

**5th MEETING
OF THE IHO COUNCIL**

Monaco/VTC, 19 – 21 October 2021



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

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

References:

- A. [List of Decisions and Actions from C-4 affecting IRCC](#)
- B. [List of Decisions and Actions of IRCC-13](#)

Annexes:

- A. Proposal for amendment of the Roadmap for the S-100 Implementation Decade
- B. Allocation of Strategic Performance Indicators (SPI) to the relevant IRCC bodies

Introduction

This document reports on the progress of the ongoing implementation of the Work Programme for 2021, especially the developments since the last report to the Council in 2020.

The thirteenth meeting of the IHO Inter-Regional Coordination Committee (IRCC13) was held in a virtual format on 23, 24 and 25 June 2021. The meeting was chaired by Mr Thomas Dehling (Germany) and attended by 80 participants from 30 Member States (MS). All Regional Hydrographic Commissions (RHC) and Subordinate Bodies of IRCC were represented. The IHO Secretariat was represented by the Secretary-General, Dr Mathias Jonas (HCA Chair), Director Luigi Sinapi (IRCC Secretary) and Assistant Director Leonel Manteigas (IRCC Assistant Secretary).

The IRCC reviewed the reports and activities of its subordinate bodies and the RHCs. IRCC also considered the outcomes of the 4th meeting of the IHO Council (C-4).

Difficulties and challenges yet to be addressed

Due to CoVID-19, IRCC and most of the subordinate bodies and RHCs had to conduct their work and especially meetings using online means. Because of the postponed meeting of IRCC in 2020, not all of them had VTC meetings in the time between the two consecutive meetings of IRCC and Council. Although all subordinate bodies and the RHCs were very innovative and productive in conducting their work virtually, there are clear challenges with more complex discussions not being handled properly due to VTC constrains. A further challenge is to find a suitable mixture of holding virtual, hybrid and personal meetings in the future, taking into account the pros and cons of them.

Achievements/outputs/conclusions

Regional Hydrographic Commissions

The RHC Chairs focused the Regions' reports on three main topics: "Work on Strategic Plan and Gap Analysis", "Important Findings" and "Proposals to IRCC". The main concerns were related to the need of guidance on the determination of SPI values at regional level and the collaboration and coordination in the implementation of the S-100 Roadmap. Some RHC's Chairs mentioned communication issues between Member States, the low productiveness of VTC, the difficulty in recruiting new Member States,

the implementation of MSDI initiatives, the postponement of Capacity Building projects and the importance of online training, such as the online courses offered by UKHO.

Maritime Safety Information

WWNWS resumed on the most recent meetings and showed a graph with the percentage of National Coordinators providing contributes from the different NAVAREA. The graph can be used to measure the efficiency of the MSI Capacity Building course as well as where to focus capacity building training. Another graph detailed an increasing trend over the last five years with respect to the promulgation of navigational warnings by the WWNWS, showing a steady increased tendency of 14%. To reduce the lack of qualified trainers, it is intended to review the course materials and to offer a train-the-trainer course.

Capacity Building Management

CBSC presented the CB Work Program (CBWP) mentioning the significant impact of the COVID-19 pandemic on the CB activities. Thanks to the highly flexible reaction, it is encouraging that initiatives such as the UKHO's online courses lead to several replacements of trainings by virtual means. This shows as well the importance of the E-learning-Initiative.

Evolution of the CB Fund

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 project. The total funds for CBWP non-earmarked projects had a decrease, which limits the funded projects. CBSC decided to establish an Activity Calendar for the Virtual CB activities accessible to the participants. In relation to the funds, almost all 2020 CB projects were postponed to 2021 and 2022. Therefore, there will temporarily be an increase in the number of funded projects in these years. IHO Secretariat mentioned that – due to a foreseeable IHO budget surplus – at the end of 2021 there could be the opportunity to increment the 2022 CBWP funds.

CB Strategy

CBSC established a Project Team to Revise the CB Strategy. The PT conducted a Gap Analysis between the new IHO Strategy and the current CB Strategy, identifying three work items: the “Draft aligned CB Strategy”, the “Update phases of development (to potentially include a phase 0 on governance)” and “To add a 5th step to the 4A-process of the CB Strategy (Awareness; Assessment; Analysis; Action)”, in order to address Measures of Effectiveness (MoE).

CB IHO e-Learning Center

The IHO e-Learning Center Project Team established TOR and ROP, with good expectations to receive contents from some Working Groups (WG) and Institutions. It is expected that the Guidelines will be finalized by September, in order to start the operational tests with the IHO Member States in 2022.

WENDWG activities

WENDWG was mainly focused on the WEND-100 principles. The Implementation Guidelines will determine how they are applied to each Product Specification. The WG also started working on the S-

101 ENC Scheming Guidelines to ensure an efficient transition from S-57 to S-101. A questionnaire was developed for ENC producers to express their plans regarding HD ENCs. The INTToGIS III using S-128 (Catalogue of Nautical Products) is welcomed. WENDWG also agreed to develop Guidelines to assist in the transition from S-57 to S-101.

IRCC endorsed the final changes to the proposed IHO Resolution on WEND-100. In accordance with IRCC ROP Art 9, IRCC invited IHO Secretariat to issue an IHO CL to IHO MS asking for the approval of the IHO Resolution on WEND-100.

IRCC endorsed the recommendations made in Doc. IRCC13-7D2 on the amendment of the Roadmap for the S-100 Implementation Decade (Annex A) and is asking C-5 for approval.

The Italian HO presented a questionnaire developed with the University of Genoa, as a joint effort to conduct a research on how the introduction of S-100 products is perceived by Hydrographic Offices, and how it is going to influence them in the upcoming years. This study is part of a wider study focused on how the introduction of S-100 will affect shipping companies and maritime operators. IRCC asked IHO Secretariat to distribute a CL with that questionnaire to MS.

Marine Spatial Data Infrastructures

MSDIWG resumed on the VTC held last March. The concept of MSDI Ver.2.0 was presented and was mentioned that the Arctic SDI Governance model could be a role model for RHC MSDI cooperation. The Strategic Performance Indicator (SPI) related to Target 2.1 - Build a portal to support and promote regional and international cooperation in marine spatial data infrastructures (MSDI), was discussed with the intention to investigate the different possibilities and needs of MS. MSDIWG is also tasked to follow the Marine Spatial Planning (MSP) and EU's New Blue Economy for a Sustainable Future. Finally, the close cooperation with the UN-GGIM-WG on Marine Geospatial Information was highlighted.

IHO-EU Network WG

IENWG explained the contribution of the IHO to the European Union programmes, with particular focus on EMODnet Portals and the specific case of EMODnet bathymetry. Maritime Spatial Planning is another area of interest, being IENWG an observer of the EC Member State Expert sub-group on MSP. The possible impact for Hydrographic Offices of the European Directive 2019/1024 on open data and the reuse of public sector information was also described, enhancing that ENCs might be included as high level datasets.

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

IBSC mentioned that at IBSC43 meeting 15 submissions were reviewed with only one recognized, and 5 recognized with conditions. The Board offered 10 inter-sessional revisions. At the end of 2020, from the 15 submissions, 11 were recognized. In 2021, at IBSC44, 14 submissions were reviewed with only one recognized, and 3 recognized with conditions. The Board offered 9 inter-sessional revisions. The main issue is the initial poor quality of submissions resulting in remedial iterations and causing heavy workload to IBSC. COVID situation implied the modification of teaching strategy and the development of remote learning strategies, with a negative impact on IBSC work and meetings.

Crowdsourced Bathymetry

CSBWG reported on the last meeting and the new elected Vice-Chair. The Circular Letters (IHO CL 21/2020 and IRCC CL 1/2020) to request MS to indicate their positions on the provision of CSB data received 30 positive replies. The Meeting was informed on the current CSB efforts and projects. On the outreach, CSBWG10 discussed how the engagement with the RHC and HO can be improved. The draft of the CSB Summary Guides and the update of IHO B-12 were described. It was highlighted that many coastal states continue to misunderstand the objectives and focus of the CSB initiative, which are to collect data in poorly surveyed or unsurveyed areas. Also, there continues to be concern over the apparent lack of dedicated resources available within national HOs to process data available via DCDB. The importance of liaison with other IHO bodies, as well as appropriate engagement with industry to progress the work items, continues to be a key enabler for the project. The quality of data has grown considerably in the last years having now more than 60TB. The Centre has about 25 GB of CSB data from 185 contributing vessels. DCDB implemented a geographic filter considering MS positions on the collection of CSB data in the areas of jurisdiction. The result is that data from only 13 CSB-supporting countries are currently discoverable and accessible via the DCDB. DCDB now hosts the GEBCO Gazetteer, a web tool that allows the public to search for, view, and download information. IHO MS and stakeholders were invited to contribute and encourage the provision of bathymetric data regardless of its origin or reason for gathering.

Ocean Mapping Programme and GEBCO Activities

GEBCO Guiding Committee considers that the minimum acceptable data coverage developed from 6% to 21%, which is still not comparable with the 100% 10m DEM coverage of all landmass. UN Decade of Ocean Science for sustainable development clearly stated the need to complete a comprehensive map of the ocean floor. The importance to invest in future generations of ocean scientists and hydrographers and the GEBCO Training Program with the University of New Hampshire were enhanced. It was decided to establish a new Sub-Committee on Education and Training to liaise with this successful existing program and to identify and connect with other ocean mapping programs. The core of GEBCO activities is building partnerships, regionally and nationally and some examples were mentioned. GEBCO's two biggest challenges are: how to get governments, institutions, private industry and their contractors to share more existing bathymetric data; and, how to get the remaining ~80% of our planet's unmapped ocean seafloor mapped.

Seabed 2030 project was endorsed as an Action of UN Decade of Ocean Science for Sustainable Development. The complex network of this project was explained along with the data ingestion in the system and mapping coverage that now stands at 20.6%. The project is focused on mapping the gaps with three different initiatives: the Ocean Frontier Mapping, Crowd Sourced Bathymetry and Technology Innovation. It is necessary to promote the need to map the entire seabed and to encourage organizations to make their data available.

Shell provided a presentation on "Enabling Contributions" starting to mention where Shell operates and that hydrographic, seismic and geological data is acquired. Also, there is the acquisition of MBES data in the vessels transits. Shell acquires data but does not have permission to share/donate without explicit prior country permission, being the process to seek permission complex. To enable contributions to Seabed 2030 it was recommended to improve the collaboration between national Hydrographic Offices and the Natural Resource Regulator, and simplify and reduce permitting requirements for transits through country Exclusive Economic Zones.

General Strategic Issues

On his summary, the IRCC Chair mentioned the importance to have time in the meeting for the Regions and for the Subordinate bodies to discuss on the Gap Analysis, S-100 Implementation Strategy and SPI. In relation with the Strategic Plan, it is important the exchange of strategies and experiences. SWPHC18 provided an excellent Gap Analysis that could be used as example for other RHC. Cooperation is considered essential, as well as sharing experiences within RHC and inter-regionally.

The SPI have been allocated to the relevant IRCC bodies, differing between lead and contributing tasks. The involved IRCC bodies were tasked to develop measurements for the respective SPIs and to report back to IRCC14. The allocation of the SPIs is provided in a table in Annex B.

The Meeting proposed to have an IRCC Workshop in September/October 2021 (date TBD), on the implementation of IHO Strategic Plan and related SPI. The Chair also discussed how to work strategically at IRCC level on sequencing the RHC conferences, IRCC and Council, using VTC and meetings in presence and the fact that the strategic issues will be generally reflected into the Council.

The next IRCC meeting is planned to be held in May/June 2022 in Indonesia (with Monaco as backup). Following meetings will be held in Japan (2023) and in Ecuador (2024).

Actions required of the Council

The Council is invited to:

- a) **note** the report of the IRCC;
- b) **note** the final changes to the IHO Resolution on WEND-100, as per IHO CL 25/2021;
- c) **approve** the recommendations to amend the Roadmap for the S-100 Implementation Decade (Annex A);
- d) **note** the SPI allocated for IRCC SC/WGs and RHCs (Annex B);
- e) **take** any other action considered appropriate.