



5th ROPME SEA AREA HYDROGRAPHIC COMMISSION CONFERENCE

Riyadh, Kingdom of Saudi Arabia
4 – 6 March 2013

IHB Report

New Directing Committee – Duties and Responsibilities

1. The new Directing Committee assumed office on 1 September 2012. Details of the allocation of responsibilities were promulgated in Circular Letter 77/2012 dated 6 August 2012. In summary, Director Mustafa İpteş will oversee IHO Programme 3 concerning regional cooperation and capacity building. Director Gilles Bessero will oversee Programme 2 – the IHO technical programme.

Status of Approval of New Member States of the IHO

2. Bulgaria, Haiti, Mauritania, Montenegro 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 their instruments of accession from these countries which will formalise their membership.

3. Viet Nam, Brunei Darussalam and Georgia have applied for membership of the IHO. By January 2013, the status of approvals was as follows:

State	Voting Status
Viet Nam	31 of 52 required
Brunei Darussalam	29 of 52 required
Georgia	20 of 54 required

4. The following IHO Member States of the RSAHC have not yet responded with their vote:

State	No responses as yet from:
Viet Nam	Bahrain, IR of Iran, Kuwait, Oman, Pakistan, Qatar, UAE
Brunei Darussalam	Bahrain, IR of Iran, Kuwait, Oman, Qatar, Saudi Arabia, UAE
Georgia	Bahrain, IR of Iran, Kuwait, Oman, Pakistan, Saudi Arabia, UAE

5. The Directing Committee, in cooperation with the representatives of the government of Monaco, stands ready to assist, through diplomatic or other channels, any States' representatives which may be encountering difficulties in progressing the outstanding approvals through their respective governments.

Suspended Member States

6. Suriname was welcomed back into full membership last year; only Congo and the Dominican Republic remain suspended. IHB is working with these states to expedite their return to full membership as soon as possible, as is the case for a number of other Member States who have fallen behind on payments of their annual fees.

Status of Approval of Amendments to the IHO Convention

7. By January 2013, 38 of the required 48 approvals to the protocol of amendments to the IHO Convention had been received by the Government of Monaco.
8. The Government of Monaco has not yet received notification of a response to the Protocol of Amendments from the following IHO Member States of the RSAHC eligible to be counted: Bahrain, Kuwait, Oman and UAE.
9. The IHB has produced a one page brief explaining the protocol of amendments to the IHO Convention for use in briefing senior government personnel. Copies can be obtained from me here in Riyadh or from the IHB at any time via email to: info@iho.int.

INT Chart and ENC Production Coordination – Region I

10. The current version of S-11 Region I on the IHO website is dated December 2011. No updates have been received at the IHB since then. IR of Iran, as INT coordinator, is invited to provide the IHB with regular updates to S-11.

IHO ENC Reference Collection and ENC Availability Catalogue

11. CL 51/2012 dated 18 May 2012 reminded Member States to provide their ENCs to the IHB in accordance with IHO General Regulation 19. This will enable the IHB to maintain an authoritative and up to date reference collection of the ENCs and also to create a global information catalogue showing all ENCs which are published. The ENC data will be maintained on a secure stand-alone server and used for internal IHB reference purposes only, it will NOT be provided to any other parties.
12. Responses to CL 51/2012 are as follows:

State	Remarks
Bahrain	ENCs to be provided through IC-ENC
IR of Iran	no information provided to IHB
Kuwait	no information provided to IHB
Oman	no information provided to IHB
Pakistan	no information provided to IHB
Qatar	no information provided to IHB
Saudi Arabia	no information provided to IHB
UAE	no information provided to IHB

13. Those ENC Producer States which have not responded to CL 51/2012 are requested to do so as soon as possible.

C-55 Updates

14. The latest updated information in C-55 – *Status of Charting and Surveys Worldwide* – submitted by Member States in the RSAHC region is as follows:

State	C-55 last update
Bahrain	12 October 2006
IR of Iran	31 January 2011
Kuwait	-
Oman	21 March 2011

Pakistan	15 March 2011
Qatar	21 March 2011
Saudi Arabia	30 December 2003
UAE	-

15. All RSAHC region Member States are invited to provide the IHB with regular updates to C-55 on at least an annual basis. Envelopes containing printouts of the current versions of Member States' C-55 composite entries and those of the Year Book have been distributed. The IHB would be grateful for delegates to up-date the information and return the envelopes to me before the end of this meeting.

IHO Publicity

16. World Hydrography Day. The theme for World Hydrography Day 2013 is "*Hydrography – supporting the blue economy*". The purpose of this theme is to provide Member States with the opportunity to raise awareness of the importance and benefits of hydrography, particularly in economic terms which will appeal both to the public and to politicians and administrators. The IHB will be providing some supporting material on the IHO website.

17. 5th Extraordinary International Hydrographic Conference. EIHC 5 will take place 6th to 10th October 2014 in the Auditorium Rainier III in Monaco. In a new departure from previous conferences, it is proposed to set aside time for various bodies to highlight their work and programmes. It is hoped these sessions will provoke discussion and throw-up ideas for new work and engagement in areas not previously investigated. It may well cause Member States to question the work being undertaken by some bodies and event if some bodies continue to have relevance in the future.

18. International Hydrographic Review. The IHR provides an ideal opportunity for Member States to publicise technical and other achievements in their regions. An editorial board comprising a representative from each region has been established. The representative for the RSAHC region is Mr Keith Brown (Oman).

19. Papers for consideration for publication in the IHR should be forwarded directly to the IHB (ihreview@iho.int) with a copy to the Editor (ian.halls1@defence.au.gov).

GEBCO Shallow Water Bathymetry

20. Traditionally, GEBCO's data sets and maps have shown the bathymetry of the deeper water regions of the world's oceans – i.e. at depths of 200 m and deeper. So that GEBCO can more accurately model the shape of the ocean floor in all areas and serve a wider user community, they have been working to improve our gridded bathymetric data sets in shallower water.

21. The bathymetry data held in the world wide coverage of Electronic Nautical Charts (ENCs), collectively produced by IHO Member States, has proven to be a valuable data source and are being used to significantly improve GEBCO's bathymetric grids in shallow water regions. Many Hydrographic Offices and hydrographic organizations have already contributed substantial amounts of shallow water bathymetry data for their coastal zones. Generally these are from ENCs in small scale 'General' and 'Coastal' navigational purpose bands. The data have resulted in significant improvements in the bathymetry for some shallow water areas and are helping GEBCO to produce a better generalized bathymetric model that seamlessly extends across oceans from shore to shore.

22. A software application has been developed to simplify the extraction of data from ENCs into simple ASCII files and is available on request. For further details on how to contribute ENC and shallow water bathymetry data to help us improve our bathymetric models, please contact Assistant Director Tony Pharaoh at the International Hydrographic Bureau.

23. GEBCO is continually working to improve its bathymetric data sets and welcomes data contributions for all ocean regions. Further details are available on how to contribute data to help improve GEBCO's grids.

24. The IHO and the GEBCO programme have created a free manual to help users prepare quality bathymetric grids from available data points. The new "IHO-IOC GEBCO Cook Book," released last year and available at <http://www.gebco.net>, provides step-by-step instructions, screenshots, command lines, and snippets of code applied on actual data, to guide users through the process of gridding data. To "grid data" means to take all the data points on a surface within a grid cell and assign them a representative number value that serves to aggregate surrounding points. Gridding quality-controlled, cleaned data aids in the creation of accurate maps of bathymetry or elevation. Data in gridded form are advantageous because they can easily be viewed and analyzed on computers. The manual's instructions are divided into three parts. The first enables beginning users to easily produce a grid from xyz data by following provided examples, the second gives a more in-depth look at topics related to preparing and processing data and gridding techniques, and the third focuses on advanced topics such as data uncertainties and error models. Links in the appendices give Web sites from which multibeam data, which can be gridded into maps, are publicly available for download. However, the methods described in the 'Cook Book' don't have to be limited to bathymetry—people can take any type of data and grid them however they want using this tool. The manual will be continually maintained and amended as better techniques and software are developed to meet changing user needs.

Capacity Building Programme

25. Funding for the IHO Capacity Building programme over the next five years is forecast to be considerably lower than in the past five years. In these circumstances, the IHO and the RHCs will need to explore alternative mechanisms to fulfil their requirements. In many RHCs, the involvement of the commercial sector has provided mutual benefits, as is the case in the RSAHC. This has taken the form of industry representatives attending some or all parts of RHC meetings as observers, and included participation and the provision of equipment and instructor in the technical workshops and training, both as part of an RHC meeting and in separate RHC training events.

Action Requested of RSAHC Member States

26. RSAHC Member States are invited to:

- **Note** this report;
- **Report** in-country progress on voting on New Member States and the Protocol of Amendments to the IHO Convention, including any difficulties being encountered or IHB assistance required;
- **Continue to provide** updates to S-11, through IR of Iran as coordinator for INT Region I;
- **Respond** to CL 51/2012 as appropriate;
- **Provide** updates to C-55 as appropriate; and
- **Take any other actions** as considered appropriate.