

6th MEETING
OF THE IHO COUNCIL
Monaco, 18 – 20 October 2022



REPORT OF THE IHO
INTER-REGIONAL COORDINATION
COMMITTEE
(IRCC)

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

References:

- A. List of Decisions and Actions from C-5 affecting IRCC
- B. List of Decisions and Actions of IRCC-14

Annexes:

- A. Revised CB Strategy (Annex A)
- B. Guidelines on the implementation of the WEND-100 principles' version 1.0 (Annex B)
- C. IRCC approved "proposal regarding SPI allocated to IRCC" (Annex C)

Introduction

1. This document reports on the progress of the ongoing implementation of the Work Programme for 2022, especially the developments since the last report to the Council in 2021.
2. The 14th meeting of the Inter-Regional Coordination Committee (IRCC-14) was held in Denpasar, Bali, Indonesia, in a hybrid format from 6 to 8 June 2022, hosted by Pushidrosal, the Hydrographic and Oceanographic Centre of the Indonesian Navy. The meeting was chaired by Mr Thomas Dehling (Germany) and attended by 95 registered participants, 39 in person and 56 by VTC, from 39 Member States. The IHO Secretariat was represented by Director Luigi Sinapi and Assistant Director Leonel Manteigas in-person.
3. The IRCC reviewed the reports and activities of its subordinate bodies and the RHCs. IRCC also considered the outcomes of the 5th meeting of the IHO Council (C-5).

Difficulties and challenges yet to be addressed

4. Due to, IRCC, RHCs and the subordinate bodies are still affected by CoVID-19 in the conduct of their work.
5. The capacity building activities are very much constraint by the very limited funds available, especially the funds not earmarked to specific activities.

Achievements/outputs/conclusions

Hydrographic Standards and Services Committee (HSSC)

6. The HSSC chair presented the progress on the S100 Roadmap, highlighting that the operational edition of S-101 will be ready in 2024. HSSC endorsed the draft Ed.1.0 of the governance document, named Dual-Fuel Concept for S-100 ECDIS, ready to be endorsed by C-6 and then submitted to A-3 for approval. He also highlighted the importance of next NCSR meeting to introduce the S-100 in the IMO regulations, critical to the success of the Roadmap of the S-100 Implementation Decade. HSSC agreed that the term "Hydrospatial" is not a technical term so it shall not be included in the Hydrographic Dictionary and will

consider the requests from the IHO e-Learning centre for providing contents, as appropriate. HSSC and IRCC Chairs highlighted the excellent cooperation between their Committees.

Regional Hydrographic Commissions

7. The RHC and HCA Chairs focused their reports on the most important regional key achievements, key findings and lessons learned and on proposals to bring to IRCC's attention. The main concerns were related to the need to complete the IHO Strategic Plan gap analyses and the determination of SPI values at regional level, as well as the collaboration and coordination in the implementation of the S-100 Roadmap. Some RHCs' Chairs mentioned the progress in the GEBCO programme and the need to increase the Capacity Building fund at regional level and the inter-regional cooperation to benefit from the IHO CB activities. RHC Chairs were invited to discuss how HOs can assume a geo-coordinating role to help ensure provision of data on a regional level. The SWPHC Chair was requested to investigate possibilities to organize a workshop on environmental emissions from shipping (COP26 outcome) and on Cyber Security, and to liaise with the HSSC to provide contents. IRCC noted the proposal by HCA regarding the recognition of the Southern Ocean by means of an IHO resolution to be proposed to A3, and invited HCA to initiate the debate on how the climate change related activities can be further investigated and what can be the role of the IHO.

Maritime Safety Information

8. The Sub-Committee on the World-Wide Navigational Warning Service (WWNWS-SC) Chair informed on the approval of the IMO NAVTEX Manual for submission to NCSR 9 and on the SPI 3.1.1 (target 90%). At the end of 2021 the indicator was at 62%, based on how many Coastal States provided information internally the NAVAREAs (143 Coastal States out of 230). A new version of the joint IMO/IHO/WMO Manual on MSI for navigational warnings is expected in January 2024. The endorsement of S-124 Ed. 1.0.0 is expected by September 2022 with a subsequent submission to HSSC for approval.
9. It has to be noted that MSI providers, should they implement Iridium SafetyCast services, are compelled to bear the burden of all additional costs, as a consequence of the approval by IMO Member States of the Iridium SafetyCast as an RMSS. This causes concerns for Coastal States.

Capacity Building Management

10. The Capacity Building Sub-Committee (CBSC) Chair presented the CB Work Program (CBWP) and the significant impact of the COVID-19 pandemic on the CB activities. The generous financial contributions from Republic of Korea and Nippon Foundation from Japan were recognized, as well as the contribution of Canada to the Empowering Women in Hydrography (EWH) project. The 1st year EWH project's activities were presented, as well as the ones planned for the 2nd year. The Committee invited the IHO Secretariat to issue a CL in liaison with CBSC Chair and IRCC Chair to be informed on the percentage of employees of Hydrographic Offices that are female and the percentage of women currently in leadership roles. The progress of the IHO e-learning center at KHOA was presented. The Committee recognized the significant effort from CB coordinators to assess the needs

in their regions and the establishment of a new C-55 Project Team to focus on the content of C-55 to better reflect both the requirements for safety of navigation and the use of hydrographic data for non-navigational purposes.

Evolution of the CB Fund

44. The total funds for CBWP non-earmarked projects limits the attribution of funds to the activities submitted by the RHC's. The funds attributed by the IHO in the last years had a tendency to decrease that was in part compensated by the contributes from ROK to also this kind of funds. However, in the end of 2021 the activities funded with non earmarked funds not executed presented a value of 420,942.78 euros that were carried over to 2022 due to the accumulation of the non executed projects related with the COVID Pandemic.

CB Strategy

12. The revised Capacity Building Strategy was approved by IRCC. The Council is invited to endorse the revised CB Strategy and forward it to the 3rd Session of the IHO Assembly for adoption. (Annex A);

WENDWG activities

13. The Worldwide ENC Database Working Group (WENDWG) Chair reported on the S-101 Scheming guidelines, noting that the consensus for a Global Common Grid Scheme was not reached yet. WENDWG agreed on the proposed way forward on the development of INToGIS III which will use S-128, to allow hydrographic offices and other users to visualize S-1xx product coverage in the future. A WEND-100 Product Matrix to help ensure that UN-GGIM framework pathway principles are being considered as new S-1XX products become available. It was recommended that a S-1xx Coordinator role is established in the RHCs, either as separate from the Chart Coordinator's role or as a combined one.
14. The first iteration of the 'Guidelines on the implementation of the WEND-100 principles' version 1.0 has been presented. IRCC approved the Guidelines as an appendix to Annex 3 of the Roadmap for the S-100 Implementation Decade (2021-2030). Council 6 is invited for endorsement.

Marine Spatial Data Infrastructures

15. The Marine Spatial Data Infrastructures Working Group (MSDIWG) Chair reported on the Joint IHO- Singapore Innovation and Technology Laboratory launch in October 2021 and on the MSDIWG 13 meeting that was organized as a joint meeting together with the Marine Domain Working Group (MDWG) of the Open Geospatial Consortium (OGC). He also reported on the UN-GGIM Working Group on Marine Geospatial Information (WG-MGI), combined with an International Seminar on United Nations Global Geospatial Information Management in May 2022. The importance of the FAIR (Findable, Accessible, Interoperable, Re-usable) data principles for the Hydrographic Offices were enhanced and the MSDIWG intends to provide guidance on how IHO MS can use the FAIR principles in their work and develop an HO MSDI FAIR principles check list. The concept of Maritime Digital Twins was included in the MSDIWG work plan that intends to provide recommendations on how MSDI and HOs can be part of Digital Twins in the future. The process to update the IHO Publication C-17 to have a better alignment and integration with

IGIF and IGIF-H was initiated. The meeting was informed on the two-step project to develop an MSDI portal that should serve as a focal point to access to datasets: 1st Step will be based on the existing solutions present in INTOGIS and a possible 2nd Step will be evaluated, consisting in the establishment of an IHO marine data hub network. A Questionnaire for getting the relevant information and datasets on the future IHO MSDI portal to be implemented in 2024, will be sent out to the IHO MS if deemed appropriate.

IHO-EU Network WG

16. The IHO-EU Network Working Group (IENWG) reported on the 10th Anniversary of the signature of IHO-EC MoU celebrated on 6 May 2022, the main contribution of the IHO to the European programmes in the last 10 years, the re-use of scientific data, the interoperability between EMODnet and the IHO standards, the Maritime Spatial Planning-MSP becoming a major topic interesting Europe, and then the EU Directive on Public Sector Information. With reference to this last, the use of Open Data and re-use of Public Sector Information with potential impact on the resources of the HOs, were discussed.

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

17. The FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers (IBSC) reported that at the IBSC45 meeting 13 submissions were received. Three submissions were recognized and for the remaining 10, the Board offered 10 inter-sessional revisions. The RHCs were invited to encourage Member States and submitting institutions to engage with the IHO Secretariat and consult the Guidelines, FAQs and the White Paper (IHR-Nov-2017 – Article: Maintaining the Standards of Competence for Hydrographic Surveyors and Nautical Cartographers) early in the process of preparing submissions for programme recognition. The revised IBSC Terms of Reference with the increase of 2 more members from the International Cartographic Association (ICA) were approved. The Board mentioned that 3 Interns from the EWH-project participated in the IBSC45 successfully.

Crowdsourced Bathymetry

18. The Crowdsourced Bathymetry Working Group (CSBWG) Chair reported on the last meetings and on the achievements of CSBWG and DCDB. The WG approved the IHO Publication B-12 - Guidance on Crowdsourced Bathymetry Edition 3.0.0. The new edition was endorsed by IRCC and will be submitted to IHO Member States for approval. The meeting was informed on the RHC Seabed 2030/CSB Coordinators and on the CSBWG Work Programme. The RHCs were invited to encourage all Member States to respond to IHO CL 21/2020 to enable provision of CSB data collected from ships within waters subject to their national jurisdiction into the public domain. The IHO Data Centre for Digital Bathymetry Director reported on the difference between the coverage of the GEBCO 2021 grid with 20.6% of seafloor mapped and the estimated global seafloor coverage held in the DCDB multibeam archive that is calculated to be about 12%. The meeting was also informed on the improvements and updates of the DCDB Map Viewer and the planned enhancements of the DCDB Infrastructure. The CSB geographical filter for incoming data that takes into account Coastal States' positions on the distribution of CSB collected in their areas of responsibility was described, as well as the GEBCO Gazetteer developed by

KHOA. CSBWG will investigate the establishment of a Seabed 2030/CSB Coordinator Collaboration Team within the CSBWG.

Ocean Mapping Programme and GEBCO Activities

19. The GEBCO Guiding Committee Chair reported on the status of Seabed 2030 in May 2022 and on the creation of a new GEBCO Sub-Committee on Education and Training – SCET, the GEBCO Governance Review Project Team led by IHO and IOC as GEBCO parent organizations, and GEBCO Strategic Plan Drafting Team to align GEBCO to the IHO Strategic Plan. The two biggest challenges of GEBCO remain “To share more existing bathymetric data” and “How to get the remaining 77% of our planet’s unmapped ocean seafloor mapped”. The Committee encouraged the RHCs to actively contribute with new data to GEBCO.

General Strategic Issues

20. The IRCC Chair presented a proposal to measure the SPI allocated to IRCC. This proposal is a result of the discussions on SPI, taking into account the various contributions and describes the best way forward. The proposal was approved by the IRCC. The IHO Secretariat, RHCs and IRCC subordinate bodies were invited to derive figures on the SPI allocated to IRCC. The approved proposal is attached to this report (Annex C). Council-6 is invited to endorse the proposal.
21. Following the proposal from SWPHC, the Committee decided to organize an IRCC workshop on how to engage with international and regional agencies, development partners and coastal states to support knowledge and understanding of hydrography and the value associated with open data policies in respect of marine geospatial information.
22. The next IRCC meeting is planned to be held on 12-14 June 2023 in Tokyo (Japan). Following meetings will be held in Ecuador (May/June 2024), Nigeria (May/June 2025) and Peru (May/June 2026).

Actions required of the Council

23. The Council is invited to:
- a) note the report of the IRCC;
 - b) note the concern of MS that MSI providers, should they implement Iridium SafetyCast services, are compelled to bear the burden of all additional costs, as a consequence of the approval by IMO Member States of the Iridium SafetyCast as an RMSS;
 - c) endorse the revised CB Strategy and forward it to the 3rd Session of the IHO Assembly for adoption (Annex A);
 - d) endorse the Guidelines on the implementation of the WEND-100 principles’ version 1.0 as an appendix to Annex 3 of the Roadmap for the S-100 Implementation Decade (2021-2030).
 - e) note the approbation of the revised IBSC Terms of Reference with the increase of 2 more members from the International Cartographic Association (ICA)
 - f) endorse the IRCC approved “proposal regarding SPI allocated to IRCC” (Annex C)
 - g) take any other action considered appropriate.