

# B-12 Guidance on Crowdsourced Bathymetry

## ***Section 1: Data Contribution***

Day 1 - Morning Session

**IHO**

# PROPOSED AMENDMENTS

International  
Hydrographic  
Organization

Ref. to the text	Edition 2.0.3 text	Updated text	Writing team notes
1. Data Contribution	Data Contribution	Data Contribution to IHO DCDB	Denmark proposed title change to match the content of the section
1. Data Contribution	Hydrographic and bathymetric data collected by the National Antarctic Programmes' ships ...	Remove	4 team members agreed this paragraph was no longer relevant. Originally added by IHO so we are looking to them for approval.
1.1 IHO Data Centre for Digital Bathymetry	The DCDB was established by the IHO in 1988 to steward the worldwide collection of open bathymetric data. The Centre archives and shares depth data contributed by mariners and others from across the world.	The DCDB was established by the IHO in 1990 to steward the worldwide collection of open bathymetric data. The Centre archives and shares, <b>freely and without restriction</b> , depth data contributed by mariners and others from across the world.	<p>Steve M: Suggest replacing "steward" with "provide and control"</p> <p>DM: I like steward. It seems more accurate than "provide and control". For example, what does "provide" mean? DCDB doesn't produce CSB data, but it serves CSB data....</p> <p>PH: Steward also has a positive, collaboration connotation</p>

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Ref. to the text	Edition 2.0.3 text	Updated text	Writing team notes
1.1 IHO Data Centre for Digital Bathymetry	The DCDB is hosted by the US National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information (NCEI) in Boulder, Colorado. All data hosted by the DCDB is accessible online via interactive web map services.	The DCDB is hosted by the US National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information (NCEI) in Boulder, Colorado, USA. All data hosted by the DCDB, <b>on behalf of the IHO</b> , are discoverable and accessible online via an interactive web map viewer.	PH: Suggested text on the relationship to IHO
1. Data Contribution	Hydrographic and bathymetric data collected by the National Antarctic Programmes' ships ...	Remove	4 team members agreed this paragraph was no longer relevant. No one supported keeping it in.
1.2 The Trusted Node Model	The Trusted Node Model	Contributing CSB Data to the IHO DCDB	DCDB: Suggested title change because this section covers more than just defining a TN. <b>Propose revisiting appropriate title AFTER we decide what paragraphs to keep/eliminate.</b>

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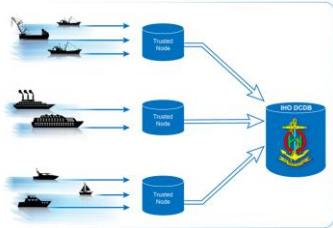
International  
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Ref. to the text	Edition 2.0.3 text	Updated text	Writing team notes
1.2 The Trusted Node Model	The DCDB currently accepts crowdsourced bathymetry (CSB) contributions through a network of Trusted Nodes, which are organizations or individuals that serve as data liaisons between mariners (data collectors) and the DCDB..	The DCDB currently accepts CSB contributions through a network of Trusted Nodes. An <b>IHO DCDB</b> Trusted Node is an approved organization or individual <b>who systematically receives CSB data collected by mariners (data collectors) and delivers them to the IHO DCDB.</b>	DM: Suggest we say “approved”, “endorsed”, “vetted”, “formal”, “official” or similar to describe “data liaisons”, as there is a process to become a “data liaison” and any organization or individual can not become a “data liaison” without going through this process.  DCDB: not sure we want to use the word “systematically”
1.2 The Trusted Node Model	Trusted Nodes may assist the mariner by supplying data logging equipment...	Trusted Nodes may assist the mariner by supplying data logging <b>or transmission</b> equipment,...	DM: Suggest "data transmission equipment" be added to this list. Fugro will soon be pulling singlebeam echosounder data from our non-survey vessels and I expect others will be doing the same soon as well. The technology (at least on large vessels) allows for remote logging instead of or in addition to vessel-based data logging.

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Ref. to the text	Edition 2.0.3 text	Updated text	Writing team notes
1.2 The Trusted Node Model	Minimal description of what defines a Trusted Node	New text written. Please refer to draft document.	SHOM: The concept of trusted node should be refined. It should also be explained how to become a trusted node and how to contact a trusted node when you want to contribute.
1.2 The Trusted Node Model	Figure 1. Data flow from vessels, through Trusted Nodes, to the DCDB.	<p>Keep or Remove??</p> <p>If keep, Update IHO logo.</p> 	<p>SM: Is this image really necessary?</p> <p>DM: I like the graphic, but I am a visual person. Others that we are trying to reach may be visual as well, however.</p> <p>Dagoberto: For me, yes.</p>

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Ref. to the text	Edition 2.0.3 text	Updated text	Writing team notes
1.2.2 Authentication Method	See document for original text.	Remove	Denmark: Suggestion to move to annex section  DCDB: Agree. The API documentation, referred to in the previous paragraph provides all of this information in much greater detail.
1.3 Overview of CSB Data Flow	See document for original text.	See draft document for suggested text.	DCDB: Entire section needed to be updated - complete rewrite



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Ref. to the text	Edition 2.0.3 text	Updated text	Writing team notes
1.3 Overview of CSB Data Flow	<p>* Filter based on coastal state response to future IHO CSB questionnaire</p>		DCDB: Figure 2 was originally a conceptual illustration (ie: before the filter existed). The updated figure more accurately represents reality.
1.3.1 Submitting CSB data to the DCDB	See document for original text.	Remove	<p>SM: Suggestion to move to annex section</p> <p>DCDB: Agree. The API documentation, referred to in an earlier paragraph provides all of this information in much greater detail.</p>
1.3.2 Accessing CSB data			DCDB: Figure 4 updated



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# AMENDMENTS FOR FURTHER DISCUSSION

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Reference to the text	Points for discussion	Origin	Major or minor
Entire document	<p>Consistency is needed!!!!</p> <p>To capitalize or NOT to capitalize?</p> <ul style="list-style-type: none"><li>crowdsourced bathymetry vs Crowdsourced Bathymetry</li><li>trusted node vs Trusted Node</li></ul> <p>Data is plural!</p> <ul style="list-style-type: none"><li>“These data” not “this data”</li></ul> <p>How to show websites?</p> <ul style="list-style-type: none"><li>As footnotes or should their urls be included in the document?</li></ul>	Steve Monk (SM), David Millar (DM)	M
Data Contribution	<p>“These data will in turn be made freely and publicly available through the IHO DCDB Map Viewer for use by....”</p> <p>SM: Do we want to add in examples of who might use it? Unofficial chart providers etc?</p>	SM	m





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1.1 IHO Data Centre for Digital Bathymetry	<p>The DCDB was established by the IHO in 1988 to steward the worldwide collection of open bathymetric data. The Centre archives and shares depth data contributed by <b>mariners and others</b> from across the world.</p> <ul style="list-style-type: none"><li>Paul Holthus (PH): Do we need more definition of ‘mariners and others’, or some examples of sources?</li></ul>	PH	m
1.2 The Trusted Node Model	<p>An IHO DCDB Trusted Node is an organization or individual who systematically receives CSB data collected by <b>mariners (data collectors)</b> and delivers them to the IHO DCDB.</p> <ul style="list-style-type: none"><li>PH: Although nicely concise, this seems a very broad term. Do we need to define this earlier to refer to something like “vessel owners or operators who are willing and able to provide CSB data”, and then refer to them as something like “CSB data contributors”?</li></ul>		
1.2 The Trusted Node Model	<p>“Trusted Nodes may assist the mariner by supplying data logging equipment...”</p> <p>PH: Great if this is true. For creating voluntary observations from industry, this will create the expectation that this equipment can be provided at no cost. Is that a correct understanding?</p>	PH	m

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1.2 The Trusted Node Model	<p>An improvement could be an online publication of available trusted nodes.</p> <ul style="list-style-type: none"><li>• DCDB: There should be a WG discussion on whether or not to list current Trusted Nodes - either here or online - considering there aren't very many at the moment and the list will need to be updated in the future.</li><li>• SM: I suggest they're listed online but it must be checked and updated at least 6 monthly.</li></ul>	SHOM	m
1.2 The Trusted Node Model	<p>DK suggests the addition of “When the CSB data is collected within a Country jurisdiction, Trusted Node must operate in agreement with national legislation and caveats.” to the end of Section 1.2</p> <p>DCDB: Is this realistic to expect of Trusted Nodes? For example, a participating navigational software company will not have control over how their customers operate their software. These data are already, and will continue to be, collected throughout the waters of the world. This is why we've put the onus on the DCDB to filter out the data in accordance to national positions.</p>	Denmark	m

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1.2 The Trusted Node Model	<p>“At present, individual data contributors are considered on a case-by-case basis but are encouraged to join an existing Trusted Node if possible.”</p> <p>PW: It doesn't seem clear to me whether this sentence is referring to individual contributors being considered as to: 1) Their contribution of data, or 2) Their interest to become part of a Trusted node. (In both cases, I would suggest that there is a need for more “How to” text, e.g. “Who can be part of a Trusted Node and How to apply/join”.</p>	PW	m
1.2.1 Transmission Protocol	<p>PH: Is the text mainly meant to inform contributors re sending data to the Trusted Node, or for the Trusted Node re sending data to DCDB . If it's the former, but I am not seeing simple, clear “How to” information that I can use with a shipping company to explain how their bathymetric data would be contributed.</p>	PH	m

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Reference to the text	Points for discussion	Origin	Major or minor
1.3 Overview of CSB Data Flow	<p>“CSB data, identified as belonging to the high seas (according to UNCLOS as “the area”),...”</p> <ul style="list-style-type: none"><li>• DM: Suggest a definition for “high seas” be provided, either here or in a section for definitions.</li><li>• PH: Agree, this is very important to the int'l shipping community to clear on</li><li>• DM: I would suggest that the relationship between “high seas” and “national jurisdiction” be explained.</li><li>• DCDB: This is an important discussion to have. Much like the "Additional Considerations" section, we need to be careful that we (a working group) don't venture too far into legal definitions and/or advice.</li></ul>	DM	M
1.2 The Trusted Node Model	<p>“Further details of which coastal states support the provision of CSB data collected within their waters of national jurisdiction, along with any caveats they have articulated, is available from the IHO website (add URL).”</p> <p>PH: This text is straightforward, but conveys a red flag/risk for commercial operators with vessels which might collect and contribute data. There is a need for guidance on “How to” navigate this patchwork of countries that do or don't agree with CSB data collection in their national jurisdictions.</p>	PH	m

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1.3.2 Accessing CSB data	<p>“When data retrieval and preparation are complete, the user is notified via email and is provided with a URL where they can retrieve the data package.”</p> <ul style="list-style-type: none"><li>• Denmark: What is the content of the data package? Does it contain the data license?</li><li>• DCDB: the actual geojson and/or csv data files. No, there is no data license included.</li></ul>	Denmark	m
1.2 The Trusted Node Model	<p>“Further details of which coastal states support the provision of CSB data collected within their waters of national jurisdiction, along with any caveats they have articulated, is available from the IHO website (add URL).”</p> <p>PH: This text is straightforward, but conveys a red flag/risk for commercial operators with vessels which might collect and contribute data. There is a need for guidance on “How to” navigate this patchwork of countries that do or don’t agree with CSB data collection in their national jurisdictions.</p>	PH	m