2nd MEETING
OF THE IHO COUNCIL

London, United Kingdom, 9-11 October 2018

REPORT OF THE IHO
INTER-REGIONAL COORDINATION
COMMITTEE
REPORT OF THE INTER-REGIONAL COORDINATION COMMITTEE TO THE SECOND MEETING OF THE IHO COUNCIL

Introduction
This document reports on the progress of the ongoing implementation of the Work Programme for 2018. The tenth meeting of the Inter-Regional Coordination Committee (IRCC10) was held in Goa, India, from 4 to 6 June 2018. The IRCC reviewed the reports and activities of its subordinate bodies and the RHCs and considered the need for enhancing regional coordination and cooperation. IRCC also considered the outcomes of the 1st meeting of the IHO Council (C-1), acknowledged the accomplishments and challenges of the Capacity Building programme and the IBSC, examined the developments on Crowd-Sourced Bathymetry and ocean mapping activities, and considered issues related to the Worldwide ENC Database (WEND).

Difficulties and challenges yet to be addressed
There is no significant change to the difficulties and challenges reported to C-1. Most of the actions agreed in June 2017 at IRCC-9 have progressed normally. With regards to supporting administration of Capacity Building activities at the Secretariat, IHO Secretary-General decided that Ms Sandrine Brunel from the Secretariat staff is to be working as a full time Capacity Building Assistant from 1 January 2018. Finding this solution has helped the Secretariat to cope with some administrative challenges related the CB.

Achievements/outputs/conclusions

Amendments of IRCC ToRs and RoPs
In accordance with Council Decision C1/05 and considering the IHO Resolution 2/2007 as amended, IRCC10 endorsed amendments to the IRCC ToRs and RoPs. Main amendments to the current IRCC ToRs and RoPs reflect:
- The presence and the role of the Council;
- The possibility for the IRCC to decide on the need to go through the Council for recommendations on standards and publications before submitting them to Member States for approval.

A Proposal for amendments to the IRCC ToRs and RoPs is provided in Annex-A.

Cooperation with Member States and attendance at relevant meetings
1. During the reporting period, Nordic Hydrographic Commission (NHC), North Sea Hydrographic Commission (NSHC), Baltic Sea Hydrographic Commission (BSHC), US-Canada Hydrographic Commission (USCHC), East Asia Hydrographic Commission (EAHC), South West Pacific Hydrographic Commission (SWPHC), Meso American - Caribbean Sea Hydrographic Commission (MACHC), Southern African and Islands Hydrographic Commission (SAIHC), North Indian Ocean Hydrographic Commission (NIOHC) and South West Atlantic Hydrographic Commission (SWAtHC) had scheduled meetings. These Regional Hydrographic Commissions (RHC) considered and coordinated their regional activities including the coordination of International (INT) Charts and ENC schemes.

In accordance with Assembly-1 Decision 5.0 IRCC considered and agreed on the revision of IHO Resolution 2/1997 as amended (Establishment of Regional Hydrographic Commissions - RHC).

A Proposal for amendments to the IHO Resolution 2/1997 is provided in Annex-B.

Increase participation by non-Member States
2. Republic of Seychelles and Republic of Bulgaria became the 88th and 89th Member States of the IHO during the report period. The IHO Secretariat continues its campaign to recruit new Member States to the IHO.

Capacity Building Management
3. The 16th Meeting of the IHO Capacity Building Sub-Committee (CBSC16) took place in Goa, India from 30 May to 1 June 2018. The CBSC updated and adjusted the 2018 CB Work Programme (CBWP)
and approved the 2019 CB Management Plan and the 2019 CBWP considering the priorities identified by the Sub-Committee with respect to the IHO CB Strategy, the available resources and potential additional resources.

CBSC revised the CBSC ToRs and RoPs that were subsequently endorsed by the IRCC that now seeks the endorsement of the IHO Council.

A Proposal for amendments to the CBSC ToRs and RoPs is provided in Annex-C.

Evolution of the CB Fund

4. The IHO CBWP was funded in 2017 (total 667 751,85 Euros) from the IHO budget and supplemented by additional financial support from Member States (currently the Nippon Foundation of Japan, and the Republic of Korea) with in-kind support from Member States and from stakeholders. For the 2018 CBWP, the Republic of Korea (ROK) contributed 531,100 Euros to the Capacity Building Programme to sponsor two students on the Category "A" Hydrographic Master Programme at the University of Southern Mississippi in USA and to sponsor seven students on a Category "B" Hydrographic Survey Program at the Korea Hydrographic and Oceanographic Agency (KHOA), Busan, ROK. In addition, some of the short courses in the 2018 CBWP are being supported by the ROK’s contribution. Fund provided previously by the Nippon Foundation (NF) of Japan (195 386,85 Euros) was used to sponsor seven students at the Category "B" 2017 course in "Marine Cartography and Data Assessment" delivered for the CHART (Cartography, Hydrography and Related Training) Project, at the UKHO, Taunton, UK. The following course is being conducted from September to December 2018 at the UKHO.

FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC)

5. Sixteen course submissions were reviewed by the IBSC at its 41st meeting held in Indonesia in April 2018 against the new standards (IHO Publications S-8A and S-8B Standards of Competence for Category "A" and Category "B" Nautical Cartographers and IHO Publication S-5A and S-5B Standards of Competence for Category "A" and Category "B" Hydrographic Surveyors. From these submissions, 14 were recognized and two will be reconsidered inter-sessional. IBSC also submitted an article which was published in the International Hydrographic Review (November 2017 edition) on “Maintaining the Standards of Competence for Hydrographic Surveyors and Nautical Cartographers”. The IRCC approved the clarifications/minor amendments made in IHO Publications S-5A Ed. 1.0.1 and S-8A Ed. 1.0.0 (see Annex C of doc. IRCC10-07H). The IRCC also acknowledged the work done by the IBSC in the delivery of the new framework for the Standards of Competence for Hydrographic Surveyors and Nautical Cartographers.

Capacity Building Assessment

6. During the reporting period, technical assessment visit was made to Azerbaijan by the MBSHC team, and technical implementation visits were made to Dominican Republic and El Salvador by a team from the MACHC and the IHO Secretariat. Additional technical visits are planned to Guatemala, Georgia, Albania and Angola by relevant RHCs to be conducted by the end of 2018.

Capacity Building Provision

7. At the time of the preparation of this report, one Technical Workshop on Implementation Hydrographic Governance was delivered in the SWPHC region. The remainder of the scheduled CB activities for 2018 are planned to be delivered by the end of the year.

Coordination of Global Surveying and Charting

C-55 - Status of Hydrographic Surveying and Nautical Charting worldwide Database

8. The IRCC considered the impact of the work done by the IHO Secretariat to maintain publication C-55 - Status of Hydrographic Surveying and Nautical Charting Worldwide. As a result of work undertaken by officers seconded from Japan and from the Secretariat Staff, C-55 is now generated using the IHO GIS from the IHO Country Information System (CIS) database that is continuously updated and available as an online service accessed in the download section of the IHO website. During the reporting period, work has continued on developing the GIS database application to support C-55.
The CBSC established the C-55 Review Project Team (C-55RPT) to review C-55 and to consider introducing CATZOC information as an interim solution as an indicator for survey adequacy. The IRCC agreed to support the use of CATZOC information as an interim solution and recommended the RHCs to encourage Member States to provide CATZOC information for C-55, directly or via RENCs. The CBSC appointed Norway, UK and France as Chair, Vice-Chair and Secretary of C-55RPT, respectively.

**WENDWG activities**

10. The IRCC10 reviewed progress towards the full implementation of the WEND Principles and considered with concern that overlapping ENCs create confusion onboard ships and that IHO community should work to eliminate overlapping data. The Committee endorsed that the management of overlap cases should be implemented by Regional Hydrographic Commissions. IRCC noted the WENDWG conviction that all ENC data should be made available to the RENCs not only for ensuring Quality Control in general but also importantly for risk assessment of overlapping ENCs. IRCC also noted the recommendation that RENCs might consider offering an S-57 licence management service to support safety of navigation for all classes of vessels.

11. The IRCC commended the work undertaken by both RENCs on their high-quality support to hydrographic offices and end-user service providers and for their contribution to Joint-RENC technical meetings. The IRCC noted the establishment of the East Asia-Regional ENC Coordination Centre (EA-RECC) and the inclusion of the EA-RENC in the Joint-RENC technical meetings. The IRCC also approved the proposed revisions to the WENDWG ToRs and RoPs by amending (which is available as “Approved amendment to the WENDWG ToR” in the IRCC10 documents) and the continuity of the WENDWG activities.

**Maritime Safety Information**

12. The IRCC10 was informed of the activities on World-Wide Navigational Warning Service, NAVAREAs, coastal warnings and progress on documentation of WWNWS. The IRCC considered that MSI training courses led by the WWNWS-SC and sponsored by the CBSC are critical issue for the continued success of the MSI course and that there is a lack of qualified trainers in particular in French and Spanish languages. RHC Chairs were invited to encourage closer engagement of the National MSI Coordinators of Member States with the relevant NAVAREA Coordinators and regional CB Coordinators.

**Ocean Mapping Programme**

*Project Seabed 2030*

13. The IRCC10 was informed of the development of the GEBCO activities in particular the progress on Seabed 2030 Project. Seabed 2030 is a new global project within the IHO-IOC GEBCO framework with the focused goal of producing the definitive, high-resolution bathymetric map of the entire World Ocean by the year 2030. The Nippon Foundation will contribute US$ 18.5 million for the first ten years of the project. The aspiration is for Seabed 2030 to compile all available and newly collected bathymetric data into a high quality, high resolution digital model of the ocean floor and to promote international efforts to collect new data. The project seeks to encourage the data collectors and data managers of governmental, academic and private interests to work together to improve the quality of publicly-available grids of the ocean floor. This project is focused on the goal of compiling a high-resolution, openly available, Digital Bathymetric Model (DBM). This DBM should efficiently provide bathymetric information at an improved resolution to end users.

14. The Seabed 2030 project has potential to create partnerships and cooperation between interested parties, significantly improving our understanding of the sea floor and empower sustainable ocean management in the coming century. Regional Hydrographic Commissions are encouraged to support the Seabed 2030 Project. Seabed 2030 will also coordinate with the ongoing IHO Crowd-sourced Bathymetry initiative. As is currently the case, the dedicated funding for Seabed 2030 will be administered by the Secretariat, as part of its existing role as the treasurer and the secretary to the GEBCO project.
**Crowd-sourced Bathymetry**

15. The CSBWG has developed the draft IHO publication B-12 – *IHO Guideline on Crowd-sourced Bathymetry*, which has completed extensive stakeholder and IHO member State consultation. IRCC endorsed the Draft Edition 1.0.0 Crowd-sourced Bathymetry Guidance Document. Additional work has commenced on the draft of Edition 2.0.0, taking into account a number of topics, for which additional time and investigation were identified as being required. In accordance with Decision C 1/31, to enlarging the scope of the tasking of the CSBWG, IRCC approved the proposed revisions to the CSBWG ToRs and RoPs (See Annex C of doc. *IRCC10-07H*) and to reappoint the WG to continue its work under the proposed revised ToRs. IRCC also acknowledged the work done by the CSBWG in the producing of the draft CSB Guidance Document.

*A Proposal for Draft IHO publication B-12 – IHO Guideline on Crowd-sourced Bathymetry (Edition 1.0.0)* is provided in Annex-D.

**Marine Spatial Data Infrastructures**

16. The IRCC10 reviewed the progress on global Marine Spatial Data Infrastructure (MSDI) activities and considered the development in Marine Spatial Planning (MSP) implementation worldwide. The IRCC also considered the impact of newly established *United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) Working Group on Marine Geospatial Information (MGIWG)*. The IRCC established the IHO Project Team on the implementation of the UN-GGIM Shared Guiding Principles for Geospatial Information Management (PPT) and endorsed the ToRs and RoPs of the PPT (see doc. *IRCC10-07E1*).

**Other Issues**

17. IRCC endorsed the proposed amendments to the IHO Resolution 6/2009 (International Hydrographic Review-IHR).

*A Proposal for amendments to the IHO Resolution 6/2009 is provided in Annex-E.*

18. In accordance with Assembly Decision A-1/19 that tasked the IRCC to review and redraft IHO Resolution 1/2005 – IHO Response to Disasters as amended taking into consideration PRO-3 and related comments and submit a draft revision to the Council, the work has yet to be finalized and IRCC scheduled the revision of IHO Resolution 1/2005 to submit at C-3.

**Key Priorities of IRCC for 2019**

19. At its 10th meeting, IRCC considered and endorsed its key priorities for 2019 which are *Capacity Building Provision, INT and ENC schemes, Crowd-sourced Bathymetry, Project Seabed 2030*, and *Marine Spatial Data Infrastructures (MSDI)*.

**Actions required of the Council**

20. The Council is invited to:

a) **note** the report of the IRCC;

b) **endorse** the amendments to the IRCC ToRs and RoPs (see Annex A, red-line and clean versions);

c) **endorse** the amendments to the IHO Resolution 2/1997 (see Annex B, red-line and clean versions);

d) **endorse** the amendments to the CBSC ToRs and RoPs (see Annex C, red-line and clean versions);

e) **endorse** the Crowd-Sourced Bathymetry Guidance Document (see Annex D);

f) **endorse** the amendments to the IHO Resolution 6/2009 (see Annex F, red-line and clean version);

h) **endorse** the proposed IRCC key priorities of the IHO Work Programme for 2019 listed in Paragraph 19 of this report;
i) **acknowledge** the work done by the IBSC in the development of the new Standards of Competence for Hydrographic Surveyors and Nautical Cartographers;

j) **acknowledge** the work done by both RENCs on their high-quality support to hydrographic offices and end-user service providers and for their contribution to Joint-RENC technical meetings;

k) **acknowledge** the work done by the CSBWG in the producing of the draft CSB Guidance Document;

l) **take** any other action considered appropriate.
ANNEXES

IRCC PROPOSALS TO THE SECOND SESSION OF THE IHO COUNCIL

Annex A: Proposal for amendments to the IRCC ToRs and RoPs
Annex B: Proposal for amendments to the IHO Resolution 2/1997
Annex C: Proposal for amendments to the CBSC ToRs and RoPs
Annex D: Proposal for endorsement of the draft Crowd-sourced Bathymetry Guidance Document (B-12)