

Report CSB/Seabed 2030 Coordinator for NSHC

1. Background

The IHO defines crowdsourced bathymetry (CSB) as depth measurements from vessels, collected using standard navigation instruments, while engaged in routine maritime operations. The CSBWG is tasked with maintaining IHO publications B-12 – IHO Guidelines for Crowdsourced Bathymetry – as well as investigating and highlighting use cases of CSB data, providing guidance on data quality and standards in liaison with the IHO DQWG and considering incentives to increase data contributions by mariners. The CSBWG is particularly tasked to work in cooperation and coordination with other IHO bodies and relevant industry stakeholders to ensure a harmonized approach to data gathering and the resultant datasets.

2. CSB meeting report

The 10th (virtual) meeting of the Crowdsourced Bathymetry Working Group (CSBWG) was held from 30 March – 1 April 2021 chaired by USA (Jennifer Jencks) with 57 participants.

The following key issues were discussed:

- **DCDB Pipeline**
An update on the developments of the IHO Data Centre for Digital Bathymetry (DCDB) data pipeline, the recent enhancements, and data contributors was provided. Feedback to allow further development and to highlight areas that could be improved to enhance the user experience was requested.
- **Seabed 2030 Regional Projects**
An update on project activities was given by the Director Nippon Foundation-Seabed 2030 Project. The coverage in the most recent GEBCO 2020 Grid is 19%; for the 2021 Grid, 21% can be expected. The project was searching for other areas; suitable candidates can be proposed by CSBWG members and through RHCs. The Seabed 2030 Community Survey is to be advertised: https://surveymonkey.com/r/SB_2030
- **Canadian CSB Update**
The Canadian Hydrographic Service (CHS) CSB activities were presented. A number of different ways and approaches to using CSB data were highlighted as well as the importance for HOs to be involved rather than not being part of the data chain and ignoring CSB.

The discussion focused on the need to develop a more formal international charting standard for CSB derived data. This would give national HOs the confidence to use CSB more widely within their legal framework. The topic should be raised at IRCC13 and discussions should be progressed with the Data Quality Working Group (DQWG) and the Nautical Cartography Working Group (NCWG).

- Trusted Community Bathymetry (TCB) & CSB Loggers

An open hardware/software solution for focused CSB data collection was presented by University of New Hampshire. The aim is to increase the data gathering activities and to generate a true crowd by developing (and producing) low-cost data loggers. It was noted in the discussion that Seabed 2030 would lead on the selection of areas, however more volunteer candidates were required to expand the field trials. The RHC Coordinators would be playing a role in gaining participation.

- Data Quality Working Group

DQWG Chairman Mr Rogier Broekman (NL) provided an update on the activities of the DQWG relevant to the CSBWG, in particular focusing on guidelines and recommendations for HOs to allocate CATZOC values.

- Project Briefs

Updates on current CSB-related Efforts were given by Da Gama Maritime (activities within the super yacht community); FarSounder (use of forward looking sonars for CSB); Navico/C-Map (overview on the recent activities); CIDCO (overview on the recent activities); James Cook University (Great Barrier Reef CSB activities); JAMSTEC (activities around Japan and recent developments); CHS (Pydro application, a suite of software developed by NOAA and University of New Hampshire, and its use with CSB datasets); Fugro (update on recent activities); China MSA CSB (details on CSB data collection efforts in China).

- Outreach to IHO RHCs

A brief on the outcomes from IRCC12 was provided. The nominated CSB/Seabed 2030 RHC Coordinators were introduced. Brief comments on the replies received to the two IHO Circular Letters were provided, which provided some details on reason for non-participation.

- General outreach to Hydrographic Offices (Action 2)

Draft versions of the two-page fliers developed were presented. The fliers are aimed at Super Yacht/Leisure Community; Survey, Geophysical and Submarine Cable Industry; Cruise Liner; Software/Hardware Industry; Hydrographic Offices; Fisheries; Academic/Scientific Research.

- **B-12: CSB Guidance Document**

For B-12 revision process, brief details on proposed amendments were provided. Additional volunteers were requested to work in the drafting group. Besides an English and a French version, the generation of a Chinese version was welcomed and supported.

- **Election of Chair and Vice-Chair**

The current Chair, Jennifer Jencks, was re-elected unanimously. There were no volunteers for the Vice-Chair position, the current Vice-Chair agreed to continue to support the Chair for a short period.

3. CSB / Seabed 2030 Coordinator for NSHC

CSB has become a very active and developing topic within the IHO and beyond, especially in liaison with the Seabed2030 initiative from the Nippon Foundation and GEBCO. RHCs are getting more and involved and therefore each RHC nominated a CSB/Seabed2030 Coordinator to ensure the coordination and exchange of the issues with each RHC. The function is currently held by Thomas Dehling. This is limited to the initial phase and a successor is needed to take over. Any volunteers are welcome. If no one else is willing to candidate, Germany would like to nominate Dr. Patrick Westfeld, who is a CSB WG member.

The Commission is invited to

- take note of the report;
 - select a new CSB/Seabed 2030 Coordinator
 - take any other decision as appropriate
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