

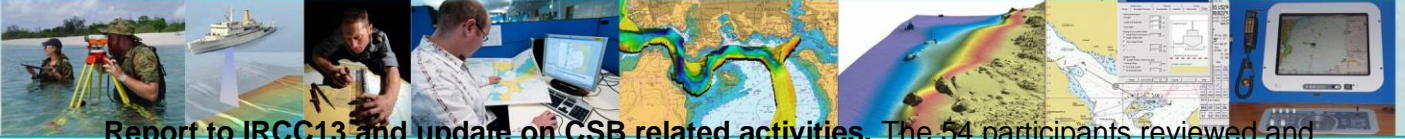
11TH MEETING OF THE CROWDSOURCED BATHYMETRY WORKING GROUP
VTC, 14-17 September

Contribution to the IHO Work Programme 2021	
Task 3.6.4	Develop general guidelines on the use and collection of Crowdsourced Bathymetry (CSB)

Due to the ongoing global travel restrictions, the Crowdsourced Bathymetry Working Group held its 11th meeting from 14 to 17 September 2021 as a remote Video Tele Conference (VTC). The meeting was held over three days, with each day split into a morning B-12 document review session followed by a plenary session in the afternoon. The document review sessions were chaired by the leads of the various B-12 section leads, with the plenary sessions chaired by the CSBWG Chair, Ms Jennifer Jencks (USA, Director of the DCDB).

The sessions were attended by 54 participants from 19 Member States (Australia, Canada, China, Colombia, Croatia, Denmark, France, Germany, India, Italy, Lebanon, Mexico, New Zealand, Norway, Portugal, South Africa, UK, Uruguay and the USA) and observers and expert contributors from Nippon Foundation-GEBCO Seabed 2030 Project, Arizona state University, DockTech Israel, Great Lakes Observing System (GLOS), Center for Coastal and Ocean Mapping/Joint Hydrographic Center – University of New Hampshire (CCOM/JHC - UNH), Centre Interdisciplinaire de Développement en Cartographie des Océans (CIDCO), Da Gama Maritime Ltd, Dongseo University, Electronic Chart Centre (ECC) AS, Environmental Systems Research Institute, Inc. (ESRI), Farsounder INC., Teledyne FLIR, Fugro, Furuno, Ground Maritime Aerospace Technologies (GMATEK), Inc., H2i, James Cook University, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), M2Ocean, NAVICO/C-Map, National Institute of Water and Atmospheric Research (NIWA), ONE Data Technology Co., Ltd, Sea-ID and SevenCs/ChartWorld. The IHO Secretariat was represented by Director Luigi Sinapi, Assistant Director David Wyatt, Assistant Director, designate, Sam Harper (Secretary) and Public Relations & Communication Officer Sarah Jones-Couture joined during sessions relating to outreach activities.

Revision of IHO Publication B-12. The principle focus of the meeting was progressing the revision of IHO publication B-12. A huge amount of work had been undertaken by the six review teams following the 10th CSBWG meeting, and this was scrutinised in detail during the dedicated document review sessions, before being presented to the wider working group for comment. Much of the revised text was endorsed by the working group, however there remains further intersessional work to complete before the full document will be presented to the 12th CSBWG meeting. The aim is to have the document fully endorsed in time for submission to IRCC14 in 2022.

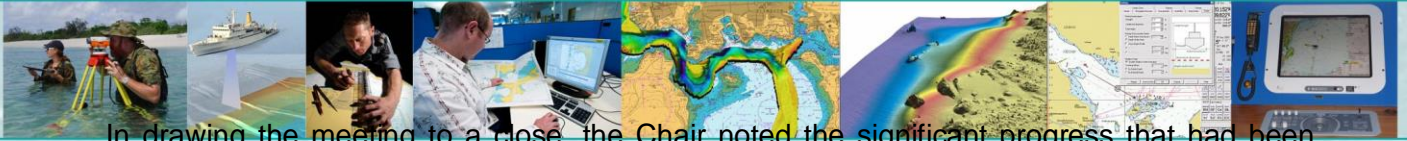


Report to IRCC13 and update on CSB related activities. The 54 participants reviewed and approved the report of the 10th CSBWG meeting and received a general progress brief from the Chair, including an update on her report to IRCC13. This was followed by a broad range of updates on Current CSB related activities. Subjects covered included the IHO DCDB CSB Pipeline, understanding measurement uncertainty of CSB using Total Propagated Uncertainty as part of the Great Barrier Reef project, the latest on Sea-ID's data logger prototypes and trials with CCOM, working collaboratively on data gathering activities with local hunting communities in Canada, potential parallels with the use of Satellite Derived Bathymetry based safety information overlays in ECDIS, and the development of dedicated data logger solutions for CSB in the Great Lakes by the GLOS.

Engagement with Regional Hydrographic Commissions. Cdr Christoff Theunissen, the CSB-GEBCO-Seabed 2030 Regional Coordinator for the Southern African and Islands Hydrographic Commission (SAIHC) gave an update on a trial that has been undertaken by the South African Navy Hydrographic Office, in partnership with the Institute of Maritime Technology (IMT) focusing on CSB data collection and data sharing. The Working Group were pleased to learn of the successful deployment of data loggers, as well as valuable lessons learnt from the team leading the trial. The chair invited updates from the other CSB-GEBCO-Seabed 2030 Regional Coordinators present, which revealed both increasing levels of engagement on CSB, as well as some of the recurring barriers cited by potential contributors. The Chair and IHO Secretariat representatives opined that this network of Regional Coordinators would be the principle means of engaging with IHO member states to advocate for open data access and CSB activities.

Sector specific outreach. Following the 10th CSBWG Meeting, seven sector specific two page information briefs had been produced with the intention that they be used to support 'first contact' engagements with potential CSB participants. These briefs (covering cruise shipping, super yacht owners/operators, fisheries, hydrographic offices, marine contractors, the marine science community and marine navigation equipment manufacturers) were presented to the working group and were endorsed for use. Following a discussion on what other sectors could be targeted, it was decided that two further briefs would be produced aimed at the leisure craft and commercial shipping communities. The Chair thanked the IHO communications team for their continued assistance in producing the briefs.

Any other business. China submitted a Chinese language version of B-12 to the working group which was gratefully accepted by the chair. China also gave a flash presentation on using Trusted CSB in a port environment as a means of indicating changes in navigable channels where systematic re-survey activity was necessary. The Chair invited China to present the full version of their study at the 12th CSBWG Meeting. Finally, the new CSBWG LinkedIn group was advertised to the meeting, with participants encouraged to use it as a networking tool whilst in person meetings were still not possible.



In drawing the meeting to a close, the Chair noted the significant progress that had been made towards completing the revision to IHO Publication B-12. This, combined with the various discussions and reports indicating increasing participation in CSB and data sharing, moved her to confirm that the objectives of the meeting had been met. The Chair took the opportunity to thank David Wyatt for his long service as CSBWG Secretary and wished him well for his retirement; a sentiment shared by all participants.

Global travel conditions allowing, it is planned to hold the 12th CSBWG meeting at the IHO in Monaco, week commencing 14 March 2022.



Some of the 54 participants connected for the CSBWG11 remote meeting.