walvis Bay, Namibia in July 2016.
16. A high-level visit to Tanzania and a MBES setting to work project for Mozambique are scheduled for 2016 and an MSI Course for 2017. These activities will be led by the UKHO. The IMO approved an extra-ordinary budget to conduct a joint IMO/IHO/IALA implementation visit to Kenya in 2016. Captain Abri Kampfer will represent the IHO. The IMO also approved funding for a joint IMO/IHO/IALA training in Africa in 2017 but the details are yet to be released.
17. **Master of Science Programme in Hydrographic Surveying at the University of Southern Mississippi (USA).** It is expected that a call for applications will be issued in September 2016 for the 2017-2018 session of the Master of Science Programme in Hydrographic Surveying at the University of Southern Mississippi (USA) sponsored by the Republic of Korea. Hydrographic Offices are invited to invest in the preparation of candidates especially with respect to English proficiency. IHO CL 72/2015 provides guidance that will be similar to the call in 2016.

### Report on the Overall Status of the IHO Work Programme

18. As a result of discussion at EIHC-5 concerning the assessment of the IHO Work Programme, Conference Decision No. 3 reinforced the reporting requirements by introducing a six-monthly reporting regime for all IHO bodies. The outcome of the first three bi-annual assessments was submitted to Member States through IHO CL 17/2015, 66/2015 and 14/2016. Only six out of 15 Regional Hydrographic Commissions (RHCs) submitted a status report (EAHC, MACHC, NIOHC, NHC, NSHC, and **SAIHC**).

### Crowd-Sourced Bathymetry

19. In accordance with Decision 8 of the EIHC-5, IRCC7 established the Crowd-Sourced Bathymetry Working Group (CSBWG) to provide guidelines on the collection and use of crowd-sourced bathymetry. Member States and other interested parties were invited to nominate representatives to participate in the CSBWG (see IHO CL 42/2015).

20. The web-based interface portal to the IHO Data Centre for Digital Bathymetry, hosted by the USA in Boulder, Colorado, as part of its commitment to the system of World Data Centres, is being upgraded to be compatible with the crowd-sourced bathymetry concept. This will enable an IHO-led CSB infrastructure to be established and promoted in the IMO and across the wider maritime community.

### IHO GIS and Databases

21. Work has continued on the development of the IHO GIS which is composed of two main parts:

- a country information database, and
- a regional information database.

22. The country information database has been progressively upgraded to include additional administrative information and facilitate the maintenance of the IHO Yearbook (IHO Publication P-5) and related lists posted on the IHO website. Countries in the SAIHC Region are invited to review their entry in the Yearbook on an annual basis and provide the IHB with the appropriate updates or report no change. The status of the data in the IHO Country Information Database concerning the SAIHC Member States is as follows:

Country	P-5 -Yearbook Last update received
France	Jun 2015
Mauritius	Mar 2016
Mozambique	Jun 2016
Norway	Nov 2015
South Africa	Dec 2013
United Kingdom	Feb 2015
Angola	Apr 2016
Comores	Feb 2014
Kenya	Feb 2014
Madagascar	Feb 2014
Malawi	Aug 2014
Namibia	Aug 2014
Portugal	Jan 2016
Seychelles	?
Tanzania	Jul 2013

23. An Esri-based GIS solution is being implemented to develop further the regional information database. This will enable access to various layers of information through the IHO website and through cloud-based on-line GIS options. The IHO ENC Catalogue and the IHO GIS for Antarctica have been transferred to this new environment.

24. Work has continued on developing a GIS database application to support C-55 - *Status of Hydrographic Surveying and Charting Worldwide* and the work of the IHO. In response to the request to complement C-55 composite data (percentage of

areas adequately surveyed / requiring re-survey / not surveyed) with CATZOC information (see IHO CL 52/2015), CATZOC data was provided by PRIMAR - on behalf of IC-ENC, PRIMAR and Canada, Singapore, Sweden and Thailand. Useful options for visualising the data in the IHB C-55 GIS are being investigated.

25. The latest information in C-55 from SAIHC Member States is as follows:

Country	C-55 Last update received
France	Sep 2015
Mauritius	May 2007
Mozambique	May 2016
Norway	Dec 2015
South Africa	Sep 2014
United Kingdom	Sep 2015
Angola	May 2016
Comores	Sep 2015
Kenya	Sep 2014
Madagascar	Sep 2015
Malawi	May 2008
Namibia	Nov 2012
Portugal	Sep 2014
Seychelles	May 2009
Tanzania	Sep 2014

26. Countries in the SAIHC Region are invited to review their entry on an annual basis and to provide the IHB with the appropriate updates or to report no change.

27. Following the development of the regional database for Antarctica, the IHB, with support provided by the Republic of Korea, initiated an "INToGIS" project in order to move S-11 part B into an interactive GIS/S-100 compliant environment. The objective of the project is to provide the Regional International Charting Coordination WGs with relevant on-line updated information and the necessary tools to review and maintain INT chart schemes and monitor the implementation of the INT chart schemes. Extending the capability to include ENC scheming and coverage is also envisaged. As announced in IHO CL 89/2015, the new INT Chart Web Catalogue and the associated INT Chart on-line Web Manager services were made available in January 2016 through the IHO website at: [www.iho.int](http://www.iho.int) > *Standards & Publications* > *S-11* > *Part B* (<http://chart.iho.int:8080/>). The following SAIHC countries have not yet requested an ID and password for the maintenance of the S-11 database: Mauritius, Mozambique and Portugal. Those countries are invited to do so as indicated in IHO CL 89/2015, as the IHB discontinued the maintenance of the pdf version of the S-11 Part B -*Catalogue of INT Charts* on 1 April 2016.

28. Feedback and lessons learned from the initial use of the INToGIS services and from the implementation of the experimental procedure for the review and monitoring of INT charts decided at IRCC-7 (IHO CL 64/2015 refers) were addressed during the workshop for Regional INT Chart / ENC Coordinators that was held at the IHB on 25 April 2016, just before the second meeting of the Nautical Cartography Working Group. The INT Chart / ENC Coordinators of 14 out of 15 charting regions were present or represented. Unfortunately South Africa was not able to attend but provided a written assessment for Charting Region H. A comprehensive demonstration of the INToGIS web-based INT chart scheme management tool was provided. The workshop confirmed the need to maintain the INT chart concept for the foreseeable future, at least for small scale charts.

## Preparation of the next IH Conference / IHO Assembly

29. The next IH Conference or first IHO Assembly is scheduled to take place from 24 to 28 April 2017. It is likely that the meeting will be the first session of the Assembly.

30. As indicated in IHO CCL 1 dated 21 April 2016, the Directing Committee has decided that registration for the Conference / Assembly will be available on-line via the IHO website from 1 September 2016. Because of IT security issues, the initial version of the tool will be self-contained, with no connection to the IHO Country Information System (CIS). The initial registration of the identity of applicants will be validated by the IHB. After this initial approval, legitimate applicants will be able to register for further IHO meetings without having to re-enter their details. A beta-version, developed with the support of the KHOA through the Project Officer seconded by the Republic of Korea, is being tested at present. It is expected that the tool will be used in full scale testing as part of registering participants for HSSC8.

31. In accordance with the General Regulations of the IHO that will enter into force once the Protocol of Amendments is ratified, the first Assembly will have to approve the list of the members of the IHO Council. If the first Assembly meets in April 2017, the selection process for the establishment of the Council should be initiated by the Secretary-General not later than October 2016. Therefore it is expected that all RHCs will have agreed before that date on the process by which they will assign Members to occupy the seat(s) in the Council allocated to them, and possibly instruct, the relevant occupant(s).

32. The agenda of the Conference / Assembly will include a review of the IHO Strategic Plan and consideration of the IHO Work Programme for the next 3-year or 5-year cycle. In accordance with IHO Resolution 12/2002 as amended the relevant documents will be prepared by the IHB in consultation with the HSSC, the IRCC and the Member States.

## IHO Outreach

### World Hydrography Day

33. The theme for World Hydrography Day 2015 “*Our seas and waterways - yet to be fully charted and explored*” concentrated on the fact that much of the world’s seas, oceans and navigable waters remain unsurveyed. Reports on events hosted in connection with WHD 2015 are available at:

[www.iho.int](http://www.iho.int) > Home > About IHO > World Hydrography Day > WHD 2015 Celebrations around the world.

34. The theme for 2016 is: “*Hydrography – the key to well-managed seas and waterways*”. This theme enables all stakeholders involved in hydrography to highlight the significance and importance of their particular activities which could include, but is not limited to, the support of safety of navigation, protection of the marine environment, coastal zone management, marine spatial data infrastructures, defence, resource exploration, and all other components of the blue economy. A background brief is available on the IHO web site.

## International Hydrographic Review

35. Twice a year, the IHR provides an opportunity for Member States to publicise technical and other achievements in their region. An editorial board comprising a representative from each region has been established. The representative for the SAIHC is Captain Abri Kampfer (South Africa).

36. Papers for consideration for publication in the IHR should be forwarded directly to the editor ([ihreview@iho.int](mailto:ihreview@iho.int), copy to [ian.halls1@defence.gov.au](mailto:ian.halls1@defence.gov.au)). The deadlines are:

end of January for the May Edition

end of July for the November Edition

37. The IHB has been working with the University of New Brunswick (UNB), Canada, in a project to develop a digital repository of the complete library of the IHR. As a result, the first phase of the project now provides access to volumes from 1963 to 2015. They can be found at: <https://journals.lib.unb.ca/index.php/ihr>.

**Action Requested of SAIHC Member States**

**Note** this report

**Expedite** the approval of the IHO membership applications of Malta, Vanuatu, Solomon Islands and Congo

**Review** entries related to IHO C-55, P-5 (Yearbook) and ECDIS back up arrangements at least annually

**Provide** continuous updates to S-11 Part B for INT Region H through the INT oGIS tool and implement the procedure depicted in IHO CL 64/2015 for the review and monitoring of INT charts

**Report** to the IHB on the status and description of the ENC schemes in the Region

**Consider** appropriate arrangements to prepare the IH Conference / IHO Assembly to be held in April 2017

**Consider** submitting papers for publication in the IH Review

**Take any other actions** as considered appropriate