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CIRCULAR LETTER 28/2019
13 June 2019

ADOPTION OF EDITION 2.0.0 OF IHO PUBLICATION B-12
CROWDSOURCED BATHYMETRY GUIDANCE DOCUMENT

Reference: CL 11/2019 dated 25 January – *Call for approval of Edition 2.0.0 of IHO Publication B-12*

Dear Hydrographer,

1. The above reference proposed the adoption of Edition 2.0.0 of IHO Publication B-12 – *IHO Crowdsourced Bathymetry Guidance Document* – as recommended by the IHO Crowdsourced Bathymetry Working Group (CSBWG); and endorsed by the IHO Inter-Regional Coordination Committee (IRCC) and the IHO Council.
2. The Secretariat of the IHO thanks the 38 Member States that replied to Reference A: Algeria, Belgium, Brazil, Canada, Chile, Colombia, Cyprus, Denmark, Ecuador, Estonia, France, Georgia, Germany, India, Iran (Islamic Republic of), Ireland, Italy, Japan, Latvia, Malta, Malaysia, Mauritius, Monaco, Netherlands, Norway, Papua New Guinea, Peru, Poland, Portugal, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Tunisia, Turkey, United Kingdom and United States of America.
3. Thirty five Member States supported the adoption of Edition 2.0.0 of B-12 and three Member States did not support the adoption of the publication. Nine Member States offered comments in addition to their vote. These comments and the outcome of their review by the Chair of the CSBWG and the Secretariat are provided in Annex A to this Circular Letter.
4. The Secretary-General would like to reaffirm the separation between the approval of B-12 and the request for indication of individual Member State general support for CSB activity within their waters of national jurisdiction. The Secretariat is currently analysing the replies received from Member States and will discuss the best way to publish this information with the Chair of Council and CSBWG, which is ultimately for the guidance of mariners who wish to undertake this activity.
5. In addition, the Secretary-General would like to emphasise that such expression of general support for CSB by individual Member States within their waters of national jurisdiction is an ongoing process with no cut-off date. Expressions of support can be submitted to the Secretary-General at any time in the future. In this regard, it is planned that the Secretary-General will call for updates of the position of Member States regarding CSB at intervals by Circular Letter.
6. When the Reference was issued, there were 89 Member States of the IHO with three States suspended. In accordance with the provisions of the Convention on the IHO, as amended, the minimum number of affirmative votes required was 29. As a result, and taking into account the editorial correction identified by the CSBWG at its 7th meeting and the remarks reported in Annex A, the proposed Edition 2.0.0 of B-12 has been adopted.

7. Edition 2.0.2 of B-12 (*English version only*) is available on the IHO website at: www.iho.int → Standards & Publications → B-12.

Yours sincerely,



Mathias JONAS
Secretary-General

Annex: Member State's responses to IHO CL 11/2019 and comments from the Chair of the CSBWG and the Secretariat.

Copy: Chair, CSBWG

**MEMBER STATES' RESPONSES TO IHO CL 11/2019 AND COMMENTS FROM
THE CHAIR OF THE CROWDSOURCED BATHYMETRY WORKING GROUP (CSBWG) AND
THE IHO SECRETARIAT**

**ADOPTION OF EDITION 2.0.0 OF IHO PUBLICATION B-12
– IHO GUIDELINES FOR CROWDSOURCED BATHYMETRY**

Brazil (Vote = Yes)

Suggestions for improvement of IHO Publication B-12, to be incorporated already in the Edition 2.0.0 or afterwards in the Edition 3.0.0:

1. To include the statement "**This document provides technical guidelines only that in no way supersede national or international laws and regulations**" on the footnote of all pages of the publication.

Brazil believes this simple action will give more visibility to the decision of IHO Council.

Comment from the Chair of the CSBWG/IHO Secretariat:

B-12 is a guidance document, therefore its content is advisory only and should be seen as indicated best practice. By its very nature, each IHO Standardization has the condition of being a recommendation and has no status within the framework of national or international law. Such a footnote could suggest that this would be different for other IHO regulations.

2. To include the text "In this case DCDB must act as a Trusted Node." at the end of the paragraph of the item 2.1.1.2 (Multibeam Echo-sounders).

Brazil considers that all echo-sounder data, even multibeam echo-sounder data, must be put available to all Coastal States on their desire. In item 2.1.1 1.2 (Multibeam Echo-sounders) it is not clear how multibeam echo-sounder data will be received by the Coastal States if they so wish.

Comment from the Chair of the CSBWG/IHO Secretariat:

Multibeam echosounder data is not considered crowdsourced bathymetry data and therefore, fall outside of the scope of the guidance document. Multibeam echosounder data cannot be forwarded to the DCDB by the technical means described in this guidance document. It is mentioned in 2.1.1.2 however, simply as a reminder to those interested, that multibeam echosounder data or processed bathymetric data can also be contributed directly to the DCDB. As an overarching principle, all data discoverable in the finally published DCDB database is freely accessible to all.

3. To delete the text "**However, if the vessel chooses to remain anonymous to data users, the Trusted Node does not need to publish the vessel name in association with the UUID.**" in the field "Description" of the Metadata Field "Unique Vessel ID" in Table 3 (item 3.3.3 Required Metadata from Trusted Nodes).

Brazil believes that any hydrographic metadata is not subject to anonymity and does not see reasonable motive for the anonymity of CSB metadata.

Comment from the Chair of the CSBWG/IHO Secretariat:

Crowdsourced bathymetry data is not to be confused with hydrographic data. Not allowing for anonymity would deter some from contributing, due to their wish for personal or commercial privacy/security. This applies, for example, to the super yacht and fishing communities.

Malaysia (Vote = Yes)

Suggested to extend the period for acceptance of Crowdsourced Bathymetry activities in National Waters of Jurisdiction until end of the year hence each member state have adequate time to refer the stated issue to related authorities for further discussion.

Comment from the Chair of the CSBWG/IHO Secretariat:

It is intended that this will be an on-going theme with periodic requests to MS to consider their position and advise of any change, which could release data already provided to the DCDB. Member states are invited and encouraged to join the positive list at any time.

Tunisia (Vote = No)

The undertaking of hydrographic surveys in waters under national sovereignty and jurisdiction is regulated by international law and national jurisdiction.

Hydrographic surveys in areas under national sovereignty and jurisdiction must be subject to a coastal State's authorization to proceed.

Comment from the Chair of the CSBWG/IHO Secretariat:

The CSBWG Chair thanks Tunisia for these comments, the position of Tunisia with respect to this activity is noted. It is the consideration that CSB is “the collection of depth measurements from vessels, using standard navigation instruments, while engaged in routine maritime operations” and is therefore neither hydrographic surveying or scientific or research data gathering or a systematic activity and therefore does not fall under the UNCLOS restrictions regime for Maritime Scientific Research. However, it is the objective of the list to take due regard of those nations who wish to restrict the transmission of such collections made within their waters of jurisdiction.

Colombia (Vote = Yes)

It is a very useful publication to have the gathering of bathymetric data implemented by non-hydrographic vessels.

Excellent summary of the procedure for this crowdsourced task.

Even if this information is not useful for the navigational charts, it can be used for several research projects.

Comment from the Chair of the CSBWG/IHO Secretariat:

The CSBWG Chair thanks Colombia for these positive and helpful comments, which indicate a clear support for CSB activity.

Monaco (Vote = Yes)

Criteria for selecting trusted nodes and their responsibilities are to be clearly indicated.

Comment from the Chair of the CSBWG/IHO Secretariat:

The CSBWG Chair thanks Monaco for its comments, it is proposed to develop criteria for selecting Trusted Nodes and to articulate their responsibilities in the next edition of B-12.

France (Vote = Yes)

Criteria for selecting trusted nodes remains to be clearly indicated, their role and level of responsibility too.

Comment from the Chair of the CSBWG/IHO Secretariat:

See response to Monaco comment above.

In the European Union the commission has set up a EMODNET network for bathymetric data sharing. Within this network the commission has also set up a bathymetric data collection and quality control system which requires national hydrographic services, legally recognised to disseminate quality and interoperable data for maritime and coastal policies.

Therefore, it would seem appropriate for the national hydrographic services to maintain this role as quality control for the DCDB.

Comment from the Chair of the CSBWG/IHO Secretariat:

The CSBWG Chair thanks France for the information regarding EMODNET, it should be noted that national hydrographic services have not exercised any quality control of the data uploaded to the DCDB as it has been only raw unprocessed data, which the subsequent user has been required to evaluate and process to meet its particular use and need. The DCDB does not, nor can it, undertake data processing or quality control of all the data provided to it from the wide variety of sources as the necessary resources are not part of the DCDB structure.

IR of Iran (Vote = No)

1) Although at the end of paragraph 4 it is mentioned that "This document (CSB guideline) provides technical guidelines only that in no way supersede national or international laws and regulations", but the provisions of document B-12 still entails various ambiguities in the method of data gathering and sending, security competence of vessels collecting data, data security, unclear methods for choosing trusted nodes, and absence of criteria for selecting and assessing them. In this manner, the sovereign rights of member states over their territories and their related data seems to be neglected in the proposed guideline, and no authority or supervision has been considered for such states, in technical, operational or security terms. Such conditions will be favorable and easy for measures against the national security of member states, and illegal activities which may threaten the interest of such countries. Crowdsourced bathymetry aims at ensuring comprehensive data gathering, which is more feasible and necessary for high seas and oceans, not coastal areas. Data about waters, coasts and ports under the jurisdiction of member states should be collected by those member states themselves and should be done by vessels flying the flag of that country.

Comment from the Chair of the CSBWG/IHO Secretariat:

The position of the IR of Iran with respect to CSB activity within its national waters is noted.

2) It is also worth mentioning that according to Iranian legislation, gathering data of the Iranian exclusive economic zones and the continental shelf is forbidden for foreign nationals, and all activities, research and scientific investigations in this respect require permission and license from relevant Iranian authorities.

Comment from the Chair of the CSBWG/IHO Secretariat:

It is the consideration that CSB is "the collection of depth measurements from vessels, using standard navigation instruments, while engaged in routine maritime operations." and therefore does not fall under the UNCLOS regime for Maritime Scientific Research. However, it is the objective of the list to take due regard of those nations who wish to restrict the transmission of such collections made within their waters of jurisdiction.

3) As it was mentioned by Iranian delegation during council meeting in London, preparing a list of members supporting CSB as per paragraph 9 will result in negative consequences among the members at the international level, and lead to political abuse, which is contrast with the spirit of IHO activities and measures. This delegation is therefore against the establishment of such lists;

Considering the mentioned comments, this authority believes that the document is too vague and immature in its present conditions and ambiguities.

Comment from the Chair of the CSBWG/IHO Secretariat:

The objective of the list is to ensure mariners do not undertake this activity within waters of a coastal state that has restrictions or a total prohibition. The list is focused on advising mariners where they can undertake this activity without restriction and what caveats some coastal states have placed on the activity or the subsequent use of the data. The list is a positive approach, focused on highlighting those that positively support the activity.

Chile (Vote = No)

Publication B-12 ignores the existence of the Hydrographic Offices, as it does not mention them through all the text. However, it creates the figure of "trusted nodes", which are replacing the role of the Hydrographic Offices when dealing with bathymetric data, since their acquisition, through their process, validation, use and

distribution. Likewise, the so detailed content about the uncertainties (Chapter 4) makes the publication deviate from its objective with a complex aspect and no value for the mariner, who is the main user of such a publication. Both remarks were made by Chile to the Edition 1.0.0, by mail, dated 2nd October 2017. However, we received neither comments to this respect, nor remarks from other Member States.

We agree with the added text, mentioning that "the document provides technical guidelines only that in no way supersede national or international laws and regulations".

Concerning the item 1.3 "Overview of CSB Data Flow", we notice that the publication leads to a sensitive area when requiring to make a difference between the data obtained in the high seas (the area) and the data collected in waters under national jurisdiction. Who will be responsible and under which criteria he will define whether it is one case or the other? This reinforces the need to include the Hydrographic Offices in this process. On another hand, figure 2 indicates flows depending from the replies that will be received to the form of Annex B, that is you are requiring the approval of the text of a publication which has something still undefined.

The CSB data obtained by whoever, of the high seas, can be included in the DCDB without the need of other procedure. However, CSB data obtained outside the high seas must go through the Hydrographic Office of the correspondent country before reaching the IHO DCDB, as national standards governing the hydrographic activity in jurisdictional waters should be met. In this last case, the "trusted nodes" would have to be the Hydrographic Offices exclusively.

It is said that the obtained data in jurisdictional waters will be kept until the IHO receives the authorization from the relevant coastal State to make them available. We understand that the data will be kept by the DCDB (nothing else is mentioned) and it is not understood why the DCDB should be responsible of keeping the confidentiality of these data and not the competent national Hydrographic Authority. The aforementioned deserves a revision and the express inclusion of the Hydrographic Offices in the process.

Comment from the Chair of the CSBWG/IHO Secretariat:

The CSB initiative is based on the fact that many Hydrographic Offices are faced with limited resources and concentrate on surveying their main shipping routes. CSB can help to enhance the knowledge about the seabed topography in other areas, including remote areas and areas with a sparse density of soundings. The principal arrangement of Trusted Nodes was an agreed element throughout the various iterations of the CSB concept. The Trusted Nodes serve for all areas including International Waters – a role which national HO's usually avoid. The general construction, however, does not rule out that a national HO adopt the role of a Trusted Node and maintains the required technical infrastructure and data processing capability.

Finally, we note that in Annex B, "Glossary", the definition given for GEBCO is:

"General Bathymetric Chart of the Ocean (GEBCO). Publicly -available bathymetric map, and I associated products, of the world's oceans. **GEBCO was created, and is maintained, by an international group of scientists, under the auspices of the IHO and IOC UNESCO.**"

It should be:

"General Bathymetric Chart of the Ocean (GEBCO). Publicly-available bathymetric map, and associated products, of the world's oceans. **GEBCO is an IHO and IOC joint Project that relies largely on the voluntary efforts of an international collaborating community of scientists and hydrographers with the support of their parent organizations.**"

Comment from the Chair of the CSBWG/IHO Secretariat:

The CSBWG Chair thanks Chile for this correction, which will be reflected in the final published version of Edition 2.0.2

USA (Vote = Yes)

Upon review of the approval process, the U.S. makes the following observations and request:

1) B-12 V 1.0.0 was endorsed by IRCC

- 2) B-12 V 1.0.0 was endorsed by the IHO Council, with some additional language proposed at the meeting, and assigning additional work regarding data flow to the CSBWG.
- 3) Council decision C2/23 stipulated B-12 V 2.0.0 be endorsed by IRCC via correspondence.
- 4) The U.S. cannot locate the IRCC endorsement of B-12 V 2.0.0

Comment from the Chair of the CSBWG/IHO Secretariat:

The Secretariat regrets that due to an internal communication error, the procedural IRCC endorsement by correspondence was mistakenly omitted. After consultation with the Chair of IRCC, direct endorsement of B-12 V 2.0.0 was sought at IRCC11 in Genoa, Italy (3 – 5 June 2019).

5) CL 11 requests approval of B-12, V 2.0.0, incorporating the Council language, and modifying the data flow.

In the event that there is a need or an opportunity to revise the disclaimer language on page 4 of Edition 2.0.0 of new IHO Publication B-12, The United States of America recommends replacing "This document provides technical guidelines only that in no way supersede national or international laws and regulations." with "This document provides technical guidelines only and should be implemented in a manner consistent with international law."

Comment from the Chair of the CSBWG/IHO Secretariat:

The Secretariat thanks the USA for this suggestion, which will be proposed to the IHO Council as the originator of the current wording for its consideration and final decision.

Malta (Vote = Yes)

The Continental Shelf Department is of the opinion that there might be some confusion when referring to the "high seas" and the "Area", of the Circular letter, part of which is being reproduced hereunder. In their opinion only high seas should be referred to in Point 7.

Comment from the Chair of the CSBWG/IHO Secretariat:

The CSBWG Chair thanks Malta for this clarification, which is noted and will be considered in subsequent correspondence.